

The 2019 Global Mercantilist Index: Ranking Nations' Distortive Trade Policies

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The Global Mercantilist Index, ranking 60 nations on 18 variables ranging from market access and forced localization to currency manipulation and intellectual property protections, finds that China is the world's most innovation-mercantilist nation.

KEY TAKEAWAYS

- In the global race for leadership in the most advanced technology industries, many countries are resorting to “innovation mercantilism” to create unfair advantages for own industries at the expense of foreign competitors and global innovation progress.
- Ranking 60 nations on 18 variables such as market access, forced localization, currency manipulation and intellectual property protections, the 2019 Global Mercantilist Index finds that China is the world's most innovation-mercantilist nation.
- While China ranks as the most mercantilist nation, others such as India, Indonesia, and Russia have also engaged in innovation mercantilist practices, placing them in the report's “moderate-high” category.
- To counter global mercantilist policies, the U.S. government should pursue three types of reforms: government restructuring, diplomatic pressure, and systemic funding.
- The U.S. Trade Representative should also construct its own biennial index to better understand other nations' mercantilist practices and identify which are the worst offenders.

INTRODUCTION

As countries increasingly vie to both achieve the highest levels of innovation-based economic growth and attract, grow, and scale innovative enterprises and industries, a growing number have turned to “innovation mercantilist” policies that seek to grow nations’ innovation-based firms and industries through policies such as local production requirements, export subsidies, weak intellectual property (IP) protection, discrimination against foreign firms, economy-specific technical requirements, and data localization requirements.¹ These policies harm both other nations and global innovation writ large.² As such, they demand a coherent and bold response from free-trading nations and multilateral trade and development organizations.

This report updates ITIF’s 2014 report and ranks 60 nations on 18 variables, documenting the extent of their innovation mercantilist practices. It finds that China is the world’s most innovation-mercantilist nation; the only nation in the category of “High.” (See table 1.) In other words, China is in a class of its own when it comes to innovation mercantilism, which is a principal reason much of the Trump administration’s trade policy efforts have focused on trying to get China to at least modestly roll back its egregious practices.

While China ranks the worst, a number of other nations, including India, Brazil, Indonesia, and Argentina, also systemically engage in innovation mercantilist practices, placing in the category of “Moderate-high.” In contrast, New Zealand, the Netherlands, Portugal, Sweden, and Singapore, in that order, engage in the lowest levels of innovation mercantilism. The countries are not evenly distributed across the four tiers, with most nations receiving a rank of “Low” (only China receives a “High”). This reflects the imbalanced nature of mercantilism around the world, whereby a handful of nations have implemented practices that are far more egregious than those of most of the rest of the countries in the world.

The United States is not included in this report, as the structure of the analysis, including analyzing trade-weighted impacts and the effects of countries’ policies toward advanced technology industries, orient the report toward assessing how other nations’ mercantilist practices affect the United States.

This report begins by providing an overview of innovation mercantilism. It then discusses the rationale for creating a Global Mercantilist Index (GMI). Next, the report presents a template and methodology to create such an index. It then lists each individual indicator, and finally proposes a range of policy recommendations.

One of the distinguishing characteristics of innovation mercantilism is that many of its harmful practices are “behind the border”—rather than typical (e.g., the use of tariffs)—which the World Trade Organization (WTO) is less equipped to handle, such as dealing with countries that engage in excessive industrial subsidization. As such, the United States and other like-minded nations need to work to both strengthen the WTO so that it has more tools to push back against these practices, and to identify other mechanisms and institutions that will enable more vigorous prosecution of innovation mercantilism.

Table 1: Global Mercantilist Index rankings (ordered from worst to best in category)

High	Moderate-High	Moderate-Low	Low	Low (cont.)
60. China	59. India	49. Malaysia	39. Japan	19. Chile
	58. Brazil	48. Philippines	38. South Korea	18. Slovenia
	57. Indonesia	47. United Arab Emirates	37. France	17. Italy
	56. Argentina	46. Kenya	36. Hungary	16. Cyprus
	55. Thailand	45. Mexico	35. Taiwan	15. Austria
	54. Vietnam	44. South Africa	34. Switzerland	14. Spain
	53. Russia	43. Poland	33. Malta	13. Lithuania
	52. Saudi Arabia	42. Colombia	32. Costa Rica	12. Slovak Republic
	51. Nigeria	41. Canada	31. Greece	11. Australia
	50. Turkey	40. Peru	30. Hong Kong	10. Ireland
			29. Norway	9. Czech Republic
			28. Luxembourg	8. United Kingdom
			27. Bulgaria	7. Finland
			26. Latvia	6. Germany
			25. Iceland	5. Singapore
			24. Israel	4. Sweden
			23. Romania	3. Portugal
			22. Estonia	2. Netherlands
			21. Denmark	1. New Zealand
			20. Belgium	

As a first step, ITIF recommends the United States Trade Representative (USTR) construct such an index and issue it at least biennially as a way to better understand these practices and which nations are the worst offenders. This ranking could be used to guide enforcement and other actions to pressure the worst nations. As discussed in the policy recommendations section, these steps could include removing Generalized System of Preferences (GSP) benefits for the nations that rank the worst on this index as well as limiting their ability to receive U.S. foreign aid.³ The index can also be used as a starting point for international organizations to make decisions about foreign assistance from such organizations as the U.S. Agency for International Development (USAID) and the World Bank.

OVERVIEW OF INNOVATION MERCANTILISM

A growing number of nations place a dominant focus on exporting goods and services—especially higher value-added goods and services—as the royal road to economic growth, while too often neglecting the opportunity to spur growth by raising the productivity of all sectors, such as through the increased application of information and communications technology (ICT). In many cases, this focus has led nations to implement unfair, protectionist mercantilist policies.

Mercantilist policies can be defined as policies that seek to expand domestic production capacity by unfairly limiting imports and promoting exports in ways that subvert the intent of free trade. Innovation mercantilism is the application of these policies in an effort to gain advantage in innovation-based industries. Tools in that service can include tariffs; application of country-unique standards and technical specifications; distortive production subsidies, including for technology exports; forced technology transfer; weak IP protection and IP theft; favoring indigenous over foreign technology products and services in government procurement; limiting cross border data flows; and others.

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For example, when China set about building its high-speed rail network in 2009, it knew both that it lacked key technological and IP know-how and that it didn't wish to purchase foreign rolling stock, even though it was running huge trade surpluses at the time. Accordingly, China developed a tender that stipulated multinational companies could hold only a 49-percent equity stake in the new companies to build the system, they had to offer their latest designs, and 70 percent of each system had to be made locally. Competing foreign rail manufacturers such as France's TGV, Japan's Kawasaki, and Germany's Siemens had little choice but to go along with these stipulations, even though they realized their joint-venture partners would soon become their rivals outside China.⁴ Chinese rail companies CSR and CNR (now combined into one national champion, CRRC) acquired many of the core technologies (many from the winning vendor, Kawasaki), applied them with stunning quickness—in part backed by government subsidies—and now not only dominate China's local market, but have become major global competitors.⁵ This represents a classic case of forced technology transfer aiding domestic competitors that are then empowered to compete in global markets. And while some might contend that companies should elect not to compete in one of the world's largest markets given the presence of constraints such as these, the better response is to insist nations adhere to the market access commitments they made in joining WTO, thereby giving those countries access to others' markets.

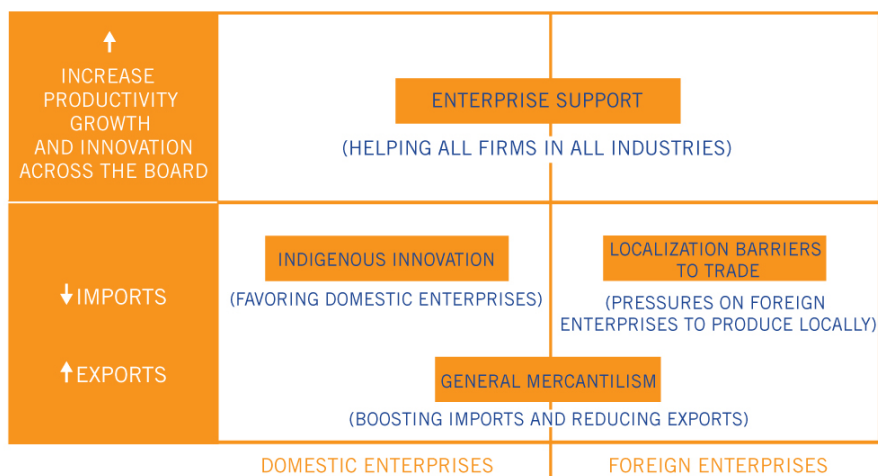
In other cases, countries require firms to shift production in order to receive market access. For example, China has used a variety of tactics, both overt (such as specific local content requirements) and subtle (such as requiring joint ventures as a condition of market access), to attempt to force foreign firms to shift production to China.⁶ Equally, the requirements of countries such as Russia, South Korea, and Vietnam that foreign enterprises locate data centers

or other ICT infrastructure locally as a condition of providing digital services to businesses and consumers in their country clearly constitute innovation mercantilism.

Some countries use government regulations and standards to keep out foreign goods and services. The European Union (EU) and a number of countries impose unjustified import bans or labeling requirements on U.S. biotechnology products, despite repeated studies demonstrating their safety.⁷ These and other types of standards-related barriers, including systemic policies mandating the use of economy-specific standards, can have significant economic impacts. For example, the Organization for Economic Cooperation and Development (OECD) estimates that complying with economy-specific technical standards can add as much as 10 percent to the cost of an imported product.⁸ Beyond increasing compliance costs, discriminatory approaches to the use of standards limit regulatory flexibility and hinder innovation.

In order to better understand the range of policies countries using mercantilist practices have put in place, it is important to distinguish between major types. As figure 1 shows, there are four types of economic development policies countries can implement. On the horizontal axis, policies are differentiated based on whether their focus is on domestic or foreign enterprises. For example, some policies seek to grow an economy by discriminating in favor of domestically owned firms. On the other hand, some policies target foreign firms—sometimes with incentives, but more often with coercion—to produce locally. The vertical axis addresses whether policies focus on spurring across-the-board innovation and productivity growth or are more mercantilist inspired, seeking to reduce imports or spur exports.

Figure 1: A matrix for understanding global economic development policies



Localization Barriers to Trade

Localization barriers to trade (LBTs) seek to explicitly pressure foreign enterprises to localize economic activity in order to sell in that country’s marketplace.⁹ Effectively, LBTs are used to force foreign enterprises to produce locally what they would otherwise produce outside that nation’s borders and export into its economy. By imposing mandated, location-based restrictions on services, the production of goods, the storage and processing of data, and even the transfer of technology and IP—often as a condition of market access—LBTs help “capture” both investments in and production output from foreign-enterprise establishments. LBTs include four primary types of policies: local content requirements, local production as a condition of market access, forced offsets, and forced technology or IP transfer.

Indigenous Innovation

Indigenous innovation policies favor domestically owned enterprises in order to enhance their competitive position. These policies include providing financial benefits such as low-interest loans, land grants, cash subsidies, tax incentives, and financial preferences only to state-owned enterprises (SOEs). They also include regulations that favor domestic enterprises by making it more difficult for foreign enterprises to compete locally, such as by introducing mandatory domestic technology standards, onerous regulatory certification requirements, and unjustified conformity assessment procedures. Finally, they include regulations that seek to explicitly block competition from foreign enterprises wishing to compete in local markets, such as through government-sanctioned monopolies, controls on foreign purchases, and limitations on foreign firms' sales and direct-investment activity.

General Mercantilism

The final category of mercantilist policies includes those that broadly distort trade but treat domestic and foreign firms the same, so long as those firms produce locally. In essence, these policies seek to increase the price of imports while reducing the cost of exports. Currency manipulation is a commonly used, economy-wide, trade-distorting policy that affects all traded industries equally. Trade analysts at the Peterson Institute for International Economics have found that a number of economies—including those of Hong Kong, Israel, Norway, Singapore, Switzerland, Taiwan, and Thailand—have recently intervened in currency markets to prevent their currency from appreciating, thus making their exports cheaper and imports more expensive.¹⁰ Countries' tariffs (and other trade barriers, such as customs restrictions) have a similar effect by raising the price of imports. Conversely, export subsidies are designed to lower costs for a country's exporters.¹¹

THE GROWTH OF INNOVATION MERCANTILISM

The intellectual foundation of the global trading system stems from the work of classical economist David Ricardo. His theory of comparative advantage—which holds that market forces and natural factor endowments determine comparative advantage, and expanded trade is always welfare-maximizing—has long been the North Star guide for U.S. trade policy. Ricardian theory assumes that comparative advantage is static (e.g., some countries will always be good at producing wine, others at producing textiles).

Notwithstanding the Ricardian doctrine, from the beginning of the industrial revolution, regions and nations have sought to shape their own competitive advantage, in part by ensuring firms in their jurisdiction become more productive and innovative, but also by trying to gain advantage over neighboring jurisdictions with which they trade. For example, after World War II, U.S. states began competing against each other for jobs, while European nations stepped up their competition internally within the continent. As global economic integration has become much more widespread, the scope of economic competition has further broadened. For instance, Chinese economic policies now affect what happens in California, and vice versa.

In part as a reflection of this practice, new trade theory holds that nations can develop competitive advantage (e.g., become good at textiles and not just wine) through effective economic growth policies. This theory emerged as it became clear that some nations, particularly Japan and the fast-growing Four Asian Tigers (Hong Kong, Singapore, South Korea, and Taiwan),

employed intentional industrial policies in order to create competitive advantage in key industries. To be sure, some of the policies the Asian Tigers implemented were legitimate (such as boosting federal support for research and development (R&D), increasing education and skill levels, and introducing a competitive tax code). But some were mercantilist in nature in that they either discriminated against foreign firms or went beyond creating a good innovation climate to embracing distorting policies (e.g., sizeable export subsidies).

The theory (if not always the practice) of competitive advantage is also supportive of trade and globalization, because it (in addition to the Ricardian theory of comparative advantage) is based on the principle that economies should export products and services for which they have (or want to have) competitive advantage, and use those earnings to import that which they need and cannot competitively produce. For 50 years after World War II, this model generally worked. And while there have been tensions between nations over their use of unfair trade practices, these tensions have either been managed through existing global trade institutions or have not been so great as to cause wide-scale distortions and dislocations.

