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CONTENTS

INTRODUCTION	3
1 ADJUSTMENT AND INCOME DISTRIBUTION IMPACTS OF THE TPP ROBERT Z. LAWRENCE AND TYLER MORAN	5
2 TPP AND THE CONFLICT OVER DRUGS: INCENTIVES FOR INNOVATION VERSUS ACCESS TO MEDICINES LEE BRANSTETTER	20
3 TPP AND THE ENVIRONMENT JEFFREY J. SCHOTT	33
4 LABOR STANDARDS IN THE TPP CATHLEEN CIMINO-ISAACS	41
5 OTHER NEW AREAS: CUSTOMS ADMINISTRATION AND TRADE FACILITATION, ANTICORRUPTION, SMALL AND MEDIUM-SIZED ENTERPRISES, AND MORE CAROLINE FREUND	66
6 TPP AND DIGITAL TRADE LEE BRANSTETTER	72
7 COMPETITION POLICY R. MICHAEL GADBAW	82
8 COMMITMENTS ON STATE-OWNED ENTERPRISES SEAN MINER	91
9 DISPUTE SETTLEMENT MECHANISM JENNIFER HILLMAN	101
10 TPP AND EXCHANGE RATES C. FRED BERGSTEN AND JEFFREY J. SCHOTT	115

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The **Peterson Institute for International Economics** is a private nonpartisan, nonprofit institution for rigorous, intellectually open, and in-depth study and discussion of international economic policy. Its purpose is to identify and analyze important issues to make globalization beneficial and sustainable for the people of the United States and the world, and then to develop and communicate practical new approaches for dealing with them. Its work is funded by a highly diverse group of philanthropic foundations, private corporations, and interested individuals, as well as by income on its capital fund. About 35 percent of the Institute's resources in its latest fiscal year were provided by contributors from outside the United States. A list of all financial supporters for the preceding four years is posted at <http://www.piie.com/institute/supporters.pdf>.

INTRODUCTION

On February 4, 2016, the United States and 11 other countries signed the Trans-Pacific Partnership (TPP), an ambitious accord that not only lowers barriers to trade and investment in goods and services but also crafts trading rules and standards in important areas such as intellectual property rights (IPR), state-owned enterprises, digital trade, labor, and environment. Now with the agreement signed, the Obama administration and Congress must work together to draft implementing legislation and resolve outstanding issues that may hold up bipartisan support for the deal. TPP compromises related to IPR, labor, and currency are among the most contentious issues.

To clarify and analyze the complicated elements of the TPP, the Peterson Institute for International Economics has undertaken an ambitious assessment of its key issues and outcomes. The Institute's study will first be published as a series of PIIE Briefings and then as a book in the first half of 2016. These papers are intended to provide a useful reader's guide to the TPP and contribute to a more educated public debate over its ratification by the United States and other member countries.

In [Volume 1](#), PIIE scholars analyzed several major market access and sectoral issues in the TPP. In this volume, they assess various innovations in trading rules and how TPP provisions build on past practice. TPP rulemaking in new areas could have important implications for future regional deals and the global trading system writ large.

Robert Z. Lawrence and Tyler Moran [estimate the adjustment costs](#) of the TPP on workers and its impact on the distribution of income across US households. They find that between 2017 and 2026, when most of the adjustment to the TPP occurs, the costs to displaced workers, both from unemployment and lower future wages, will amount to about 6 percent of the benefits estimated by Peter A. Petri and Michael G. Plummer in volume 1. Over this adjustment period the TPP will have an average benefit-cost ratio of 18:1. The authors find that the TPP will not worsen income inequality but argue that a Trade Adjustment Assistance program with more generous wage-loss insurance should be part of the legislation implementing the TPP.

Lee Branstetter analyzes [intellectual property protections for pharmaceuticals](#), including the most controversial provision relating to "data protection" in the development of drugs. He argues that the compromise reached in the TPP is a good one, strengthening incentives for innovation while also incorporating important safeguards to ensure access to essential medicines.

Jeffrey J. Schott assesses [provisions on the environment](#) in the TPP, which covers a broader range of issues than any previous trade accord. He argues that the agreement does not resolve all environmental challenges facing TPP countries, but it does establish important disciplines on trade and domestic policies that will discourage abusive environmental practices and strengthen enforcement of existing multilateral environmental agreements to which TPP countries are signatories.

Cathleen Cimino-Isaacs analyzes the [labor standards](#) in the TPP. She argues that while the agreement may not address all the concerns of critics, it does move the labor agenda incrementally forward, and future trade deals can be expected to build upon the progress made in the TPP. For many countries, like Vietnam and Malaysia, the TPP labor commitments reinforced by labor plans negotiated with the United States, should help improve their weaker standards, but like any treaty, the strength of TPP labor commitments relies heavily on their implementation.

Caroline Freund analyzes several [chapters of the TPP](#)—customs administration and trade facilitation, cooperation and capacity building, small and medium-sized enterprises, regulatory coherence, transparency and anticorruption—all of which are designed to augment the gains from trade and spread them more evenly among participating countries and companies. She argues that among these chapters, the customs administration and trade facilitation provisions are the most important. These provisions aim to simplify and speed up the processing of trade at the border and, if implemented, are likely to do more to stimulate trade and strengthen supply chains than tariff reduction.

Lee Branstetter assesses the [digital trade](#), or electronic commerce, provisions. The TPP seeks to ensure an open and level playing field for online commerce and to limit the ability of participating members to restrict information flows across national borders. He argues that the TPP reflects the interests of US-based digital service providers but also maximizes the opportunities for growth of trade and development of new digital products and services.

R. Michael Gadbaw assesses the [competition policy provisions](#), which have become increasingly important as business practices or collusive relationships can undermine efforts to lower barriers to trade and investment. He argues that the TPP achieved qualified success in strengthening international law on competition, even though the chapter is not enforceable under the agreement's dispute settlement mechanism.

Sean Miner assesses the [TPP's provisions for state-owned enterprises](#), which aim to discipline policies that give SOEs unfair advantages over private firms. He argues that exemptions for subfederal SOEs and certain entities under a revenue threshold will limit the TPP's ability to create a completely level business environment, but the agreement still represents a major step in defining the rules of commercial engagement for SOEs.

Jennifer Hillman analyzes the [general dispute settlement provisions](#) in the TPP, the mechanism by which participating countries resolve disputes and seek remedies over alleged failures to implement the agreement's provisions. She argues that the TPP dispute settlement mechanism is designed to be broader, deeper, faster, and more transparent than the system in either the World Trade Organization or any prior bilateral or regional free trade agreement.

C. Fred Bergsten and Jeffrey J. Schott review [The Joint Declaration of the Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries](#), a separate agreement from the main TPP text, which seeks to limit currency manipulation—the practice of artificially depressing the value of a country's currency to boost exports. They argue that while the declaration is not subject to TPP dispute settlement, its requirements for more transparency and public disclosure of data on exchange rate intervention, and regular reviews of exchange rate policies, should make the “naming and shaming” of manipulators more effective.

CHAPTER 1

ADJUSTMENT AND INCOME DISTRIBUTION IMPACTS OF THE TPP

ROBERT Z. LAWRENCE AND TYLER MORAN

Like all free trade agreements, the Trans-Pacific Partnership (TPP) will yield gains to the economy in general but force difficult adjustments on some workers and businesses. Peter A. Petri and Michael G. Plummer (2016) find that the agreement will benefit the United States as a whole, raise real wages of both skilled and unskilled workers, and increase the real return to capital. It will, however, hurt some workers. In particular, some workers will be displaced by imports and lose income from being unemployed or earning less in their new jobs.

