



How TPP Critics Muddle Facts, Fictions, and Unfounded Fears: A Point-by-Point Analysis

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FOREWORD

At stake in the debate over the TPP is the very future of globalization: Will robust economic integration and trade liberalization continue, or will opponents halt or reverse this process?

Not all criticisms of the Trans-Pacific Partnership (TPP) should be treated equally. It is understandable and appropriate that the TPP has generated heated debate. There will be legitimate points of criticism—no trade agreement is ever perfect. This is the reality of negotiating an agreement of 30 chapters with 12 countries, all with different interests. As policymakers evaluate this debate, there will be critics who point out where the deal falls short of the ideal, but who, overall, rightly believe the TPP is the sensible next step toward a more globally integrated and prosperous economy. But there will also be vociferous critics who oppose not only individual terms of the TPP, but more importantly, its broader vision.

The latter group's opposition doesn't stem from the details of the agreement, but from the very idea of the agreement: enabling greater global integration and getting other nations to adopt rules and regulations similar to those already in place in the United States. These opponents want to roll back globalization and revert to regionalized economies that are local (not global), small (not corporate), protected (not competitive), and static (not innovative, nor disrupted). They also want a world in which intellectual property rules are largely absent, so that people can go online to do whatever they want on the Internet, including consume copyrighted content without paying and get pharmaceutical drugs without paying their fair share. In many ways the real debate over the TPP is a debate about the kind of world we want, globally integrated with the economic benefits that flow from that or localized and fragmented with the perpetuation of the status quo that comes from that.

As policymakers in the United States and elsewhere consider the TPP, they need to carefully evaluate both the individual parts of the agreement and its whole—on balance, despite its shortcomings, do they think the TPP is in their country's interest? The answer

should be yes. This report analyzes the key criticisms that have been levied against the TPP, assessing whether they are valid or invalid, and finds that while there are a few areas where the TPP's terms could have been strengthened, the overwhelming preponderance of the objections to the TPP are misguided, overstated, or just plain wrong on the facts.

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INTRODUCTION

Consideration of the Trans-Pacific Partnership (TPP) agreement during the final months of the Obama administration will initiate a new phase of legitimate debate, but also a massive campaign of misinformation and hyperbole designed to sink the agreement. The problem policymakers face is that while a small portion of the criticism is valid, the majority of it is not. Some specific technical criticism, like of the agreement's exemption of financial services from data localization limits, is constructive. However, the lion's share of the criticism raised by opponents represents an attempt to kill the deal by a thousand cuts, for these opponents fundamentally oppose what the TPP represents: the next step in deep global economic integration and trade liberalization. In sifting through this, policymakers must not lose sight of the bigger picture and ultimate goal: a truly integrated global economy.

While policymakers need to weigh up the individual parts of the agreement (some of which are not perfect), they should not lose sight of the overall value of the agreement.

Indeed, what's fundamentally at stake in the debate over the Trans-Pacific Partnership is nothing less than the future of globalization. There are three camps when it comes to the political economy of trade in the United States. One camp—the “globalists”—broadly supports the TPP's objective of furthering the globalist enterprise by developing a next-generation trade agreement, among a large block of nations in the world's fastest growing economic region (the Asia-Pacific), and that installs new disciplines and rules in reducing barriers and distortions to manufacturing and services trade, expands the size of global markets, and creates conditions in which the most innovative enterprises, regardless of size or nationality, can thrive. To be sure, some in this group might seek technical or pragmatic improvements to some aspects of the TPP—e.g., stronger prohibitions against localization requirements in the financial services sector, more disciplines related to currency manipulation, greater services sector liberalization, stronger protections for intellectual property rights in the life sciences—but they are fundamentally supportive of the TPP's animating geopolitical objectives. The Information Technology and Innovation Foundation (ITIF) is firmly in this camp.

A second camp—the “liberal Keynesians”—views the TPP through its prism of focusing on privileging worker (as opposed to consumer) welfare and focusing more on equity than growth.¹ As such, many liberal Keynesians are skeptical of globalization and trade, especially trade with low-wage nations.² This is because they believe that trade, especially with low-wage nations, reduces wage growth for some workers. As the liberal Economic Policy Institute (EPI) writes, “Trade and globalization policies have major effects on the wages and incomes of American workers.”³ In this case, they mean negative effects. In addition, by privileging worker welfare, liberal Keynesians oppose labor market disruption, even if, on net, it produces economic benefits. For them, even a trade deal that would result in net GDP growth might be undesirable if it means that some workers are hurt. In other words, a deal that has mixed employment effects on different sectors—fewer textile or apparel workers but more aerospace and e-commerce workers—would be too disruptive, even if it would move the United States in the direction of being a higher-skill, higher-wage, higher value-added economy over the long run. Moreover, they resist global

competition because it requires competitive business climates, which mean some limits on how much companies can pay lower-skilled workers and how much regulators can regulate. Better to return to the postwar world of strong unions and an active regulatory state before the post-1990s round of globalization.

But it's the third group—the “anti-globalists”—that has been most vocal in its opposition to the TPP and most willing to engage in misleading negative messaging. These opponents, who are primarily on the political left (though with some common cause on the Tea Party right), view globalization and multinational corporations as the fundamental problem.⁴ This collection of voices, under the banner of coalitions such as “Expose the TPP,” fundamentally rejects a world in which multinational corporations are major producers and where global economies are tightly integrated. The anti-globalists view multinational companies, global supply chains, global markets operating according to harmonized rules, and the rise of a consumer-based global middle class as somehow inherently suspect and therefore undesirable. For them, the TPP is the abhorrent hallmark of this globalist enterprise. The anti-globalists believe that every corporate benefit comes at the expense of public benefit and that small and local is inherently more beautiful. They seek a return to an idealized prior world of nationalistic and even localized economies where most products and services would be produced by small businesses (ideally worker-owned co-ops) in close geographic proximity to where they are consumed. For them, the rise of localization barriers to trade—policies that seek to balkanize local production, such as local facilities for information and communications technologies (ICT) for local markets—are preferable, because they fear that they lack the ability to compete on level terms in a homogenized, “corporatized” world of large enterprises that efficiently serve global consumer markets.

In essence, what's at stake isn't just the TPP itself: It's the future of globalization. On the one hand stands a vision of a globally integrated economy that is increasingly market-driven, rules-based, and competitive. In such an economy, the corporations (whether large or emerging) that produce and market the most innovative products and services can compete at global scale. This global economic system can maximize innovation, productivity, and ultimately consumer and worker welfare. The other vision is more hidebound and conservative, wishing to revert to fragmented, localized production—often enabled by government policies that limit competition or balkanize production—in other words, a set of policies that will lead to less productivity, less innovation, and ultimately lower consumer and worker welfare.

The TPP is poised to play a pivotal role in the next phase of globalization. First, the TPP promotes the goal of global trade liberalization by establishing a higher-standard trade agreement that should become a model for other global trade agreements going forward. Second, the TPP creates new rules and imposes new disciplines that make substantial progress toward preventing discriminatory, anticompetitive trade policies that a growing number of nations have tried to implement in recent years. This is vital, for continued global integration must come with a strong commitment to open and non-distorted markets on the part of U.S. trading partners. Indeed, if U.S. enterprises and workers are

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going to be able to compete on fair and equitable terms in global markets—a competition in which they should be well positioned to succeed, especially if the United States ever gets around to putting in place a domestic national competitiveness strategy—it is imperative that we enact trade deals that go substantially beyond the relatively limited World Trade Organization (WTO) trade regimes now in place. Third, and related, is the notion that the TPP can become a “docking station” that enrolls additional nations—and, notably, possibly China in the future—in a high-standard trade agreement that perpetuates the world’s most robust set of trade rules in a more enforceable manner.

Given the importance of the TPP, this report responds to and rebuts many, if not most, criticisms of the agreement, pushing back on the distorted fear campaign being used by opponents. The first section rebuts the strategic claim made against the TPP—that it is bad for the American economy and American workers. For example, opponents claim the TPP will harm America’s consumers, but America’s consumers actually benefit from the more robust global competition that trade engenders and the fact that competition forces producers—foreign or domestic—to innovate and to develop products and services of the best quality and value at the lowest cost. Opponents further claim that the TPP will harm American workers, when in reality the agreement will create conditions in which America’s most innovative and fastest-growing industries and enterprises can thrive in global competition and thus support growing workforces. Moreover, if they carried the day, many of the critics’ objections to the intellectual property (IP) provisions of the TPP—from their complaint that the TPP is too IP friendly or that its antipiracy provisions are too robust—would actually significantly harm the interests of U.S. workers involved in the production of IP-enabled goods and services. But beyond that point, critics further miss that job creation shouldn’t be the focal point on which the merit of trade agreements is assessed. From an international economics perspective, trade neither creates nor reduces the total number of jobs; it redistributes them, ideally toward higher value-added production. Rather, the test should be whether a particular trade agreement engenders the conditions—e.g., large markets that enable economies of scale, particularly for innovation-based industries; robust and market-based competition that keeps firms on their toes; and the ability of nations to specialize in the facets of production in which they are most productive and efficient. When these conditions expand, economic growth can flourish to the maximum extent possible.

The report then examines a variety of issues—including the investor-state dispute-settlement mechanism, currency manipulation, and various IP provisions. The report identifies legitimate criticisms of the TPP on some issues, while showing that, in the vast majority of cases, the criticism is simply not valid. Indeed, a substantial portion of the criticism is intentional misdirection by opponents who have an ideological bias against corporations, globalization, intellectual property, or some mix of the three. The report concludes by observing that the TPP represents a vital step in continuing the momentum for wealth-creating global economic integration and trade liberalization.

CONFRONTING THE NOTION THAT THE TPP IS BAD FOR AMERICA'S ECONOMY AND WORKERS

The Intellectual Case for Market-Based Trade

The TPP has acted as a magnet for a range of economic, political, and societal concerns impacting the U.S. economy, especially given its timing during a contentious U.S. presidential campaign. One of the reasons for this is that the opponents are really making two cases, one of which is legitimate, the other not.

The illegitimate argument is that trade and globalization are inherently not beneficial. Truly free trade, where both parties abide by the rules, benefits the U.S. economy through a number of channels—including comparative advantage, greater economies of scale, technological and innovation spillovers, and import competition.⁵ These gains are manifested in cheaper (and a wider variety of) imports, greater domestic specialization, greater productivity, and more innovation from greater scale economies and improved circulation of knowledge, talent, and technology. These types of gains have a range of direct and indirect benefits to the American economy, consumers, and workers.

For example, the Peterson Institute for International Economics credits trade liberalization with raising American household purchasing power by about \$13,000 on average since 1950.⁶ This gain can be as much as 20 percent of household expenditures for lower-income households.⁷

The most important ways in which trade generates economic benefits relate to scale, specialization, and competition. With regard to the first, globally integrated markets enable larger markets, which in turn help drive innovation.⁸ Because innovation-based industries (e.g., content, life sciences, advanced technology manufacturing, information technology, etc.) have high fixed costs of design and development but relatively low marginal costs of production, larger markets better enable innovative enterprises to cover those high fixed costs, so that unit costs can be lower and revenues for reinvestment in further innovation higher. This is why firms in most innovation industries are global. If they can sell in 20 countries rather than 5, expanding their sales by a factor of 4, their costs increase by much less than a factor of 4.⁹ This is why numerous studies have found a positive effect of the ratio of cash flow to capital stock on the ratio of R&D investment to capital stock.¹⁰ The larger the markets in which companies have to produce revenues from selling mobile phones, airplanes, pharmaceutical drugs, or software, the more that can be plowed back into creating the next-generation of innovative products and services. This explains why efforts not just to lower tariffs, but to break down barriers to market access (especially forced localization policies) are so important.

Moreover, to the extent that trade enables nations to specialize in their comparative advantage—and for high-wage nations such as the United States, this is to specialize in high value-added production—this is a positive step. Indeed, the natural evolution of the global trading system should benefit high-wage countries by creating a new global division of labor where the industrial base of these economies evolves toward even more high-value-added and innovation-based goods and services.¹¹ As Adam Posen, president of the

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Peterson Institute for International Economics, explains, this efficiency-enhancing specialization that trade generates is one of its most significant benefits. Posen observes, “Capital and labor should go where businesses have advantages, and where they are uncompetitive, those businesses should ultimately close. Trade accelerates and strengthens those forces on business.”¹² Posen continues, “The real goal of trade is about the productivity gains made through domestic reallocations of demand, investment, and, yes, employment in countries opening further to foreign trade and investment.”¹³

Finally, as noted, by fostering intense competition, global trade encourages producers—foreign and domestic alike—to innovate and to develop products and services of the best quality and value at the lowest cost. As Posen notes, “Competitive pressure is the part of trade that is most demonstrably and domestically beneficial.”¹⁴ And a vital objective of trade agreements is to achieve the “right” level of competition in global markets to maximize innovation. For instance, many nations seeking high-paying innovation industries and jobs unfairly subsidize new entrants or incumbents, leading to more competition than market forces might otherwise produce and negative, not positive economic results. This can occur when governments intervene in markets to prop up inefficient domestic producers, whether by providing production or export subsidies or by providing financial support to enterprises that would otherwise be unable to successfully compete in global markets. This excess competition reduces the market share of more efficient or innovative firms and leads them to invest less in R&D and other areas. Trade agreements combat the other side of the equation as well: hidebound localized markets that are shielded from foreign competition to protect entrenched domestic incumbents who aren’t forced to compete, innovate, and improve. Trade agreements with high and enforceable standards, like the TPP, can play a key role in getting to that sweet spot: more competition, but competition that is market based.

It’s this trinity of markets of scale, specialization, and competition that lies at the heart of not just of the TPP but the broader vision of global economic integration, and that opponents react most fiercely to. For the TPP facilitates the growth of global corporations (whether American, Canadian, Japanese, Malaysian, or other) that can achieve global reach and scale and who can succeed with large-scale innovations that are difficult to achieve: creating new life-sciences drugs, inventing next-generation digital platforms and IT systems, etc. An analogy is the evolution of the U.S. economy in the last century. After World War II, thanks to the rise of national telecommunications, air travel, and an interstate highway network, the U.S. economy evolved from a set of regionalized economies into a truly integrated national economy that both facilitated greater markets of scale and greater competition among regions to be the most attractive research or production locations for companies whose attention was now national in scale. The TPP achieves a similar dynamic, though now throughout the entire Asia-Pacific region, producing large markets of scale, opening market access, and facilitating market-based competition.

This failure by the trade establishment has inadvertently given support to the anti-globalists, who can now conflate the benefits of true market-based, free trade with the costs from foreign mercantilism.

Critics of trade, however, do have at least one legitimate argument, which is that a considerable share of “trade” over the last two decades has been anything but free and this has hurt the U.S. economy. Indeed, a growing number of nations, led by China, have been systemically engaged in what ITIF has termed “innovation mercantilism,” where countries use an array of policies to unfairly compete against and harm the U.S. and other market-based economy.¹⁵ Unfortunately, the Washington trade establishment has largely ignored these practices and even argues that they only hurt the nations engaged in them, not the United States.¹⁶ Willem Buiter, a Cambridge University economist and a former head of the European Bank for Reconstruction and Development, spoke for many in the trade establishment when he wrote in a 2003 letter to the editor of the *Financial Times*: “Remember: unilateral trade liberalization is not a ‘concession’ or a ‘sacrifice’ that one should be compensated for. It is an act of enlightened self-interest. Reciprocal trade liberalization enhances the gains, but is not necessary for the gains to be present.”¹⁷ In other words, it doesn’t matter if other nations massively subsidize their exporters, require U.S. companies to hand over the keys to their technology in exchange for market access, or engage in other forms of mercantilist behavior. America still benefits.