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But to paraphrase Reinhart and Rogoff, authors of the influential book *This Time Is Different*, this time it really is different: A growing share of nations see the “Washington Consensus” (i.e., the view that market forces work and governments should play only a minimal role in promoting the interests of their countries’ companies and workers) as discredited and are instead turning to a new “Beijing Consensus” (i.e., innovation mercantilism). With prior growth rates in excess of 7 percent a year, these nations’ view has been that China must be doing something right. As a result, for many nations, the Beijing Consensus has become more appealing than the Washington Consensus.¹²

This is one reason why the WTO recently reported that it was notified of a record 3,065 new or altered technical barriers to trade in 2018 alone.¹³ Just one type of innovation mercantilist tool, local content requirements, has been implemented over 145 times since 2008, and continues to cost the global economy approximately \$60 billion annually.¹⁴ In 2017, ITIF identified almost three-dozen nations that have implemented data localization policies or other barriers to cross-border data flows.¹⁵ For instance, in 2010, Malaysia enacted the Personal Data Protection Act (which came into force in 2013), which stipulates that personal data cannot be transferred outside Malaysia without the Malaysian government’s consent. In 2013, Turkey enacted a law—the Law on Payments and Security Settlement Systems, Payment Services and Electronic Money Institutions—that forces Internet-based payment services, such as PayPal, to store all data in Turkey for 10 years. Brazil’s public procurement policies strongly encourage domestic production by establishing price preferences of up to 25 percent across a number of sectors, including for medical technologies and medications, automobile production, and electricity generation. China has deployed a wide range of innovation mercantilist practices; it excels at mandating technology and IP transfer as a condition of market access, forcing joint ventures, introducing technology standards that favor domestic industries, showering domestic technology companies with subsidies, using antitrust policy as a club against foreign companies, using the legal system to

support the use of foreign IP without due compensation, and pressuring state-owned enterprises to buy Chinese technology.

Thus, an even-larger threat is the Beijing Consensus will replace the Washington Consensus as the guiding star of other nations around the globe seeking to get rich. This is already apparent in such countries as India, Indonesia, Malaysia, and Russia that are looking to emulate China in certain respects by ramping up their innovation mercantilist policies, thus making it even more difficult to maintain a global trading system that operates along the lines most economists and policymakers originally envisioned.

Unfortunately, innovation mercantilism is spreading, in part, because some mercantilist practices actually do work—at least in the short term. China’s mercantilist practices have clearly been the principal factor in enabling it to grow. For example, China’s share of world exports jumped from 7 to 13 percent between 2006 and 2017.¹⁶ And, since 2010, the United States has accrued a \$3.1 trillion deficit in trade with China.¹⁷ Similarly, China’s share of global output in high-technology manufacturing industries has increased from 8 percent in 2003 to 27 percent today (just 2 percent off the U.S. share), and it has become the world’s largest exporter of high-tech products, with a 24 percent global share.¹⁸

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WHY INNOVATION MERCANTILISM IS A PROBLEM

For over a generation, U.S. policy toward countries employing mercantilist practices has been predicated on the belief that these countries were only hurting themselves. In essence, the United States has viewed its policy as benevolently trying to keep countries from unwittingly hurting themselves (and the United States) with mercantilist practices, believing that if it could only explain a bit more clearly how mercantilism is a failed strategy, these nations would see the light and abandon the practice. The problem is many other nations have a fundamentally different political economy than the Anglo-Saxon system—which is based on the rule of law, transparency, trust, respect for markets, limited government, and market-based, for-profit companies acting in their own interests—we enjoy. The rules-based WTO system works reasonably well adjudicating disputes between nations with such systems. However, it fails in serious ways when dealing with nations that lack the rule of law, transparency, or respect for markets—or when confronting nations that have deeply interventionist governments and a large-scale state-owned enterprise presence. Moreover, despite what some free-trade advocates claim, mercantilist practices can help the economies practicing them—and by distorting markets, they also hurt the U.S. economy, other affected economies, and the broader global economy.

Mercantilist Practices Harm Other Economies

When a nation chooses mercantilism as a means to drive growth, it harms not just the nations whose firms are explicitly targeted—whether through forced localization or indigenous innovation—but also third-party nations that might otherwise receive foreign investment if such policies were not implemented.

With regard to the former, to the extent mercantilism in foreign nations changes business practices in enterprises' home nations—whether through cutbacks or reduced expansion—it stunts economic growth, at least in the short and medium term. Unemployment increases, imposing costs not just on workers, but also on governments. And the firms targeted by these practices are hurt because their cost structure goes up; for example, if it made economic sense to localize production in the destination country, firms would have already done so. Thus, by definition, coerced local production raises firms' costs, meaning lower profits and less investment in their home nations. Or, to the extent indigenous innovation limits market access completely, it limits firm growth, resulting in fewer jobs and lower profits.

Unfortunately, mercantilist policies also have continuous impacts, meaning their effects persist over long time periods. Indeed, as ITIF argued in *Innovation Economics: The Race for Global Advantage*, if such distortions are large and sustained enough, they can have long-term effects on economies, distorting investment patterns and creating bubbles (e.g., the U.S. housing bubble, which stemmed in part from a declining demand for “real” commercial investment capital) and reducing overall investment, leading to a self-reinforcing pattern of decline, not rebound.¹⁹

Mercantilism also injures third-party nations. For example, China's extensive use of LBTs has distorted global trade and investment patterns, and significantly hurt other developing nations, such as Brazil and India, which might otherwise have received some of the investment and gained some of the global market share. Not only has this meant slower economic growth in these third-party nations, more troublingly, it has encouraged these nations to ramp up their own innovation mercantilist practices in response. Moreover, as they see nations such as China contravene the rules and spirit of the global trading system with general impunity—thus undermining confidence in trade's ability to produce globally shared prosperity—they see the risks of retaliation from embracing mercantilism as minimal. Consequently, the global trading system decays and devolves into a contest wherein every country is incentivized to turn to mercantilism, the competition becomes cutthroat, and the global economy suffers.

Mercantilist Practices Damage the Global Economy

Innovation industries have three key characteristics: they feature rapid and regular development of new processes, products, and services; they have marginal costs that are significantly lower than their average costs; and they rely heavily on IP. Rapid development cycles ensure industries such as biotechnology and semiconductors prioritize creating next-generation products in addition to improving current products. Low marginal costs and high average costs reflect an industry that must invest heavily in R&D before any product is released. For example, Boeing invested almost eight years of development work and more than \$32 billion dollars before a single 787 Dreamliner was sold. That \$32 billion must be built into the overhead of every 787 Boeing sells. Innovation industries also rely more heavily on IP because their advantages are predominantly knowledge-based, such as the properties of a molecular compound or source code. That's why a European Commission study found that for non-high-tech firms, the contribution of knowledge capital to success is lower than the contribution of physical capital—but for high-tech firms it's higher.²⁰

For these reasons, maximizing innovation by innovation-based industries internationally thus depends on three key factors: 1) ensuring the largest possible markets; 2) limiting non-market-

based competition; and 3) ensuring strong IP protections. All three factors get to the core challenge for innovation industries: Investment in innovation is uncertain, and therefore firms need higher-than-normal profits on the innovations that succeed. True innovation is not about risk in the sense that the likelihood of success can be modeled accurately, but about uncertainty that can't be modeled, thus making failure the norm. In fact, only 8 percent of innovation projects exceed their return on investment hurdle rate, while only 12 percent of R&D projects exceed their cost of capital. For every Apple succeeding with an iPad, there are 10 companies that fail. Innovation mercantilism imperils each of these conditions innovation industries depend on, thus compromising innovators' ability to realize profits that can then be reinvested back into the next generation of expensive and risky innovation, and risking undermining the entire life-cycle process of innovation.

Given the rise in mercantilist practices and the damage they do to the U.S. and global economies, it's critical that free-trading nations take stronger steps to stem the mercantilist tide.

Given the rise in mercantilist practices and the damage they do to the U.S. and global economies, it's critical that free-trading nations take stronger steps to stem the mercantilist tide. The first step is assessment—in this case, ranking nations on the extent of their mercantilist policies.

USTR does publish its “*National Trade Estimate (NTE) Report on Foreign Trade Barriers*,” an annual series that surveys significant foreign barriers to U.S. exports and investment as well as selected actions taken by other nations to eliminate damaging trade barriers. The NTE, however, does not rank nations. At the same time, USTR's “*Special 301 Report*,” an annual review of countries that maintain inadequate and ineffective IP protection and enforcement regimes, does rank countries according to a four-tier system. (See box A.) So while the NTE provides a review of trade barriers, it has no ranking; and while the “*Special 301 Report*” ranks countries, it is not exhaustive. As such, we believe there is a need for a biennial comprehensive ranking of nations' mercantilist policies; in other words, a Global Mercantilist Index.

BOX A: UNDERSTANDING THE SPECIAL 301 RANKINGS

USTR's “*Special 301 Report*” is the result of an annual review of the state of intellectual property rights (IPR) protection and enforcement in trading partners around world, which USTR conducts pursuant to Section 182 of the Trade Act of 1974, as amended by the Omnibus Trade and Competitiveness Act of 1988 and the Uruguay Round Agreements Act.²¹

Specifically, the amended Section 301 of the Trade Act of 1974 states that USTR must, by April 30 of each year, identify:

(1) those foreign countries that (A) deny adequate and effective protection of intellectual property rights, or (B) deny fair and equitable markets access to United States persons that rely upon intellectual property protection, and (2) those foreign countries identified under paragraph (1) that are determined by the Trade Representative to be priority foreign countries.²²

The Act defines “Priority Foreign Countries” (PFC) as those foreign countries:

(A) that have the most onerous or egregious acts, policies, or practices that (i) deny adequate and effective intellectual property rights, or (ii) deny fair and equitable market access to United States persons that rely upon intellectual property protection, (B) whose acts, policies, or practices described in subparagraph (A) have the greatest adverse impact (actual or potential) on the relevant United States products, and (C) that are not (i) entering into good faith negotiations, or (ii) making significant progress in bilateral or multilateral negotiations to provide adequate and effective protection of intellectual property rights.²³

As a result, USTR created a “Priority Watch List” (PWL) and “Watch List” (WL) under the Special 301 provisions. Placement of a trading partner on the PWL or WL indicates particular problems exist in that country with respect to IPR protection, enforcement, or market access for parties relying on IPRs. PFCs are potentially subject to an additional investigation under the Section 301 provisions of the Trade Act of 1974, while countries placed on the PWL are the focus of increased bilateral attention concerning the problem areas. Those on the WL are countries in which improvement can be made and that require less attention than the PWL countries.

Report Methodology

The Global Innovation Mercantilist Index analyzes 60 nations, which were selected primarily because they represent the most significant trade partners of the United States (although data availability was also a consideration in country selection). The report includes 18 indicators divided into 9 categories: 1) forced localization; 2) intellectual property protection; 3) open market access; 4) benefits for domestically owned enterprises; 5) currency manipulation; 6) preferences for domestic production; 7) tariffs and import discrimination; 8) digital barriers; and 9) NTE Report ranking. These factors are closely related to the 11 sectors in the NTE Report. ITIF combined “service barriers” and “investment barriers” (renamed “market access”); “government procurement” and “competition” (renamed “benefits for domestically owned enterprises”); and investment barriers and e-commerce regulations (renamed “forced localization”). We then retained “import policies,” “barriers to digital trade,” and “intellectual property protection,” and combined “export subsidies” into the broader “preferences for domestic production.” Finally, we added “currency manipulation” and “overall ranking of the NTE Report.” We included currency manipulation because countries that manipulate their currencies accrue unsustainable trade surpluses and undermine confidence in trade’s ability to bring globally shared prosperity through innovation; and we added an overall NTE ranking in order to get a glimpse of the full picture of a nation’s trade policy.

These categories were chosen because of their relevance as well as data availability. In an ideal world, more data would be available, including more assessments of currency manipulation, quantitative impacts of different localization barriers to trade, more granular information about taxes and subsidies given to domestic enterprises, and more data about discriminatory application of technical standards and specifications and government regulations (e.g., the use of competition policy to discriminate against foreign firms). At the level of detail available, many indicators are largely determined by EU-wide policies, leading many EU members to receive the same scores in certain categories.

In order to measure the magnitude of the differences between the countries rather than just their rank, we standardize raw scores for each indicator within the nine categories. Weights for each indicator are determined according to their relative importance within each category, and adjusted such that closely correlated indicators do not bias the results. To produce the overall category scores, the standardized indicator scores are multiplied by their respective weights (as listed in table 2) and summed. We calculate the final score by first summing the maximum possible score in each category to determine a maximum potential overall score. The overall, un-weighted pure score for each country is then the sum of the country's score for each category, which is expressed as a percentage of the maximum potential overall score.

Any ranking of foreign nations' mercantilist practices needs to incorporate a strategic approach that weighs the policies on a number of different factors, depending on their effect on the U.S. economy. The system ITIF proposes is fourfold.

First, we create an assessment that ranks nations on the extent of their mercantilist policies. Second, we adjust this ranking to reflect the relative importance of the foreign economy to the U.S. economy. The federal government does not have unlimited financial and political capital to contest all trade issues. Thus, the limited resources should be focused on those nations that pose the largest challenge. As such, the trade-weighted score for each country is the unweighted aggregate score multiplied by its U.S. economy score. The trade-weighted score is important because, while the unweighted score is a good measure of a country's mercantilist practices, we are more interested in the effect of these mercantilist practices on the U.S. economy, so the methodology weights the mercantilist scores by the countries' relative trade and investment importance to the United States. This U.S. economy score is determined by standardizing two variables—the share of two-way trade and the share of U.S. foreign direct investment (FDI) (expressed as 2017 imports and exports and 2017 U.S. FDI as a percentage of total 2017 U.S. trade and FDI, respectively)—multiplying each by their respective weights (60 percent and 40 percent), and then summing them.²⁴

In addition, certain industries are more important to U.S. competitiveness, prosperity, and national security than others. Indeed, if America loses its base of advanced industries to foreign competitors, its industrial supply chains and industrial commons will be hollowed out, leaving the country unable to manufacture a wide range of advanced, high-technology products.²⁵ Foreign countries that target advanced industries most blatantly should be the focus of greater scrutiny by the United States. Thus, the third step is to modify the ranking based on the extent to which those policies affect U.S. advanced-technology industries, as these products and services represent the central drivers of the U.S. economy. A country's advanced technology score (ATS) is determined, capturing the degree to which its trade with the United States centers on innovation industries. It is calculated by determining the percentage of two-way 2018 U.S. trade conducted across six high-tech industries: pharmaceuticals and medicines, computer equipment, communications equipment, semiconductors, navigational and measurement instruments, and aerospace.

Finally, we combine the advanced technology scores and economy-weighted scores (weighted at 60 percent and 40 percent, respectively) to create an overall final ranking.

For each weighting, if a country's score falls under 1 standard deviation below the average, its un-weighted score is multiplied by a factor 0.75. If a country's score is within 1 standard

deviation below the average and one-half standard deviation above the average, its un-weighted score is multiplied by a factor of 1.00. If a country's U.S. economy score is between one-half and 2 standard deviations above the average, its un-weighted score is multiplied by a factor of 1.25. If a country's score is greater than 2 standard deviations above the average, its un-weighted score is multiplied by 1.50.²⁶

Finally, to determine a final score, the economy-weighted and ATS-weighted scores are combined (at 40 percent and 60 percent, respectively) to create the final GMI scores and rankings. In addition, we code the pure mercantilist, economy-weighted, ATS-weighted, and final scores by partitioning the score distributions into quartiles to produce the "Low," "Moderate-Low," "Moderate-High," and "High" rankings. The quartiles do not contain an equal number of countries, but rather indicate whether a country's score falls into a quartile range based on a normal distribution.