This chapter complements the work of Petri and Plummer (2016) by estimating the adjustment costs of the TPP on workers and its impact on the distribution of income across US households. While the costs could be substantial for some individual workers, aggregate losses are likely to be a small fraction of the agreement's overall benefits. Although some workers will be displaced by costly involuntary unemployment, much of the adjustment in the labor market will occur through less painful responses—namely, reassigning workers within firms to fill growing demand from other sources, not hiring workers who would otherwise have been hired, and voluntary attrition.

Between 2017 and 2026, when most of the adjustment to the TPP occurs, the costs to workers who will be displaced, both from unemployment and lower future wages will amount to about 6 percent of the benefits estimated by Petri and Plummer. Over this period the TPP will have an average benefit-cost ratio of 18:1. After 2026, when the economy will have almost fully responded to the TPP, the adjustment costs fall to far less than 1 percent of overall benefits, implying that the Petri-Plummer estimates of benefits in 2030 are basically unaffected by adjustment costs. For the full adjustment period Petri and Plummer consider (2017–30), the benefits are more than 100 times the costs.

These findings lend support to the passage of the TPP, but they also point to an increased role for adjustment assistance for those who are hurt by the agreement. A Trade Adjustment Assistance (TAA) program with more generous wage-loss insurance should be part of the legislation implementing the TPP. It would be even more desirable to extend and improve these benefits in a consolidated general worker adjustment program that aids all displaced workers, regardless of the reasons for their displacement (Lawrence 2014a). Although training and other forms of search and relocation assistance should be provided, the centerpiece of this new program should be wage-loss insurance.

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The chapter also suggests that the fears that the TPP will increase income inequality are misplaced. By 2030, based upon the net value that will be added as a result of the TPP, the percentage gains for labor income will be slightly greater than the gains to capital income. Households in all quintiles will benefit by similar percentages, but once differences in spending shares are taken into account, the percentage gains to poor and middle-class households will be slightly larger than the gains to households at the top. Thus the agreement will confer net benefits to households at all levels of income and will certainly not worsen income inequality.

MODELING THE TPP: WHAT SHOULD WE ASSUME?

This study uses the results of Petri and Plummer (2016) as a starting point. However, some scholars have argued that their simulations are defective because they neglect the impact on the dislocation and wage losses of workers as well as the impact more broadly on income inequality, especially the incomes of middle- and lower-income Americans.¹ In particular, critics suggest that the basic assumption that drives the model—that the economy remains at the same normal employment level—makes it inappropriate for understanding the principal concerns raised by the TPP.²

Once ratified, the TPP will be implemented over a decade or more, and its rules will remain in place even longer. Accordingly, it should be analyzed using models designed to capture long-run impacts. For analyzing the long-run impact of the TPP, it is reasonable for Petri and Plummer to assume that the agreement is unlikely to permanently affect the level of employment or the trade balance. Assuming normal employment levels is justified not because changes in imports and exports have no impact on employment in the short run—obviously import growth can cause job loss and exports can generate job growth—but rather because the size of the annual impact of the TPP will be smaller than the many other shocks that will occur every year.³ For example, as we show later, an upper bound estimate for the annual displacement of workers due to the TPP during the adjustment period would be 169,000 per year. By comparison, in the first two months of 2016, a period when the unemployment rate was constant at about 4.9 percent, weekly additions to unemployment averaged 277,000. Moreover, over a longer period macroeconomic policies and wage and price adjustments are likely to restore the economy to the same employment level as the baseline. It would be especially inappropriate to assume, as Capaldo, Izurieta, and Sundaram (2016) do, that displaced workers never find alternative employment over this time horizon.⁴

In the short run, changes in trade flows could change the trade balance, especially if the economy is at less than normal employment, so that trade flows could also affect net national saving by changing national income. But over the long run, intertemporal saving and investment decisions of Americans determine the current account. Such decisions are driven by income, demographics, income distribution, price expectations, interest rates, fiscal policy, and other variables, most of which are unlikely to be systematically related to the TPP.⁵

1. For an evaluation of the methodological weaknesses in the model used in this study, see Bauer and Erixon (2015). For a comparison of the papers by Petri and Plummer (2016) and Capaldo, Izurieta, and Sundaram (2016), see Robert Lawrence, “Studies of TPP: Which Is Credible?” Trade and Investment Policy Watch, January 29, 2016, Peterson Institute for International Economics, <http://blogs.piie.com/trade/?p=553>.

2. Congressman Sander Levin correctly criticized an approach similar to that of Petri-Plummer that was used in a World Bank study (World Bank 2016) as being “incomplete.” See “World Bank, Tufts Studies Offer Starkly Different Pictures of TPP’s Impact,” *Inside U.S. Trade*, January 15, 2016, www.insidetrade.com (accessed on February 5, 2016).

3. It should be stressed that while they assume that employment will follow the same path as the baseline, Petri and Plummer do not assume that that path constitutes full employment.

4. What differentiates the Global Policy Model (GPM) from many other models is that there is no built-in tendency for demand to adjust towards a given level of capacity utilization or to a notion of potential output that effectively determines realized output (Cripps, Izurieta, and Vos 2010).

5. For an explanation and application to US oil self-sufficiency, see Lawrence (2014b). For a comprehensive survey of the current account from an intertemporal view, see Obstfeld and Rogoff (1995).

It is also wrong to assert that the Petri-Plummer model fails to capture changes in wages and profits that would result from the TPP. The TPP will create an excess supply of workers and capital in some industries and excess demand for workers and capital in other industries. It is, therefore, likely that wage and profit rates will change in order to restore equilibrium. Precisely because it assumes a given path for employment growth and flexible prices and wages, the model used by Petri and Plummer is able to estimate the changes in wages and profits that will occur when the structure of the economy changes.⁶

The Petri-Plummer model forecasts net changes in employment, but it provides no information on the dislocation and adjustment challenges the TPP is likely to present to American workers. Given the United States' experience over the past decade in dealing with the expansion of Chinese imports in the context of broader declines in US manufacturing employment (Autor, Dorn, and Hanson 2016), this concern is an important one. The long-run analysis, therefore, needs to be supplemented with estimates of adjustment and wage costs of workers who are likely to be displaced by the TPP.⁷

One dimension of this issue is the general impact of the TPP on earnings (and wages in particular) throughout the economy. The model of Petri and Plummer shows the impact of the TPP on value added by industry (i.e., gross profits plus wage compensation). They thus capture the effects on the earnings of workers and capital that are employed. Their model, however, does not provide information about the costs that accrue to displaced workers from spells of unemployment, withdrawal from the workforce, or the erosion in specific human capital when they eventually find new jobs (e.g., earnings reductions as a result of loss of seniority, change in occupation, and loss of payment for skills valued in the previous job).⁸ This exercise requires first estimating the magnitude of the displacement and then its costs and comparing these costs with the TPP's benefits. In this chapter we carry out this exercise, attempting at each stage to use estimates that are conservative in that they do not understate these costs.

JOB DISPLACEMENT

We start by providing an upper bound of the job displacement that could occur as a result of the TPP and then provide more realistic projections that allow for domestic demand growth and voluntary attrition.

Upper Bound

Petri and Plummer project that US employment will grow by 16.1 million people between 2015 and 2030 (table 1.1, column 1). We first assume that the only way to accommodate the increased imports as a result of the TPP is to lay off workers employed in the United States to produce the value added represented by the increase (scenario 1 in table 1.1). In other words, we assume that all imports lead to the laying off of not only workers who produce the goods and services that are traded (e.g., the impact of increased imports of automobiles on the auto industry) but also workers who produce the intermediate inputs used in producing the import-competing good (e.g., steel, glass, electronics, and banking).