Because the trade establishment believes trade is good under even the most lopsided of circumstances, they view the issue in black-and-white terms. For them, there are only two camps: free traders and protectionists. And confronting foreign protectionists risks making us protectionists. Better to embrace free trade and let other countries be mercantilists, the establishment argues, than to engage in a “trade war.” America’s role is to be a shining “city on the hill”; we should show misguided nations by force of example alone rather than prosecution why mercantilism is bad. But China and others are proving this is folly. In industry after industry, including the advanced innovation-based industries that represent America’s future, countries are gaming the rules of global trade to hold others back while they leap forward.

This failure by the trade establishment has inadvertently given support to the anti-globalists, who can now conflate the benefits of true market-based, free trade with the costs from foreign mercantilism. They can now argue, “See, trade has hurt the U.S. economy, so don’t pass the TPP.” But this ignores the fact that a central goal of the TPP is to install more robust regimes to limit and roll back these foreign mercantilist practices.

The TPP’s Benefits for the American Economy and American Workers

But putting aside the intellectual or “theoretical” benefits of trade, the simple reality is that the TPP itself—provided partner countries compete according to its rules and the United States aggressively contests any situations where that’s not the case—will benefit American workers and the American economy. Indeed, the ability of American enterprises to compete effectively in the Asia-Pacific region is vital. The Asia-Pacific represents the world’s fastest growing economic region, and already 40 percent of America’s trade occurs with TPP-member countries, and 63 percent with Asia-Pacific Economic Cooperation (APEC) economies.¹⁸ As this region continues to grow in economic importance, the TPP will help ensure that American enterprises are able to fairly compete in the region.

Moreover, as this section elaborates, as America's economy becomes more knowledge- and technology-intensive, the TPP's new provisions to facilitate digital trade and protect (most) intellectual property will help ensure that many of America's most innovative and fastest-growing sectors can flourish in competition in the Asia-Pacific region.

These factors explain why economic analysis finds the TPP will deliver positive, albeit modest gains for the U.S. economy. For example, the United States International Trade Commission (USITC) finds positive benefits, estimating that within 15 years (by 2032), U.S. real annual income would be \$57.3 billion (0.23 percent) higher and real gross domestic product (GDP) \$42.7 billion (0.15 percent) higher relative to baseline projections if the United States joins the TPP.¹⁹ An econometric analysis by the World Bank and the Peterson Institute for International Economics authored by Peter Petri and Michael Plummer finds somewhat larger gains, estimating that, by 2030, the U.S. economy would grow 0.5 percent faster than baseline projections (realizing real annual income gains of about \$131 billion above baseline) from joining the TPP.²⁰ In terms of U.S. trade balance, analysts anticipate the TPP will have mostly neutral overall effects. As Petri and Plummer write, "Imports rise more than exports in manufacturing, while exports rise more than imports in primary goods and services, but net trade effects are small compared to gross trade changes, implying substantial opportunities for productive firms in every sector of the economy."²¹

Moreover, far from U.S. accession to the TPP having the disastrous employment and income impacts opponents breathlessly conjure, the reality is joining the TPP will produce positive impacts for both. The USITC study finds employment would grow by 0.07 percent (128,000 full-time equivalents), although in theory trade should have no effect on employment levels over the moderate term, as employment levels are largely determined by demographics, and fiscal and monetary policy. Trade can, however, raise wages. And, indeed, the Peterson study finds the TPP would raise U.S. wages slightly by 2030—about 0.6 percent for skilled workers and 0.4 percent for unskilled workers.²²

Modern trade is increasingly about services. Services already play an important role in the U.S. economy, accounting for 78 percent of U.S. GDP in 2014. U.S. exports of services continue to grow robustly, with services accounting for more than 30 percent of U.S. exports in 2015. In fact, U.S. exports of services increased 75 percent from 2006 to 2015, growing from \$410 billion in 2006 to \$716 billion in 2015.²³ And the United States recorded a \$227 billion trade surplus in services in 2015. Moreover, the United States realizes far more leverage from services exports than imports. Comparing production with the international purchases of services, the U.S. Department of Commerce shows that U.S. parent companies involved in international trade contributed nearly \$21 of value-added to the U.S. economy for every dollar of services that they imported. Overall this led to U.S. parent companies exporting about \$10,000 of services and importing nearly \$5,000 of services per employee.²⁴ Current U.S. services exports to TPP countries (excluding Brunei, Peru, and Vietnam) reached \$178 billion in 2014. (Imports from TPP partners in 2014 were \$98 billion, giving the U.S. an \$80 billion surplus in services trade with TPP partners.)²⁵ The TPP, by taking important steps to remove barriers to trade in services among member countries, is positioned to significantly bolster these numbers. In fact, the

Peterson study estimates participation in the TPP would increase U.S. traded services exports by approximately \$140 billion over baseline projections by 2030, with value-added growing by over \$60 billion.²⁶

While services have long been an afterthought in trade policy, the advent of global information technology networks have made an increasing number of services tradable in ways that were never before possible. It is harder for the general public and parts of the media and policymaking community to point to a particular service job and say that it benefits from trade, compared with a worker on an assembly line that makes and packs goods bound for overseas destinations. But the TPP's potential to significantly bolster U.S. services exports and service-sector jobs should not be underestimated. For instance, more than 20 million U.S. workers now ply their trade in the professional and business services sector, which tends to be tradable, such as legal, accounting, software, architectural, engineering, scientific, advertising, design, and project management services.²⁷ To provide some perspective, manufacturing employs approximately 8 million fewer workers than America's service sectors, yet when it comes to the debate about trade, the impact on manufacturing receives the majority of the attention.

The TPP's impact on the U.S. manufacturing sector will be mixed, due to ongoing structural changes, differences in the comparative advantage of different subsectors, and the different sizes of trade barriers. The impact in terms of exports, imports, output, and employment are also relatively minor in the context of baseline projections used by studies to assess the impact over the long term. The Petri and Plummer study for the Peterson Institute for International Economics shows there would be a small negative impact on overall manufacturing employment, but this is minor compared to the baseline in 2030.²⁸ The U.S. International Trade Commission estimates a similarly minor change in the context of its baseline projection for 2032.²⁹ But subsectors are poised to benefit from tariff reductions on scores of manufactured goods as part of the agreement (although most of these gains will be concentrated in the five TPP partners—Brunei, Japan, Malaysia, New Zealand, and Vietnam—that the United States does not currently have a free trade agreement, or FTA, with). For instance, simple average MFN (most-favored nation) tariffs on U.S. exports of vehicles to Vietnam, Malaysia, and Brunei are 25, 15, and 9 percent, respectively, while the corresponding U.S. tariff is only 2 percent.³⁰ Indicative of the mixed result, the Petri and Plummer study estimates that passenger vehicle exports will increase by \$2 billion, imports by \$2.4 billion, and employment by 0.3 percent by 2032.³¹ To put this into the current context, U.S. vehicle exports increased 138 percent from \$24 billion in 2009 to over \$57 billion in 2014.³²

Perhaps the more contentious issue in the TPP has been U.S. foreign direct investment abroad. Too often this is dismissed as “offshoring,” which tends to dominate much of the debate when it comes to U.S. companies investing abroad, but this is only one aspect of the complex interactions that characterize globalization. In fact, there should be a broader understanding of the impact that outward foreign direct investment (FDI) can have on the U.S. economy in generating positive spillovers.³³ The impact of global economic

Workers in export-intensive sectors, in both manufacturing and service sectors, earn more. This wage premium is higher for blue vs. white collar workers.

integration is more complex than the simplistic argument put forward by opponents of FDI, who argue that U.S. companies are simply exporting domestic jobs to foreign countries, shifting productive capital abroad, and generating no benefit to the home country. For example, a popular perception is that U.S. firms invest overseas to avoid U.S. labor unions or high U.S. wages; however, 74 percent of the accumulated U.S. foreign direct investment is in high-income developed countries.³⁴ This is indicative of the risk of relying on a simplified understanding of how U.S. multinationals operate. Reality shows a much more positive story.

Outward investment can generate positive spillovers to the U.S. economy. Obviously, the impact that each outward investment has on the U.S. economy differs, based on the motivations, structure, and characteristics of the company and the investment (i.e., horizontal or vertical FDI; driven by market- or resource-access or labor-cost considerations). The positive impacts occur directly, through the hiring of staff in the home company, increases in exports, or in contracts to supporting companies. One study finds that an increase in U.S. foreign affiliate employment of 1 percent is associated with an increase in parent employment of 0.2 percent.³⁵ Furthermore, empirical studies based on industry- or country-level data, in general, find a positive or complementary relationship between FDI and exports.³⁶ For example, when U.S. restaurant chains such as McDonald's and Pizza Hut invest in other nations, that creates jobs in the United States. In other words, U.S. affiliate activity abroad is often a complement to, rather than a substitute for, the activity of parent companies in the United States.³⁷

Outward investment can also provide important indirect economic benefits. Studies show that such FDI provides broad economic gains to the home country of firms. Research has shown that more productive firms engage in FDI, and that FDI itself is productivity enhancing to the firms' home country.³⁸ Studies also find significant and positive spillovers from multinational customers to the productivity of their home country suppliers (backwards spillovers).³⁹ Exporting and small firms are more likely to receive positive spillovers from outward FDI in downstream industries.⁴⁰ Despite these benefits, the debate over the TPP shows that the benefits outward FDI can have on a host economy are often overlooked.

The TPP builds upon the United States' position as both the leading destination for FDI and the leading investor in other economies. Peterson's study estimates that the TPP will increase outward foreign direct investment by \$149 billion by 2030, while direct investment into the United States increases by \$128 billion.⁴¹ This will further increase U.S. investment abroad, which grew 4.8 percent to \$4,920 billion in 2014. Outward investment grew at an average annual rate of 9.0 percent between 2004 and 2013.⁴² The domestic economic role of these firms is significant. The U.S. Bureau of Economic Analysis shows that U.S. multinational companies employed 22.9 million workers in 2011—roughly one-fifth of total U.S. employment in private-sector industries.⁴³

The success of America's largest enterprises in global competition significantly benefits American workers.

On the other side, foreign-owned firms investing in the United States are definitely not “the enemy” so often portrayed by trade’s naysayers (although the rise of state-backed foreign acquisition of U.S. firms can be problematic if the goal is to acquire U.S. technology and ship it back overseas). Majority-owned U.S. affiliates of foreign companies employed 6.1 million U.S. workers in 2013, up from 5.8 million in 2011. These U.S. affiliates of foreign companies are a catalyst for research and development in the United States, spending \$53 billion on R&D in 2013 (which amounted to 16.4 percent of total private R&D in the United States).⁴⁴ U.S. affiliates of foreign firms also pay better—total compensation averaged nearly \$80,000 per U.S. employee, compared with an average of \$60,000 for workers in the U.S. economy as a whole.⁴⁵ This wage differential holds for both manufacturing and nonmanufacturing jobs, although with a slightly higher differential in manufacturing.⁴⁶

Some opponents focus on the welfare of poorer nations in the TPP instead of the ways the U.S. economy stands to benefit from the TPP. As ITIF has argued, there is a faction of liberal Keynesians whose sympathies lie with foreign workers, not American ones. Perhaps no one articulates this perspective better than Joe Stiglitz, former chief economist of the World Bank.⁴⁷ Stiglitz has long railed against globalization (and now the TPP), not because it hurts American workers, but because in his view, it is stacked in favor of supposedly profit-hungry corporations determined to exploit poor people across the globe. In his jeremiad against globalization, *Making Globalization Work*, Stiglitz writes that “there are too many losers from globalization in the developing world to allow the developed world to try to reshape globalization unfairly in its favor.”⁴⁸ Stiglitz is more than willing to have other nation’s policies hurt working Americans, including encouraging them to have weak intellectual property policies in both patents and copyright. And one can make an argument, although it is one ITIF disagrees with, that weak IP can help consumers in low-income nations. But what one cannot legitimately argue is that it is not in the U.S. interest to pass a TPP that contains stronger IP protections, for these will help millions of U.S. workers employed in IP-intensive industries, such as the 810,000 employed in the U.S. life-sciences industry. As this faction ramps up its opposition to TPP, it should be pressed to make it clear that its sympathies and interests do not lie with American workers, but with low-wage foreign workers.

More broadly, opponents of the TPP suggest that it’s a compromised agreement because U.S. trade negotiators were just doing the bidding of “big business” in negotiating the agreement. While that contention is false on its face—America’s trade negotiators try to secure the best deal possible to represent the interests of America writ large—the notion that if America’s trade negotiators put America’s largest companies in a position to succeed that this is somehow bad for America’s workers and consumers is a fully misguided proposition.

In fact, America’s largest enterprises, the vast majority of which compete in globally traded markets and who thus need robust trade rules to ensure fair market access, fair market-based competition with foreign competitors, and protection of underlying intangible

capital, are key drivers of U.S. economic growth and high-wage employment. Indeed, as of 2013, firms with more than 500 workers employed 51.6 percent of U.S. workers, but accounted for 67 percent of U.S. exports.⁴⁹ Moreover, workers in large firms are significantly more productive than workers in small ones, and that is a key reason why workers in large firms (over 500 workers) earn 57 percent more than workers in companies with fewer than 100 workers.⁵⁰ And besides getting paid more, these workers get 3.5 times more retirement benefits than workers at small companies, 2.7 times more paid leave, and 2.4 times more health-care benefits.⁵¹ And while high-growth startups certainly play a key role in America's innovation system, larger companies are also vital engines of American technological innovation, accounting for 81 percent of the funds American enterprises invest in R&D, investments that over time have driven a range of breakthroughs in sectors as diverse as aerospace, integrated circuits, and life sciences. Put simply, the success of America's largest enterprises in global competition significantly benefits American workers. Assuming that the U.S. economy and workers can thrive without robust and healthy multinational companies is a dangerous delusion.

REBUTTING TPP CRITICISM—SEPARATING FACT, FICTION, AND FEAR

The TPP has attracted no shortage of criticism. Some is valid, much of it not. This section analyzes 12 major points of criticism to parse fact, fiction, and fear to evaluate if these criticisms are valid and whether they are relevant or used as a distraction for ideological opposition to trade, globalization, and intellectual property, or some combination of all three. These claims cover a broad range of diverse issues: the Investor-State Dispute Settlement mechanism; a range of intellectual property provisions, privacy, worker rights and environmental protections; the secrecy surrounding negotiations; and currency manipulation.

Invalid Claim: The Investor-State Dispute Settlement Is an Attack on State Sovereignty

The reality is that if we are to have market-based trade between nations, there have to be rules to limit what nations can do. The American republic's founders understand this well, which is why they insisted on the U.S. constitution containing the Commerce Clause to limit state government action. No one claimed this was antidemocratic, for the framers knew that imposing limits on individual states (who were inclined by self-interest to cheat and engage in protectionism), the nation as a whole benefited.

Today, the issue is different only in that more trade is now between nations. If these nations are not constrained in what they can legally do, even by their democratically elected representatives, trade breaks down and everyone loses. By creating a rules-based system, global trade agreements and institutions help establish a larger integrated economy—rather than one that is state-based—as this is a better way toward shared prosperity.

Yet, many TPP opponents object to the provisions regarding Investor-State Dispute Settlement (ISDS) as inherently undemocratic because they limit what sovereign nations can do. As discussed, this is not a valid complaint, unless these opponents argue that we

should withdraw completely from global commerce. The only legitimate debate to have about ISDS is whether particular provisions are appropriate.

Investor-State Dispute Settlement (ISDS) provisions provide protection against a fundamental risk for overseas investment—expropriation and unfair treatment without compensation. Negotiating agreements to address this basic concern in international trade and investment is why ISDS provisions are included in approximately 3,300 existing agreements, involving 180 countries.⁵² The United States already has agreements containing ISDS provisions with 6 of the 11 other countries in the TPP, while the remaining 5 are party to over 100 agreements containing ISDS provisions.⁵³ So the TPP is but the latest iteration of this, as it aims to set a common, higher-standard for ISDS processes.

ISDS mechanisms provide a basic protection against a fundamental risk for overseas investment—expropriation and unfair treatment without compensation.