In those cases where a country does not receive a score for an indicator (because of a lack of data or nonparticipation in a particular survey), that country receives a "Non/Applicable" (N/A). Indicator weights are then adjusted within that category to make up for the missing score. For example, Russia has no score on the General Agreement on Trade in Services (GATS) Index, so its score in the "Market Access" category is just a weighted average of the two other indicators within said category.²⁷

The GMI combines elements of preexisting rankings with stand-alone indicators, drawing from the Fraser Institute's Non-Tariff Trade Barriers and Government Enterprise and Investment ratings, the Global Innovation Policy Center's International IP Index, the World Economic Forum (WEF) Global Competitiveness Report's IP Protection and Tariff Complexity ratings, OECD's Services Trade Restrictiveness, Digital Services Trade Restrictiveness, Foreign Equity Restrictions Indexes, and the Peterson Institute's analysis of currency manipulation. These rankings are integrated with analyses of data from the World Bank on tariff rates and the time to import goods, WTO on regional trade agreements, the USTR's NTE and "*Special 301 Report*," and prior ITIF reports to capture a broad range of factors inhibiting global trade. In assessing country ranks, each category of mercantilism is allocated a weight ITIF deems appropriate given the severity of the problem it presents. Table 2 shows the indicators used and their relative weights.

Table 2: Global Mercantilist Index ranking methodology

Indicator	Data Type	Source	Category Weight	Indicator Weight
Forced Localization			1.5	
Non-Tariff Trade Barriers	Rating	Fraser Institute		0.75
Quantity of LBT Types	Number	ITIF LBT Report		0.75
Intellectual Property			1.5	
Special 301 Ranking	Ranking	USTR " <i>Special 301 Report</i> "		0.75
International IP Index	Rating	U.S. Chamber of Commerce		0.25
WEF IP Protection	Rating	WEF GCI Report		0.50
Market Access			1.0	
Services Trade Restrictiveness Index	Rating	OECD		0.40
Regional Trade Agreements to WTO	Number	WTO		0.20
Foreign Equity Restrictions	Rating	OECD		0.40
Benefits for Domestically Owned Enterprises			1.0	
Participation in WTO GPA	Y/N	WTO		0.40
Government Enterprise and Investment Rating	Rating	Fraser Institute		0.60
Currency Manipulation			1.0	
Currency Manipulation	Y/N	Peterson Institute		1.50
Preferences for Domestic Production			1.0	
Trade Policy Reviews	Qualitative	WTO		1.00
Tariffs and Import Discrimination			1.0	
Time to Import Goods	Number	World Bank		0.20
Simple Mean, Tariff Rate, All Products	% Rate	World Bank		0.40
Complexity of Tariffs	Rating	WEF GCI Report		0.40
Digital Trade Barriers			1.0	
Digital Services Trade Restrictiveness Index	Rating	OECD		0.60
NTE Key Barriers to Digital Trade	Number	USTR		0.40
NTE Report Ranking			1.0	
NTE Report Ranking	Ranking	USTR		1.00

RESULTS AND INDICATORS

Table 3 lists the final weighted, economy-weighted, ATS-weighted, and pure Global Mercantilist Index scores for the 60 nations. (Appendix A provides countries' overall scores for each of the nine individual categories). China scores the worst both on the pure and final scores, receiving a score of 42.1 and 50.5, respectively. China is tied for the highest score in the Preferences for Domestic Production and NTE Report Ranking categories, has the highest Digital Trade Barriers score outright, and has scores above 1 in every category except Currency Manipulation and Tariffs and Import Discrimination. Among the “Moderate-High” countries, Forced Localization is the weakest category for India and Turkey, Intellectual Property for Argentina, Market Access for Nigeria, Benefits for Domestically Owned Enterprises for Malaysia, Currency Manipulation for Thailand, Digital Trade Barriers for Vietnam and Saudi Arabia, and NTE Report Ranking for Brazil and Russia.

China scores the highest both on the pure and final scores, receiving a score of 42.1 and 50.5, respectively.

On the other end of the spectrum, nearly two-thirds of countries are ranked as “Low,” reflecting the better policies enacted by many less-mercantilist nations. The least-mercantilist country is New Zealand, with a final score of 7.7, which has a superior ranking in every category except Market Access, followed by the Netherlands, Portugal, Sweden, and Singapore.

Table 3: Global Mercantilist Index scores (high scores indicate worse performers)

Country	(1) Pure Score	(1) Pure Ranking	(2) Econ Score	(2) Econ Ranking	(3) ATS Score	(3) ATS Ranking	(4) Final Score	(4) Final Ranking
Argentina	33.9	High	33.9	Moderate Low	33.9	High	33.9	Moderate High
Australia	11.2	Low	11.2	Low	11.2	Low	11.2	Low
Austria	12.9	Low	12.9	Low	12.9	Low	12.9	Low
Belgium	13.9	Low	13.9	Low	13.9	Low	13.9	Low
Brazil	36.6	High	36.6	Moderate High	36.6	High	36.6	Moderate High
Bulgaria	14.9	Low	14.9	Low	14.9	Low	14.9	Low
Canada	17.8	Moderate Low	26.7	Moderate Low	13.3	Low	18.7	Moderate Low
Chile	15.8	Low	15.8	Low	11.9	Low	13.4	Low
China	42.1	High	63.1	High	42.1	High	50.5	High
Colombia	23.2	Moderate Low	23.2	Moderate Low	17.4	Moderate Low	19.8	Moderate Low
Costa Rica	16.3	Moderate Low	16.3	Low	16.3	Moderate Low	16.3	Low
Cyprus	13.0	Low	13.0	Low	13.0	Low	13.0	Low
Czech Republic	10.9	Low	10.9	Low	10.9	Low	10.9	Low

Denmark	12.3	Low	12.3	Low	15.3	Low	14.1	Low
Estonia	12.3	Low	12.3	Low	15.4	Low	14.2	Low
Finland	10.8	Low	10.8	Low	10.8	Low	10.8	Low
France	14.8	Low	14.8	Low	18.5	Moderate Low	17.0	Low
Germany	9.1	Low	11.4	Low	9.1	Low	10.0	Low
Greece	16.3	Moderate Low	16.3	Low	16.3	Moderate Low	16.3	Low
Hong Kong	14.1	Low	14.1	Low	17.6	Moderate Low	16.2	Low
Hungary	17.0	Moderate Low	17.0	Low	17.0	Moderate Low	17.0	Low
Iceland	14.7	Low	14.7	Low	14.7	Low	14.7	Low
India	38.3	High	38.3	Moderate High	38.3	High	38.3	Moderate High
Indonesia	40.4	High	40.4	Moderate High	30.3	Moderate High	34.3	Moderate High
Ireland	8.0	Low	10.0	Low	12.0	Low	11.2	Low
Israel	14.7	Low	14.7	Low	14.7	Low	14.7	Low
Italy	13.2	Low	13.2	Low	13.2	Low	13.2	Low
Japan	16.6	Moderate Low	20.8	Low	16.6	Moderate Low	18.3	Low
Kenya	25.2	Moderate High	25.2	Moderate Low	25.2	Moderate High	25.2	Moderate Low
Latvia	11.4	Low	11.4	Low	17.0	Moderate Low	14.8	Low
Lithuania	12.2	Low	12.2	Low	12.2	Low	12.2	Low
Luxembourg	12.1	Low	15.1	Low	15.1	Low	15.1	Low
Malaysia	22.4	Moderate Low	22.4	Moderate Low	33.6	High	29.1	Moderate Low
Malta	14.2	Low	14.2	Low	17.8	Moderate Low	16.4	Low
Mexico	20.8	Moderate Low	31.2	Moderate Low	20.8	Moderate Low	25.0	Moderate Low
Netherlands	7.6	Low	11.4	Low	7.6	Low	9.1	Low
New Zealand	7.7	Low	7.7	Low	7.7	Low	7.7	Low
Nigeria	35.8	High	35.8	Moderate High	26.8	Moderate High	30.4	Moderate High
Norway	16.0	Low	16.0	Low	16.0	Low	16.0	Low
Peru	21.8	Moderate Low	21.8	Moderate Low	16.3	Moderate Low	18.5	Moderate Low
Philippines	23.4	Moderate Low	23.4	Moderate Low	29.3	Moderate High	26.9	Moderate Low

Poland	17.8	Moderate Low	17.8	Low	22.3	Moderate Low	20.5	Moderate Low
Portugal	9.3	Low	9.3	Low	9.3	Low	9.3	Low
Romania	14.6	Low	14.6	Low	14.6	Low	14.6	Low
Russia	38.4	High	38.4	Moderate High	28.8	Moderate High	32.7	Moderate High
Saudi Arabia	36.6	High	36.6	Moderate High	27.4	Moderate High	31.1	Moderate High
Singapore	8.4	Low	8.4	Low	10.5	Low	9.6	Low
Slovak Republic	13.5	Low	13.5	Low	10.2	Low	11.5	Low
Slovenia	13.4	Low	13.4	Low	13.4	Low	13.4	Low
South Africa	24.8	Moderate Low	24.8	Moderate Low	18.6	Moderate Low	21.1	Moderate Low
South Korea	17.3	Moderate Low	17.3	Low	17.3	Moderate Low	17.3	Low
Spain	12.5	Low	12.5	Low	12.5	Low	12.5	Low
Sweden	9.3	Low	9.3	Low	9.3	Low	9.3	Low
Switzerland	13.6	Low	17.0	Low	17.0	Moderate Low	17.0	Low
Taiwan	17.0	Moderate Low	17.0	Low	17.0	Moderate Low	17.0	Low
Thailand	28.8	Moderate High	28.8	Moderate Low	36.0	High	33.1	Moderate High
Turkey	30.1	Moderate High	30.1	Moderate Low	30.1	Moderate High	30.1	Moderate High
United Arab Emirates	26.5	Moderate High	26.5	Moderate Low	26.5	Moderate High	26.5	Moderate Low
United Kingdom	8.1	Low	12.1	Low	10.1	Low	10.9	Low
Vietnam	32.7	Moderate High	32.7	Moderate Low	32.7	Moderate High	32.7	Moderate High

The distribution across tiers is less skewed than it was in the initial GMI ranking, reflecting an uptick in mercantilist practices by many nations since 2014. (Although some of this change could reflect modest changes in methodology between the two reports.) Six nations (Australia, Chile, India, Japan, Singapore, and South Korea) moved into a lower tier, while four (Indonesia, Thailand, Turkey, and Vietnam) increased from “Moderate-Low” to “Moderate-High,” and two (Kenya and Poland) increased from “Low” to “Moderate-Low.” (See table 4.) Further, of the five nations added to this edition of the index (Colombia, Costa Rica, Nigeria, Saudi Arabia, and United Arab Emirates), only Costa Rica received a rank of “Low.”

Table 4: Countries in different tiers than in the 2014 Global Mercantilist Index

Increased Ranking		Decreased Ranking		Newly Included Ranking	
Indonesia	Moderate-High	Australia	Low	Colombia	Moderate-Low
Kenya	Moderate-Low	Chile	Low	Costa Rica	Low
Poland	Moderate-Low	India	Moderate-High	Nigeria	Moderate-High
Thailand	Moderate-High	Japan	Low	Saudi Arabia	Moderate-High
Turkey	Moderate-High	Peru	Low	United Arab Emirates	Moderate-Low
Vietnam	Moderate-High	Singapore	Low		

Forced Localization

Forced localization constitutes a family of government policies that mandate foreign companies operate locally as a condition of doing business in a country, such as requiring products be made domestically or customer data not be stored internationally. The forced localization indicator includes two measures—countries’ scores on the Fraser Institute’s Non-Tariff Trade Barriers rating and ITIF’s tally of types of localization barriers to trade—as shown in table 5.²⁸ When combined, Indonesia, India, Turkey, and Brazil score the worst, with scores of at least 2.0, while Hong Kong, Singapore, and Finland score the best at -2.7, -2.2, and -2.0, respectively.

It’s likely that non-tariff barriers now have a greater detrimental impact on world trade than tariffs do.

Non-Tariff Barriers

While countries have made some progress in reducing tariffs, their use of non-tariff barriers has increased. In fact, though they are difficult to measure, it’s likely that non-tariff barriers now have a greater detrimental impact on world trade than tariffs do.²⁹ In fact, one WTO *World Trade Report* estimates that non-tariff measures are almost twice as trade restrictive as tariffs.³⁰ Non-tariff barriers refer to measures other than tariffs that distort trade, including quantitative restrictions, price controls, subsidies, non-tariff charges, unwarranted customs procedures, and the discriminatory application of technical standards. Other non-tariff barriers that seek to restrict trade include controls on FDI; forced technology or IP transfer as a condition of market access; forced local production as a condition of market access; discriminatory rules and regulations, including those pertaining to health and safety standards; weak IP protections; and unfair import licensing requirements. As the Global Trade Alert organization’s “9th GTA Report” notes, “One of the defining characteristics of contemporary protectionism is the fact that so little of it is effectively regulated by multilateral trade rules.”³¹ Our study employs the “Non-Tariff Trade Barriers” rating of the “Economic Freedom of the World Index” to examine differences in non-tariff barriers. The index scores countries on two hard data points: the percentage of trade affected by non-tariff measures, and the average number of notifications for products affected by non-tariff barriers (on an inverted scale, where a score of zero is best and a score of ten is

worst).³² Table 5 summarizes data pertaining to countries' forced localization scores, including their non-tariff barrier scores.

Localization Barriers to Trade

Another way to view countries' localization policies is through a tally of the types of localization barriers to trade they have implemented over the last five years, which ITIF completed in its Localization Barriers to Trade: Threat to the Global Innovation Economy report, originally published in the fall of 2013.³³ Data was updated and expanded from news analyses and a review of the literature for the release of this report. A 0 indicates no localization policies and a 1 to 5 indicates how many of the following types of LBTs a country has implemented: local content requirements, local production requirements, forced offsets, forced technology or intellectual property transfer, and compulsory licenses. This measure is included to get a grasp on how widespread countries' localization policies are, while the non-tariff barrier ranking from the Fraser Institute is used as a quantifier for how detrimental each nation's localization policies are.