6. If, for example, as Bivens (2015) claims, import growth caused by the TPP will result on balance in the contraction of industries that employ unskilled labor relatively intensively, the model would detect this change and estimate the decline in the relative wage of nonskilled workers that would occur when these workers are employed in other industries that are less intensive in unskilled labor.

7. As Congressman Sander Levin has pointed out, concerns about wages and unemployment are “the first focus of the debate in the Congress and at the kitchen table.” See “World Bank, Tufts Studies Offer Starkly Different Pictures of TPP’s Impact,” *Inside U.S. Trade*, January 15, 2016, www.insidetrade.com (accessed on February 5, 2016).

8. Petri and Plummer provide evidence that even the largest plausible labor displacement from the TPP is likely to be a very small share of the overall churn in the US labor market.

Table 1.1 Cumulative import displacement of US workers due to the TPP, by industry
(thousands)

Industry	Petri-Plummer base growth of US employment, 2015–30	Displacement scenarios		
		1: US direct and indirect employment equivalence of TPP imports	2: Scenario 1– employment growth repression	3: Scenario 2 – voluntary attrition
Manufacturing				
Apparel	5	–28	–24	–21
Chemicals	128	–91	–30	–25
Electrical equipment	–80	–16	–16	–14
Food and beverages	–5	–11	–11	–9
Machinery	–21	–98	–98	–84
Metals	107	–91	–36	–31
Other manufacturing	281	–91	–10	–8
Textiles	–8	–35	–35	–30
Transportation equipment	160	–32	0	0
Subtotal	568	–493	–259	–222
Other industries				
Communications	187	–26	0	0
Construction	2,545	–36	0	0
Financial services	1,318	–270	0	0
Mining	333	–37	0	0
Agriculture	–11	–19	–19	–16
Business services	1,271	–272	0	0
Social services	6,196	–55	0	0
Trade and transportation	3,644	–469	0	0
Utilities	21	–12	0	0
Subtotal	15,504	–1,196	–19	–16
Total	16,072	–1,689	–278	–238

Sources: Authors' calculations and Petri and Plummer (2016).

This procedure indicates that the US employment equivalence of the increased import content as a result of the TPP over the full adjustment period amounts to 1.69 million workers (scenario 1 in table 1.1), or 169,000 a year over a 10-year adjustment period. Note that because we estimate not only the direct impact of the goods and services that are actually traded but also the indirect effects of the intermediate goods and services used to produce them, the effects are spread over a wide range of industries, including several not heavily involved in trade (such as social services and utilities).

These estimates represent an extreme upper bound, for several reasons. First, they ignore the possibilities of adjustment through the other mechanisms considered below. Second, a large share of the adjustment to imports will occur in industries supplying indirect inputs, and the demand displaced by imports for inputs such as utilities, financial services, and transportation will be offset by increased demand within these firms as a result of increased exports. Third, there will be much less job loss than assumed if the same firms involved in wholesale and retail trade and distribution switch from selling domestic products to selling imports. Finally, these estimates are biased upwards, because they are based on input-output tables that assume that all the

value added that is displaced by imports as a result of the TPP occurs in the United States. In a world of global value chains, however, the typical US manufactured good already contains some foreign content. Some of the import value added would, therefore, displace other imported value added rather than domestic content.

Employment Growth Repression

In several industries employment in the base (non-TPP) scenario is expected to rise by far more than the displacement estimated by the upper-bound method. In these industries many firms will be able to respond to the rise in imports not by laying off workers but by not hiring as many workers as they would have in the base case scenario. As demand for their output from other sources will increase, they can also reassign workers no longer producing the goods and services displaced by imports to other activities within their firms. We term this response employment growth repression. It shows why structural change is more easily achieved in an economy with growing demand, especially when the required changes are relatively modest. To be sure, compared with the base case, fewer jobs may be created in some industries, but employment repression has the virtue of not involving the costs of layoff and displacement, as workers simply find jobs elsewhere in the economy.⁹

The Petri-Plummer model provides projections at the industry level, but industry growth is unlikely to be spread equally across all firms; some firms may experience slower than average growth. Absent additional information, we could assume that all firms in growing industries are alike, but again to be conservative we assume that firms accounting for only two-thirds of the employment growth are able to make their adjustments through employment growth repression. Despite this assumption we obtain markedly reduced estimates of job loss for industries with employment growth. After this adjustment is made, the overall number of workers affected is reduced to 278,000, almost all of whom turn out to be in manufacturing (scenario 2 in table 1.1).

Voluntary Attrition

It is normal for some workers to voluntarily quit their jobs, presumably to find more attractive employment elsewhere. Workers also regularly exit the labor force through retirement or death. Firms where sales are declining can downsize simply by not replacing these workers.

According to the Job Opening and Labor Turnover Survey (JOLTS), conducted quarterly by the Department of Labor, voluntary separations (resignations, retirements, deaths) typically account for a large share of job separations and a fairly large share of employment. As Petri and Plummer note, in the private sector as a whole, voluntary separations accounted for 25.3 percent of employment in 2014. Employment churning in the manufacturing sector is typically lower than in the rest of the economy. Once we take account of employment growth repression, manufacturing industries provide much of the dislocation. We, therefore, use the smaller share for non-layoff separations in manufacturing rather than the larger numbers for all private industries. Subtracting 14.3 percent (the 2014 share of employment represented by voluntary separations in manufacturing¹⁰) from the estimate in scenario 2 to account for voluntary attrition yields an estimate of 238,000 workers actually displaced (scenario 3 in table 1.1). This would imply that displacement from the full adjustment to the TPP over more than a decade is less than the weekly additions to unemployment claims in 2016. Of course, because employment is kept at the baseline level by adjusting wages, an equal number of new hires would be made in other industries. About half would be in manufacturing and the rest mainly in services.

9. For an application of the concept of repression to US manufacturing employment, see Pierce and Schott (2012).

10. Data from US Bureau of Labor Statistics, www.bls.gov/jlt/data.htm.

Costs of Lost Jobs

Involuntary unemployment is an extremely painful and costly experience. The displaced worker surveys regularly conducted by the Bureau of Labor Statistics show that although a few workers may quickly find new jobs—with some even earning higher wages—most will suffer.¹¹ Initial wage losses (including the costs of being unemployed) could average 17 percent of wages (Farber 2005).

The lifetime impact for such workers, however, is much larger. Some workers have difficulty finding jobs and withdraw from the labor force. Others accept jobs that pay lower wages, because they change occupations or lose seniority or union-premiums. The entire future trajectory of their earnings can be lower as a result.