ISDS mechanisms provide a neutral, law-based arbitration mechanism for companies to use, given the potential role for corrupt, arbitrary or discriminatory government laws or national courts. Indicative of where this protection is most required, the most frequent ISDS claims occur in countries with weak legal institutions and high levels of corruption, such as Argentina (59 claims) and Venezuela (36 claims).⁵⁴ As research shows, international investment treaties that include ISDS add stability, transparency, predictability, and security that facilitates foreign direct investment, particularly in developing countries.⁵⁵

The TPP's ISDS mechanism has acted as a lightning rod for criticism—much of it aimed at conjuring fear. Stiglitz warns us that “manufacturers could sue governments from restraining them from killing more people.”⁵⁶ Stiglitz portrays ISDS as an all-encompassing tool for corporations to “impede health, environmental, safety ... and financial regulations.”⁵⁷ Liberal economist Jeffrey Sachs contends that the “system proposed [ISDS] in the TPP is a dangerous and unnecessary grant of power to investors and a blow to the judicial systems of all the signatory countries.” Leading TPP critic Public Citizen warns that ISDS is “empowering multinational corporations to attack our domestic laws.”⁵⁸ Critics rely on fear over facts in trying to give the impression that the United States and every other TPP member inadvertently handed over basic sovereign rights to regulate and govern in crafting the TPP's ISDS provisions.

The most serious accusations leveled against ISDS are that it undermines state sovereignty, as it can overturn domestic court decisions and force a country to change its laws—both of which are false. ISDS cases cannot force states to change laws, only to pay monetary damages.⁵⁹ ISDS is not a threat to the core responsibilities of governments—it cannot be used to attack a country's health and social security systems, and regulations in the TPP explicitly confirm that every country retains the right to regulate in its public interest, including with regard to health, safety, the financial sector, and environmental protection.

One high-profile area opponents tout is the use of ISDS to challenge national tobacco control regulations. However, both Australia and Uruguay recently won high-profile ISDS cases involving tobacco companies challenging health-related regulations in each country. Moreover, the TPP explicitly excludes tobacco control regulations from ISDS.⁶⁰

Claims that the ISDS mechanism gives investors “special rights” ignore the fact that these treaty protections are comparable to universal civil rights in international law, the U.S. constitution, and European human rights law.⁶¹ All these provisions have broadly common aims: to ensure that individuals have the right to own property, that individuals are entitled to a fair process by an independent and impartial tribunal, and that property cannot be taken without compensation. Moreover, past experience shows that ISDS is not the threat to government legislation that many critics make it out to be—of the hundreds of resolved ISDS cases worldwide, the vast majority concerned individual administrative treatment of investors; cases against governments involving legislative acts were few, and when they did take place, rarely successful.⁶²

Even with this, negotiators introduced new ISDS rules to address potential concerns raised over past ISDS practices. To ensure only legitimate cases are heard, the TPP raises safeguard standards by shifting the burden to the company to prove all elements of the claim. If a government faces a frivolous ISDS case, the TPP allows it to seek an expedited hearing to review and dismiss the case. Furthermore, with such frivolous cases, the TPP allows the ISDS arbitration panel to award attorney fees and costs to the government, which acts as a deterrent against such baseless claims. The TPP also makes ISDS proceedings more transparent by allowing members of the public, such as labor unions and environmental groups, to participate in cases and make amicus curiae (briefs submitted by people or groups not party to a case) submissions to cases.⁶³

Over the last 30 years, the United States has had only 13 ISDS cases brought against it, and it has won every single case.

Despite being painted as a broad risk to state sovereignty, the scope of potential cases under the TPP’s ISDS provisions are narrowly focused. Just because a government measure frustrates an investor’s “expectations” does not itself give rise to a potential case.⁶⁴ The TPP explicitly limits damages an investor can recover to damages that an investor has actually incurred.⁶⁵ So, no—to dispense with another falsehood—the ISDS does not make taxpayers assume the financial risk that is normally associated with being “entrepreneurs.”⁶⁶ ISDS is about unfair or discriminatory treatment; ISDS does not protect an investor from a mere loss of profits following a change in government policy.

In considering the ISDS, the United States’ experience is indicative. The United States is a signatory to 51 agreements with ISDS provisions. Contrary to the criticism that ISDS represents a tool of big business, of the 105 disputes filed by U.S. investors, two-thirds of the claimants were individual investors or small- and medium-sized businesses (those with fewer than 500 employees). Nor is the U.S. government facing ISDS challenges at every turn—over the last 30 years, the United States has had only 13 cases brought against it, and it has won every single case. But this has not stopped critics from seizing the political opportunism presented by TransCanada’s decision to bring an ISDS case against the United States (using ISDS provisions in the North America Free Trade Agreement) over its decision to cancel the Keystone XL Pipeline Project to Canada—the only ISDS case against the United States in the last five years.⁶⁷ While this obviously does not preclude the outcome of current ISDS cases going against the United States, it provides a realistic basis for considering its potential impact in the future. The miniscule number of cases stands in

contrast to the hundreds of thousands of cases that individuals, corporations, and foreign investors have brought against the U.S. government in U.S. courts over the last decade.

The small number of ISDS cases against the United States is not an anomaly, but a feature of the system—over 90 percent of the nearly 2,400 bilateral investment treaties (which include ISDS provisions) in force have operated without a single dispute.⁶⁸ In 2015, investors from around the world initiated 70 ISDS cases, with a cumulative total of 696 cases since 1987.⁶⁹ One of the reasons for this is that investors see the low probability of winning, the high costs (which can be higher than awards), interest in an ongoing investment, risks to relationships with host-country governments, and future investment opportunities. Even if a company wins a case, the TPP only requires that the government pay monetary damages, and any damages are subject to review by domestic courts or international review panels. Based on past disputes that end in an arbitral decision, states win about two-thirds of the cases, and when investors do win, the awards are a small fraction of the initial claim—on average, less than 10 percent of the investor’s claim.⁷⁰

Finally, let’s be clear, hard-core TPP opponents object to ISDS not because they want to protect American jobs (precisely what the ISDS does by protecting U.S. companies, often from rapacious and corrupt foreign governments), but because they not only reject the notion that corporations should have rights, but they also reject the notion that nations should be constrained by global rules and norms, as least when it comes to commerce.⁷¹ This underlying objective is exposed by the fact that the United States already has ISDS provisions in place with many TPP members, while other TPP members have many ISDS agreements in place, showing that all the TPP does is establish a common high-standard approach to resolving international disputes. For these opponents, virtually any state action against a corporation is justified, and no agreement is justified that limits domestic state action vis-à-vis business. But this reflects a willful disregard for the interests of U.S. businesses and workers, who in some cases face foreign governments operating crony capitalist systems that intentionally take actions to hurt foreign companies in order to favor domestic ones. This is clearly against the spirit of deep globalization and against the interests of the U.S. economy.

Invalid Claim: The TPP’s Intellectual Property Rules Only Benefit Big Corporations at the Expense of Consumers and Workers

The amount and intensity of criticism directed at the TPP’s intellectual property rights provisions is far and away unjustified. The Electronic Freedom Foundation (EFF), an organization dedicated to weak intellectual property rules and “free content,” rails against the TPP as a “secretive, multinational trade agreement that threatens to extend restrictive intellectual property (IP) laws.”⁷² And in its standard line of attack on virtually any policy it objects to, EFF contends that the IP chapter has “digital policies that benefit big corporations at the expense of the public.”⁷³ The hyperbole defies the fact that the IP chapter will not require the United States to change any of its IP laws. However, instead of seeing this chapter as the latest iteration of an ongoing trend toward a modern and broadly

harmonized level of intellectual property protection and enforcement, many opponents portray the provisions as some new and sinister plan to harm consumers.

Before analyzing the specifics, it's important to point out a key reason why the debate over the IP chapter has largely departed from reality: the rise of tech populism and an ideology that is fundamentally opposed to the very concept of intellectual property.

First, the argument against the TPP IP chapter is another instance in a series where technology policy debates are increasingly shaped by angry populist uprisings. As ITIF argued in *How Tech Populism Is Undermining Innovation*, such populism draws its strength from individuals' fears, misunderstandings or distrust, appealing to the prejudices of the crowds and relying on demagoguery, distortion, and groupthink.⁷⁴ Tech populists focus on maximizing self-interest and personal freedom, not the broader public interest. The populist view is that elites, especially big business and big government, will prevent useful rules from being established. They distrust the private sector because they believe corporations are driven purely by profit, and they distrust the public sector because they believe government is ineffectual and overbearing. As a result, they decry even the most pragmatic of tech-policy solutions, many of which are included in the TPP.

Ideas, embodied in IP, are crucial to the goods and services of the future, and must be protected in modern trade agreements.

Second, part of the reason for the shrill rhetoric surrounding the TPP is that some critics, whom ITIF labels as “Internet exceptionalists,” do not want common-sense rules that apply off-line to apply online. These opponents are ideologically opposed to intellectual property and refuse to acknowledge the role that IP plays in spurring innovation and creativity. These critics oppose not only the U.S. approach to intellectual property in the digital economy, which the TPP reflects, but also the extension of a whole range of policies (not just IP) that exist off-line to the online world. In contrast to the broader public and most governments, such critics see little or no role for governments enacting common-sense policies online. Ultimately, Internet exceptionalists believe (or hope) that the Internet heralds the end of IP rights.

Critics of the TPP's IP chapter revert to two main reproaches to mask their underlying opposition to intellectual property: first, that intellectual property has nothing to do with trade; second, that protecting intellectual property is a corporate giveaway. These are both false.

Regarding the first claim, critics try to exploit the fact that the popular understanding of trade is still based around manufactured goods facing tariffs when crossing borders, while intellectual property is behind the border and nations have unlimited rights to do whatever they want. Liberal economist Paul Krugman speaks for many TPP critics when he asserts that the TPP “is not a trade agreement. It's about intellectual property and dispute settlement.”⁷⁵ But this narrow focus refuses to acknowledge that what goes on “behind the border” is central to shaping trade in the 21st century. The idea that reducing a tariff on a widget is legitimate in a trade agreement but reducing the ability of a nation's citizens to steal another nation's goods and services—that is, ensuring robust intellectual property enforcement—is not legitimate is illogical. Trade in goods and services increasingly

depends on intellectual property, and that IP needs to be protected in the trade agreements of tomorrow if we are to have global, market-based trade.

To be effective, modern trade requires robust IP protections, because without them producers will be less able to sell their products and services across borders. If a nation promulgates a weak IP regime and turns a blind eye to rampant piracy, imports of IP-based goods and services paid for with an export of money would by definition decline. Moreover, the knowledge and creativity required to create the goods and services exchanged in the 21st century—from smartphones, to biopharmaceutical drugs, to movies and music—is difficult to develop, but often very easy to steal or pay for at less than full market value. But without fair payment, global innovation and creative output decreases.

The notion that intellectual property is not a crucial enabler of U.S. trade ignores the fact that ideas and knowledge form the basis of many U.S. firms' competitive advantage. Businesses in the United States now invest more in knowledge-based capital than in tangible capital.⁷⁶ The life sciences, IT, content, and advanced manufacturing sectors are important traded sectors in the U.S. economy. Indeed, of the country's \$233 billion surplus in services exports in 2014, the largest category was for the use of intellectual property (\$88.2 billion).⁷⁷ This reflects America's strength in content creation and in research and development. So another reason the TPP is important is that it includes some leading markets for intellectual property exports. For example, Canada is the second-largest market for the export of intellectual property, at \$8.7 billion, while Japan is the third-largest, consuming \$8.6 billion.⁷⁸ The agreement also holds the potential to add some new markets if Indonesia, Thailand, and China join the TPP in the future.

The rise of digital trade makes embedding intellectual property regimes in trade agreements such as the TPP more imperative, as technology makes the sale of digital goods and services to foreign markets so much easier and cheaper, although it also makes IP theft much easier. The base-level of global protection for intellectual property—the Trade-Related Aspects of Intellectual Property (TRIPS) Agreement—was established in the 1990s when the Internet and e-commerce as we know it barely existed. The system for digital trade has come a long way from the first e-commerce sale 21 years ago, when a broken laser printer sold on AuctionWeb, the predecessor of eBay, for \$14.83. By the end of 2016, global business-to-consumer e-commerce sales will reach an estimated \$1.92 trillion.⁷⁹ Intellectual property is the main value component of many trade transactions, such as music, video, pictures, software, designs, training modules, and systems.⁸⁰ It is therefore no surprise that the United States and other nations sought to use the TPP to raise the collective bar—to a level similar to the United States' IP protections—to ensure that the innovation and creativity that defines the U.S. economy can spread elsewhere.

Improving enforcement is an important part of the deal: If they are to be effective, IP rules need to have consequences. This remains a major issue for U.S. firms, as U.S. International Trade Commission surveys have shown: 75 percent of large firms and 50 percent of SMEs in digital trade view intellectual property infringement as an obstacle to trade, with this

being most felt by the content creators, large retail firms, and SMEs in the digital communications sector.⁸¹ While the economic cost of online piracy to U.S. businesses is hard to specify, it is undoubtedly high, given the impact that lost revenue has on profits (and therefore taxes), employment, content production, and innovation.⁸²

Second, to portray the IP provisions in TPP as the tool of large corporations is, first of all, an ad hominem attack and irrelevant. It also reflects how critics miss the point about the broader role that IP plays in terms of jobs and economic activity. Critics disingenuously associate intellectual property only with certain industries and firms, such as large film studios, when intellectual property is essential throughout an economy—to firms both large and small, traditional and high-tech, goods and services-based.⁸³ Furthermore, the prevailing criticisms ignore the broader role that intellectual property plays beyond the end products people commonly associate with IP: that people's jobs rely on innovation and creativity. Whether as workers or consumers, people around the world benefit from the innovation that intellectual property spurs.

Intellectual property is far more pervasive in the U.S. economy than critics admit. In today's economy, the generation and management of knowledge plays a predominant role in wealth creation, compared with traditional factors of production such as land, labor, and capital.⁸⁴ The rise of a knowledge-based economy is reflected in the U.S. workforce. Employment in intellectual property-intensive industries (those that use patents, trademarks, and copyright the most) is significant, with direct employment of approximately 27.1 million jobs in 2010, and indirect support of an additional 12.9 million U.S. jobs. Together, this represents 27.7 percent of all jobs in the U.S. economy.⁸⁵ These jobs are found in manufacturing, the media, business services, the creative arts, IT, agriculture, and elsewhere. Jobs in IP-intensive sectors also pay better—an average weekly wage of \$1,156 for IP-intensive industries, compared with the \$815 average weekly wage in other sectors. And this wage premium has only been growing, from 22 percent in 1990 to 42 percent by 2010.⁸⁶

The U.S. software sector provides a useful case study for the role of intellectual property and trade, given the rise in mobile phones and the app economy, the easy digital delivery of software, and a growing range of goods that require software with the rise of the Internet of Things. U.S. businesses are clearly world leaders in software, employing nearly 2 million workers in 2014.⁸⁷ The U.S. Bureau of Labor Statistics estimates that software-sector jobs will grow at an annual rate of 3.1 percent through 2020, and that the software industry as a whole will grow by almost 9 percent annually.⁸⁸ Software clearly needs intellectual-property protections and enforcement, given the ongoing prevalence of piracy. The TPP ensures online enforcement gets equal legal treatment to off-line.⁸⁹ While this seems a common-sense step, it is important to note that the TPP is the first free trade agreement to do this. The Business Software Alliance has estimated that reducing software piracy by 10 percentage points could add over 25,000 high-tech jobs, nearly \$38 billion in new economic activity, and \$6.1 billion in tax revenues over four years.⁹⁰

In today's global digital economy, no copyright can be applied efficiently without the support of technical protection measures.