Table 5: Forced localization scores³⁴

Country	Forced Localization Overall Score	Non-Tariff Barriers (10 = Worst, 0 = Best)	Tally of LBTs (5 = Worst, 0 = Best)
Argentina	1.6	5.53	2
Australia	-0.1	3.57	2
Austria	-0.8	3.46	1
Belgium	0.2	3.85	2
Brazil	2.0	6.00	2
Bulgaria	0.2	4.63	1
Canada	1.0	4.05	3
Chile	-1.4	2.77	1
China	1.1	4.19	3
Colombia	1.1	4.99	2
Costa Rica	0.1	5.29	0
Cyprus	-0.1	3.57	2
Czech Republic	-0.5	3.13	2
Denmark	-0.7	3.55	1
Estonia	-0.6	2.94	2
Finland	-2.0	2.12	1
France	0.8	4.61	2
Germany	-0.4	3.16	2
Greece	-0.1	3.55	2
Hong Kong	-2.7	1.97	0
Hungary	0.9	4.77	2
Iceland	-0.3	4.76	0
India	2.3	4.13	5

Indonesia	2.6	4.54	5
Ireland	-1.0	3.19	1
Israel	-0.4	3.99	1
Italy	0.0	3.63	2
Japan	-0.8	4.24	0
Kenya	0.9	4.70	2
Latvia	-0.9	3.31	1
Lithuania	0.6	4.40	2
Luxembourg	-1.0	3.26	1
Malaysia	1.3	3.68	4
Malta	-0.5	3.03	2
Mexico	-0.2	4.19	1
Netherlands	-1.2	2.99	1
New Zealand	-1.8	2.29	1
Nigeria	0.0	3.71	2
Norway	-0.7	4.28	0
Peru	-0.1	4.30	1
Philippines	-0.7	4.27	0
Poland	1.6	4.06	4
Portugal	-1.7	2.45	1
Romania	0.2	3.94	2
Russia	2.0	5.23	3
Saudi Arabia	1.0	4.15	3
Singapore	-2.2	1.84	1
Slovak Republic	0.5	4.25	2
Slovenia	0.2	3.96	2
South Africa	0.6	4.36	2
South Korea	0.8	4.64	2
Spain	0.8	3.82	3
Sweden	-1.1	3.15	1
Switzerland	-1.3	3.61	0
Taiwan	-0.7	3.57	1
Thailand	0.5	4.28	2
Turkey	2.2	3.97	5
United Arab Emirates	-1.8	2.32	1
United Kingdom	-1.2	2.99	1
Vietnam	1.9	5.13	3

Intellectual Property

The Intellectual Property indicator includes three measures—countries’ scores on USTR’s “*Special 301 Report*,” the U.S. Chamber of Commerce Global Innovation Policy Center’s (GIPC) International IP Index, and WEF Global Competitiveness Report IP protection score—as shown in table 6. Argentina, Indonesia, India, Chile, and China (all of which are on the Special 301 Priority Watch List) perform the worst and have subpar scores from GIPC and WEF, while the United Kingdom, Singapore, and the Netherlands perform the best.

Special 301 List

USTR’s “*Special 301 Report*” identifies countries that do not provide “adequate and effective” protection for U.S. IPR holders. These countries are placed on the Watch List or Priority Watch List, or designated as a Priority Foreign Country, depending on the severity of infractions.³⁵ (Countries not included in this list either have adequate policies or were not assessed because their market is too small to significantly affect the American economy.) As a result, countries could receive a score of between 0 (the best) and 3 (the worst), depending on whether they are included and the severity of their ranking on the report.

U.S. Chamber of Commerce Global Innovation Policy Center International IP Index

The U.S. Chamber of Commerce Global Innovation Policy Center’s International IP Index replaces the Park Index in this edition as the latter has not been updated since 2008. The GIPC IP Index scores 50 countries on 40 indicators relating to their recognition and enforcement of IP rights.³⁶ Countries are scored on an inverted scale such that the highest scores represent the least protection of IP rights.

World Economic Forum IP Protection

WEF has benchmarked national IP environments in its Global Competitiveness Report. The measure surveys executives on how they rate IP protection, including anti-counterfeiting measures, in countries.³⁷ Countries are scored out of a maximum of 7, which we invert such that higher scores are worse.

Table 6: Intellectual property scores³⁸

Country	IP Overall Score	301 Status (High = Worse)	GIPC IP Index Score (High = Worse)	WEF IP Protection Score (High = Worse)
Argentina	2.6	2	35.04	3.25
Australia	-1.2	0	13.94	1.19
Austria	0.4	0	N/A	1.13
Belgium	0.4	0	N/A	0.99
Brazil	1.3	1	31.75	3.03
Bulgaria	-0.6	0	N/A	3.64
Canada	0.1	1	20.12	1.36
Chile	2.1	2	30.03	2.46
China	2.0	2	28.55	2.50
Colombia	1.3	1	29.30	3.05

Costa Rica	0.7	1	27.62	2.16
Cyprus	-0.1	0	N/A	2.32
Czech Republic	0.0	0	N/A	2.06
Denmark	0.3	0	N/A	1.41
Estonia	0.2	0	N/A	1.60
Finland	0.6	0	N/A	0.50
France	-1.4	0	9.00	1.11
Germany	-1.2	0	9.46	1.47
Greece	0.4	1	N/A	2.89
Hong Kong	0.4	0	N/A	1.07
Hungary	-0.1	0	15.82	3.03
Iceland	0.2	0	N/A	1.54
India	2.1	2	33.78	2.40
Indonesia	2.2	2	37.13	2.39
Ireland	-1.3	0	9.76	1.23
Israel	-1.0	0	20.11	1.36
Italy	-0.5	0	13.42	2.44
Japan	0.4	0	10.52	1.12
Kenya	0.1	0	35.33	2.62
Latvia	-0.2	0	N/A	2.59
Lithuania	-0.2	0	N/A	2.67
Luxembourg	0.5	0	N/A	0.77
Malaysia	-0.7	0	27.63	1.58
Malta	0.0	0	N/A	2.07
Mexico	1.1	1	26.06	2.86
Netherlands	-1.5	0	9.93	0.88
New Zealand	-1.2	0	19.37	1.01
Nigeria	0.9	0	36.45	3.88
Norway	0.2	0	N/A	1.52
Peru	1.7	1	31.94	3.66
Philippines	0.0	0	33.80	2.55
Poland	0.0	0	20.06	3.01
Portugal	0.1	0	N/A	1.86
Romania	0.0	1	N/A	2.03
Russia	1.3	2	30.54	3.14
Saudi Arabia	1.9	2	33.53	1.97
Singapore	-1.5	0	12.88	0.73
Slovak Republic	-0.2	0	N/A	2.53
Slovenia	-0.1	0	N/A	2.26
South Africa	0.1	0	34.45	2.64

South Korea	-0.5	0	13.94	2.44
Spain	-0.5	0	12.93	2.58
Sweden	-1.3	0	8.97	1.24
Switzerland	-0.6	1	12.75	0.55
Taiwan	-0.6	0	21.95	1.96
Thailand	1.6	1	35.50	3.33
Turkey	1.4	1	28.91	3.25
United Arab Emirates	0.6	1	31.78	1.65
United Kingdom	-1.5	0	7.78	0.94
Vietnam	1.7	1	36.19	3.47

Market Access

The Market Access indicator includes three measures, as shown in table 7: countries' scores on the Organization for Economic Cooperation and Development's Services Trade Restrictiveness Index (STRI), regional trade agreements notified to WTO, and OECD's FDI Regulatory Restrictiveness Index. Saudi Arabia receives the weakest overall Market Access score, with the worst Foreign Equity Restriction score and only three regional trade agreements, followed closely by Nigeria and the UAE. The best Market Access scores go to Latvia (which received the best STRI rating), the Netherlands, and the Czech Republic.

Services Trade Restrictiveness Index

One important group of market access barriers pertains to trade in services, where many barriers persist, particularly in the financial, engineering, legal, medical, ICT services, transportation, and tourism sectors. Many governments jealously guard many of their incumbent firms in non-traded sectors, such as European restrictions on cross-border licensing of legal or medical professionals and Europe's constrained competition in financial services because of regulatory restrictions.³⁹ Given these myriad restrictions, services trade liberalization represents the next frontier in global trade integration and liberalization. The Services Trade Restrictiveness Index from the OECD replaces the General Agreement on Trade in Services (GATS) Commitments Restrictiveness Index, which has been discontinued, in this edition of the report. The STRI measures the extent of trade restrictions across 21 service-based sectors. Countries are scored on the average of their scores across each sector, which range from 0 (i.e., completely liberalized) to 1 (i.e., completely closed).⁴⁰ Several countries have no score on this indicator because they are neither OECD countries (e.g., Thailand) nor large enough to be included.

Participation in Regional Free Trade Agreements

The extent to which countries participate in regional trade agreements is another indicator of market access. This indicator measures the number of regional free trade agreements notified to WTO in which each country participates.⁴¹ This is then transformed into an ordinal scale wherein if a country has less than 4 regional free trade agreements it receives a 5; less than 7, a 4; less than 10, a 3; less than 13, a 2; and a 13 or more, a 1.

Foreign Equity Restrictions

A key component of market access is countries' openness to both inward and outward market-driven FDI.⁴² Competitive domestic markets both allow foreign firms to compete in their markets and encourage FDI. The most direct form of FDI control is restrictions on foreign equity, a measure provided by OECD.⁴³ Countries are scored from 0 (no restrictions) upward, with higher scores being worse. Several countries have no score because they are neither OECD countries (e.g., Thailand) nor are large enough to be included.

Table 7: Market access scores⁴⁴

Country	Market Access Overall Score	Services Trade Restrictiveness Index (High = Worse)	Regional Trade Agreements to WTO (High = Worse)	Foreign Equity Restrictions
Argentina	-0.3	N/A	2	0.031
Australia	-0.2	0.18	1	0.149
Austria	-0.1	0.25	1	0.106
Belgium	-0.3	0.26	1	0.04
Brazil	0.3	0.32	2	0.087
Bulgaria	-0.5	N/A	1	N/A
Canada	0.0	0.22	1	0.161
Chile	-0.5	0.21	1	0.057
China	1.5	0.45	1	0.251
Colombia	-0.4	0.26	1	0.026
Costa Rica	-0.3	0.25	1	0.048
Cyprus	-0.5	N/A	1	N/A
Czech Republic	-0.9	0.17	1	0.01
Denmark	-0.6	0.20	1	0.033
Estonia	-0.6	0.23	1	0.018
Finland	-0.6	0.22	1	0.019
France	-0.4	0.23	1	0.045
Germany	-0.8	0.17	1	0.023
Greece	-0.4	0.26	1	0.032
Hong Kong	2.0	N/A	4	N/A
Hungary	-0.4	0.26	1	0.029
Iceland	0.8	0.38	1	0.167
India	1.9	0.49	1	0.313
Indonesia	1.8	0.46	3	0.243
Ireland	-0.7	0.17	1	0.043
Israel	0.6	0.32	3	0.118
Italy	-0.2	0.28	1	0.052

Japan	-0.6	0.20	1	0.052
Kenya	0.6	N/A	5	N/A
Latvia	-1.0	0.14	1	0.021
Lithuania	-0.8	0.18	1	0.019
Luxembourg	-0.6	0.23	1	0.004
Malaysia	0.1	0.32	1	0.072
Malta	-0.5	N/A	1	N/A
Mexico	0.7	0.35	1	0.188
Netherlands	-0.9	0.16	1	0.015
New Zealand	0.5	0.21	2	0.235
Nigeria	2.9	N/A	5	N/A
Norway	-0.1	0.26	1	0.085
Peru	-0.3	N/A	1	0.077
Philippines	2.2	N/A	2	0.374
Poland	-0.1	0.27	1	0.072
Portugal	-0.7	0.20	1	0.007
Romania	-0.8	N/A	1	0.008
Russia	1.7	0.45	2	0.257
Saudi Arabia	2.9	N/A	5	0.372
Singapore	-0.5	N/A	1	N/A
Slovak Republic	-0.5	0.22	1	0.049
Slovenia	-0.5	0.25	1	0.007
South Africa	0.3	N/A	4	0.055
South Korea	0.2	0.29	1	0.135
Spain	-0.6	0.21	1	0.021
Sweden	-0.5	0.22	1	0.059
Switzerland	0.0	0.29	1	0.083
Taiwan	2.0	N/A	4	N/A
Thailand	-0.5	N/A	1	N/A
Turkey	0.1	0.33	1	0.059
United Arab Emirates	2.9	N/A	5	N/A
United Kingdom	-0.7	0.18	1	0.04
Vietnam	0.4	N/A	2	0.13

Benefits for Domestically Owned Enterprises

The Benefits for Domestically Owned Enterprises indicator includes two measures—countries' scores on their participation in the WTO Government Procurement Agreement (GPA) and the Fraser Institute's Government Enterprise and Investment rating—as shown in table 8. In an ideal report, we would also be able to measure a real number and the extent of distorting subsidies for each nation, based on actual subsidies and not any and all government investments (e.g., most R&D would not be included). Though the WTO does maintain a list of subsidies, several nations, including China, have refused to provide full information (and often do so on only an extremely belated basis if at all). A true list of subsidies could include, for example, the types of subsidies detailed by Usha and George Haley in their book, *Subsidies to Chinese Industry: State Capitalism, Business Strategy, and Trade Policy*.⁴⁵ Nigeria and the UAE are tied for this category's highest score, as neither participate in the GPA and both receive scores of 8 for Government Enterprise and Investment from Fraser. Fourteen nations (Australia, Austria, Belgium, Cyprus, Czech Republic, Germany, Ireland, Israel, Italy, Lithuania, Portugal, South Korea, Spain, and Switzerland) are tied for the lowest score, all of which are participants in the GPA and receive a score of 0 from Fraser.

Participation in WTO Government Procurement Agreement

The WTO's Government Procurement Agreement prohibits restrictions on government purchases between member countries, stating that companies in other signatory countries are to be treated no less favorably than domestic companies, in accordance with the principles of national treatment and nondiscrimination. Some countries are observers of the GPA, meaning they participate in discussions at meetings and follow the proceedings of the WTO Committee on Government Procurement, but are not obliged to fulfill commitments related to the agreement. Countries received either a 2 (non-participant), 1.5 (observer), or 0 (participant).⁴⁶

Government Enterprise and Investment Ranking

An important component of procurement policy is the extent to which countries use private rather than government enterprises to produce goods and services. As the Fraser Institute noted, "Government firms play by rules that are different from those to which private enterprises are subject. They are not dependent on consumers for their revenue or on investors for capital. They often operate in protected markets. Thus, economic freedom is reduced as government enterprises produce a larger share of total output."⁴⁷ State-owned enterprises often enjoy other advantages, including monopoly access to markets through sharply constrained (foreign and domestic) competition; public subsidies, including preferential access to free or discounted land, capital, and even labor; and exemptions from certain laws and regulations. In other words, for countries in which state-owned enterprises account for a disproportionate share of economic activity, private market-based economic activity is substantially distorted. To measure this, the Fraser Institute uses an index that is based on the number, composition, and share of output supplied by state-operated enterprises and government investment as a share of total investment. Countries are ranked from 0 to 10, with those wherein there are few SOEs and government investment is generally less than 15 percent of total investment receiving a 0, and those where the economy is dominated by SOEs and government investment exceeds 50 percent of total investment receiving a 10.⁴⁸

Table 8: Benefits for domestically owned enterprises scores⁴⁹

Country	Benefits for Domestic Enterprises Overall Score	Participation in WTO GPA (High = Worse)	Government Enterprise and Investment Rating (High = Worse)
Argentina	0.9	1.5	4
Australia	-0.9	0.0	0
Austria	-0.9	0.0	0
Belgium	-0.9	0.0	0
Brazil	1.5	1.5	6
Bulgaria	-0.4	0.0	2
Canada	-0.4	0.0	2
Chile	-0.2	1.5	0
China	2.0	1.5	8
Colombia	-0.2	1.5	0
Costa Rica	-0.2	1.5	0
Cyprus	-0.9	0.0	0
Czech Republic	-0.9	0.0	0
Denmark	-0.4	0.0	2
Estonia	-0.1	0.0	3
Finland	-0.4	0.0	2
France	-0.4	0.0	2
Germany	-0.9	0.0	0
Greece	0.2	0.0	4
Hong Kong	-0.1	0.0	3
Hungary	0.7	0.0	6
Iceland	-0.4	0.0	2
India	0.7	1.5	3
Indonesia	0.7	1.5	3
Ireland	-0.9	0.0	0
Israel	-0.9	0.0	0
Italy	-0.9	0.0	0
Japan	-0.1	0.0	3
Kenya	1.2	2.0	4
Latvia	-0.4	0.0	2
Lithuania	-0.9	0.0	0
Luxembourg	-0.1	0.0	3
Malaysia	1.5	1.5	6
Malta	0.2	0.0	4
Mexico	0.1	2.0	0

Netherlands	-0.4	0.0	2
New Zealand	-0.4	0.0	2
Nigeria	2.3	2.0	8
Norway	-0.1	0.0	3
Peru	1.2	2.0	4
Philippines	0.1	2.0	0
Poland	-0.4	0.0	2
Portugal	-0.9	0.0	0
Romania	-0.1	0.0	3
Russia	1.1	1.5	0
Saudi Arabia	1.1	1.5	N/A
Singapore	-0.4	0.0	2
Slovak Republic	-0.4	0.0	2
Slovenia	-0.4	0.0	2
South Africa	1.7	2.0	6
South Korea	-0.9	0.0	0
Spain	-0.9	0.0	0
Sweden	-0.4	0.0	2
Switzerland	-0.9	0.0	0
Taiwan	-0.4	0.0	2
Thailand	0.9	1.5	4
Turkey	0.7	1.5	3
United Arab Emirates	2.3	2.0	8
United Kingdom	-0.4	0.0	2
Vietnam	1.1	1.5	N/A

Currency Manipulation

Countries manipulate their currencies in order to lower the prices of their exports and raise the prices of imports. The International Monetary Fund (IMF) commits member countries to “avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members.”⁵⁰ The IMF bylaws call for “discussion” with any countries that engage in “protracted large-scale intervention in one direction in exchange markets.” Yet, in reality, the IMF does virtually nothing to enforce this.