In the most authoritative recent study of this effect, Davis and von Wachter (2011) use a sample of displaced mature male workers who had held their jobs for at least three years and were laid off in mass layoffs. This type of job loss is likely to be the most costly, because the workers often experience a loss of compensation for job-specific skills and because they are likely to be competing with large numbers of similar workers in local labor markets. Using longitudinal data, Davis and von Wachter take account of both the income loss these workers incur when unemployed or out of the labor force and the lower wages they are likely to receive over the next 20 years once they do find work. They estimate that the present value of the income losses of men displaced in normal times (when the unemployment rate is below 6 percent) could be 1.4 times their annual wage earnings.¹² Although this estimate could overstate the earnings loss of less experienced workers (or those with more general human capital), we apply this coefficient to total compensation (wages plus benefits) to estimate the lifetime loss of compensation of workers who might be subject to involuntary job loss as a result of the TPP.¹³

BENEFIT-COST RATIOS

To measure the annual benefits from the TPP, we use the projected time-series of income gains provided by Petri and Plummer. To estimate costs over time, we assume that real compensation grows at the baseline rate of 1 percent a year (the rate of productivity growth), so that workers displaced in later years incur higher costs. We compute compensation losses as 1.4 times annual average compensation in the year of displacement. This allows us to estimate the annual displacement costs and benefit-cost ratios implied by each of our three scenarios.¹⁴

Petri and Plummer estimate that the benefits from the TPP in 2030 will be equal to 0.5 percent of baseline US GDP or \$131 billion. They also provide annual estimates of the benefits as the economy adjusts (row 1 in table 1.2). Using these benefit estimates and the annual costs of job displacement, we estimate the annual ratio of benefits to costs for each of the displacement scenarios in table 1.2.

In all three scenarios the benefit-cost ratio is far above 1 and increases markedly after 2026. This increase occurs because Petri and Plummer assume that the nontariff measures under the TPP are phased in over a decade in 10 equal increments.

11. Ebenstein, Harrison, and McMillan (2015) find that losses are borne mostly by workers who are actually displaced and workers in similar occupations. Research on the impact of trade confirms that human capital is partly specific to industries and occupations. See, in particular, Jacobson, LaLonde, and Sullivan (1993) and Kambourov and Manovskii (2009).

12. According to Davis and von Wachter (2011), workers “lose a staggering 2.8 years of pre-displacement earnings if displaced when the unemployment rate exceeds 8 percent. These results reflect discounting at a 5 percent annual rate over 20 years after displacement.”

13. In an analogous exercise, Walker (2013) estimates the impact on earnings of workers when employment is reduced by environmental regulation. He finds almost no impact on the earnings of workers who remain in their jobs. In contrast, workers who are forced to separate experience a lifetime reduction in earnings equivalent to 130 percent of their annual income. In total, as with trade, these wage losses are far smaller than the overall social gains from environmental improvements.

14. To simplify the calculation, we assume the full present value of the lifetime earnings reduction of each displaced worker occurs in the year in which the worker is displaced rather than allocating these costs across time. The actual costs are thus larger in the initial year and smaller in later years than they actually would be.

Table 1.2 Adjustment costs and benefits of the TPP

	2017	2021	2026	2030	Average		
					2017–30 (full period)	2017–26 (adjustment period)	2027–30 (postadjustment period)
Annual increase in US real income (billions of dollars)	8	42	122	131			
Benefit-cost ratio							
<i>Scenario 1</i> : US direct and indirect employment equivalence of TPP imports	0.7	3.0	3.6	37.4	12.3	2.9	36.0
<i>Scenario 2</i> : Scenario 1 – employment growth repression	3.9	17.1	14.2	355.0	98.1	15.2	305.5
<i>Scenario 3</i> : Scenario 2 – voluntary attrition	4.6	19.9	16.6	414.3	114.5	17.7	356.5

Sources: Authors' calculations and background data for Petri and Plummer (2016), supplied by authors.

It is informative to consider the average annual benefit-cost ratio in the adjustment phase (2017–26) and the postadjustment period (2027–30). In all three scenarios the ratio is well above 1 during the adjustment phase. In the most realistic scenario (scenario 3), the benefits are 17.7 times greater than the costs. After 2026, adjustment is almost complete, and the annual benefit-cost ratios rise to the point where the ratio in 2027–30 averages 36 even in scenario 1. For the entire period (2017–30), even scenario 1 indicates that benefits are 12.3 times the costs. In the most realistic estimate, which allows for repression and attrition (scenario 3), the average benefit-cost ratio is 114.5.¹⁵

In sum, the TPP yields a high return in terms of future income for the United States as a whole. Even in the unrealistic scenario that all imports displace US workers, the adjustment and wage loss costs amount to just 8 percent of the benefits between 2017 and 2030. Under the more plausible scenarios, which account for employment growth repression and voluntary attrition, the costs are much less than 1 percent of the benefits. There is thus a strong national economic welfare case for the TPP, and beneficiaries could easily compensate those who lose.

INCOME DISTRIBUTION OF TPP BENEFITS

Trade economists have long been aware that even when trade creates aggregate benefits, it can create losers. The most widely used model of this process assumes perfect competition and factors of production (inputs such as land, labor, and capital) that are perfectly mobile and perfect substitutes (Stolper and Samuelson 1941). Combined with the Heckscher-Ohlin theory—which predicts that if the United States is more intensively endowed with capital than labor, it will specialize in capital-intensive products—it implies that trade will raise the return to capital and lower the return to labor.¹⁶

Invoking this theory, Bivens (2015) asserts that the TPP will reduce the wages of most US workers and raise US profits because the United States is “among the most capital abundant countries in the global economy, while many of our trading partners are among the most labor abundant.” But an extensive debate has raised questions about how well US trade patterns actually conform to the Heckscher-Ohlin theory (Edwards and

15. Our estimates in scenarios 2 and 3 do not take account of the fact that some new labor market entrants might have to find jobs in different industries perhaps at lower wages. But the benefit-cost ratios in these scenarios are so large that even taking this into account is unlikely to change the qualitative results we have estimated.

16. This theory has been applied widely to explore the role trade may have played in growing US income inequality. For a survey, see chapter 9 in Edwards and Lawrence (2013).

Lawrence 2010), and Bivens provides no evidence to support his claim that the TPP will increase the demand for capital relative to labor in the United States. Moreover, although the Petri-Plummer model assumes that US factors of production are mobile and factor markets competitive, it uses a realistic model of the product market, in which products are differentiated, competition is imperfect, and firms are heterogeneous. Unlike in the competitive Stolper-Samuelson framework, in markets with these characteristics, all factors of production can benefit from trade (Bernard, Redding, and Schott 2007).

In this section we develop measures of the factor intensities of US industries and use them to infer how the increase in value added as a result of the TPP will affect demand for factors. Because we are interested in factor incomes, we use net value added to measure the income of capital, in order to account for depreciation. In addition, we divide occupations based on whether the majority of the workers in them are college educated or not college educated.¹⁷

Using a different methodology, we confirm the Petri-Plummer finding that the TPP would raise demand for labor (both college-educated and non-college-educated) relative to capital. We then use the projections of how the TPP will affect factor incomes to infer how it will affect the earnings of US households in each quintile of the income distribution. To pin down changes in real consumption by quintile, we incorporate the degree to which different household quintiles consume the goods and services that are traded in the TPP. We conclude that the TPP would have a mildly progressive impact on US income distribution.

Factor Incomes

In the baseline projections, we estimate the share of value added in 2030 as 32 percent for net capital, 29 percent for non-college-educated labor, and 39 percent for college-educated labor. The first column in [table 1.3](#) reports Petri-Plummer's estimated changes in industry factor payments that would result from the TPP in 2030. Assuming that each factor of production would have the same share in industry value added as it had in 2013, and taking depreciation into account, we infer shares of factor income as a result of the TPP of 24 percent for net capital income, 27 percent for non-college-educated labor, and 36 percent for college-educated labor.¹⁸ As shown in the bottom row of table 1.3, measured in 2015 US dollars, these changes total \$28 billion for capital, \$32 billion for non-college-educated labor, and \$42 billion for college-educated labor. Relative to 2030 factor incomes in the base case, the gains amount to increases of 0.44 percent for capital, 0.55 percent for non-college-educated labor, and 0.56 percent for college-educated labor.¹⁹ These figures suggest that as a result of the TPP there would be a small increase in the demand for labor relative to capital.²⁰ Although we use a different database, our results are very similar to those of Petri and Plummer.²¹

17. Occupations in which workers with at least a bachelor's degree were the most numerous were classified as college-educated labor; all others were considered non-college-educated labor. Petri-Plummer report that some 60 percent of labor compensation went to "high-skill" workers. We estimate that 57 percent of earnings went to college-educated labor.