Intellectual property is essential to firms of all sizes, especially in the modern digital economy. Worldwide intellectual property rights are essential to protecting the latest business ideas from small U.S. firms because many are “born global” via the Internet. For many small- and medium-sized firms working in sectors such as software, app design, and biotech, intangible intellectual property is their main asset and source of competitive advantage. Moreover, critics also forget that big corporations employ more than half of American workers, who earn 57 percent more than workers at small firms, on average.⁹¹ When these businesses lose sales to piracy and other intellectual property theft, yes, their profits are hurt, but so too are their workers, because the firms’ sales suffer.

The TPP addresses intellectual property issues, because this is where modern barriers to trade exist. It reflects the fact that modern trade is increasingly in bytes, ideas, and services. The TPP will harmonize approaches to intellectual property protection up to a similar level that is already in place in Australia, Canada, Japan, and the United States. Therefore, contrary to the rhetoric, the TPP’s IP laws are not new, nor scary. The provisions benefit all businesses, since harmonization drives down the transaction costs inherent in seeking IP protection and enforcement in foreign markets. A high-standard and harmonized IP system among TPP member countries will encourage flows of innovation, technology, and knowledge, which are increasingly important in today’s knowledge-based economy.

Invalid Claim: Technical Protection Measures Are an Attack on Innovation, Fair Use, and the Freedom to Tinker

In today’s global digital economy, no copyright can be applied efficiently without the support of Technical Protection Mechanisms (TPMs).⁹² TPMs protect access controls and copying for copyright-protected content and the devices/networks that use them, such as Netflix, the Xbox, or Valve’s Steam. Such “digital locks” are crucial to fight piracy, which threatens the creative output and innovation behind the growing global trade in digital goods and services. The stakes are high, given that the cost to develop a video game, for example, can frequently exceed \$50 million.⁹³ The rights of creators, especially online, are not worth much if they can’t be protected. TPMs have facilitated the innovation that led to new business models to distribute copyrighted content and vastly increased the range of content offerings, all the while increasing consumer access. Digital technologies and widespread high-speed Internet access have not only transformed how creators and companies realize the benefits from their creativity and deliver goods and services, but have also created a vulnerability whereby a single circumvention tool can quickly and easily facilitate piracy on a global scale.

While people use devices and networks that rely on TPMs on a daily basis to stream music, movies, and TV shows or to play games without particular concern, critics see nothing but doom. Canadian academic Michael Geist, a promotor of weak IP protection, calls provisions that prohibit TPM circumvention “unquestionably the biggest and most controversial digital copyright issues.”⁹⁴ According to the EFF, these are the “most threatening provisions” of the intellectual property chapter and are one of the main reasons they oppose the TPP.⁹⁵ EFF paints TPMs as a broad, sweeping evil that impedes

innovation, security, and basic user rights and expectations, while claiming that they fail to inhibit copyright infringement.⁹⁶ It is important to understand that these critics are absolutists; they do not see intellectual property rules as about balance between access and protection. For them, absolute access to all content, even if the user does not have a legal right to that content, is an ultimate goal. Any law, regulation, or trade agreement that works to ensure that people can't steal content with impunity is a law, regulation, or trade agreement that they will oppose.

Despite opponents' best efforts at misinformation and hyperbole, TPM provisions are not new, not scary, and hardly surprising, given the technology at the center of today's digital economy.

Like passing laws prohibiting a locksmith from selling forged keys, the TPP provides legal protection and effective remedies against TPM circumvention and prohibits actors from providing circumvention services and supporting trade/trafficking in circumvention tools.⁹⁷ Given incidences whereby people disseminate how to circumvent TPMs, such as on video games, the agreement requires members to provide criminal sanctions where a person is found to have willfully and for purposes of commercial advantage or financial gain violated the legal protections for TPMs.

TPM provisions are not new, as they build on provisions made part of multilateral treaties—including the World Intellectual Property Organization's (WIPO) Internet Treaties—agreed to in the late-1990s.⁹⁸ These WIPO treaty provisions were remarkably prescient, given digital creators rely on technical measures to protect their content in order to realize the benefits of their creativity. As WIPO outlined in its guide for the treaties, the application of TPMs is “a key condition for the protection, exercise, and enforcement of copyright in the digital networked environment.”⁹⁹ In the 20-plus years since these treaties were signed, and since the United States implemented these provisions as part of the Digital Millennium Copyright Act (DMCA), it's hardly surprising that the TPP would seek to build upon these same provisions and update them where necessary to better account for changes in technology and consumer preferences.¹⁰⁰

Critics claim that TPMs stifle innovation and consumer access. On the contrary, TPMs have not limited consumer access, but rather have facilitated it. In the 20 years since the DMCA was enacted, the United States has developed a framework of rulings and set of experiences that are the foundation for our country's exceptional success in the digital economy. Digital companies continue to develop and introduce new and innovative business models under current copyright and TPM laws, including via mobile phones, consoles, and computer games, and via different mechanisms, such as free-to-play, freemium, subscription, advertising, and crowdfunding. Games, TV shows, movies, and other content are more accessible now than at any point in the past, both for audiences and creators, as no one has to rely on physical retail outlets.

Take the video-game sector for example—rules that protect access controls and copying have allowed big firms and indie developers alike to sell games for consoles, smartphones,

and computers via centralized platforms and entertainment networks. For example, Valve's digital games platform, *Steam*, introduced an average of eight games a day in 2015.¹⁰¹ These networks not only sell games, but also act as a hub for more compelling and sophisticated experiences for consumers, especially as gaming becomes more social, sports-like, and multiplayer-based. In 2015, digital content (such as subscriptions, digital games and add-ons, mobile apps, and network gaming) accounted for 56 percent of the \$23.5 billion in U.S. games-sector sales. The games industry employs, directly and indirectly, 146,000 people in 36 U.S. states.¹⁰² Extending these rules overseas is important, as the Asia-Pacific region has varying levels of intellectual property protections and is a major growth market for games. In fact, analysts expect the games market in six Southeast Asian countries (Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) to be worth \$2.2 billion in 2017.¹⁰³

A lock is only good if the right people have the key. There are (a very few) legitimate reasons why countries allow people to circumvent TPMs for valid “tinkering”: Reverse engineering for software compatibility, accessibility for disabled persons, and unlocking cell phones are a few. Such incremental innovation is, of course, a part of innovation, and there are indeed cases on the margins where TPMs have inhibited such innovation. The problem is that the steps involved in the circumvention of TPMs for legitimate tinkering are the same exact steps used to facilitate widespread piracy. A major risk regarding TPMs is that some requests for permission to circumvent TPMs have a marginal benefit in terms of transformative innovation, but more broadly, risk entire networks and libraries of copyrighted content and further embolden people to pirate more material. Tools that circumvent TPMs quickly spread, especially on the Internet.

Critics claim that the TPP's TPM provisions will stop people's ability to legitimately tinker, modify, and build on copyright-protected goods or services in a way that is innovative and transformative. However, the TPP includes provisions to manage instances where TPMs do stop legitimate cases for circumvention. First, the TPP includes general exemptions for nonprofit libraries, museums, archives, educational institutes, and public noncommercial broadcasters, similar to what many countries already have in their respective laws and regulations. Second, the TPP includes key principles to guide how each country determines case-by-case exceptions to these rules, providing flexibility for each country.¹⁰⁴ Many countries, such as Australia, Canada, and the United States, already have a review mechanism to provide a “safety valve” to address specific cases where the prohibitions on TPM circumvention prevent a legitimate noninfringing use or access to copyright-protected content. For example, Canada permits an exception for cell-phone unlocking and for printer cartridges, which would continue to be allowed under the TPP.¹⁰⁵ In the United States, the librarian of Congress has a triennial review to identify cases where additional exceptions to circumvention are warranted to enable legitimate noninfringing uses.

The TPP provision sets a high standard for this process, as it wants to avoid the potential end result of a weak process—further piracy. This is exactly what the U.S. Copyright

The three-step test for fair use provides a workable standard for balancing copyright protections and other public interests and sets a flexible boundary for exceptions.

Office acknowledged during its triennial rulemaking in 2012 in its rejection of a case brought by EFF that sought TPM circumvention for games consoles.¹⁰⁶ The U.S. Copyright Office found that console firmware TPMs are a key element in protecting highly valuable expressive works and that—on balance—the potential piracy costs resulting from circumvention far outweighed whatever new and transformative uses that EFF and proponents claimed circumvention would provide (the final analysis labelled this impact as likely “di minimis”).¹⁰⁷ The Copyright Office deemed that such potential “non-infringing” uses “are in fact used overwhelmingly in the video game context for copyright infringement.” Highlighting the risk of overly broad allowances for TPM circumvention, it noted that hackers routinely attempt to mask their true motives by marketing or labelling their tools and activities as “noninfringing” or “fair use” even when the hacking or trafficking is for piracy.¹⁰⁸

The debate around TPMs, much like intellectual property more broadly, is about balance—between rights and exceptions. In this regard, the benefits provided by TPMs far outweigh the costs. Even then, the TPP outlines a framework for how countries can reduce these costs in terms of the adverse impact that TPMs may have on some parties seeking to circumvent TPMs for legitimate noncommercial purposes. Despite this approach, critics choose to focus on cases on the margin—where there are some legitimate adverse impacts from TPMs inhibiting legitimate research and tinkering—while refusing to acknowledge that TPMs play an overwhelmingly positive role in spurring innovation, especially online. True to their ideological opposition, these critics, such as EFF, do not recognize the value that these laws provide for innovation and intellectual property and remain unconcerned with policies that would allow even greater levels of digital piracy.

Invalid Claim: The TPP Is a Threat to Free Speech

Public Knowledge and other anti-IP critics claim that the TPP’s copyright rules constitute an attack on free speech, as they do not include binding commitments to implement the U.S. “fair-use” doctrine. Public Knowledge claims that the TPP’s approach to fair use—how exemptions and limitations to copyright are allowed for such uses as commentary, criticism, parody, news reporting, research, and scholarship—is the “epitome of such overbroad [copyright] protections, laying out restrictive provisions that weaken U.S. exceptions and limitations.”¹⁰⁹

Such criticism is false. The TPP’s copyright provisions use the same core criteria to define fair use already employed around the world, as different legal systems and approaches mean there is no one-size-fits-all approach to defining fair use. This is why it is misguided to think that the U.S. fair-use doctrine, which is based in complex and ongoing judicial interpretations, can simply be exported.

The TPP protects fair use with the same core criteria—known as the “three-step test”—that have been part of international law for decades in the Berne Convention (an international copyright agreement, with 171 country signatories), the TRIPS agreement (162 country signatories), and other World Intellectual Property Organization treaties.¹¹⁰

All parties in the TPP must join these agreements, if they have not already. The three-step test provides a workable standard for balancing copyright protections and other public interests and sets a flexible boundary for exceptions. In particular, the Berne Convention's inherent flexibility has allowed the treaty to bridge different legal systems and ride the pendulum swings over time between the interests of rights holders and users—for close to half a century.¹¹¹ Despite this track record of widespread adoption, opponents such as EFF ignore the TPP's role in cementing the key principles for fair use, as they think that even this flexible standard is too restrictive.¹¹²

This flexible system has resulted in a range of different approaches around the world. A small number of countries employ fair-use provisions, such as the Philippines, South Korea, and Israel, while many common-law countries include the three-step criteria as part of a “fair dealing” doctrine, such as Australia, Brunei, Canada, Malaysia, New Zealand, Singapore, and the United Kingdom. Civil-law countries (many in Europe) have a specific and detailed list of statutory exceptions in their code-based laws.

Making the U.S. fair-use doctrine mandatory for all members of the TPP does not make sense, as other countries do not have the same court-tested set of legal cases. This is critical, as the U.S. Copyright Act of 1976 does not explicitly define “fair use” but spells out four statutory factors that form the core of the doctrine in terms of assessing whether a use is “fair” and thus noninfringing.¹¹³ However, these factors are not applied formulaically or mathematically (i.e., three factors win over one) and are nonexclusive (allowing judges to take into consideration other factors), which is what makes the role of the courts so important and what makes it a dynamic doctrine that cannot simply be exported.¹¹⁴

This means the U.S. “fair-use” doctrine remains dependent on judicial interpretations, as courts clarify what are infringing or fair uses as technology and copyright uses change.¹¹⁵ This means that the doctrine evolves with new judicial decisions. Indicative of the role played by the courts in different systems is the fact that in the United Kingdom (which has a fair-dealing system) there have been 67 cases since 1978 (an average of 2 per year).¹¹⁶ Meanwhile, in the United States, there were an estimated 306 judicial decisions from 215 cases that involved fair use between 1978 and 2005, an average of 8 cases and 11 opinions per year.¹¹⁷ Adopting a similar fair-use system without this history of jurisprudence means there would have to be a number of diverse, and (possibly) lengthy, and costly, litigation to determine the scope of permitted uses. This will also flow through to higher transaction costs for commercial intellectual property arrangements and increased uncertainty about the legality of any broad fair-use exception. Without jurisprudence to define the barriers, people will be unsure what is and is not legal.

The TPP does not preclude countries from reforming their respective copyright systems and how they define changes in contemporary fair use—a benefit of the flexible “three-step” test's approach to fair use. For example, in 2012, Canada rejected a U.S.-like fair-use law as part of its Copyright Modernization Act, even after a long and contentious debate where many parties wanted such an approach. Australia has also been going through a

similar review and debate about copyright reform, including around provisions similar to the U.S. fair-use doctrine. However, it is one thing for a country to revise how it applies the three-step test to create the space in copyright laws for fair use, but forcing countries to adopt the U.S. approach is misguided, given the serious risk of it being misinterpreted and misapplied.¹¹⁸

Invalid Claim: Source Code Rules Will Stop Governments From Regulating

Source code—the coded instructions at the heart of a computer program—enable computer technology to do the amazing things it does. For companies developing software, protecting source code is necessary to prevent other entities from stealing and free riding on the large R&D costs associated with software development. Indicative of the sensitivity around source code is the fact that when one purchases software or goods with software embedded, the software is generally compiled in “object code” form, and not with the actual source code, as this would make it much easier for thieves, hackers, and others to copy and misuse. In other cases, software firms use open-source licensing arrangements to disclose source code in order to allow others to modify and build on the source code, but such a decision is made by each individual or firm.

The key aspect of the TPP's provisions regarding source code is that they prohibit countries from making disclosure of source code a condition of market entry.

Within the debate around this provision, it's important to remember that the United States does not have a law that requires a source code audit as a condition of market entry. Furthermore, from a commercial perspective, not disclosing source code is standard practice, given the intellectual property and security considerations. So it's not as if the TPP is a change from current U.S. policy. The focus of the TPP is when governments ask for source-code disclosure upfront, as with China, as this is a form of appropriation and IP theft. However, the TPP will not affect the scenarios where source code is disclosed as a matter of business (after entry), such as in commercial contracts, government procurement, patent applications, legal discovery, and for regulatory concerns (such as environmental).

Some countries, especially China, in an effort to gain valuable foreign IP, have proposed regulations that require companies to transfer or allow access to source code as a condition of market entry—effectively acting as a barrier to trade.¹¹⁹ Source code is the intellectual property at the heart of modern digital innovation, but as it is digital, it can be easily copied, transferred, and replicated. As in China, the risk of exposure comes from government authorities who pass on part of the code or full copies to local competitors. The provision is a trade issue, as source-code provisions can effectively exclude foreign firms from key markets, such as for ICT products that have preloaded software installed. The TPP provision aims to counter the use of source-code disclosure as a thinly disguised trade barrier against foreign firms. On a number of occasions, China proposed regulations that negatively affected foreign firms (who are market leaders) while directly or indirectly benefiting uncompetitive domestic Chinese firms. These tools, and this outcome, support China's broader industrial development goal to replace foreign-made goods with domestic ones.¹²⁰

Raising the standard for source-code protection in the TPP sets a new global norm for a large part of the global economy and a level of protection that other countries should aspire to. The relevant provision states that no TPP member shall require the transfer of, or access to, source code of software owned by a person of another TPP member, as a condition for the import, distribution, sale, or use of such software, or of products containing such software, in its territory.¹²¹ The phrase “as a condition for” shows that it targets measures used to prevent market entry—a trade barrier to electronic commerce.¹²²

For TPP member economies, it means companies (and their home countries) do not have to react on a case-by-case basis when countries try to access (and steal) source code, and the corresponding efforts to garner support to push back against such measures, which may or may not be successful.¹²³ More broadly, the TPP provisions send a signal that source code deserves protection, that efforts to target it through behind-the-border rules in order to gain a competitive advantage for local firms are unacceptable, and that countries should aspire to the benchmark set by the TPP if they want the world’s most innovative companies in their country. Ultimately, what this provision aims to avoid is the use of source-code disclosure as a discriminatory tool to seal off markets from foreign technology companies, which rely on global economies of scale (as companies do with China) to recoup their significant investments in their ideas and research and development. While China is not a member of the TPP, it will need to meet these standards should it ever want to join.