Additionally, the General Agreement on Tariffs and Trade, which is now an integral part of the WTO, indicates that “contracting parties shall not, by exchange action, frustrate the intent of the provisions of this Agreement” relating to currency manipulation.⁵¹ But, like the IMF, the WTO turns a blind eye to this, thereby essentially creating a trading system wherein nations can be called to task for subsidizing exports or erecting tariffs—but when they manipulate their currency to make exports cheaper or imports more expensive, the global trading system looks the other way.

By disabling the principal adjustment mechanisms of international commerce, countries that manipulate their currencies accrue considerable trade surpluses while undermining confidence in trade's ability to bring globally shared prosperity through innovation. If global growth is to be maximized, the flow of goods, services, and capital should be determined on the basis of actual costs and prices, not subsidies. Moreover, currency manipulation can hurt the manipulating nations themselves, especially because it raises the costs of key capital goods imports that can power productivity growth. Table 9 shows the nations trade analysts at the Peterson Institute for International Economics determined to have intervened in currency markets between 2016 and 2018 in order to prevent their currencies from appreciating. (Per the Peterson Institute, "Currency manipulation occurs when a government buys or sells foreign currency to push the exchange rate of its currency away from its equilibrium value or to prevent the exchange rate from moving toward its equilibrium value."⁵²) Currency manipulation represents an area of significant progress in recent years, as only 7 countries (Hong Kong, Israel, Norway, Singapore, Switzerland, Taiwan, and Thailand) have been found to be manipulators, down from 12 in the Peterson Institute's prior report.⁵³ Peterson's report notably excludes China, although it does flatly state, "China was by far the largest currency manipulator in 2003–13."⁵⁴ Further, while it should be noted that China's recent actions may not meet the Peterson Institute's test for currency manipulation, since June 2018, China has allowed its currency to slide lower—the renminbi has depreciated 5 percent in trade-weighted terms since then—in part to blunt the effects of the Trump administration's tariffs placed on Chinese exports.⁵⁵ Indeed, China has consistently "demonstrated a willingness to strategically hold the value of its currency below what it would otherwise be relative to the U.S. dollar."⁵⁶

Table 9: Currency manipulation scores⁵⁷

Country	Currency Manipulation Overall Score	Currency Manipulation (Yes = 1/No = 0)
Argentina	-0.3	0
Australia	-0.3	0
Austria	-0.3	0
Belgium	-0.3	0
Brazil	-0.3	0
Bulgaria	-0.3	0
Canada	-0.3	0
Chile	-0.3	0
China	-0.3	0
Colombia	-0.3	0
Costa Rica	-0.3	0
Cyprus	-0.3	0
Czech Republic	-0.3	0
Denmark	-0.3	0
Estonia	-0.3	0
Finland	-0.3	0

France	-0.3	0
Germany	-0.3	0
Greece	-0.3	0
Hong Kong	2.0	1
Hungary	-0.3	0
Iceland	-0.3	0
India	-0.3	0
Indonesia	-0.3	0
Ireland	-0.3	0
Israel	2.0	1
Italy	-0.3	0
Japan	-0.3	0
Kenya	-0.3	0
Latvia	-0.3	0
Lithuania	-0.3	0
Luxembourg	-0.3	0
Malaysia	-0.3	0
Malta	-0.3	0
Mexico	-0.3	0
Netherlands	-0.3	0
New Zealand	-0.3	0
Nigeria	-0.3	0
Norway	2.0	1
Peru	-0.3	0
Philippines	-0.3	0
Poland	-0.3	0
Portugal	-0.3	0
Romania	-0.3	0
Russia	-0.3	0
Saudi Arabia	-0.3	0
Singapore	2.0	1
Slovak Republic	-0.3	0
Slovenia	-0.3	0
South Africa	-0.3	0
South Korea	-0.3	0
Spain	-0.3	0
Sweden	-0.3	0
Switzerland	2.0	1
Taiwan	2.0	1
Thailand	2.0	1

Turkey	-0.3	0
United Arab Emirates	-0.3	0
United Kingdom	-0.3	0
Vietnam	-0.3	0

Preferences for Domestic Production

In order to determine which countries engage in preferential treatment for domestic production, such as subsidies and tax breaks for local production, we conducted a qualitative analysis of the NTE Report, a yearly review of restrictive trade policies countries have implemented published by USTR. Countries were ranked on a scale from 0 to 5, with a 5 indicating many of these types of policies were in place, and a 0 indicating none of them were. Table 10 shows countries' scores on the Preferences for Domestic Production indicator, which includes a qualitative ranking from USTR's NTE Report. Brazil, China, India, and Russia receive the highest NTE Domestic Preference rank of 5, while 33 countries receive ranks of 1.

Table 10: Domestic preference scores⁵⁸

Country	Preferences for Domestic Production Overall Scores	NTE Ranking, With Respect to Domestic Production (High = Worse)
Argentina	1.5	4
Australia	0.7	3
Austria	-0.8	1
Belgium	-0.8	1
Brazil	2.2	5
Bulgaria	-0.1	2
Canada	0.7	3
Chile	-0.1	2
China	2.2	5
Colombia	0.7	3
Costa Rica	0.7	3
Cyprus	-0.8	1
Czech Republic	-0.8	1
Denmark	-0.8	1
Estonia	-0.8	1
Finland	-0.8	1
France	-0.1	2
Germany	-0.8	1
Greece	-0.8	1
Hong Kong	-0.8	1
Hungary	-0.8	1
Iceland	-0.8	1
India	2.2	5

Indonesia	1.5	4
Ireland	-0.8	1
Israel	-0.8	1
Italy	-0.8	1
Japan	0.7	3
Kenya	0.7	3
Latvia	-0.8	1
Lithuania	-0.8	1
Luxembourg	-0.8	1
Malaysia	0.7	3
Malta	-0.8	1
Mexico	0.7	3
Netherlands	-0.8	1
New Zealand	-0.8	1
Nigeria	1.5	4
Norway	-0.8	1
Peru	0.7	3
Philippines	1.5	4
Poland	-0.8	1
Portugal	-0.8	1
Romania	-0.8	1
Russia	2.2	5
Saudi Arabia	0.7	3
Singapore	-0.8	1
Slovak Republic	-0.8	1
Slovenia	-0.8	1
South Africa	0.7	3
South Korea	0.7	3
Spain	-0.8	1
Sweden	-0.8	1
Switzerland	-0.8	1
Taiwan	-0.8	1
Thailand	0.7	3
Turkey	1.5	4
United Arab Emirates	0.7	3
United Kingdom	-0.8	1
Vietnam	0.7	3

Tariffs and Import Discrimination

As shown in table 11, the Tariffs and Import Discrimination indicator includes three measures: countries' scores on the World Bank's Time to Import Goods, the World Bank's Simple Mean Tariff Rate, and WEF's Complexity of Tariffs indicators. Argentina receives the worst score for Tariffs and Import Discrimination because, although it has relatively simple tariffs, its tariffs are three-times higher than the average, and documentary compliance takes nine-times longer than average, followed by Nigeria and Kenya, which have the two-highest mean tariff rates. Hong Kong receives the best score, as it applies no tariffs (and thus also has the least-complex tariffs possible).

Time to Import Goods

Beyond implementing trade policies that ensure domestic markets are open to foreign products and services, it's also important that countries continue to take measures to reduce transaction costs related to customs procedures and administration. In fact, the losses businesses incur through delays at borders, lack of transparency and predictability, complicated documentation requirements, and similarly outdated customs procedures can exceed the cost of tariffs. One way to evaluate the efficiency of countries' import-export procedures is to consider the amount of time and number of documents required to import goods. Such delays unnecessarily inhibit and distort global trade yet often are intentionally put in place to discourage imports of foreign goods. The time necessary to complete documentary compliance in order to import, as measured by the World Bank, replaces the number of documents needed in this edition of the report.⁵⁹

Tariffs

High tariffs are mercantilist in several ways. First, they often disadvantage more innovative, productive, and efficient foreign competitors while protecting domestic enterprises that are often less so. Further, in the interest of trying to favor domestic sectors to which the tariffs are applied, high tariffs damage other industries in the economy that are consumers of those goods. For example, high tariffs applied to foreign ICT products in the interest of supporting domestic ICT producers have the effect of both raising the cost of ICT goods for other industries in an economy and inhibiting the ability of those sectors to procure best-of-breed ICTs. Hence, placing high tariffs on one sector of an economy often damages all the other sectors. Ultimately, then, high tariffs distort global markets for innovative products and services, and, by disadvantaging the economic interests of the most efficient and innovative enterprises, leave the world with less innovation. This indicator measures the simple mean tariff rate on all products applied by the countries in our study.⁶⁰

Complexity of Tariffs

Beyond countries' tariff levels, another component of open market access is the complexity of those tariff levels.⁶¹ WEF's "*Global Competitiveness Report 2018*" creates a composite index of the nature of countries' tariffs based on four hard-data measures, scoring countries from 1 (worst) to 7 (best), which is inverted for this report.⁶²

Table 11: Tariffs and imports scores⁶³

Country	Tariffs and Imports Overall Score	Time to Import Goods (Hours)	Simple Mean Tariff Rate, All Products	Complexity of Tariffs (High = Worse)
Argentina	1.5	192	12.73	0.4
Australia	-0.9	4	2.23	0.2
Austria	0.0	1	2.35	4.0
Belgium	0.0	1	2.35	4.0
Brazil	0.7	24	13.41	0.4
Bulgaria	0.0	1	2.35	4.0
Canada	-0.4	1	1.99	2.2
Chile	-1.0	36	1.04	0.0
China	0.1	24	8.46	0.6
Colombia	-0.3	64	4.39	0.4
Costa Rica	-0.5	26	3.81	0.5
Cyprus	0.1	2	2.35	4.0
Czech Republic	0.0	1	2.35	4.0
Denmark	0.0	1	2.35	4.0
Estonia	0.0	1	2.35	4.0
Finland	0.0	1	2.35	4.0
France	0.0	1	2.35	4.0
Germany	0.0	1	2.35	4.0
Greece	0.0	1	2.35	4.0
Hong Kong	-1.3	1	0.00	0.0
Hungary	0.0	1	2.35	4.0
Iceland	-0.4	3	1.29	2.6
India	0.6	30	8.88	2.1
Indonesia	0.4	106	5.86	1.3
Ireland	0.0	1	2.35	4.0
Israel	-0.4	44	1.89	1.8
Italy	0.0	1	2.35	4.0
Japan	-0.1	3	3.69	2.8
Kenya	0.8	60	12.11	0.8
Latvia	0.0	1	2.35	4.0
Lithuania	0.0	1	2.35	4.0
Luxembourg	0.0	1	2.35	4.0
Malaysia	0.2	7	6.22	2.6
Malta	0.0	1	2.35	4.0
Mexico	-0.6	18	2.97	0.7
Netherlands	0.0	1	2.35	4.0

New Zealand	-0.8	1	2.13	0.7
Nigeria	1.2	144	12.44	0.3
Norway	0.2	2	3.62	3.8
Peru	-0.5	72	1.38	1.0
Philippines	-0.1	96	3.70	0.8
Poland	0.0	1	2.35	4.0
Portugal	0.0	1	2.35	4.0
Romania	0.0	1	2.35	4.0
Russia	0.5	43	5.06	3.6
Saudi Arabia	0.0	90	4.54	0.9
Singapore	-1.2	3	0.19	0.1
Slovak Republic	0.0	1	2.35	4.0
Slovenia	0.0	1	2.35	4.0
South Africa	0.3	36	6.67	2.1
South Korea	0.0	1	5.36	2.1
Spain	0.0	1	2.35	4.0
Sweden	0.0	1	2.35	4.0
Switzerland	0.7	2	4.80	5.3
Taiwan	-0.4	N/A	N/A	2.1
Thailand	0.5	4	7.96	2.8
Turkey	-0.3	3	2.74	2.6
United Arab Emirates	-0.5	12	4.56	0.6
United Kingdom	0.1	2	2.35	4.0
Vietnam	0.3	76	6.51	1.4

Digital Trade Barriers

New to this edition of the report is a measurement of countries' level of restrictions to digital trade, which has seen a significant uptick in recent years through policies such as data localization requirements. Advocates for such policies are given unwarranted succor by misguided policy advice from international organizations such as the United Nations Conference for Trade and Development (UNCTAD), which in its "2019 Digital Economy" report asserted that, "The only way for developing countries to exercise effective economic 'ownership' of and control over the data generated in their territories may be to restrict cross-border flows of important personal and community data."⁶⁴ This advice misses the point that there are effective mechanisms for nations to protect privacy rights and ensure data security without having to resort to restrictions on cross-border data flows.⁶⁵

Table 12 presents the scores given by OECD's new Digital Services Trade Restrictiveness Index (DSTRI) and countries' inclusion in USTR's "Key Barriers to Digital Trade" fact sheet. China's Digital Trade Barriers score of 3.1 is the highest for any country across all categories, with both the worst DSTRI score and the most mentions in the "NTE Digital Trade" fact sheet, followed by

Indonesia at 2.7 and Vietnam at 2.0. Costa Rica, Hong Kong, Malaysia, Peru, the Philippines, Singapore, Taiwan, and Thailand have the least-restrictive digital trade policies.