18. We are measuring aggregate output and our total of \$118 billion is lower than the \$131 billion increase in income obtained by Petri-Plummer because of changes in relative prices.

19. We projected factor value added for 2030 from 2013 based on the GDP growth rates reported in Petri-Plummer.

20. In addition to using a different database in order to link factor and household incomes, these projections are slightly different from those of Petri-Plummer because here we are projecting factor demands at constant factor prices, whereas their model allows factor prices to respond. Since the demands are basically proportional, however, the factor price adjustments required to reequilibrate the factor markets are very small.

21. We confirm the Petri-Plummer estimates that the TPP would increase the income of labor relative to income of capital. The two estimates differ on the performance of what Petri-Plummer call unskilled labor and we call non-college-educated labor, however. Part of this discrepancy may be driven by the fact that our categorization is based on worker-level data from the Census Bureau and theirs on the International Labor Organization's definition of unskilled labor. We also use different base years and industry data, which could imply different shares of value added as well as differences in the relative sectoral importance.

Table 1.3 Factor income shares and gains from the TPP

Industry	Petri-Plummer changes in factor payments, 2030 (billions of 2015 US dollars)	Shares of factor income (percent)				Gains (billions of 2015 US dollars)			
		Depreciation	Net capital	Noncollege labor	College labor	Net capital	Noncollege labor	College labor	College labor
Goods									
Agriculture	11	21	57	20	2	6	2	0	0
Mining	3	35	42	15	9	1	0	0	0
Food and beverages	8	13	41	31	15	3	2	1	1
Textiles	-18	18	11	44	27	-2	-8	-5	-5
Apparel	-4	12	7	38	43	0	-2	-2	-2
Chemicals	-3	20	54	12	14	-2	0	0	0
Metals	-5	10	28	42	20	-1	-2	-1	-1
Electrical equipment	2	39	9	11	41	0	0	1	1
Machinery	-12	16	21	31	32	-3	-4	-4	-4
Transportation equipment	3	22	26	26	26	1	1	1	1
Other manufacturing	-1	20	16	36	28	0	0	0	0
Services									
Utilities	2	36	31	19	15	1	0	0	0
Construction	16	6	31	49	15	5	8	2	2
Trade and transportation	27	11	26	40	23	7	11	6	6
Communications	4	14	46	9	30	2	0	1	1
Finance	9	14	30	12	44	3	1	4	4
Business services	24	11	15	18	56	4	4	13	13
Social services	51	15	8	32	45	4	17	23	23
Total	118	14	24	27	37	28	32	42	42

Sources: Authors' calculations and Petri and Plummer (2016).

Table 1.4 US household income gains from the TPP, by income quintile

Quintile	Shares of additional factor income (percent)			Gains from TPP, 2030				Gains relative to 2030 factor income (percent)
	Net capital	Noncollege labor	College labor	Billions of 2015 dollars			Total	
				Net capital	Noncollege labor	College labor		
5th quintile	1	4	0	0	1	0	2	0.528
4th quintile	5	12	2	1	4	1	6	0.530
3rd quintile	10	21	7	3	7	3	13	0.529
2nd quintile	16	27	19	5	9	8	21	0.531
1st quintile	49	28	60	14	9	25	48	0.521

Note: 1st quintile refers to top 20 percent of the income distribution; 5th quintile refers to the bottom 20 percent.

Source: Authors' calculations.

Translating Factor Incomes into Household Incomes

In the national income accounts, the Bureau of Economic Analysis reports industry gross value added and its components, indirect taxes, gross operating surplus (profits), and labor compensation. We use 2013 data, in order to be consistent with our other data. Using household survey micro-data from the Census Bureau and the Bureau of Labor Statistics, one of us (Tyler Moran) developed a social accounting matrix that tracks household incomes in each quintile category using these national income data.²² We use the data on factor incomes to infer household income growth in each quintile as a result of the TPP. To distribute these gains, we estimate the 2030 factor income of US household quintiles based on the distribution of income in 2013 (these values are given in appendix table 1A.1). The 1st quintile (i.e., the top 20 percent of US households) earned slightly more income than all other households combined; it also received the most earnings from each of the three factors. Groups with higher incomes tend to rely more on college-educated labor. The top quintile also draws far more on capital income than the others.

The first three columns of table 1.4 show the share of total additional factor income each household would receive as a result of the TPP (the shares do not sum to 100, because not all factor income would be distributed directly to households).²³ The next three columns distribute the changes in value added of labor (college and noncollege) and capital to households based on those shares. The last column reports the cumulative change relative to their 2030 market income (i.e., excluding direct taxes and transfers).

As might be expected given the similarity in the percentage gains of all factors, households at different quintiles see similar relative gains, with the middle three quintiles benefiting very slightly more than the highest and lowest. Judged by their factor intensities, and the degree to which they contribute to earnings, the mix of growth in value added as a result of the TPP is extremely similar to the mix in the economy in 2013. The top quintile benefits the least from the agreement, gaining about 0.01 percent of income less than the second quintile, which derives the greatest benefits. The bottom two quintiles boost their income by about 0.53 percent compared with 0.52 percent for the top two. All told, the agreement appears to have very little impact on the overall distribution of income.

22. These data are on file with author.

23. About 13 percent of labor compensation was absorbed by government social insurance, and 20 percent of net capital income was retained by corporate business or paid in taxes on corporate income.

Table 1.5 Household consumption of increased imports as a result of the TPP, by commodity and income quintile

Industry	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Goods					
Agriculture	1	1	1	0	0
Mining	1	1	1	1	0
Food and beverages	1	1	1	1	1
Textiles	11	8	6	5	4
Apparel	8	5	4	4	3
Chemicals	14	11	9	8	6
Metals	6	4	3	2	2
Electrical equipment	5	3	2	2	1
Machinery	17	14	12	11	8
Transportation equipment	8	4	3	2	2
Other manufacturing	11	7	6	5	4
Services					
Utilities	0	0	0	0	0
Construction	1	1	1	1	0
Trade and transportation	15	9	7	6	5
Communications	1	1	0	0	0
Finance	11	6	4	3	2
Business services	11	7	5	4	3
Social services	0	0	0	0	0
Total	123	80	64	55	42
Impact relative to median	0.94	0.98	1.00	1.02	1.02

Source: Authors' calculations.

Household Consumption

The TPP affects household incomes at all quintiles in roughly the same way. But because households in different quintiles purchase imports in different proportions, the TPP could affect the distribution of real consumption if its impact differs on the goods and services that different quintiles consume.²⁴ Indeed, as reported in appendix table 1A.2, poorer households allocate a larger share of their consumption spending to products such as food and beverages (and, indirectly, their intermediate inputs), whereas wealthier households allocate larger shares of their consumption spending to services, especially finance.

Table 1.5 explores these effects in greater detail. For each commodity it divides the increase in imports predicted by Petri-Plummer among US households, based on their 2013 levels of direct and indirect consumption.²⁵ The last two rows report total changes in dollar terms, and as a share of total 2013 consumption, relative to the middle quintile. In absolute terms, higher-income quintiles consume more imports. However,

24. For evidence that the poor consume a relatively higher share of traded products, see Fajgelbaum and Khandelwal (2014).