Critics, and some in the media, claim the TPP’s provisions to prohibit source-code disclosure threaten a government’s ability to ensure public safety, cybersecurity, and national security, and enact environmental, health, and other public-interest regulations.¹²⁴ These critics miss two central points—that the aim of the provision is the misuse of source-code audits as a barrier to market entry overseas, and that the TPP has a set of exceptions that address legitimate interests countries have about government operations, national security, and the ability to regulate for public health or other interests.

Critics claim that this provision will limit the government’s ability to take public-safety measures in law enforcement, cybersecurity, and encryption.¹²⁵ An example of this alarmist rhetoric by EFF: “TPP threatens security and safety by locking down U.S. policy on source code audit.”¹²⁶ Such claims are false. First, common exceptions in the TPP account for core government activities and interests—the security of government systems, national security, and the right to regulate. Governments are able to require source-code disclosure for software and products used by the government.¹²⁷ In addition, the TPP includes a broader national-security exception that a member country could use to contravene this provision if it were deemed absolutely necessary for security reasons.¹²⁸

Second, criticism about the impact it will have on the government’s ability to regulate ignores the usual framework used in the TPP (and other trade agreements) to balance the government’s ability to regulate for legitimate public interests with measures to protect against the potential misuse of regulations as trade barriers. First, it allows source-code

modification of software if that is required for companies to comply with existing laws or regulations. Second, it allows authorities to examine the software used in critical infrastructure, and while there isn't a clear list of what this covers, it would reasonably be expected to cover systems such as the power grid, financial systems, and telecommunication systems. Finally, even if a TPP member wanted to do so, the TPP allows governments to perform a source-code audit in a way that may contravene the terms of the TPP, but only under certain conditions. The source-code provision is subject to a general exception in the TPP that allows countries to enact measures that protect human, animal, and plant life or health, privacy, and to prevent deceptive and fraudulent practices.¹²⁹ But critical to this exception is language that limits the potential for this exception to be used as an unnecessary and discriminatory trade barrier, as is the case in China.¹³⁰

As is common in the debate around trade and regulation, the key is balance—providing for legitimate government interest and action, while not allowing the misuse of regulations for protectionist purposes, and providing an avenue to hold countries to account for any such potential misuse. The current framework of intellectual property laws has proven ineffective in securing this balance in China and elsewhere, so it is hoped that the TPP can help provide a clearer and stronger mechanism to stop this type of trade barrier from spreading.

What is left is the large and growing market for software and goods (with embedded software) that is at the heart of the digital economy. The provision is “limited to mass-market software or products containing such software.”¹³¹ It is the software that the public and private sector generally use on a daily basis—the U.S. General Accounting Office defines mass-market software as that which is available to the public through retail selling points (without restrictions), whether in-store, by mail order, over the telephone, or via the Internet.¹³² Furthermore, despite the fears raised by some critics, the TPP does nothing to stop source-code disclosures that are undertaken as part of commercial arrangements—individuals and companies use legal tools to manage software disclosure, use, and purchases on a daily basis. In fact, it includes explicit language allowing these traditional means of facilitating source-code reviews: “[N]othing in this Article shall preclude ... the inclusion or implementation of terms and conditions related to the provision of source code in commercially negotiated contracts.”¹³³ This shows that there are no grounds for claims that this provision is a threat to free software and open-source licensing systems.

Invalid Claim: ‘Safe Harbor’ Provisions Turn ISPs Into Content Police on the Internet

“Safe harbor” frameworks for Internet service providers (ISPs) are not new. These rules started in the earliest days of the Internet when ISPs became aware of the potentially high risks in content liability cases. For copyright, the ability of the Internet to act as a platform for the distribution of music, movies, TV shows, and other information content has been shadowed by a large and persistent level of digital piracy, especially via peer-to-peer file sharing networks (e.g., BitTorrents) and streaming. Once the legal risks to ISPs became clear, many countries introduced limited liability protections. However, this is based on the

condition that, to benefit from this liability limitation, an ISP should be prepared to act as a responsible stakeholder when asked to remove or block access to identified illegal or infringing content.

Internet exceptionalists, such as EFF and Fight for the Future, do not want intellectual property rules to apply online, including rules that require ISPs to take responsible action to escape liability from users' copyright infringement—the so-called “safe harbor.” For example, Fight for the Future claims, “This [the ISP safe harbor provision] is one of the worst sections that impacts the openness of the Internet” as it requires ISPs to play “copyright cops.”¹³⁴ Public Citizen asserts that the TPP further enforces rules that enable censorship by copyright takedown.¹³⁵ To a large extent, the criticism can be categorized as being from those who oppose the current state of U.S. copyright law, while ignoring the role that such rules play in facilitating digital trade and innovation and the fact that many TPP members already have a system similar to that outlined in the TPP. After all the fearmongering from opponents, these provisions will not change anything in the United States.¹³⁶ Furthermore, Australia, Canada, Chile, Japan, Malaysia, New Zealand, and Singapore all have some form of ISP liability limitation.¹³⁷

There is nothing in the TPP that requires ISPs to monitor their systems for copyright infringement, and there's nothing in the TPP that requires ISPs to become “copyright cops.”

The TPP does not turn ISPs into “copyright cops.” There is nothing in the TPP that requires ISPs to monitor their systems for copyright infringement; in fact it stipulates that safe harbor is explicitly not contingent on such active monitoring.¹³⁸ The TPP provides a “safe harbor” framework for ISPs to escape liability for users' copyright infringements by promptly removing or disabling access to infringing material after being notified about the material's existence on their system. The TPP stipulates that to benefit from the limit on legal liability, ISPs have to forward notices of alleged infringement, as they already have to do in the United States and elsewhere. It also provides protections to ensure that rights holders don't abuse the process. If an ISP does this in good faith, it is free from liability.

What the TPP does is set a framework for each country to design a system to balance ISP liability protection and responsibilities in fighting digital piracy. The TPP included these rules as growing cross-border Internet-enabled trade and innovation depends on Internet intermediaries such as ISPs.¹³⁹ These intermediaries facilitate trade by allowing the expansion, aggregation, and globalization of markets, as well as the customization of goods and services.¹⁴⁰

Invalid Claim: Trade Secret Protections Are Unnecessary, Will Restrict Entrepreneurship and Innovation, and Will Be Used to Target Whistle-Blowers and Journalists

Contrary to popular belief, the most common form of intellectual property protection is not patents or copyrights, but secrecy.¹⁴¹ Trade secrets are perhaps the oldest form of intellectual property, going back to methods used in China to protect how silk was harvested and weaved.¹⁴² Trade secrets include any protected business information—whether technical, financial, or strategic—that is not generally known, has commercial value because it is secret, and the owner has taken reasonable steps to keep it secret.¹⁴³

Trade secrets, which include any protected business information that is not generally known and has commercial value because it is secret, are an important IP protection tool for small and large enterprises alike.

Trade secrets can be formulas, know-how, contract terms, software, customer lists, marketing, finance, strategy information, or market intelligence. Trade-secret provisions are part of the TPP, as all of this internal know-how is both incredibly valuable and increasingly digital, and thereby at heightened risk of cybertheft. State-directed or supported actors seek to use cybermeans to steal and use trade secrets for their own country or company's commercial advantage, especially in China.

Some critics claim that because trade secrets do not have to be disclosed, like patents and copyright, that they are not worthy of protection.¹⁴⁴ Other critics claim that trade secrets restrict entrepreneurship and innovation and would cost TPP economies significantly more in terms of lost growth, jobs, and welfare than it would earn.¹⁴⁵ Such alarmist criticism shows a lack of understanding about what trade secrets are, how they are used in a digital world, and why there is a need to raise the collective level of trade-secret protection and enforcement in TPP countries.

Owners value trade secrets as a way to manage proprietary knowledge. Trade secrets are valuable in their own right, but they also act as a vital link in the broader innovation processes for other forms of intellectual property. For example, with patents, trade-secret laws protect the information that leads up to an application, as national patent laws require "absolute novelty," that the invention must be completely protected from any public disclosure.¹⁴⁶ Furthermore, firms can use trade-secret protections to leverage the value of internal, firm-specific information through licensing, partnerships, or other relationships, and they need to ensure that this information is properly protected in order to benefit from it.¹⁴⁷ In this way, trade secrets facilitate sharing among partners, as they create a way for firms to seek legal recourse if a third party misappropriates their valuable knowledge. For example, in the absence of such protections, 40 percent of companies in the European Union report that they would likely retain business information strictly internally to avoid losing control over it.¹⁴⁸

Due to their very nature, the value of trade secrets is easy to underestimate and therefore underappreciate. A study of Australian, European, and U.S. companies found that trade secrets comprise an average of two-thirds of the value of firms' information portfolios, increasing to 70 to 80 percent for knowledge-intensive sectors, such as manufacturing, information services, and professional, scientific, and technical services.¹⁴⁹ In contrast to critics' assertions that trade secrets are merely a tool of large corporations; however, small businesses rely disproportionately on trade secrets, partly due to the fact they are much less expensive to obtain, keep, and enforce than patents.¹⁵⁰

The TPP is the first FTA to require criminal penalties for trade-secret theft, including through a computer system.¹⁵¹ Digital storage of commercially sensitive information is commonplace, but the ability of thieves to steal this information via the Internet (or via an employee with a portable hard drive) places the information at constant risk. If this information is stored on overseas servers, it means the company needs to take legal action wherever the theft occurred, making it reliant on jurisdictions with potentially weak or

nonexistent trade-secret protections. The TPP thereby provides a higher and common set of legal remedies should a company experience trade-secret theft, especially by cybermeans.

What the TPP seeks to address is the growing cybertheft of trade secrets. In a 2012 speech, General Keith Alexander, then head of the National Security Agency and U.S. Cyber Command, stated that IP theft by cyberespionage is the “greatest transfer of wealth in history,” estimating that U.S. companies lose \$250 billion per year via IP theft.¹⁵² Many countries do not adequately account for this risk and do not provide legal recourse for such cybertheft. As a 21st-century trade agreement, it is only logical that the TPP include rules that both support legitimate digital trade and counter activities that pose a risk to such modern trade. The TPP raises the collective level of trade-secret protection and enforcement in member countries, which at this stage, varies considerably, as the TRIPS agreement sets a current (low) international benchmark.¹⁵³ In this way, the TPP reflects individual country efforts toward better trade-secret protections—the United States, the European Union, and Japan have each reformed their own trade-secret laws this year.¹⁵⁴

Fight for the Future (FFTF) argues “This [the trade-secret provision] is clearly intended to stifle whistleblowers and journalism covering the documents they expose—it could criminalize, for example, *The Guardian’s* reporting on the documents they received from Edward Snowden.”¹⁵⁵ EFF and FFTF wrote a joint letter that includes the claim that: “[T]he TPP’s trade secrets provisions could make it a crime for people to reveal corporate wrongdoing ‘through a computer system.’” These claims—that TPP members wanted to use a trade agreement to target journalists and whistle-blowers—is a good example of critics of the entire agreement reading into the TPP what they wanted—mainly, fear. The informed reader would note that global news agencies—Reuters, AFP, AP, CNN, and others—have not joined together and used their influential broadcasting platforms to collectively oppose a provision that supposedly puts their profession in jeopardy.

These claims ignore the laws in place in the United States and elsewhere that protect employees from potential repercussions from disclosing illegal activities that a firm may try to portray as “trade secrets.” First, the definition of trade secret has not suddenly expanded to include activity that is not already in international law—the TPP uses the definition of trade secrets in TRIPS as a minimum. TRIPS, with 162 members, has been enforced since 1995 and has not been used to target journalists or whistle-blowers.

Second, the text of the TPP shows that negotiators were cognizant of exactly this type of criticism. For example, a footnote to the title of the trade-secret provision states that the entire provision is “without prejudice to a Party’s measures protecting good faith lawful disclosures to provide evidence of a violation of that Party’s law.”¹⁵⁶ Backing up this “good-faith” intention, the TPP’s transparency and anticorruption chapter includes provisions that members shall adopt or maintain measures to protect whistle-blowers.¹⁵⁷ Moreover, the application of proportionality to all IP provisions provides a backstop should any country try to misuse trade secrets or other provisions in an absurd way that is clearly not the intention of the provision—if they tried, they could not blame the TPP.

Finally, in the United States, whistle-blower protections are covered in America's recently passed Defend Trade Secrets Act of 2016, which provides civil and criminal immunity—a legal safe harbor—to individuals who disclose a trade secret in confidence to a government official (federal, state, or local) or to an attorney for the sole purpose of reporting or investigating a suspected legal violation.¹⁵⁸

Trade secrets are protected in the TPP because member countries recognize that changing technology and business practices means that the level and type of protection needs to change. Moreover, U.S. negotiators sought these provisions, in part, to future-proof the agreement, given the rise in trade-secret theft by cybermeans, especially by China. While insider disclosure of trade secrets by current or former employees remains a major issue, there is a need for updated rules to account for cyberthreats, as such attacks are far more insidious and difficult to detect and deter. This is what the TPP tries to address.

Invalid Claim: The TPP Is a Threat to Privacy

There are two main arguments TPP opponents use to attack the agreement's privacy provisions: that its rules to allow people to identify and address "cybersquatters" is a privacy risk and that its rules on cross-border data flows undermine privacy. Neither is valid.

Unmasking Cybersquatters

Critics claim that TPP provisions requiring members to have a way to disclose and address domain-name cybersquatting—where unknown people register a domain name that is the same or confusingly similar to that of a trademark owner and does this to profit—is a privacy risk. Fight for the Future claims that the provision "undermines anonymous online expression."¹⁵⁹ The Electronic Frontier Foundation claims that these provisions will make people "vulnerable" to copyright and trademark "trolls," identity thieves, scammers, and "harassers."¹⁶⁰ Such critics equate transparency with an invasion of privacy, seeking to ensure that common-sense rules that exist off-line do not apply online. All the while they ignore the criminal activity that motivates cybersquatters and the risk that such fraudulent behavior and piracy poses to the digital economy.