Digital Services Trade Restrictiveness Index

The OECD released the Digital Services Trade Restrictiveness Index (DSTRI) in 2019 as a complement to its longer-running STRI. The DSTRI scores 44 countries across their infrastructure and connectivity, electronic transactions, payment systems, IP rights, and other barriers affecting trade in digitally enabled services from 0 (complete openness) to 1 (no openness).⁶⁶

National Trade Estimate Key Barriers to Digital Trade Fact Sheet

In addition to the full “*National Trade Estimate Report*,” USTR now releases a “Key Barriers to Digital Trade” fact sheet, highlighting the most-restrictive practices impacting U.S. exporters. Nations are scored by the number of their policies identified in the document’s 2019 edition.⁶⁷

Table 12: Digital trade barriers scores⁶⁸

Country	Digital Trade Barriers Overall Score	Digital Services Trade Restrictiveness Index (1 = Worst, 0 = Best)	Digital Barriers in NTE (3 = Worst, 0 = Best)
Argentina	0.3	0.30	0
Australia	-1.0	0.08	0
Austria	0.3	0.20	1
Belgium	0.0	0.16	1
Brazil	0.7	0.39	0
Bulgaria	0.5	N/A	1
Canada	-0.8	0.12	0
Chile	0.0	0.26	0
China	3.1	0.49	3
Colombia	0.2	0.30	0
Costa Rica	-1.2	0.04	0
Cyprus	0.5	N/A	1
Czech Republic	-0.1	0.14	1
Denmark	-0.1	0.14	1
Estonia	-0.4	0.08	1
Finland	-0.1	0.14	1
France	-0.2	0.12	1
Germany	-0.1	0.14	1
Greece	-0.1	0.14	1
Hong Kong	-1.1	N/A	0
Hungary	0.1	0.17	1
Iceland	0.1	0.27	0
India	0.9	0.30	1
Indonesia	2.7	0.41	3

Ireland	-0.1	0.14	1
Israel	-0.5	0.18	0
Italy	-0.2	0.13	1
Japan	-0.9	0.10	0
Kenya	0.2	N/A	1
Latvia	0.4	0.22	1
Lithuania	-0.3	0.10	1
Luxembourg	-0.4	0.08	1
Malaysia	-1.1	N/A	0
Malta	0.5	N/A	1
Mexico	-0.7	0.14	0
Netherlands	-0.3	0.10	1
New Zealand	-0.5	0.18	0
Nigeria	0.5	N/A	1
Norway	-1.0	0.08	0
Peru	-1.1	N/A	0
Philippines	-1.1	N/A	0
Poland	0.6	0.26	1
Portugal	-0.1	0.14	1
Romania	0.5	N/A	1
Russia	1.1	0.34	1
Saudi Arabia	1.9	0.39	1
Singapore	-1.1	N/A	0
Slovak Republic	-0.3	0.10	1
Slovenia	-0.2	0.12	1
South Africa	0.5	0.34	0
South Korea	-0.4	0.08	1
Spain	-0.2	0.12	1
Sweden	-0.1	0.14	1
Switzerland	-1.0	0.08	0
Taiwan	-1.1	N/A	0
Thailand	-1.1	N/A	0
Turkey	0.3	0.20	1
United Arab Emirates	-0.4	N/A	0
United Kingdom	-0.2	0.12	1
Vietnam	2.0	N/A	2

NTE Report Ranking

Table 13 shows countries' scores on an overall ranking of the NTE Report. This was undertaken in order to get a glimpse of the full picture of nations' trade policies. Countries were qualitatively ranked on their mercantilist practices, receiving a score of between 0 (indicating no mercantilism) and 5 (indicating a significant extent of mercantilism). This measure provides an overall look at the extent of mercantilism in a particular country, regardless of the sector or industry it affects. Brazil, China, and Russia receive scores of 5, while 31 countries receive scores of 1.

Table 13: NTE report overall score⁶⁹

Country	NTE Report Overall Score	Score (High = Worse)
Argentina	1.5	4
Australia	0.0	2
Austria	-0.8	1
Belgium	-0.8	1
Brazil	2.3	5
Bulgaria	-0.8	1
Canada	0.0	2
Chile	0.0	2
China	2.3	5
Colombia	0.7	3
Costa Rica	0.0	2
Cyprus	-0.8	1
Czech Republic	-0.8	1
Denmark	-0.8	1
Estonia	-0.8	1
Finland	-0.8	1
France	0.0	2
Germany	-0.8	1
Greece	0.0	2
Hong Kong	-0.8	1
Hungary	-0.8	1
Iceland	-0.8	1
India	1.5	4
Indonesia	1.5	4
Ireland	-0.8	1
Israel	-0.8	1
Italy	0.0	2
Japan	0.7	3

Kenya	0.0	2
Latvia	-0.8	1
Lithuania	-0.8	1
Luxembourg	-0.8	1
Malaysia	0.7	3
Malta	-0.8	1
Mexico	0.7	3
Netherlands	-0.8	1
New Zealand	-0.8	1
Nigeria	1.5	4
Norway	-0.8	1
Peru	0.7	3
Philippines	1.5	4
Poland	-0.8	1
Portugal	-0.8	1
Romania	-0.8	1
Russia	2.3	5
Saudi Arabia	1.5	4
Singapore	0.0	2
Slovak Republic	-0.8	1
Slovenia	-0.8	1
South Africa	0.0	2
South Korea	0.0	2
Spain	-0.8	1
Sweden	-0.8	1
Switzerland	-0.8	1
Taiwan	-0.8	1
Thailand	1.5	4
Turkey	1.5	4
United Arab Emirates	1.5	4
United Kingdom	-0.8	1
Vietnam	0.7	3

ENFORCING THE GLOBAL MERCANTILIST INDEX

While the first step in working to roll back innovation mercantilism is to accurately rank nations on their policies, the second step should be to use the report to guide action. The “*Special 301 Report*” has enjoyed some success in creating negotiating leverage for the United States with foreign countries, but much of the leverage is hortatory and based on “name and shame.” A GMI can be used the same way, but in a world of rampant and fast-growing innovation mercantilism, the United States can’t rely on name and shame alone. There needs to be real consequences for nations, especially those ranked with weighted scores of “Moderate-High” or “High.”

Cases brought through bodies such as the WTO are often limited in their effectiveness, especially when dealing with nations whose mercantilist policies and actions are more informal and disguised than typical WTO-actionable violations (e.g., a blatant export subsidy or clearly stated legal provision). For example, Chinese requirements for tech transfer as a condition of market access are very difficult to prosecute because they are not “on the books,” but instead occur by informal “administrative guidance.” The same appears to apply to China’s discriminatory anti-monopoly laws and pressures on SOEs to buy domestically. In the life-sciences sector, for instance, China has deployed a range of mercantilist strategies such as favoring Chinese firms in national drug selection and imposing strict price controls that don’t allow for adequate remuneration for innovative drugs.⁷⁰ It’s not clear whether any of these policies are actionable in the WTO.

While the first step in working to roll back innovation mercantilism is to accurately rank nations on their policies, the second step should be to use the report to guide action.

Indeed, today, China uses the WTO to obtain immunity from prosecution of its most egregious mercantilist practices. As the Trump administration’s 2019 Trade Policy Agenda observes, “[M]any of China’s unfair practices—including most of the practices described in USTR’s Section 301 report—are not covered by WTO rules,” meaning “the WTO dispute settlement process is of only limited value in dealing with China’s non-market practices.”⁷¹ As the report continues, China “plainly seeks to exploit the WTO dispute settlement process to discourage U.S. policymakers from using their leverage to push for market-opening changes,” and “seeks to use the WTO dispute settlement system to shield a broad range of trade-distorting policies and practices not covered by WTO rules.”⁷²

It is this limitation that has led the Trump administration to contest Chinese innovation mercantilist practices through unilateral actions—principally tariffs. Hopefully these actions conclude with a high-standard, enforceable agreement whereby China commits to a significant rollback of its innovation mercantilist practices, but it is not clear whether such a unilateral approach will succeed. Thus, over the longer term, a restructuring of the WTO needs to take place. The WTO’s key success has been as a market-opening organization, but its dispute-settlement mechanism has not been effective in helping its members enforce rules across all relevant areas (e.g., IP, subsidies, technical barriers to trade, and transparency and notification requirements). All of this has been compounded by the WTO’s trade negotiation function essentially having stopped functioning for 20-some years (starting with the death of the Doha Development Round), as members have been unable to agree on how to update market access

rules to account for modern barriers to trade (as China and other mercantilists are part of these discussions).

Furthermore, even when the WTO's dispute-settlement mechanism has been successfully used as a trade enforcement tool it is often labeled as protectionism. Indeed, the former head of the WTO, Pascal Lamy, would rather blame enforcement than the mercantilist policies that require the enforcement, and has denied that trade policies play any role in national trade balances. As Lamy once stated, "Given that current account deficits and surpluses originate in differences in savings propensities and investment opportunities across countries, trade restrictions will not permanently reduce deficits since they do not alter the underlying conditions driving the imbalances."⁷³ In addition, the WTO is an agency created largely by countries from the Western world, and as such, these are the principal countries that mostly follow those rules. Now, with the addition of new, important players such as the BRICS (Brazil, Russia, India, China, and South Africa), the WTO is less capable of fighting illegality: Its rules cannot govern new forms of illegality that did not exist decades ago. Newer countries drag their feet on implementation after dispute settlements or choose to retaliate with more cases. The result is often a tangled mess of antidumping and countervailing duties, implementation and court dates, and limited capacity to even get to all the complaints. And the regional trade agreements (bilateral and multilateral free trade agreements between members) that many propose will solve the problem do not typically cover the countries creating the most problems (e.g., China).

As such, U.S. trade policy needs to move beyond a tactical response to trade enforcement to a strategic one, whereby countries that behave the worst are the most penalized. As the GMI shows, these countries are China first and foremost, and to a lesser extent Argentina, Brazil, India, Indonesia, Nigeria, Russia, Saudi Arabia, Thailand, Turkey, and Vietnam. This calls for the United States to conduct a major review of the trade policy tools available, and to formulate an understanding of the new tools needed going forward. This could include building alliances with like-minded partners, such as the European Union, Japan, and the United Kingdom (opportunities that have been explored but not pursued by the United States in the form of the Transatlantic Trade and Investment Partnership and Trans-Pacific Partnership agreements, respectively), as well as realizing that sitting back and waiting for countries to behave is no longer a viable option. ITIF proposes that the U.S. government fundamentally ramp up its enforcement toolbox. This can be accomplished through three types of reforms: government restructuring, diplomatic pressure, and systemic funding.

Government Restructuring

The first key step should be for the United States to think more strategically about the role of trade in global economic competition. To facilitate this, Congress should create an Office of Competitiveness within USTR to identify foreign-government policies and practices that do not necessarily violate WTO rules but clearly harm U.S. commerce. Similar to the State Department's Office of Policy Planning, it should be charged with focusing on U.S. trade policy in the context of globalization and competitiveness.⁷⁴

The second key step will be ensuring the United States is positioned to expand its trade enforcement strategy. Chapter 3 of USTR's "2019 Trade Policy Agenda and 2018 Annual Report of the President of the United States on the Trade Agreements Program" includes a comprehensive strategy and agenda for the Trump administration's trade enforcement

approach.⁷⁵ Future presidential administrations must continue this practice—in other words, the practice of administrations releasing national trade enforcement strategies should be institutionalized—with a particular focus on nations engaging in innovation mercantilist practices. But while the Trump administration has increased focus on trade-enforcement activities, additional resources are needed to support more-effective trade policymaking and trade-enforcement activities on the part of the federal government. For the fiscal year 2019, the Trump administration requested \$63 million for USTR, a 13-percent reduction from 2018, with the House and Senate increasing that funding to \$68 million—still nearly \$5 million below FY 2018 funding.⁷⁶ Not only was that far below what was needed for trade enforcement, but it reflects the mistaken belief that U.S. economic competitiveness does not need to be protected. Thus, ITIF recommends that the administration not only reverse its trend of requesting cuts for USTR, but that it request an increase of the USTR budget by about \$30 million.

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Additionally, the Interagency Center on Trade Implementation, Monitoring, and Enforcement (formerly the Interagency Trade Enforcement Center) received only \$12 million in 2017, and no longer receives funding separate from USTR.⁷⁷ Finally, the administration requested \$440 million to fund the International Trade Administration, with an eventual \$484 million enacted.⁷⁸ These agencies also need their full funding plus around \$15 million more in order to significantly increase emphasis on customs enforcement.

However, even if Congress gives these agencies more resources, government alone cannot investigate all potential WTO cases. U.S. companies will have to play a larger role. But there are two reasons U.S. companies don't bring more cases. First, they are expensive and risky. Second, the "free rider" problem means companies benefit if they can convince other firms in their industry to bear the burden of helping USTR bring a trade case. In order to remedy this, ITIF proposes that Congress encourage companies to build WTO cases by allowing them to take a 25-percent tax credit for expenditures related to bringing those cases.⁷⁹

Congress also needs to make sure it's appointing individuals to the International Trade Commission (ITC) who do not place "maximizing consumer utility" above all else. The health of the U.S. innovation economy needs to be a key factor in their decision-making. ITC is an independent, bipartisan, quasi-judicial federal agency of the United States that provides trade expertise to both the legislative and executive branches. Furthermore, the agency determines the impact of imports on U.S. industries and directs actions against unfair trade practices, such as subsidies, dumping, and patent, trademark, or copyright infringement.

Finally, Congress needs to craft an Omnibus Trade and Competitiveness Act, similar to that of 1988, as it's been almost 25 years since the U.S. government has seriously updated its trade laws. A new act should do the same: fully review the new trade environment and the challenges related to enforcement, and institute new proposals. The act should consider new powers and mechanisms to enable trade enforcement activity on the part of U.S. agencies.

For instance, one element of a revised Omnibus Trade and Competitiveness Act could be Congress empowering the U.S. ITC to investigate and issue reports on allegations of trade violations U.S. companies claim are happening with trading partners.⁸⁰ Such ITC reports, in the form of a “Trade Advisory Opinion,” would provide a valuable middle option along the spectrum—with bilateral talks at one end and WTO dispute cases at the other—thus shedding light on whether U.S. trade partners are violating trade rules and, if so, if such a case is credible and worthy of a potential case at WTO or under free trade agreements the United States has signed.

Congress could establish this process by expanding Section 332 of the Tariff Act of 1930, which allows Congress to ask ITC to conduct general fact-finding investigations with respect to U.S. trade and competitiveness issues. ITC has this responsibility, as it is an independent agency with a reputation for authoritative and objective assessments. Through this process, a U.S. company could file a detailed petition with the Senate Finance Committee and the House Ways and Means Committee requesting ITC investigate whether a country is violating trade rules in a specific way, and assess whether such violations generate a material economic effect (in terms of jobs, investment, exports, etc.) on a given company. If the committee leaders agreed, the ITC could review the claim, including by inviting the foreign government and other stakeholders (e.g., other companies in the sector) to comment. ITC would then issue a determination within 120 days. The process would be transparent, and the final report would only be an advisory opinion, and therefore not obligate the administration to initiate a trade-dispute case.