25. In theory, increased trade could also raise the US prices of domestic substitutes for exports. But for the most part US domestic and export prices both mirror domestic unit labor costs (Lawrence and Rangan 1993).

as a share of their initial incomes, the result is unambiguously progressive: The relative benefit to households strictly declines as income increases, with households in the lowest quintile spending 2 percent more on TPP imported products than households in the median quintile, while households in the top quintile spend 6 percent less than the median. The share of consumption spending on TPP imports by the poorest households (both directly and indirectly) is thus 8 percent higher than the share of spending by the top quintile. In sum, the TPP will improve the consumption possibilities of poorer relative to wealthier households. Claims that the TPP would worsen income inequality in the United States are thus not borne out.

EXPANDING ADJUSTMENT ASSISTANCE FOR DISPLACED WORKERS

The TPP raises overall US incomes even when the adjustment costs and wage losses of displaced workers are taken into account. Indeed, once the adjustment has been made, the TPP is the gift that keeps on giving, since few adjustment costs are required to offset the annual benefits. Nonetheless, as we have seen, there are displaced workers who lose.

Currently, US policies distinguish unemployed workers according to the reasons for their displacement. Workers who can successfully make the case they were laid off due to increased trade receive Trade Adjustment Assistance (Rosen 2008, Lawrence 2014a). TAA is a special program that provides training and some health benefits as well as wage-loss insurance for older workers. This wage-loss insurance program supplements the earnings of displaced workers who accept new jobs that pay less than they previously earned. In 2015 Congress renewed TAA.

Given the overwhelming net benefits to the nation as a whole there is a case to compensate those who lose. A TAA program with a more generous wage-loss insurance program should, therefore, be part of the legislation implementing the TPP. It would be even better if Congress took this opportunity to pass a similar program for all workers, regardless of the reasons for their displacement.

Wage-loss insurance has a strong rationale as a way to help all workers, not only those displaced by trade. When economic risks are high, either at work or in investments, a common strategy is diversification. But most workers have only one job at a time, and so diversification is not easily achieved. Public unemployment insurance is one mechanism to partly insure against the risk of job loss, but its coverage is incomplete because it does not deal with the erosion in specific human capital that leads to lower wages in the future—a loss that is especially severe for older workers with low educational levels. Public investment in training is another response that can in principle allow workers to develop new skills and thus increase their earning opportunities. But training is not appropriate for all. As an additional mechanism, wage-loss insurance compensates workers for reduced pay as a result of the erosion in their specific human capital—precisely the type of loss that is likely to be the result of the TPP. A wage-loss insurance program would not only provide insurance benefits but also speed up adjustment and save on unemployment benefits, by encouraging workers to accept jobs earlier and at lower wages than they might otherwise (Lawrence and Litan 1986). Indeed it could offset some of the disincentives that are created by unemployment insurance. The costs of such a program will depend on the age of the workers to be covered, the job tenure required for eligibility, the proportion of the wage that would be replaced, and the duration of the benefits.²⁶

The issue of safeguards should also be given more attention. One of the more controversial aspects of the estimates of the impact of the TPP relates to the general state of employment that is assumed. Involuntary

26. In his 2016 State of the Union address, President Barack Obama proposed a wage-loss insurance program for all US workers. Brainard, Litan, and Warren (2005) estimated that a national wage insurance program that replaces 50 percent of earnings losses for workers over 45 (upto a maximum of \$10,000 a year) for upto two years would cost roughly \$3.5 billion annually and require an insurance premium of roughly \$25 per worker a year. See also Kletzer and Litan (2001) and LaLonde (2007).

dislocation is likely to be much smaller in industries that are growing than in industries that are contracting, and the costs of dislocation for workers are likely to be much higher when unemployment rates are higher. As noted, Davis and von Wachter (2011) find that if the unemployment rate is above 8 percent, adjustment costs can be twice as high. Safeguards could slow the pace of liberalization when economic conditions are unfavorable. It would be desirable to include a special safeguards provision that would not permit additional protection but allow the pace of implementation to be slowed in the face of serious macroeconomic difficulties, such as a recession. One way to do so would be to make the conventional safeguards provision, which can be invoked at the discretion of the president to offset injury caused by imports, a faster administrative proceeding.

CONCLUDING COMMENTS

The TPP raises overall US incomes even when the adjustment costs and wage losses of displaced workers are taken into account. Once the adjustment has been made, the TPP is the gift that keeps on giving. Some workers will lose out, however. Yet it would be relatively easy to assist these workers with wage-loss insurance, using some of the gains that the TPP generates.

Some observers have claimed that the Petri-Plummer estimates that the TPP would raise real US incomes by 0.5 percent of baseline GDP in 2030 imply that its benefits are small. Indeed, their estimate implies the benefits would grow between 2017 and 2030 at an annual average of 0.029 percent of GDP. But compared with GDP, most policy measures are small. The relevant question is whether on balance the TPP would benefit the nation. If the Petri-Plummer estimates are correct, the answer is a resounding yes: Assuming a net 5 percent annual return, passing the TPP today is the equivalent of permanently adding \$2.62 trillion to the US capital stock in 2030. And as this chapter has shown, these benefits vastly outweigh the agreement's costs.

APPENDIX 1A

Table 1A.1 Composition of US household factor income, by quintile, in 2030 based on distribution of income in 2013

Quintile	Billions of 2015 dollars			Percent share of total		
	Capital	Noncollege labor	College labor	Capital	Noncollege labor	College labor
1st quintile	3,139	1,565	4,508	34	17	49
2nd quintile	1,019	1,551	1,402	26	39	35
3rd quintile	633	1,193	538	27	50	23
4th quintile	304	707	150	26	61	13
5th quintile	93	221	27	27	65	8

Note: 1st quintile refers to top 20 percent of the income distribution; 5th quintile refers to the bottom 20 percent.

Source: Authors' calculations.

Table 1A.2 Direct and indirect household consumption by quintile (percent share of total)

Sector	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Agriculture	2.1	2.6	2.9	3.0	3.2
Mining	2.6	3.2	3.6	3.5	3.5
Food and beverages	4.0	5.0	5.5	5.8	6.2
Textiles	0.8	0.9	0.8	0.9	1.0
Apparel	1.0	1.0	1.0	1.1	1.2
Chemicals	7.2	9.0	10.0	9.9	9.9
Metals	2.3	2.3	2.3	2.3	2.4
Electrical equipment	1.8	1.7	1.6	1.6	1.6
Machinery	0.5	0.6	0.7	0.7	0.7
Transportation equipment	2.4	1.8	1.9	1.6	1.5
Other manufacturing	4.2	4.3	4.3	4.3	4.5
Utilities	1.6	1.9	2.1	2.1	2.2
Construction	1.0	1.0	1.0	1.0	1.0
Trade and transportation	5.5	5.1	5.2	5.2	5.3
Communications	4.5	5.1	5.1	5.1	4.7
Finance	9.7	8.0	7.5	6.8	5.4
Business services	10.2	10.0	9.8	9.7	9.5
Social services	38.8	36.5	35.0	35.4	36.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculations.

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CHAPTER 2

TPP AND THE CONFLICT OVER DRUGS: INCENTIVES FOR INNOVATION VERSUS ACCESS TO MEDICINES

LEE BRANSTETTER

Well before talks were completed on the Trans-Pacific Partnership (TPP) agreement, a furor surrounded the negotiators as they attempted to reconcile two conflicting demands. Pressure from advocates for poor countries sought to ensure that innovative pharmaceutical products—especially “biologics” derived from genetic material, cells, or other biological sources—are quickly made available to poor countries in generic form at affordable prices. On the other side was the insistence of branded pharmaceutical companies that protection of their intellectual property (IP), through a long timetable before less expensive generic copies enter the market, is essential to their ability to innovate and produce more life-saving drugs in the future, for the benefit of everyone.