Cybersquatters profit from the intellectual property tied up in a domain name that uses a business's trademark. As the business value of domain names on the Internet has increased, so too has cybersquatting. The domain name system is the mechanism whereby host names (such as www.example.com) get translated into numeric Internet protocol addresses (such as 72.72.217.222). Cybersquatters exploit the fact that they can profit from someone else's intellectual property, as there is no need to demonstrate a connection between a domain name and its ultimate purpose.¹⁶¹ Cybersquatters exploit the first-come, first-served nature of the domain name registration system to register names of trademarks, famous people, or businesses with which they have absolutely no connection.¹⁶²

Cybersquatters profit by putting the domain names up for auction, or offer them for sale directly to the company or person involved, at prices far beyond the cost of registration. This has led to a growing number of disputes between cybersquatters and the businesses or individuals whose names have been registered in bad faith. As WIPO Director General

Francis Gurry has said, “there is no doubt that for a brand owner, the task of surveillance of the misuse of the brand is complicated by the increase in the number of domains, or possibilities of misuse of the brand.”¹⁶³

The TPP requires members to adopt a low-cost, fair and equitable, and straightforward dispute settlement process for businesses and individuals to seek remedies against cases involving bad-faith registration of domain names that are confusingly similar to registered trademarks.¹⁶⁴ Even then, this common-sense set of rules only applies to a country code top-level domain, such as .au for Australia, .ca for Canada, and .nz for New Zealand, as the requirements for these country code top-level domains (ccTLDs) are managed and set by individual countries.¹⁶⁵ Different countries approach ccTLD management differently, as these domains represent the national or territorial interests of a domain, and are often viewed as the flagship of a country’s Internet participation and as a strategic asset with symbolic, socioeconomic, and/or Internet stability and security implications.¹⁶⁶

The TPP allows countries to decide how to implement this dispute system for domain-name registration, including by basing it on the Uniform Domain-Name Dispute-Resolution Policy, which is approved by the Internet Corporation for Assigned Names and Numbers (ICANN, which governs much of the Internet’s architecture).¹⁶⁷ Many TPP countries, such as Australia and Canada, already do this.¹⁶⁸ By following this approach, the TPP simply extends principles that are already widely used around the world.

Once again, this criticism is ideologically based in opposition to intellectual property in whatever shape or form it takes. In this case, it’s the value tied up in trademarks. It seems a stretch to believe Fight for the Future’s claim that these rules will be dangerous for opposition groups in repressive countries to voice their concerns online without fear of violent retribution, as if opposition groups are going to use a domain name that is the same or similar to a well-known brand name.¹⁶⁹ This argument highlights these critics’ belief that privacy equates with piracy. Instead of trying to defend individuals involved in digital piracy, these critics should focus on the actual privacy measures of interest in terms of how ISPs and website registry companies manage customer details.

Cross-Border Data Flows, the False Promise of Data Nationalism, and Privacy

The TPP’s e-commerce chapter breaks new ground in including protections for cross-border data flows—which are the lifeblood of the global information economy. The agreement prohibits countries from forcing companies to store data or use computing facilities within a country’s borders—a concept known as “forced localization.”¹⁷⁰ These rules push back against growing global digital protectionism, whereby countries enact barriers to data flows as part of efforts to protect and support local ICT companies at the expense of foreign firms. Updated rules are sorely needed, as current WTO rules addressing data flows were largely codified in the 1990s when the Internet as we know it barely existed and such digital protectionism did not exist.

Critics claim that the TPP’s provisions to protect cross-border data flows are an attack on privacy. For example, Public Citizen asserts that “in some cases, our data may be vulnerable

in another country—to surveillance or marketing abuses—in ways that it is not at home” and that “the TPP could limit governments’ ability to protect us against such threats.”¹⁷¹ Furthermore, Public Citizen claims that the TPP has no express protection for privacy and data-protection policies to be exempted from the rules.¹⁷² Similarly, other critics, such as Canadian academic Michael Geist, criticize the provisions, as they believe that countries should be allowed to force companies to store data within a country.¹⁷³

Effectively, the TPP’s provisions on cross-border data flows protect the open architecture of the Internet from being “balkanized,” with each country deciding what data must be stored locally and what can be transferred. Even some critics, such as EFF, recognize that data flows are beneficial.¹⁷⁴ The TPP’s rules provide a much-needed counter to the growing number of countries, such as China, India, Indonesia, and Russia, that either require local data storage or are enacting other barriers to data flows.¹⁷⁵ Allowing these rules to proliferate would undermine the dynamic and innovative ways that businesses and users are able to take advantage of cloud-based computer storage and services, such as for emails, file exchanges, and music/movies/TV shows. These rules also go a long way to setting a new norm for the global digital economy, as TPP member countries are home to close to 600 million Internet users, or almost one in every five global Internet users.¹⁷⁶

Companies that have legal nexus in a country are subject to its privacy and cybersecurity laws and regulations—moving data overseas, or storing it elsewhere, does not give the company a free pass to ignore a nation’s laws.

There are a number of problems with critics’ objections to the TPP’s cross-border data-flow provisions and forced-localization prohibitions. First, Geist and other critics hold a misguided notion that data stored at home is more secure or better protected for privacy, and that if transferred overseas, the data is somehow inherently less secure. However, as ITIF demonstrated in a detailed report, *The False Promise of Data Nationalism*, those who argue that free-trade provisions for data abrogate national privacy rules, and therefore should not be included in trade agreements, overlook the reality that data does not need to be stored locally to be secure or to maintain commercial privacy protections. As long as the company involved has legal nexus in a nation, it is subject to the privacy and cybersecurity laws and regulations of that nation—moving data overseas, or storing it elsewhere, does not give the company a free pass to ignore a nation’s laws. It is either in compliance with the privacy laws and regulations of that nation, or it is not.

This is why ITIF asserts that it is a mistake for the TPP to allow countries to use privacy as a valid reason to require data localization, as in Australia and two Canadian provinces.¹⁷⁷ The TPP’s ability to protect data flows will be undermined, given how much data includes personal information. Allowing these policies to remain perpetuates the misguided notion that data stored domestically is somehow better protected, when what matters are the specific measures used for storing the data—wherever it is stored. The TPP provides explicit exceptions to its rules on data flows for “legitimate” public policies, including privacy, as long as such policies are not arbitrary or unjustifiable, disguised trade barriers, and do not impose restrictions that are any greater than necessary. However, no country has ever launched a legal challenge against privacy-based data localization at the World Trade Organization, meaning that these measures are likely to remain.¹⁷⁸ Similarly, ITIF opposed the exemption from prohibitions to data localization that the TPP provided for

financial data. As ITIF argued in *Financial Data Does Not Need or Deserve Special Treatment in Trade Agreements*, this carve-out was unnecessary, redundant, and created a policy loophole that other countries could misuse to justify further data protectionism.¹⁷⁹ Thankfully, the Obama administration realized its error in this regard and implemented a fix to clarify and minimize the impact of TPP’s carve-out for financial data from the rules prohibiting data localization.¹⁸⁰

Otherwise, the TPP promotes a flexible framework for privacy—without prescriptive and binding measures—as there isn’t a one-size-fits-all approach to the issue. The agreement states that TPP members shall adopt or maintain a legal framework that provides for the protection of the personal information of the users of electronic commerce, and each member should take into account principles and guidelines of relevant international bodies.¹⁸¹ This flexible approach is consistent with the evolving privacy framework in the Asia-Pacific region. Diverse societal and political values and legal systems mean that there are widely different approaches to privacy. For example, Brunei and Vietnam are both still developing data-privacy protections, while at the other end of the spectrum, the United States, Australia, and Canada have well-established privacy protections. This is why the Asia-Pacific Economic Cooperation (APEC, which includes all TPP members) has been developing a common privacy framework since 2004, acknowledging that there is a diverse range of approaches, but a common need for balance—among efforts to improve consumer confidence, the growth of electronic commerce, effective information privacy protection, and the free flow of information.¹⁸² The TPP reflects this flexible approach, which continues to evolve as countries share and implement best practices.

The TPP’s e-commerce chapter breaks new ground in including protections for cross-border data flows—which are the lifeblood of the global information economy.

Invalid Claim: The TPP Will Inhibit Patient Access to Medicines and Make Them Unaffordable

Some of the most vocal and emotional opposition to the TPP has come from the TPP’s intellectual-property protections for medicines, with a particular focus on the latest and most complex medicines, known as “biologics,” or drugs that are derived from and synthesized in living tissues. For example, Doctors Without Borders has asserted that “the TPP agreement is on track to become the most harmful trade pact ever for access to medicines in developing countries” and contends that the TPP “will dismantle public health safeguards” enshrined in international law.¹⁸³ Public Citizen contends that the TPP would give pharmaceutical firms new rights and powers to increase medicine prices, to limit consumers’ access to cheaper generic drugs, and to undermine health-system reforms in the United States and elsewhere.¹⁸⁴ But despite this over the top rhetoric, the TPP will have only a modest impact on drug prices and, if anything, will probably increase the availability of drugs over the long term. Moreover, if anything, the provisions regarding IP and biopharma products are too weak, reducing the ability of U.S. companies to compete effectively in the global economy, and prevent the creation of more U.S. jobs in the industry.

The first problem with the assertion that the TPP will limit access to medicines is that the TPP will have virtually no impact on access to the vast majority of the world’s essential

medicines—including ones treating the largest causes of mortality in developing countries—more than 92 percent of which are already off-patent.¹⁸⁵ (This extends to developed countries—in the United States, generic drugs account for more than 84 percent of all prescriptions.) To be sure, access to medicines is important, but the factors involved are more complex than simply wanting all drugs to be off-patent generics. This is demonstrated by the fact that, despite the prevalence of access to already off-patent medicines, at least one-third of the world’s citizens living in developing countries still lack access to World Health Organization-identified essential medicines.¹⁸⁶ This owes largely to weak health-care systems and infrastructure, underinvestment in many developing countries, and, in some cases, high taxes and tariffs on medicines imposed by developing-country governments.¹⁸⁷

The second problem with the assertion that the TPP will make medicines unaffordable is that the TPP will not change its members’ ability to influence the price at which drugs are sold domestically, as many countries effect this through public-health procurement programs. Australia, Canada, Japan, and New Zealand all have government agencies that negotiate with drug companies to lower prices for patent-protected drugs sold within those countries. For example, Australia has already declared that the TPP will not change its national Pharmaceutical Benefits Scheme and will have no impact on how it assesses medicines or the cost of medicines for consumers.¹⁸⁸ To be clear, such pricing policies reflect a desire by these nations to free-ride off the innovations in nations that don’t require deep drug discounts. In other words, their policies directly harm global biopharma innovation by reducing revenues that biopharma innovators can receive from new drugs.¹⁸⁹

Similarly, critics read nefarious intentions into TPP measures that focus on transparency and procedural fairness (a right of appeal) for the listing of pharmaceuticals and the reimbursements they receive from national health systems.¹⁹⁰ These provisions are process related and do not ensure any specific outcome, yet critics still want to generate fear from it as they view any measure that may conceivably benefit corporations as being evil. Again, this is all part and parcel of an attempt by some advocates to seek lower prices (or free in the case of their advocacy of piracy), even though such actions will directly hurt innovation and U.S. jobs.

The TPP also includes a number of safeguards and flexibilities. It includes transition periods (of 3 to 10 years) for the least-developed TPP countries before certain provisions come into force. The TPP also incorporates the Doha Declaration on the TRIPS Agreement and Public Health and confirms that members are not prevented from taking emergency measures to protect public health, such as responding to epidemics such as HIV/AIDS. Furthermore, it counters concerns about the applicability of the TPP’s Investor-State Dispute Settlement mechanism to the intellectual property chapter by explicitly allowing countries to regulate for public health.

The TPP’s rules around biologic drugs—those derived from and produced within living organisms—have been a particular lightning rod for criticism. However, this criticism

exposes a lack of understanding about the nature and use of biologics and how these differ from traditional medicines. Intellectual property for biologics differs from traditional pharmaceutical drugs in important ways, and this is why many countries in the TPP afford biologics two forms of IP protections: a patent for the original compound and data protection to incentivize the lengthy development work necessary to establish a biologic drug's clinical safety and efficacy. TPP members need to provide at least eight years of data exclusivity or guarantee at least five years of data exclusivity and another three years of "other measures ... and market circumstances ... to deliver a comparable outcome (to eight years)." Internationally, the TPP's period of data exclusivity compares to 12 years in the United States, 10 years in the European Union, 8 years in Japan and Canada, 6 years in China and Korea, and 5 years in Australia, Chile, New Zealand, Malaysia, Peru, Singapore, and Vietnam.¹⁹¹

ITIF believes that biologics should receive 12 years of data exclusivity, as this provides the right balance between promoting competition and providing adequate incentives to support continued innovation of new treatments and cures.¹⁹² The success of this balanced system is reflected by the fact that the United States has become the world's leading biotech innovator—in fact, from 1997 to 2012, more than half the IP related to the world's new medicines was invented in America, while, in the 2000s, U.S. biopharmaceutical companies introduced more new chemical entities than companies from the next five nations combined.¹⁹³ As mentioned earlier, U.S. policies also support a thriving generics market.¹⁹⁴ In other words, a thriving generics industry depends on a thriving novel biopharmaceutical industry that in the first place invents the new drugs that later become generics.

The TPP should not undermine the length of protection provided in the United States and would ideally match it. But given where the TPP is with the debate over its level of protection, TPP members need to find a way to ensure—with absolute certainty and clarity—that signatories provide at least eight years of effective exclusivity for clinical trial data. This is because the text in the agreement creates uncertainty about the actual length of protection and how this will be achieved in TPP member countries.¹⁹⁵ Similar to its fix for the financial data carve-out, the Obama administration needs to find a solution—whether through side agreements or other mechanisms—to provide certainty and clarity for biologics' protection.¹⁹⁶ Whether it is 8 or 12, this is simply one part of the debate around biologics, as many critics of this provision do not think there should be any period of exclusivity at all.

Biologic drugs are especially important, as they represent the future of biomedical innovation. More than 900 novel biologic drugs targeting more than 100 different diseases are under development today, addressing a range of conditions from cancers such as leukemia and melanoma to diabetes and infectious diseases.¹⁹⁷ By 2020, biologic products

are projected to account for more than 50 percent of sales within the top 100 prescription products.¹⁹⁸ According to the latest *Global Pharmaceutical R&D Pipeline* report by Fitch Ratings, FDA approvals for biologics accounted for 28 percent of all new drug approvals in the last 21 months (as of December 2015), up from 17 percent over the 2010 to 2013 period.¹⁹⁹

Biologics are fundamentally different from traditional pharmaceutical drugs in many ways. Unlike traditional pharmaceutical drugs, which involve smaller molecules that operate largely on the basis of chemical reactions and that work by treating the consequences of a disease, biologics work by blocking diseases earlier in their development, in the immune system. And since they can be tailored to individuals taking the medicine, biologics constitute an important step toward realizing the vision of personalized medicine.²⁰⁰ But as biologics are large, complex, and sensitive molecules that must be manufactured within living tissues, the resulting protein is unique to the cell lines and the specific process used to produce it, and even slight differences in the manufacturing of a biologic can alter its nature.²⁰¹ Indeed, the sensitivity of these complex proteins make them more difficult to characterize and to produce such that even minor differences in manufacturing processes or cell lines may result in variations in the resulting protein.²⁰² This is why biologics receive unique intellectual property protections.

The differences between biologics and traditional drugs extend to the discovery and development process. Unfortunately, the process of developing a biologic drug is extremely risky, time-consuming, and expensive. The vast majority of biologic medicines never make it to the approval stage, with less than 15 percent moving from initial preclinical studies to clinical trials.²⁰³ Yet the cost to develop a new prescription medicine that gained marketing approval in 2013 was \$2.6 billion (a 145 percent increase over 2003 costs), while estimated post-approval R&D costs of \$312 million “boosts the full product life cycle cost per approved drug” to close to \$3 billion.²⁰⁴ Moreover, for biologic drugs that are approved, development of manufacturing facilities represent an additional cost beyond R&D that can range from \$90 million to \$450 million or more.

Pharmaceutical firms therefore have a different time horizon for biologics compared with traditional drugs in terms of analyzing cost recovery and the incentive to invest in research and development. Studies find that the break-even time to recover development, manufacturing, promotion, and capital costs averages 14.6 years.²⁰⁵ Specifically, Grabowski et al. find that a representative portfolio of pioneer biologics would be expected to break even (that is, to recover the average costs of development, manufacturing, and promotion; and the cost of capital) in 12.9 to 16.2 years.²⁰⁶ This long break-even timeframe means that biologics makers have a limited amount of time in which to recoup their investment before a biologic drug’s intellectual property rights expire. Affording innovators, for a finite period of time, data-exclusivity protection (as the TPP does) on the clinical trial data that validates the safety and efficacy of novel biologic drugs extends the period of time during which they can recoup their risky and expensive investments in novel-drug development.