A Trade Advisory Opinion would prove a useful tool for several reasons. First, while USTR has consistently pressed other countries over alleged trade violations, and brought a number of cases before the WTO, the sheer number of trade agreements and alleged trade violations makes it too overwhelming for USTR to respond to each allegation. The ITC has the expertise to manage such investigations, and its reports could help USTR determine which allegations to pursue at the WTO or elsewhere. Second, it would provide U.S. companies with an avenue to obtain a timely and thorough assessment of their claim. This may be particularly valuable when there is internal disagreement within a sector about whether a country is violating trade rules—those in favor would not be held back by others and could see whether they have a credible case. Third, USTR is in the awkward position of being responsible for both deciding whether a company’s claim of a trade violation is credible and then prosecuting the claim. Fourth, it would provide Congress with an enhanced, but appropriately limited, role in trade enforcement. The ITC is an independent agency that would conduct its investigation in a transparent manner, thus testing whether the U.S. company was right in asking for an investigation.

Another approach the United States could consider to tamp down foreign innovation mercantilism involves using Section 301(b) of the Trade Act of 1974 (as amended) as leverage to either negotiate solutions to countries’ unfair practices that don’t violate the WTO or retaliate against countries using unfair trade practices with WTO-consistent remedies. For example, Section 301(b) could be used to prohibit Chinese services investment in the United States not covered by U.S. WTO GATS commitments until China restores balance to the trade relationship. U.S. citizens could petition USTR to initiate an investigation, or USTR can start one itself.⁸¹ If USTR determines “an act, policy, or practice of a foreign country is unreasonable or discriminatory and burdens or restricts United States commerce,” under 301(b), it can respond.⁸² Subject to presidential direction and approval, the act allows USTR to “suspend,

withdraw, or prevent the application of, benefits of trade agreement concessions,” and “impose duties or other import restrictions on the goods of, and, notwithstanding any other provision of law, fees or restrictions on the services of, such foreign country for such time as the Trade Representative determines appropriate.”⁸³

Finally, many nations have developed innovation strategies that highlight industries they wish to champion for national competitiveness. For instance, Sweden’s innovation strategy focuses on key sectors for the country, including the life sciences; mining, materials, and steel; sustainable civil engineering and urban management; and forestry sectors.⁸⁴ So long as countries’ innovation strategies focus on constructive, WTO-consistent (i.e., nondiscriminatory) policies such as supporting R&D funding, supporting public-private partnerships to build industry technology roadmaps or solve technological challenges, and making investments in education or infrastructure, this is fine. But it’s another matter when countries’ development strategies, such as China’s “Made in China 2025” strategy, target industries and then support them with WTO-inconsistent measures such as production or export subsidies. One response the United States could take to such practices would be to task USTR with determining which countries have developed such lists of targeted advanced-technology industries, and for which they are seeking leadership and using unfair economic or trade practices to support. Senators Marco Rubio and Tammy Baldwin have proposed such legislation in the *Fair Trade with China Enforcement Act* (S.2).⁸⁵ The legislation would further require USTR to implement countervailing duties if and when U.S. industry is harmed by finished goods exported by companies in Chinese industries benefiting from unfair trade practices embedded in the “Made in China 2025” strategy.

Diplomatic Pressure

This report proposes that if a country appears as “Moderate-High” or “High” on the GMI, it triggers an automatic interagency review of that country’s policies. As part of this interagency review, countries could be subject to economic sanctions, including possible removal of their GSP benefits.

Generalized System of Preferences Benefits

Instituted in 1976, GSP aims to promote economic growth in the developing world by providing preferential, duty-free treatment for up to 5,000 products when imported from any of 127 countries. Since the 1980s, when the Senate made reforms to the GSP program that specified conditions beneficiary countries must meet in order to gain and maintain their preferential trade status, administrations have had the ability to add or eliminate nations from the list. Divided between “mandatory” and “discretionary” criteria, the president has 15 qualifications to consider before a country can be granted beneficiary status. The criteria related to trade mercantilism are discretionary: “[T]he extent to which such country has assured the United States that it will provide equitable and reasonable access to its markets and basic commodity resources of such country and the extent to which it has assured the United States that it will refrain from engaging in unreasonable export practices,” and “the extent to which such country is providing adequate and effective protection of intellectual property rights.”⁸⁶

When making these reforms, a Senate Finance Committee report explained that, “in delegating this discretionary authority to the President, it is the intent of the Committee that the President will vigorously exercise the authority to withdraw, to suspend, or to limit GSP eligibility for non-complying countries.”⁸⁷

Unfortunately, very few nations have ever been removed for engaging in trade mercantilism. Removal or suspension has been mostly made on the basis of labor-rights violations, graduation (attaining a higher level of economic development), or implementation of a free-trade agreement that supersedes GSP. In a significant departure from past practice, India was terminated from GSP on March 4, 2019, due to “a wide array of trade barriers that create serious negative effects on United States commerce.”⁸⁸ As USTR elaborated, “India’s termination from GSP follows its failure to provide the United States with assurances that it will provide equitable and reasonable access to its markets in numerous sectors.”⁸⁹ United States Trade Representative Robert Lighthizer has indicated that other nations may lose their GSP benefits if they embrace innovation mercantilist policies and fail to ensure reasonable access to their markets for U.S. enterprises. As he noted in 2017, “[GSP] [b]eneficiary countries choose to either work with USTR to meet trade preference eligibility criteria or face enforcement actions. The Administration is committed to ensuring that other countries keep their end of the bargain in our trade relationships.”⁹⁰

The message to mercantilist countries should be that if they want to engage the global community for development assistance, mercantilist policies cannot constitute the “dominant logic” of their innovation and economic growth strategies.

As a result, the interagency review should recommend the president withdraw GSP preferences if a nation is “Moderate-High” or “High” on the GMI (or a PWL or PFC on 301) for three years or more, unless the nation is a least-developed country. Second, rather than make GSP preference more or less automatic, USTR should be required to report to Congress annually why nations with problematic mercantilist practices have not been cut off.

Embassy Action Plans

If a country is perpetually appearing on either the 301 or GMI, then the development of an annual action plan to get itself off should be mandatory every year. For those countries listed as “Moderate-High” or “High” (or a PWL or PFC), in order to have their status upgraded, they must coordinate with their U.S. embassy trade personnel to develop an action plan for submission to USTR—and effectively implement it. Each action plan would theoretically include proposed ideas and policies that indicate a commitment to a non-mercantilist strategy.

Systemic Funding

One reason mercantilism continues to proliferate is the nations using mercantilist policies know that even if they are called out on the practice, there will normally be little pushback from other nations or international organizations. To remedy this, developed countries need to work alongside international development organizations and other global institutions to reformulate foreign aid policies to use as a “carrot and stick” to push countries to eschew mercantilism and instead implement the right kinds of development policies. Two principles need to guide developed countries’ foreign aid policies. First, foreign economic development assistance should focus more on enhancing the productivity of developing countries’ domestic, non-traded sectors, not on helping their export sectors—especially their advanced technology sectors—become more competitive.

Second, countries with “Moderate-High” or “High” rankings should have their foreign aid privileges withdrawn or cut back until they show significant progress in reducing their use of these kinds of policies. Certainly, the GMI is written from a U.S. perspective, so the international community, especially the WTO, should be responsible for composing its own report that reflects global interests in order to make these decisions. The message to mercantilist countries should be that if they want to engage the global community for development assistance, mercantilist policies cannot constitute the “dominant logic” of their innovation and economic growth strategies. If countries are implementing mercantilist policies in a systematic way, the global community should support them less; if they are implementing across-the-board productivity-based growth and open trade policies, it should support them more.

In particular, developed countries and international and national development organizations—such as the World Bank’s International Bank for Reconstruction and Development (IBRD), the International Monetary Fund, the Millennium Challenge Corporation, OECD, the United States’ Agency for International Development, the Overseas Private Investment Corporation, and EuropeAid—all should cut off foreign aid to countries fielding egregious mercantilist practices. The U.S. Ex-Im Bank should also give preference to providing export credit support for transactions U.S. companies are making in nations that score better in the GMI. It makes little sense for the international community to continue to support countries fielding extensive trade-distorting practices.

Put simply, countries and global organizations alike need to stop promoting export-led growth (and import substitution) as a primary development tool, and instead tie their assistance to steps taken by developing nations to move away from mercantilist policies. In particular, the IBRD should make a firm commitment that it will cut off support for countries that continue to use mercantilist policies.

The global community needs to get far more serious about confronting innovation mercantilism’s threat to global economic development and innovation.

Likewise, countries that do not use mercantilist policies should be rewarded for their efforts. The United States Agency for International Development should develop a new agency to advocate for better innovation policies in countries receiving U.S. foreign aid. EuropeAid and the World Bank could do the same. The countries that perform the best on the GMI should receive the bulk of foreign aid from USAID, the Millennium Challenge Corporation, EuropeAid, and the World Bank, which means that rather than reducing foreign aid across the board, development agencies should concentrate their funding on the countries that deserve it the most and are practicing the best policies designed to spur economic growth. ITIF proposes giving the most foreign aid to the countries that are in the top quartile of actors (i.e., “Low”) on the GMI.

CONCLUSION

The global community needs to get far more serious about confronting innovation mercantilism’s threat to global economic development and innovation. The importance of this cannot be understated because mercantilism that hampers innovation also hinders long-run economic growth and quality-of-life improvements. For instance, the U.S. Department of Commerce has estimated that technological innovation has been responsible for as much as 75 percent of the

growth in the American economy since World War II.⁹¹ Moreover, up to 90 percent of per capita income growth stems directly from innovation.⁹²

As innovation and trade policy have become increasingly intertwined, openness to trade—characterized by open market access and receptivity to FDI—has become a bedrock pillar of a country’s innovation capacity. However, too many countries are pursuing mercantilist, trade-distorting approaches instead of implementing productivity and innovation-enhancing policies designed to promote economic growth, which is holding the global economy back from achieving its fullest potential. The United States has a unique opportunity to step in and set the standard for not only how it analyzes and synthesizes data on innovation mercantilism, but also how it chooses to push back against it.

APPENDIX A: GLOBAL MERCANTILIST INDEX BY OVERALL RANKING

Country	Final Ranking	Final Ranking Group	Final Score	ATS Weight	Trade Weight	Pure Score	Forced Local Score	IP Score	Market Access Score	Domestic Benefits Score	Currency Score	Dom. Pref. Score	Tariffs Score	Digital Score	Overall NTE Score
China	60	High	50.5	1.00	1.50	42.1	1.1	2.0	1.5	2.0	-0.3	2.2	0.1	3.1	2.3
Indonesia	59	Moderate High	34.3	0.75	1.00	40.4	2.6	2.2	1.8	0.7	-0.3	1.5	0.4	2.7	1.5
Russia	58	Moderate High	32.7	0.75	1.00	38.4	2.0	1.3	1.7	1.1	-0.3	2.2	0.5	1.1	2.3
India	57	Moderate High	38.3	1.00	1.00	38.3	2.3	2.1	1.9	0.7	-0.3	2.2	0.6	0.9	1.5
Saudi Arabia	56	Moderate High	31.1	0.75	1.00	36.6	1.0	1.9	2.9	1.1	-0.3	0.7	0.0	1.9	1.5
Brazil	55	Moderate High	36.6	1.00	1.00	36.6	2.00	1.3	0.3	1.5	-0.3	2.2	0.7	0.7	2.3
Nigeria	54	Moderate High	30.4	0.75	1.00	35.8	0.0	0.9	2.9	2.3	-0.3	1.5	1.2	0.5	1.5
Argentina	53	Moderate High	33.9	1.00	1.00	33.9	1.6	2.6	-0.3	0.9	-0.3	1.5	1.5	0.3	1.5
Vietnam	52	Moderate High	32.7	1.00	1.00	32.7	1.9	1.7	0.4	1.1	-0.3	0.7	0.3	2.0	0.7
Turkey	51	Moderate High	30.1	1.00	1.00	30.1	2.2	1.4	0.1	0.7	-0.3	1.5	-0.3	0.3	1.5
Thailand	50	Moderate High	33.1	1.25	1.00	28.8	0.5	1.6	-0.5	0.9	2.0	0.7	0.5	-1.1	1.5
United Arab Emirates	49	Moderate Low	26.5	1.00	1.00	26.5	-1.8	0.6	2.9	2.3	-0.3	0.7	-0.5	-0.4	1.5
Kenya	48	Moderate Low	25.2	1.00	1.00	25.2	0.9	0.1	0.6	1.2	-0.3	0.7	0.8	0.2	0.0
South Africa	47	Moderate Low	21.1	0.75	1.00	24.8	0.6	0.1	0.3	1.7	-0.3	0.7	0.3	0.5	0.0
Philippines	46	Moderate Low	26.9	1.25	1.00	23.4	-0.7	0.0	2.2	0.1	-0.3	1.5	-0.1	-1.1	1.5
Colombia	45	Moderate Low	19.8	0.75	1.00	23.2	1.1	1.3	-0.4	-0.2	-0.3	0.7	-0.3	0.2	0.7
Malaysia	44	Moderate Low	29.1	1.50	1.00	22.4	1.3	-0.7	0.1	1.5	-0.3	0.7	0.2	-1.1	0.7
Peru	43	Moderate Low	18.5	0.75	1.00	21.8	-0.1	1.7	-0.3	1.2	-0.3	0.7	-0.5	-1.1	0.7
Mexico	42	Moderate Low	25.0	1.00	1.50	20.8	-0.2	1.1	0.7	0.1	-0.3	0.7	-0.6	-0.7	0.7
Poland	41	Moderate Low	20.5	1.25	1.00	17.8	1.6	0.0	-0.1	-0.4	-0.3	-0.8	0.0	0.6	-0.8
Canada	40	Moderate Low	18.7	0.75	1.50	17.8	1.0	0.1	0.0	-0.4	-0.3	0.7	-0.4	-0.8	0.0
South Korea	39	Low	17.3	1.00	1.00	17.3	0.8	-0.5	0.2	-0.9	-0.3	0.7	0.0	-0.4	0.0
Hungary	38	Low	17.0	1.00	1.00	17.0	0.9	-0.1	-0.4	0.7	-0.3	-0.8	0.0	0.1	-0.8
Taiwan	37	Low	17.0	1.00	1.00	17.0	-0.7	-0.6	2.0	-0.4	2.0	-0.8	-0.4	-1.1	-0.8
Japan	36	Low	18.3	1.00	1.25	16.6	-0.8	0.4	-0.6	-0.1	-0.3	0.7	-0.1	-0.9	0.7
Costa Rica	35	Low	16.3	1.00	1.00	16.3	0.1	0.7	-0.3	-0.2	-0.3	0.7	-0.5	-1.2	0.0
Greece	34	Low	16.3	1.00	1.00	16.3	-0.1	0.4	-0.4	0.2	-0.3	-0.8	0.0	-0.1	0.0
Norway	33	Low	16.0	1.00	1.00	16.0	-0.7	0.2	-0.1	-0.1	2.0	-0.8	0.2	-1.0	-0.8
Chile	32	Low	13.4	0.75	1.00	15.8	-1.4	2.1	-0.5	-0.2	-0.3	-0.1	-1.0	0.0	0.0
Bulgaria	31	Low	14.9	1.00	1.00	14.9	0.2	-0.6	-0.5	-0.4	-0.3	-0.1	0.0	0.5	-0.8
France	30	Low	17.0	1.25	1.00	14.8	0.8	-1.4	-0.4	-0.4	-0.3	-0.1	0.0	-0.2	0.0
Iceland	29	Low	14.7	1.00	1.00	14.7	-0.3	0.2	0.8	-0.4	-0.3	-0.8	-0.4	0.1	-0.8
Israel	28	Low	14.7	1.00	1.00	14.7	-0.4	-1.0	0.6	-0.9	2.0	-0.8	-0.4	-0.5	-0.8
Romania	27	Low	14.6	1.00	1.00	14.6	0.2	0.0	-0.8	-0.1	-0.3	-0.8	0.0	0.5	-0.8