In the end, the agreement reached in 2015 satisfied neither side. For months it was subjected to withering criticism from nongovernmental organizations (NGOs), patient rights advocates, academics, and even Margaret Chan, the head of the World Health Organization, for allegedly yielding to the demands of “Big Pharma.” These critics faulted the TPP for providing overly generous IP protections for new drugs that reduce access to them by poor patients.

The pharmaceutical industry is not happy either. It argues that the TPP’s IP protections are too weak. When the outlines of the agreement were announced, in early October 2015, Jim Greenwood, president and CEO of the Biotechnology Industry Organization (BIO), declared that anything less than 12 years of protection for the data used to develop biologic drugs was “remarkably short-sighted and has the potential to chill global investment and slow development of new breakthrough treatments for suffering patients.”¹ The criticism of Senator Orrin Hatch, a longtime champion of the industry, which threatens to hold up approval of the TPP in the Senate, was equally tough. He declared that “this deal appears to fall woefully short”² and called for its renegotiation.

The 74-page Chapter 18 on Intellectual Property is long, complex, and multifaceted, addressing a very complicated set of policy domains. The most controversial provision relates to “data protection” or “data exclusivity” in the development of drugs, which refers to the period during which a generic pharmaceutical company may not market a competing generic drug on the basis of the data previously submitted by a branded

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1. Jim Greenwood, president and CEO, Biotechnology Innovation Organization, “BIO Statement on Data Exclusivity Provisions Within the Trans-Pacific Partnership,” October 4, 2015, Washington, www.bio.org/media/press-release.

2. “Hatch Statement on Trans-Pacific Partnership Negotiations,” press release, October 5, 2015, Washington, www.hatch.senate.gov/public/.

pharmaceutical company to demonstrate the safety and efficacy of the original drug. Drug companies wanted this protection for their new biologic drugs for 12 years. Opponents wanted to reduce it to five years. In the end the compromise provided eight years of protection. This chapter summarizes TPP Chapter 18's most important provisions and explains why the compromise accommodates the needs for both innovation and access. It concludes that the compromise reached is a good one, strengthening incentives for innovation, especially in the pharmaceutical space, while incorporating important safeguards to ensure access to essential medicines.

PATENTS, PHARMACEUTICAL INNOVATION, AND HUMAN HEALTH

Most economists believe that innovation, broadly defined, is the primary driver of long-run economic growth in advanced countries.³ They generally accept the usefulness of a patent system for new inventions as a means of promoting innovation. Under such a system, innovators receive a temporary monopoly right over the new technology they create. This monopoly raises the price of new inventions in the short run but induces more innovation and, therefore, more growth in the longer run.⁴

Empirical research shows that pharmaceutical innovation is especially dependent on patent protection.⁵ The development of new drugs requires long-term, expensive, risky investments and the engagement of large teams of very talented researchers and clinicians. Most candidate drugs never make it through the clinical testing process. The cost of developing new drugs, inclusive of the cost of failures, lies in the billions of dollars per successful drug.⁶ Patents allow firms to recoup these costs, inducing the development of inventions that have a unique impact on human welfare.

As a salient example, consider the modern drugs that keep AIDS at bay. The tens of millions of people with HIV/AIDS who are living normal lives have many to thank for this modern miracle, but it was a pharmaceutical company, making a risky bet with shareholders' capital, that first developed the antiretroviral treatments that proved to be effective. Without some degree of IP protection for these drugs, the treatment would never have seen the light of day.

Many economists and other policy analysts accept the rationale for reasonably strong patent protection in general—and drug patent protection in particular—in rich countries. Consensus regarding the imposition of stronger patent rights in poor developing countries is much weaker. The idea that the rich should pay for innovation but that its fruits should be shared at very low cost with the global poor sounds particularly appealing in the context of medical innovation, where access can mean the difference between life and death.

The creation of the pharmaceutical arsenal that exists today has relied very heavily on profits earned by the drug industry in a single rich country, the United States. The historical reliance of the global pharmaceutical industry on profits earned in the US market is likely to prove unsustainable in the face of an aging American population, mounting government fiscal challenges, and incomes that are growing much more slowly than health care costs (as discussed in appendix 2A). The willingness of American consumers to underwrite

3. This consensus rests in part on the classic work of Solow (1957). Paul Romer (1986, 1990) is credited with (re)focusing the attention of the profession on the role of innovation. The modern theory of economic growth, with innovation at its core, is summarized in the graduate textbook by Acemoglu (2009).

4. Jaffe and Lerner (2004) provide a critical assessment of the US patent system as it existed at the end of the 20th century and advance a convincing (and accessible) version of the mainstream defense of a well-functioning patent system as an essential policy tool for promoting innovation. Boldrin and Levine (2008) are perhaps the best-known patent skeptics within the economics community; they go so far as to suggest that patents can actually be a barrier to innovation.

5. Cohen et al. (2002) present survey evidence supporting the view that managers in the pharmaceutical industry regard patent protection as particularly important. Branstetter, Chatterjee, and Higgins (2014) and Budish, Roin, and Williams (2015) present regression-based evidence showing the strong responsiveness of pharmaceutical development to the strength and length of patent protection.

6. DiMasi, Grabowski, and Hansen (2014) suggest that this cost now exceeds \$2 billion.

a disproportionate share of the world's drug development costs has limits that are visible in the context of election-year politics. Yet the benefits of new drugs are greater than ever in a world whose population is both growing and aging.

It is in this larger context that one needs to evaluate the push in the TPP and other recent trade agreements to strengthen IP protection for pharmaceuticals outside the United States. A trade agreement provides a forum in which groups of countries can agree to redistribute more equitably the burden of investing in tomorrow's miracle cures. As the leading developing countries have enjoyed sustained periods of economic growth, which have led them to account for an ever-increasing fraction of the world's GDP and consumer purchasing power, the argument that at least some of these countries can and should make a contribution toward the continued progress of humanity's pharmaceutical arsenal has strengthened.

KEY INTELLECTUAL PROPERTY PROVISIONS IN THE TPP

Data Protection

The TPP requires member states to grant newly approved drugs a monopoly right loosely referred to as data exclusivity or data protection; for convenience this chapter uses the term data protection. This protection is separate from and runs concurrently with patent protection.⁷ The data at issue refer to the data branded drug companies submit to regulatory agencies that demonstrate the safety and efficacy of a drug. While drugs are under data protection, no other firm is allowed to market a competing product that relies on the same data to demonstrate safety and efficacy. Data protection thus prevents any generic competitor from competing with the original drug as long as it is in force.⁸ Once the data protection period ends, drugs are protected only by their patents. Patent protection ends when patents expire, when patents are demonstrated to be invalid, or when a method is found to produce a version of the drug that does not infringe on the patent.