Opponents of intellectual-property protections for biologics base their criticism on the claim that longer data-exclusivity protections for biologics delay cheaper “biosimilars” (generic versions of biologics), when the likelihood is that the cost reductions may not be as significant as with traditional “simple” drugs.²⁰⁷ Again, this comes back to the differences between traditional and complex drugs. In the case of conventional small-molecule medicines, the cost of developing a generic drug over three to five years is approximately \$1 million to \$5 million, thus providing patients a lower-cost alternative.²⁰⁸

But, in contrast, many of the shortcuts available to generic manufacturers will not be available to biosimilar producers, who are expected to invest in clinical trials as well as manufacturing and post-approval safety-monitoring programs similar to those of the innovative biologic company.²⁰⁹ Consequently, biosimilar products are estimated to take 8 to 10 years to develop at a cost of \$75 million to \$250 million.²¹⁰ A study by Lybecker notes that, “Current studies estimate cost savings from biosimilars will be between 10 and 20 percent less than the cost of the pioneer biologic.” In fact, European data suggests that biosimilars may offer just a 10 percent discount from a branded pioneer biologic medicines.²¹¹ In the United States, the first biosimilar drug was offered at only a 15 percent discount to the original.²¹² The key point to take away from this is Lybecker’s conclusion: “It is not worth undermining the future of this technology [biologics] with weakened intellectual property protection for the limited cost savings anticipated through biosimilar competition.”²¹³

The next step in this line of criticism is the claim that longer periods of regulatory-data protection for biopharmaceuticals are automatically associated with increased expenditures on medicines, while, in fact, this is not a certainty. That has not been borne out in the experiences of either developed nations, such as Canada and Japan, nor developing nations, such as Peru. For instance, in 2006, Canada changed its laws to increase the duration of IP rights for clinical data from zero to eight years, but pharmaceutical expenditures as a percentage of Canada’s health-care expenditures actually decreased over that period.²¹⁴ Likewise, Japan increased its data-protection window from six to eight years in 2007, yet pharmaceutical expenditures as a share of Japan’s health care expenditures have actually decreased since 2005.²¹⁵ These experiences show that bolstering IP rights does not necessarily result in meaningful increases in expenditures on medicines relative to overall health-care budgets.

For developing countries, Peru’s experience with data protection and trade agreements is illustrative. At the hearing on the TPP in January 2016, Luis Miguel Castilla Rubio, Peru’s ambassador to the United States, told the U.S. International Trade Commission that Peru has not experienced an increase in the price of medicines after signing the United States-Peru Trade Promotion Agreement, which committed it to begin providing five years of test-data protection for pharmaceutical drugs.²¹⁶ As Peru’s ambassador noted, opponents at

The TPP establishes the strongest protections for workers in any U.S. trade agreement ever signed and makes these provisions fully enforceable.

the time argued that the price of medicines would rise and that access would be diminished, but those predictions did not materialize.²¹⁷ As he noted, after the FTA came into force, the price of medicines increased less than the rate of inflation, with prices for medicines in 2009 increasing by 2 percent over 2007, while inflation increased by 3.3 percent.²¹⁸ Furthermore, he pointed to the fact that there are a wide range of factors in a national health-care system that influence drug prices and accessibility, not just regulatory protection periods. Peru's government has introduced a range of other policies to keep prices lower and improve access, such as policies to increase competition and improve regulation. The ambassador also noted that stronger IP rules have led to more technology transfer and increased investment in Peru.²¹⁹

Even after taking all these factors into account, the TPP provides transition periods for its least-developed members—Malaysia, Mexico, Peru, and Vietnam—that may have an impact on the price of and access to medicines. For example, Peru will not be required to implement the biologics exclusivity provision for 10 years (or to implement the exclusivity provision for new uses for 5 years) from when the TPP comes into force. That is particularly notable because Peru is expected to become a high-income country by the year 2027.²²⁰ For its part, Vietnam will have 10 years (possibly extended to 12) to implement data-exclusivity periods for both biologics and small-molecule drugs, and a range of delays for other measures.

Finally, this debate should raise a fundamental issue that many critics discount—that while *access to medicines* is vitally important, it presumes in the first place *the existence of medicines*. And that requires a system that permits the profits earned from one generation of biomedical innovation to sow the seeds for investment in the next, for there exists a direct link between the pharmaceutical industry's ability to earn profits and its ability to invest in innovation. As the Organisation for Economic Cooperation and Development (OECD) writes, "There exists a high degree of correlation between pharmaceutical sales revenues and R&D expenditures."²²¹ Indeed, recent data from the U.K. Department of Innovation, Universities, and Skills' *R&D Scoreboard* shows a very strong relationship between R&D expenditures and sales for the largest 151 pharmaceutical firms worldwide.²²²

The simple reality is that stronger intellectual property protections are associated with greater levels of biomedical innovation, which saves lives.²²³ For instance, a Canadian study on the impact of pharmaceutical innovation on premature cancer mortality finds pharmaceutical innovation has saved more than 100,000 years of aggregate life.²²⁴ And anti-cancer biologic drugs (such as Avastin and Herceptin) account for the overwhelming majority of the most effective anticancer drugs, with more than 300 anticancer biologics currently under development. In other words, stronger intellectual property protections *actually increase access to the medicines that save lives*—that is, by underpinning an

Stronger intellectual property protections actually increase access to the medicines that save lives—that is, by underpinning an innovation system that enables their invention in the first place.

innovation system that enables their invention in the first place. It was this understanding that led a diverse group of more than 100 organizations to sign onto *The Declaration Supporting Incentives for Medical Innovation in Trade Agreements* in February 2015.²²⁵

Of the many competing sides in this debate over the TPP—patients vs. pharmaceutical companies, developing vs. developed countries, etc.—policymakers also need to focus on longer-term interests—those of present vs. future generations.²²⁶ The purpose of intellectual property is to incentivize innovation and discovery, and the life-sciences sector offers some of the most exciting potential in terms of finding solutions to diseases and conditions that currently remain unsolved. Examples include diseases like Parkinson’s or Alzheimer’s, which if left unchecked have the potential to cripple global health-care systems in years to come. The payoffs for finding treatments or cures for these diseases could be tremendous. For instance, the financial impact of Alzheimer’s disease is expected to soar to \$1 trillion per year by 2050, with much of the cost borne by the federal government, according to the Alzheimer’s Association’s report, *Changing the Trajectory of Alzheimer’s Disease*.²²⁷ However, the United States could save \$220 billion within the first five years if a cure or effective treatment to Alzheimer’s disease were found.²²⁸ But this requires preserving sufficient incentives to invest in biomedical research.

Moreover, this debate is not about drug companies vs. patients in developing countries; it’s about future innovation vs. low prices. Most fundamentally, it should be about preserving the economics of a virtuous innovation system that allows biopharmaceutical innovation to flourish to the maximum extent possible (in the United States and elsewhere), thus affording the best possibility to develop treatments and cures for unsolved conditions.

Invalid Claim: The TPP Doesn’t Do Enough to Protect Workers and the Environment

International trade agreements can be a help or hindrance to the environment and labor—what matters are the rules, which is what the TPP strengthens in ways never before included in a U.S. trade agreement. Nevertheless, these provisions have attracted considerable criticism. For example, 350.org claims “The TPP is an act of climate denial.”²²⁹ Going further, the Sierra Club claims that “the polluter-friendly TPP poses an array of threats to our climate and environment.”²³⁰ The heated rhetoric and starkly different positions requires looking at both the individual provisions and the ideological basis of opponents, including those who think that trade agreements should not deal with these types of “behind the border” issues.

Building Stronger Protection for Workers—Combating Myths About Trade and Labor

One argument against the TPP is that it doesn’t do enough to ensure that workers in foreign nations are making close to comparable wages as U.S. workers. But this idea fundamentally reflects a misunderstanding of the nature of global competition. If a firm in a foreign nation has productivity levels 20 percent of a U.S. firm, it competes against and pays the worker 20 percent of what the U.S. worker makes, then the U.S. firm and worker

are not competing on an unfair playing field. The key question is not absolute wage levels, but overall worker rights and protections.

The TPP establishes the strongest protections for workers in any U.S. trade agreement ever signed and makes these provisions fully enforceable.²³¹ The TPP obligates members to adopt and maintain in their laws and practices the fundamental labor rights as recognized by the International Labor Organization (ILO), including acceptable work conditions, an obligation not to waive or derogate from fundamental labor rights or conditions (i.e. not engage in a “race to the bottom”), gives workers the right to unionize and bargain collectively, requires members to eliminate exploitative labor practices, and discourages the importation of goods produced by compulsory labor. For TPP members that have been cited for labor rights issues in the past—notably Brunei, Malaysia, and Vietnam, the United States has added a new tool not seen in past agreements: It has developed specific and detailed implementation plans for each country, which increases concrete legal and institutional reforms.²³² These plans must be implemented before the TPP enters into force.²³³ Enforcement is built on a combination of cooperative, consultative, and most importantly, thorough use of the dispute settlement mechanism.

The heated debate over the TPP’s labor provision, especially by labor unions and others on the political left, is the latest iteration in a long-running debate about how to manage the nexus between trade and labor. The TPP’s reference to ILO standards reflects the international consensus that it, and not the WTO, is responsible for setting labor rights.²³⁴ Many trade agreements use ILO provisions as part of labor chapters—as of December 2015, there were 76 trade agreements in place (covering 135 economies) that include labor provisions.²³⁵ At the heart of this issue are concerns about labor standards being used as a source of comparative advantage in international trade. Often weaved into this is the myth that stronger foreign labor standards—seen as a way of “levelling the playing field” between developed and developing countries—improve the material well-being of U.S. workers. Put another way, lower labor standards allow foreigner firms to undercut and outcompete the United States. This is based on the premise that countries compete in a “race to the bottom” in order to attract investment and business.²³⁶ The issue is not this simplistic, and research shows that this is not the case.

There is no clear evidence that countries improve their trade through poor labor conditions, and, in fact, research shows that the opposite can happen. A U.S. International Trade Commission study of the issue found that the ratification of ILO conventions—as part of individual ILO conventions and/or as part of trade agreements—does not necessarily imply compliance and thereby result in improved labor conditions.²³⁷ More importantly, to the extent that ILO provisions do improve labor conditions, the study shows that improved labor conditions can actually improve a country’s export performance. (This is the exact opposite of what many opponents on the left believe, which is that if better labor conditions existed in these countries, that U.S. exports would be benefitted and U.S. jobs would be protected.) This helps make the case that stronger labor

standards are essentially in those countries' own interest, which is presumably the argument used by USTR in TPP negotiations.

The TPP Includes the Strongest Environmental Protections of Any U.S. FTA

The TPP contains the strongest environmental provisions of any trade deal the United States has concluded, and these are also fully enforceable.²³⁸ The six FTAs the United States currently has with TPP members include an environment chapter, but these are less prescriptive and comprehensive. The TPP is the first agreement ever to address sustainable fishing practices by stopping subsidies that lead to overfishing, while also including efforts that promote the conservation of sea life, such as sharks and dolphins. The agreement also includes provisions that target illegal logging. The TPP limits the production and consumption of ozone-depleting substances, as per the Montreal Protocol, and further eliminates tariffs on environmental goods. The environment chapter is enforceable through the dispute settlement mechanism.²³⁹ Reflecting that reality, environmental groups, such as the World Wildlife Fund, the Humane Society, and World Animal Protection, support the deal by taking a pragmatic view on the actual provisions of the TPP.²⁴⁰

Deconstructing the Policy and Ideological Opposition to These Provisions and the TPP

The mix of ideological opposition, vitriolic rhetoric, and conflation of issues makes it difficult for policymakers to deconstruct criticism of the labor and environment provision as part of a clear, balanced, and detailed assessment. Given that the agreement sets the objectives, it would be valid to compare and criticize the TPP's environment and labor provisions against the negotiating objectives set by the Obama administration and the U.S. Congress, and raise concerns about enforcement after it comes into force.²⁴¹ Another broader view would be to decide whether the environment and labor rights will be better off in the Asia-Pacific with these provisions.

However, many opponents have tried to create a false and misleading benchmark that the TPP was never going to clear. For many opponents, the basis for criticism is not only that the TPP is a trade agreement—something many TPP critics fundamentally oppose, but what it isn't—and never was going to be: an agreement to address climate change, human rights, Internet governance, or any number of international issues related to trade. There are specialist multilateral forums and agencies for these, such as the United Nations (for human rights and climate change). Climate change, for example, was not part of negotiating objectives set for the TPP.²⁴² As U.S. Trade Representative Michael Froman puts it, the United Nations is the “appropriate forum for that [climate change], not a trade agreement,” as it was for the 196 nations that negotiated the Paris climate change agreement in December 2016.²⁴³

These critics reject the notion that trade can be a progressive force on environmental and labor issues, despite the TPP's role in setting new, higher standards for U.S. trade policy. Would opponents prefer that the TPP not address trade-related labor or environmental issues at all, and instead wait for multilateral consensus at the United Nations, World Trade Organization, the International Labor Organization, or some other multilateral forum to take up these issues (if they ever do)? Given the major reforms that Vietnam will

need to make to improve its labor standards, would workers there be better off without the TPP? As a major area of ecological biodiversity, would Asia-Pacific flora and fauna be better without enforceable rules that seek to address a number of trade-related issues? When considering the TPP's labor and environment chapters, it's rather tendentious to argue that global efforts to push for ever-higher environmental and labor standards would be better off if the TPP did not include these provisions, especially if one considers the impact these rules could have should China, Indonesia, and other countries with serious labor and environmental issues join the TPP.

Mixed into this opposition is the belief among many opponents that trade agreements should not address behind-the-border issues. Reflecting an outdated or particular ideological view of trade, these critics think that trade agreements should be restricted to traditional barriers to trade—tariffs, as if these are the only barrier to modern trade worth addressing, ignoring the fact that tariffs have largely been addressed in previous trade negotiations. Many of these critics do not think it is a legitimate policy objective for the TPP to address behind-the-border issues to help boost trade and shared prosperity, while thinking it is fine to get countries to address behind-the-border issues that suit their views, such as getting countries to sign up to a multilateral agreement on the environment. Further complicating any analysis is that some of these same critics want to have it both ways in criticizing the deal—saying that the TPP does not do enough to protect the environment, yet simultaneously attacking it on the grounds that it will affect how governments protect the environment.²⁴⁴ Or they simply oppose provisions that constrain government behavior because they would prefer to turn back the clock on globalization to a time when the economy was more local, static, and uncompetitive.²⁴⁵

There are few other labels that have perhaps been more commonly used to poison public perception than claims that the TPP is a “secret” trade agreement.

In the end, the bewildering range of criticism levelled at the TPP makes it difficult to see how the TPP can—could ever—win. But this is the point. For intractable opponents, it is not so much what is or is not in the TPP labor or environment chapter, but what the TPP represents—in terms of modern trade and ongoing global economic integration—that they fundamentally oppose. These opponents do not want to accept that the TPP is a trade agreement that seeks to address a select range of trade-related issues—labor and the environment—as per the objectives set out for U.S. negotiators, and was never meant to be the vehicle to address every trade-related international issue that it touches upon.

Partly Valid, but Irrelevant and Distracting Claim: The TPP Was Negotiated in Secret

Opponents assert that the TPP was negotiated “in secret” and by implication that this portends nefarious objectives, such as doing multinational corporations’ bidding. For example, Fight for the Future states that, “The TPP is a secretive trade agreement negotiated behind closed doors with no democratic process.”²⁴⁶ There are few other labels that have perhaps been more commonly used to poison public perception than claims that the TPP is a “secret” trade agreement. Transparency and public participation are laudable goals and key ingredients in building public trust in the legitimacy of outcomes. But what this criticism intentionally overlooks is that trade agreements need to be negotiated

privately if countries are to best advance their interests, and, moreover, that at least in the United States, the U.S. Congress is the democratically elected body that ultimately decides whether the agreement is in the United States' interest or not. That is where the transparency rightly plays itself out.