Country	Final Ranking	Final Ranking Group	Final Score	ATS Weight	Trade Weight	Pure Score	Forced Local Score	IP Score	Market Access Score	Domestic Benefits Score	Currency Score	Dom. Pref. Score	Tariffs Score	Digital Score	Overall NTE Score
Malta	26	Low	16.4	1.25	1.00	14.2	-0.5	0.0	-0.5	0.2	-0.3	-0.8	0.0	0.5	-0.8
Hong Kong	25	Low	16.2	1.25	1.00	14.1	-2.7	0.4	2.0	-0.1	2.0	-0.8	-1.3	-1.1	-0.8
Belgium	24	Low	13.9	1.00	1.00	13.9	0.2	0.4	-0.3	-0.9	-0.3	-0.8	0.0	0.0	-0.8
Switzerland	23	Low	17.0	1.25	1.25	13.6	-1.3	-0.6	0.0	-0.9	2.0	-0.8	0.7	-1.0	-0.8
Slovak Republic	22	Low	11.5	0.75	1.00	13.5	0.5	-0.2	-0.5	-0.4	-0.3	-0.8	0.0	-0.3	-0.8
Slovenia	21	Low	13.4	1.00	1.00	13.4	0.2	-0.1	-0.5	-0.4	-0.3	-0.8	0.0	-0.2	-0.8
Italy	20	Low	13.2	1.00	1.00	13.2	0.0	-0.5	-0.2	-0.9	-0.3	-0.8	0.0	-0.2	0.0
Cyprus	19	Low	13.0	1.00	1.00	13.0	-0.1	-0.1	-0.5	-0.9	-0.3	-0.8	0.1	0.5	-0.8
Austria	18	Low	12.9	1.00	1.00	12.9	-0.8	0.4	-0.1	-0.9	-0.3	-0.8	0.0	0.3	-0.8
Spain	17	Low	12.5	1.00	1.00	12.5	0.8	-0.5	-0.6	-0.9	-0.3	-0.8	0.0	-0.2	-0.8
Estonia	16	Low	14.2	1.25	1.00	12.3	-0.6	0.2	-0.6	-0.1	-0.3	-0.8	0.0	-0.4	-0.8
Denmark	15	Low	14.1	1.25	1.00	12.3	-0.7	0.3	-0.6	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
Lithuania	14	Low	12.2	1.00	1.00	12.2	0.6	-0.2	-0.8	-0.9	-0.3	-0.8	0.0	-0.3	-0.8
Luxembourg	13	Low	15.1	1.25	1.25	12.1	-1.0	0.5	-0.6	-0.1	-0.3	-0.8	0.0	-0.4	-0.8
Latvia	12	Low	14.8	1.50	1.00	11.4	-0.9	-0.2	-1.0	-0.4	-0.3	-0.8	0.0	0.4	-0.8
Australia	11	Low	11.2	1.00	1.00	11.2	-0.1	-1.2	-0.2	-0.9	-0.3	0.7	-0.9	-1.0	0.0
Czech Republic	10	Low	10.9	1.00	1.00	10.9	-0.5	0.0	-0.9	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Finland	9	Low	10.8	1.00	1.00	10.8	-2.0	0.6	-0.6	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
Sweden	8	Low	9.3	1.00	1.00	9.3	-1.1	-1.3	-0.5	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
Portugal	7	Low	9.3	1.00	1.00	9.3	-1.7	0.1	-0.7	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Germany	6	Low	10.0	1.00	1.25	9.1	-0.4	-1.2	-0.8	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Singapore	5	Low	9.6	1.25	1.00	8.4	-2.2	-1.5	-0.5	-0.4	2.0	-0.8	-1.2	-1.1	0.0
United Kingdom	4	Low	10.9	1.25	1.50	8.1	-1.2	-1.5	-0.7	-0.4	-0.3	-0.8	0.1	-0.2	-0.8
Ireland	3	Low	11.2	1.50	1.25	8.0	-1.0	-1.3	-0.7	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
New Zealand	2	Low	7.7	1.00	1.00	7.7	-1.8	-1.2	0.5	-0.4	-0.3	-0.8	-0.8	-0.5	-0.8
Netherlands	1	Low	9.1	1.00	1.50	7.6	-1.2	-1.5	-0.9	-0.4	-0.3	-0.8	0.0	-0.3	-0.8

APPENDIX B: GLOBAL MERCANTILIST INDEX IN ALPHABETICAL ORDER

Country	Final Ranking	Final Ranking Group	Final Score	ATS Weight	Trade Weight	Pure Score	Forced Local Score	IP Score	Market Access Score	Domestic Benefits Score	Currency Score	Dom. Pref. Score	Tariffs Score	Digital Score	Overall NTE Score
Argentina	53	Moderate High	33.9	1.00	1.00	33.9	1.6	2.6	-0.3	0.9	-0.3	1.5	1.5	0.3	1.5
Australia	11	Low	11.2	1.00	1.00	11.2	-0.1	-1.2	-0.2	-0.9	-0.3	0.7	-0.9	-1.0	0.0
Austria	18	Low	12.9	1.00	1.00	12.9	-0.8	0.4	-0.1	-0.9	-0.3	-0.8	0.0	0.3	-0.8
Belgium	24	Low	13.9	1.00	1.00	13.9	0.2	0.4	-0.3	-0.9	-0.3	-0.8	0.0	0.0	-0.8
Brazil	55	Moderate High	36.6	1.00	1.00	36.6	2.00	1.3	0.3	1.5	-0.3	2.2	0.7	0.7	2.3
Bulgaria	31	Low	14.9	1.00	1.00	14.9	0.2	-0.6	-0.5	-0.4	-0.3	-0.1	0.0	0.5	-0.8
Canada	40	Moderate Low	18.7	0.75	1.50	17.8	1.0	0.1	0.0	-0.4	-0.3	0.7	-0.4	-0.8	0.0
Chile	32	Low	13.4	0.75	1.00	15.8	-1.4	2.1	-0.5	-0.2	-0.3	-0.1	-1.0	0.0	0.0
China	60	High	50.5	1.00	1.50	42.1	1.1	2.0	1.5	2.0	-0.3	2.2	0.1	3.1	2.3
Colombia	45	Moderate Low	19.8	0.75	1.00	23.2	1.1	1.3	-0.4	-0.2	-0.3	0.7	-0.3	0.2	0.7
Costa Rica	35	Low	16.3	1.00	1.00	16.3	0.1	0.7	-0.3	-0.2	-0.3	0.7	-0.5	-1.2	0.0
Cyprus	19	Low	13.0	1.00	1.00	13.0	-0.1	-0.1	-0.5	-0.9	-0.3	-0.8	0.1	0.5	-0.8
Czech Republic	10	Low	10.9	1.00	1.00	10.9	-0.5	0.0	-0.9	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Denmark	15	Low	14.1	1.25	1.00	12.3	-0.7	0.3	-0.6	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
Estonia	16	Low	14.2	1.25	1.00	12.3	-0.6	0.2	-0.6	-0.1	-0.3	-0.8	0.0	-0.4	-0.8
Finland	9	Low	10.8	1.00	1.00	10.8	-2.0	0.6	-0.6	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
France	30	Low	17.0	1.25	1.00	14.8	0.8	-1.4	-0.4	-0.4	-0.3	-0.1	0.0	-0.2	0.0
Germany	6	Low	10.0	1.00	1.25	9.1	-0.4	-1.2	-0.8	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Greece	34	Low	16.3	1.00	1.00	16.3	-0.1	0.4	-0.4	0.2	-0.3	-0.8	0.0	-0.1	0.0
Hong Kong	25	Low	16.2	1.25	1.00	14.1	-2.7	0.4	2.0	-0.1	2.0	-0.8	-1.3	-1.1	-0.8
Hungary	38	Low	17.0	1.00	1.00	17.0	0.9	-0.1	-0.4	0.7	-0.3	-0.8	0.0	0.1	-0.8
Iceland	29	Low	14.7	1.00	1.00	14.7	-0.3	0.2	0.8	-0.4	-0.3	-0.8	-0.4	0.1	-0.8
India	57	Moderate High	38.3	1.00	1.00	38.3	2.3	2.1	1.9	0.7	-0.3	2.2	0.6	0.9	1.5
Indonesia	59	Moderate High	34.3	0.75	1.00	40.4	2.6	2.2	1.8	0.7	-0.3	1.5	0.4	2.7	1.5
Ireland	3	Low	11.2	1.50	1.25	8.0	-1.0	-1.3	-0.7	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Israel	28	Low	14.7	1.00	1.00	14.7	-0.4	-1.0	0.6	-0.9	2.0	-0.8	-0.4	-0.5	-0.8
Italy	20	Low	13.2	1.00	1.00	13.2	0.0	-0.5	-0.2	-0.9	-0.3	-0.8	0.0	-0.2	0.0
Japan	36	Low	18.3	1.00	1.25	16.6	-0.8	0.4	-0.6	-0.1	-0.3	0.7	-0.1	-0.9	0.7
Kenya	48	Moderate Low	25.2	1.00	1.00	25.2	0.9	0.1	0.6	1.2	-0.3	0.7	0.8	0.2	0.0
Latvia	12	Low	14.8	1.50	1.00	11.4	-0.9	-0.2	-1.0	-0.4	-0.3	-0.8	0.0	0.4	-0.8
Lithuania	14	Low	12.2	1.00	1.00	12.2	0.6	-0.2	-0.8	-0.9	-0.3	-0.8	0.0	-0.3	-0.8
Luxembourg	13	Low	15.1	1.25	1.25	12.1	-1.0	0.5	-0.6	-0.1	-0.3	-0.8	0.0	-0.4	-0.8
Malaysia	44	Moderate Low	29.1	1.50	1.00	22.4	1.3	-0.7	0.1	1.5	-0.3	0.7	0.2	-1.1	0.7
Malta	26	Low	16.4	1.25	1.00	14.2	-0.5	0.0	-0.5	0.2	-0.3	-0.8	0.0	0.5	-0.8
Mexico	42	Moderate Low	25.0	1.00	1.50	20.8	-0.2	1.1	0.7	0.1	-0.3	0.7	-0.6	-0.7	0.7
Netherlands	1	Low	9.1	1.00	1.50	7.6	-1.2	-1.5	-0.9	-0.4	-0.3	-0.8	0.0	-0.3	-0.8
New Zealand	2	Low	7.7	1.00	1.00	7.7	-1.8	-1.2	0.5	-0.4	-0.3	-0.8	-0.8	-0.5	-0.8
Nigeria	54	Moderate High	30.4	0.75	1.00	35.8	0.0	0.9	2.9	2.3	-0.3	1.5	1.2	0.5	1.5
Norway	33	Low	16.0	1.00	1.00	16.0	-0.7	0.2	-0.1	-0.1	2.0	-0.8	0.2	-1.0	-0.8

Country	Final Ranking	Final Ranking Group	Final Score	ATS Weight	Trade Weight	Pure Score	Forced Local Score	IP Score	Market Access Score	Domestic Benefits Score	Currency Score	Dom. Pref. Score	Tariffs Score	Digital Score	Overall NTE Score
Peru	43	Moderate Low	18.5	0.75	1.00	21.8	-0.1	1.7	-0.3	1.2	-0.3	0.7	-0.5	-1.1	0.7
Philippines	46	Moderate Low	26.9	1.25	1.00	23.4	-0.7	0.0	2.2	0.1	-0.3	1.5	-0.1	-1.1	1.5
Poland	41	Moderate Low	20.5	1.25	1.00	17.8	1.6	0.0	-0.1	-0.4	-0.3	-0.8	0.0	0.6	-0.8
Portugal	7	Low	9.3	1.00	1.00	9.3	-1.7	0.1	-0.7	-0.9	-0.3	-0.8	0.0	-0.1	-0.8
Romania	27	Low	14.6	1.00	1.00	14.6	0.2	0.0	-0.8	-0.1	-0.3	-0.8	0.0	0.5	-0.8
Russia	58	Moderate High	32.7	0.75	1.00	38.4	2.0	1.3	1.7	1.1	-0.3	2.2	0.5	1.1	2.3
Saudi Arabia	56	Moderate High	31.1	0.75	1.00	36.6	1.0	1.9	2.9	1.1	-0.3	0.7	0.0	1.9	1.5
Singapore	5	Low	9.6	1.25	1.00	8.4	-2.2	-1.5	-0.5	-0.4	2.0	-0.8	-1.2	-1.1	0.0
Slovak Republic	22	Low	11.5	0.75	1.00	13.5	0.5	-0.2	-0.5	-0.4	-0.3	-0.8	0.0	-0.3	-0.8
Slovenia	21	Low	13.4	1.00	1.00	13.4	0.2	-0.1	-0.5	-0.4	-0.3	-0.8	0.0	-0.2	-0.8
South Africa	47	Moderate Low	21.1	0.75	1.00	24.8	0.6	0.1	0.3	1.7	-0.3	0.7	0.3	0.5	0.0
South Korea	39	Low	17.3	1.00	1.00	17.3	0.8	-0.5	0.2	-0.9	-0.3	0.7	0.0	-0.4	0.0
Spain	17	Low	12.5	1.00	1.00	12.5	0.8	-0.5	-0.6	-0.9	-0.3	-0.8	0.0	-0.2	-0.8
Sweden	8	Low	9.3	1.00	1.00	9.3	-1.1	-1.3	-0.5	-0.4	-0.3	-0.8	0.0	-0.1	-0.8
Switzerland	23	Low	17.0	1.25	1.25	13.6	-1.3	-0.6	0.0	-0.9	2.0	-0.8	0.7	-1.0	-0.8
Taiwan	37	Low	17.0	1.00	1.00	17.0	-0.7	-0.6	2.0	-0.4	2.0	-0.8	-0.4	-1.1	-0.8
Thailand	50	Moderate High	33.1	1.25	1.00	28.8	0.5	1.6	-0.5	0.9	2.0	0.7	0.5	-1.1	1.5
Turkey	51	Moderate High	30.1	1.00	1.00	30.1	2.2	1.4	0.1	0.7	-0.3	1.5	-0.3	0.3	1.5
United Arab Emirates	49	Moderate Low	26.5	1.00	1.00	26.5	-1.8	0.6	2.9	2.3	-0.3	0.7	-0.5	-0.4	1.5
United Kingdom	4	Low	10.9	1.25	1.50	8.1	-1.2	-1.5	-0.7	-0.4	-0.3	-0.8	0.1	-0.2	-0.8
Vietnam	52	Moderate High	32.7	1.00	1.00	32.7	1.9	1.7	0.4	1.1	-0.3	0.7	0.3	2.0	0.7

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