Trade negotiations are extraordinarily sensitive: Each country closely guards what it is and is not willing to offer as part of negotiations, especially when this involves 11 countries, legal technicalities, and a wide range of sectors. Negotiations inevitably involve give-and-take among the parties; governments weigh up what they are willing to concede in exchange for concessions from another country. To facilitate such candid negotiations, TPP negotiating parties signed a confidentiality undertaking that requires them to treat as confidential any exchange of draft treaty text and other documents. This is done to ensure negotiations are not delayed at each and every provision and proposal by political debate in individual countries. To balance this with broader public interests of transparency and participation, many countries set up processes that facilitate a degree of transparency and consultations, without compromising the confidentiality that cements the trust needed to negotiate a deal.

While the draft negotiating texts were not public, which is standard practice for international treaty negotiations, the policy issues themselves are no secret. This confidentiality undertaking does not impede any member's ability to consult with stakeholders, just the protection of the actual negotiating text. This did not stop negotiators and policymakers from all TPP member countries from talking about the broad objectives and key provisions of the deal during negotiations. For example, USTR officials held more than 1,700 congressional briefings related to the TPP.²⁴⁷ The Australian Department of Foreign Affairs and Trade engaged in over 1,000 TPP stakeholder briefings and consultations between May 2011 and mid-2015.²⁴⁸ This stakeholder outreach typically involved industry associations, unions, nongovernmental organizations, and community groups. This process, in the United States and Australia, was replicated to some extent in other TPP member countries, as such outreach is a fundamental part of building legitimacy in the process and outcome.

Joseph Stiglitz's broad sweeping smearing of the entire process is typical of some critics' willful ignorance of the role played by Congress and elected bodies in other democratic countries: "It is possible to write a trade agreement that is fair to workers and provides broadly shared benefits for all Americans. But when people other than those representing the interests of big businesses are shut out of writing the rules of the economy, that outcome is unlikely."²⁴⁹ To accuse the TPP of not being democratic is to ignore the fact that elected representatives take part in various formal processes used to set objectives for negotiators, review progress during negotiations, and ultimately, to vote on the end result. In the United States, Congress, on a bipartisan basis, set clear negotiating objectives for the TPP as part of the Bipartisan Congressional Trade and Priorities and Accountability Act. Members of Congress and cleared staff are also able to read the negotiating text while negotiations are ongoing.²⁵⁰

Stepping down from the broad smearing, a major focal point for more functional criticism has been the U.S. trade advisory system. Created by the Trade Act of 1974, the system is made up of committees that facilitate input from stakeholders on the environment, labor, agriculture, and a range of specific industries. The U.S. president, through USTR and the commerce secretary, has the authority to shape the system's trade committees, their members, and disclosure of classified and trade-sensitive information.²⁵¹ These committees are chartered at least once every four years, most recently in 2014. Together, these committees include hundreds of representatives who are allowed to review U.S. negotiating proposals, to receive updates from U.S. negotiators, and to provide feedback. However, again, given the need for negotiating confidentially, these committee members are also bound by confidentiality agreements.

Critics see the composition of these committees as being too focused on industry and “corporate” interests. In light of this, USTR made changes to the system by opening up positions on industry committees for representatives from labor and consumer groups. It has started the process to create a Public Interest Trade Advisory Committee, inviting NGOs, academics, and other public interest groups to join to provide input on issues including, but not limited to, public health, international development, and consumer protection.²⁵² Whether this is enough or too much is a separate debate, but it is one worth having, as it is at least channeled in a realistic and productive way to finding a better balance between transparency and wider participation, while maintaining confidentiality for negotiating text.

At its broadest level, accusations of secrecy and that negotiations are “antidemocratic” are difficult to diffuse. It is understandable how the general public, which is not accustomed to such international negotiations, can view the process as suspect, given that negotiating rounds are conducted “behind closed doors,” even though this is an essential factor to achieve an agreement. As much as it can, this is where USTR should focus its efforts—at improving education regarding the process, broader participation before, during, and after negotiations, and allowable transparency on talks and issues. But even the European Union, which some critics point to as a model for emulation, only publishes draft, nonspecific text of the topics it is negotiating.²⁵³

It is impossible to satisfy all participants in the trade policymaking process. Consultations and transparency do not always result in an alignment of interests. Some critics of the TPP who are fully engaged in the consultative process will nonetheless resort to accusations of secrecy if their interests and views were not accepted by negotiators. This highlights the fact that, given the enduring need for confidentiality, there is only so much that negotiators can do, as the process will never be perfectly transparent, and therefore, will never satisfy everyone.

What policymakers need to be attuned to are the many critics who use claims of secrecy as a smokescreen to obscure their underlying opposition to free trade. EFF's exaggerated and false criticism is indicative of this approach when it erroneously asserts that “while

Hollywood has had easy access to view and comment on draft text ... lawmakers were mostly left out.”²⁵⁴ Again, EFF falsely claims that the Trade Promotion Act empowers the government to negotiate and sign trade agreements without congressional oversight.²⁵⁵ For these intractable opponents, who were never going to support a trade agreement on ideological grounds, claims of secrecy are simply a tool to use as part of a campaign of misinformation and fearmongering.

Valid Claim: The TPP Doesn't Do Enough to Stop Currency Manipulation

Manipulating currency for competitive advantage, something that many U.S. trading partners engage in, can affect trade in much the same way as imposing tariffs or providing export subsidies. Thus, it is not surprising that the TPP has been criticized for not having a formal chapter on currency manipulation.²⁵⁶ In this, critics have a valid point: The agreement does not include any binding and enforceable measures that would prohibit countries from manipulating their currency. This is important, as currency manipulation can effectively cancel out the benefits the TPP (and other trade agreements) provides in terms of improved market access through lower tariffs and the removal of other nontariff barriers to trade. Part of the problem here is not so much in the agreement, but in the abject failure of the U.S. Treasury Department to aggressively enforce existing currency manipulation rules (both as part of the rules of the International Monetary Fund and in legislation Congress passed regarding Chinese currency manipulation). The U.S. Treasury has only labeled three countries as currency manipulators in the past: Japan in 1988, Taiwan in 1988 and again in 1992, and China from 1992 to 1994.²⁵⁷ But Treasury clearly missed the mark, as there are many more. The Peterson Institute list of the world's 20 most egregious currency manipulators from 2001 to 2012 included China, Japan, Malaysia, Singapore, South Korea, and Thailand.²⁵⁸ By turning a blind eye to foreign-currency manipulation, the Treasury Department has actively undermined support for globalization and expanded trade. Because of Treasury's past failures, advocates for a more rules-based trading system sought to have stronger currency-manipulation rules within the TPP. In this sense, the TPP was a missed opportunity to put rules in place to limit countries' ability to use currency intervention as a viable trade and economic policy tool to shift advantage in their favor.

Foreign governments manipulate currencies principally by purchasing foreign-exchange reserves and other financial assets denominated in foreign currencies, which drives the currency of the intervening government lower. By driving the currency lower, countries give local firms a competitive advantage by making their exports cheaper, while making imports more expensive. Currency manipulation seeks to alter the value of currencies so that they do not reflect underlying economic fundamentals. A recent Peterson Institute for International Economics study revealed that more than 20 countries have increased their aggregate foreign exchange reserves and other foreign assets by an average of nearly \$1 trillion a year for several years, mainly through government intervention in foreign-exchange markets, which has shifted trade balances by more than \$500 billion per year from deficit

to surplus countries.²⁵⁹ As such, currency manipulation is no different from instituting tariffs on imports and direct subsidies on exports.

Currency manipulation matters, as trade flows respond strongly to exchange-rate movements. The International Monetary Fund (IMF) estimates that a 10 percent real depreciation in a country's currency is associated with a rise in real net exports of 1.5 percent of GDP.²⁶⁰ Also important, when it comes to the timeliness of reacting and addressing currency manipulation, is the IMF's observation that while it takes a number of years for this effect to fully materialize, much of the economic impact occurs in the first year.²⁶¹ Changes in exchange rates can actually affect trade flows and trade balances more than tariffs or nontariff barriers to trade.²⁶² As the world's largest trading country, the United States is the biggest loser, especially since most of the interventions take place in U.S. dollars, as the dollar is the global trading system's main reserve currency (thereby driving up the value of the U.S. dollar, which makes U.S. exports more expensive relative to other currencies).

Some in the trade establishment claim that the TPP should not address currency manipulation because it was not included in past trade agreements. But this ignores a central motivation for the TPP: It was meant to update and create new rules in order to address modern, 21st-century trade issues. This argument about historical precedent didn't stop the United States and others from agreeing to provisions on many other new and forward-thinking provisions, such as on cross-border data flows and source-code protection. Furthermore, many of these new provisions were negotiated with China in mind, in case it joins the TPP.

The TPP was the right vehicle to address currency manipulation, as it has been a major issue in the Asia-Pacific region. It's an issue most closely associated with China, as China has long pegged its national currency, the renminbi (RMB) to the U.S. dollar—by definition manipulating its currency.²⁶³ As ITIF argued in *False Promises: The yawning Gap Between China's WTO Commitments and Practices*, China is clearly the largest currency manipulator of the last decade, having piled up \$4 trillion of foreign-exchange assets by intervening in currency markets. At times this averages at \$1 billion a day in interventions.²⁶⁴ Within the TPP, Japan, Malaysia, and Singapore have intervened in foreign-currency exchanges in the past.

To be fair, TPP members adopted a joint declaration (which is not part of the actual trade agreement) to avoid “unfair currency practices and to refrain from competitive devaluation.”²⁶⁵ The focal point is dialogue and improved transparency: Members agreed to meet at least annually and to increase the transparency of their actions in foreign-exchange markets by reporting foreign-exchange reserves each month and reporting government interventions in foreign-exchange markets each quarter.²⁶⁶

The effectiveness of this declaration is questionable, however, as it is nonbinding, and there is no enforcement mechanism, as this is outside the TPP and therefore not subject to its dispute settlement mechanism. Its ability to change behavior therefore depends on how

susceptible the intervening country is to diplomatic pressure from the United States and other TPP members. However, if past experience is any guide, countries should not expect timely and effective action. In the past, the political and economic benefits that countries derived from currency manipulation—in terms of exports, jobs, and investment—have clearly outweighed the downside in terms of international pressure. The clearest example is China: Years of pressure (albeit weak) by the United States and others has had a limited impact on the country’s behavior, as it intervened in currency markets as part of long-term and large-scale efforts to boost domestic economic activity to the detriment of its trading partners.

Given that the IMF has already improved its surveillance and reporting on exchange-rate settings (at the urging of the United States and others), it’s questionable whether the TPP will add any pressure.²⁶⁷ The IMF is the international organization that has jurisdiction over exchange-rate issues and therefore should respond to cases where countries manipulate their currency for competitive advantage. The IMF Charter prohibits currency manipulation “to gain an unfair comparative advantage.” The IMF recently bolstered its own transparency measures, supposedly to make it more difficult for member nations to manipulate their currencies. In 2014, the IMF started an annual process to provide exchange-rate assessments for 29 of the world’s largest economies. The IMF analysis assesses current accounts, exchange rates, external balance sheet positions, capital flows, and international reserves.²⁶⁸ The IMF also analyzes exchange-rate settings as part of its assessment of each country’s economic and financial situation.²⁶⁹ However, similar to the TPP, these mechanisms are likely to be ineffective, as the IMF does not have a direct enforcement tool tied to currency manipulation, but has the option to restrict funding and aid to nations that violate this rule, something the organization has largely refused to do to date.

In a similar fashion, the United States missed an opportunity to include an enforcement mechanism during recent changes to its own approach to identifying currency manipulators, again, hoping that “naming and shaming” would be enough to get manipulators to change their ways. Following the passage of the new Trade Facilitation and Trade Enforcement Act, the U.S. Treasury Department set up a criteria and “monitoring list” of trading partners who engage in currency manipulation.²⁷⁰ However, the department found that no country satisfied all three criteria when it released its first assessment in April 2016, but that five countries met two of the criteria: China, Japan, Korea, Taiwan, and Germany.²⁷¹ Again, the effectiveness of this new policy will depend on a country’s susceptibility to being called out, given the act only allows for limited remedial action and “enhanced bilateral engagement” with alleged currency manipulators.²⁷²

It’s hard to see the TPP approach affecting the cost-benefit calculation countries undertake when deciding whether to manipulate their currencies, given the lack of accountability and repercussions. This is a major reason why both the WTO and IMF have been unable to address the issue—both organizations have rules that prohibit members from manipulating their currencies, but lack instruments to enforce the rules.²⁷³ The TPP was a missed

opportunity to create an enforceable framework—that would have covered a growing share of the global economy as new members joined the TPP—to address a practice that has had a significant impact on U.S. trade for many years.

CONCLUSION

The TPP, like all trade agreements before it, is not perfect. There are individual parts that could be better, although in almost all of these cases the needed improvements (e.g., strong IP protections, stronger regimes on cross-border data flows) are precisely the steps that the anti-globalists rail against. These deserve careful scrutiny, and where possible, fixes. However, what should not be lost is what the TPP represents overall—a much improved framework for global innovation and trade. The TPP represents a significant step forward in establishing competitive, innovation-enabling, market-based terms of trade and commerce throughout the Asia-Pacific region. If passed, it will serve as a model for the rest of the global economy going forward, especially if others in the region join the deal, such as China, Indonesia, South Korea, Thailand, and the Philippines. Ultimately, the agreement can influence the global trading system, as the TPP has raced far ahead of the out-of-date and limited WTO rulebook and enforcement system, including on services, investment, telecommunications, the digital economy, and other critical industries. If the TPP is ratified, these rules will renew progress—now stalled for more than two decades—in strengthening the world trading system and taking more needed steps to deep globalization.²⁷⁴

The TPP represents a significant step forward in establishing competitive, innovation-enabling, market-based terms of trade and commerce throughout the Asia-Pacific region. If passed, it will serve as a model for the rest of the global economy going forward.

At the end of the day, TPP supporters rightly see it as the logical and latest step in long-term movement toward a more globally integrated economy: one that gradually shares more and more in common in terms of key rules and principles. The TPP would be the latest iteration of the evolving rules-based international trading system that has developed since World War II. However, one reason there has been so much vitriolic and exaggerated criticism is that this worldview hit a number of raw ideological nerves in many opponents. These opponents are not interested in the technicalities as much as they are against what the TPP represents more broadly.

Amid the myriad criticisms leveled at the TPP, it's worth trying to extrapolate what these ideological opponents would support. Many of these opponents harbor a deep disdain and distrust of globalization, especially the role played by corporations in trade and commerce. Corporations are automatically eyed with suspicion and labelled as the source of all manner of evils, in contrast to the opponents' ideal form of production: locally operated, worker- and community-owned co-ops that produce and use socially- "responsible" goods and services, such as non-GMO food and renewable energy. These opponents prefer small-firm localism over anything foreign or corporate.²⁷⁵ They prefer an economy in stasis and free from competitive pressures and technological disruption. Other opponents who make common cause with the anti-globalists are the anti-intellectual proprieties, who seek a world in which consumers have virtually unlimited rights to IP-based goods and services without paying, or paying the minimum amount possible. Such a world is a clear

prescription for a world with no innovation or new content production going forward, and many fewer U.S. jobs.

Ultimately, the opponents' vision for the economy is protected, segmented, smallholder, and cooperative. Taken from this angle, it shows a worldview that is fearful and anything but progressive. It also exposes a view that is fundamentally out of step with broader efforts to improve global governance on trade, to create a world that is moving closer together, and to establish the next phase of deep globalization that will be a major force for progress for the planet's 7.5 billion inhabitants.

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