Data protection is not a new concept. All recent US free trade agreements (FTAs) have required it, and virtually all TPP member states already provide some degree of data protection for new drugs. The TPP requires that all current and future member states provide this protection, and it sets the minimum period of data protection at five years for chemically synthesized drugs (known in the industry as "small molecule" drugs) and eight years for drugs based on biotechnology (known in the industry as biologics).⁹ This extended period of data protection for biologics is a first for a US trade agreement; it was easily the single most controversial provision of the entire agreement. Member states are allowed to exceed these minimums. The United States grants 12 years of data protection for biologics.¹⁰ Western European markets grant 10 years of data protection

7. The debate, as reported in the popular press, tends to use the terms data protection and data exclusivity interchangeably. Technically, data protection refers to a period during which generic firms are forbidden from using data submitted by a branded firm's original drug to obtain regulatory approval for a competing product, whereas data exclusivity refers to the period during which generic companies are forbidden from marketing a product based on that data. The TPP largely focuses on the latter concept. Article 39.3 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) endorses the principle of protection for data submitted to regulatory authorities but does not stipulate minimum periods of protection in the way the TPP does.

8. In principle, the generic drug company could enter by conducting its own clinical trials to demonstrate safety and effectiveness, but that would be extremely expensive and time consuming, and generic companies do not pursue that pathway.

9. Member states are given the option of providing either eight years of data protection or five years of data protection plus other regulations that, together, ensure a comparable period of effective market protection against generic entry.

10. The US pharmaceutical industry balked when a 2014 budget proposal from the Department of Health and Human Services provided a calculation of the potential cost savings from reducing the period of data protection from 12 to 7 years. A recommendation to reduce the data protection period to seven years reappeared in the most recent budget proposal for the department, but President Obama has not emphasized this issue in his public statements or speeches, and there has been no significant effort on the part of the administration to lobby for a shorter data protection period (see www.biopharma-reporter.com/Markets-Regulations/Seven-year-market-exclusivity-Industry-hits-out-at-Obama-s-pro-biosimilar-Budget).

to both small molecule drugs and biologics. The minimum durations required by the TPP are thus not extreme by international standards.

Proponents of data protection assert that it provides a minimum period of monopoly protection to reward firms for the time, expense, and uncertainty involved in drug development. “Old” drugs—even ones for which the patents have expired—sometimes prove to be effective cures for diseases other than the ones they were originally developed to fight. Data protection compensates firms for the expense and risk of putting this old drug through an expensive and risky set of clinical trials to verify its effectiveness in fighting this different disease. Furthermore, patents are not perfect protectors of new ideas: Inventive chemists can sometimes find ways around the patents that protect a new drug, ending a legal monopoly without actually creating a new product.¹¹ These concerns about the adequacy of patent protection are heightened in the context of biologics. Drugs based on biotechnology are highly complex. Because generic versions of biologics, known in the industry as “biosimilars,” are not exact copies, there is some uncertainty about whether patents provide sufficient protection. NGOs and patient advocacy groups argue that by strengthening the (temporary) monopoly power of a drug innovator, data protection raises drug prices and limits drug access.

Patent Linkage

The TPP contains obligations regarding the resolution of pharmaceutical patent disputes—a domain often loosely referred to in the wider debate as “patent linkage.” The TPP requires that members provide for (1) notification to patent holders of any request to market a generic drug that may infringe on their patent and (2) time and opportunity prior to the marketing of that generic drug for the patent holder to seek remedies if the patent has been infringed. The relevance of these provisions can be seen by contrasting US law with the current situation in many developing countries.

Under the US Hatch-Waxman Act (box 2.1), drug companies are required to identify the patents that protect the small molecule drugs for which they are requesting regulatory approval; those patents become part of an official government data record. If a producer of a generic wishes to enter the market while these patents are still in force, it has to inform the drug inventor of its intent and certify its belief that the original patents are invalid or that its own preparation of the medicine does not infringe these patents. If the incumbent patent holder believes its patent(s) to be valid and/or infringed, the US Food and Drug Administration (FDA) places an automatic 30-month stay on any generic entry pending legal resolution of the questions of patent validity and/or infringement. Upon the first court ruling in favor of the generic entrant, the FDA allows the generic product onto the market. The entry of biosimilars is governed under a separate law, the Biologics Price Competition and Innovation Act (BPCIA), which was enacted as part of the Affordable Care Act in 2010. That law also requires that generic entrants notify the incumbent patent holder and provides for the resolution of patent disputes before entry is approved. The idea of “patent linkage”—promotion of resolution of patent disputes before the entry of a generic product on the market—is thus deeply embedded in US law and regulatory practice (see the forthcoming article by Branstetter, Chatterjee, and Higgins). Similar provisions exist in Japan, Canada, Singapore, and other developed countries.

In some developing countries, generic producers can enter a market and compete unimpeded with patent-protected products until a court finds the generic producer liable for patent infringement. Drug regulators approve the generic entrants without delay, there is no requirement that the owners of the patents protecting existing drugs even be notified of the approval, and the local government leaves it to the (often dysfunctional) courts to determine if any infringement has taken place. If legal proceedings take years, the damage to the revenues of the innovator can be substantial.

11. Branstetter, Chatterjee, and Higgins (forthcoming) explore the effects of generic entry while patents are still in force.

Box 2.1 The Hatch-Waxman Act

In a far-reaching act of bipartisan legislating that is all too rare today, former liberal California Democratic Congressman Henry Waxman and conservative Utah Republican Senator Orrin Hatch joined forces in 1984 to create the landmark Hatch-Waxman Act. It sought to expand access to generic drugs while preserving adequate incentives for continued pharmaceutical innovation.

The Hatch-Waxman Act codified some of the same legal mechanisms—including data protection, patent linkage, patent term extensions, and limited protection for incremental innovation—that have been widely denounced by opponents of the TPP. Under the Hatch-Waxman regime, generic penetration in the US market rose steadily. It now exceeds 84 percent of prescription drug sales by volume, making the United States the biggest market for generic drugs in the world. Since 1984 waves of breakthrough therapies, including the antiretrovirals used to treat AIDS, have emerged that could not have been dreamed of when the law was passed.

In its purest form, patent linkage makes regulatory approval contingent on a legal resolution of any patent dispute. The TPP does not explicitly require patent disputes to be fully resolved before a health ministry is allowed to permit the introduction of a generic competitor to a branded drug, but it does require advance notification by any prospective generic manufacturer of intent to enter the market, and it requires that member states provide procedures for the expeditious resolution of patent disputes.

One way member states could comply with this requirement would be through the creation of an administrative procedure that could issue a judgment on claims of patent infringement before generic entry. A judgment against the generic entrant would stay entry; a judgment that no infringement occurred would allow entry. Either party would have the option of pursuing its position in the courts if it were not satisfied with the administrative judgment, but generic entry would not have to wait for a formal court resolution—a time-consuming prospect in many countries.

Patent Term Extensions

The development of new drugs is not only extraordinarily expensive but also extremely time-consuming. The process, from the earliest phases of research (prediscovery) to final approval of a new product, can take a dozen years or more. The challenge for drug companies is that patents are typically taken out early on the research process, often before the true therapeutic value of the new prospective medicine is known. Under international law patents expire 20 years after the initial filing date. Companies can spend five to seven years guiding their prospective medicines through clinical trials. By the time regulatory approval is finally granted, they may have very little time left on their patent clocks in which to recoup the expenses of drug development.

The 1984 Hatch-Waxman Act in the United States provides drug innovators the opportunity to add up to five years to their patent clocks, in order to compensate them for time lost due to regulatory delays.¹² Japan, Australia, and a number of other developed countries already have provisions in their patent laws that provide a broadly similar degree of de jure or de facto patent term extension. The TPP seeks to make this compensation available in all TPP member states by requiring patent term extensions in the event of unreasonable regulatory delays. It provides for patent term extensions in response to both patent office delays in granting a patent and drug regulatory agency delays in granting product approval. It does not specify a minimum period of patent term extension. Instead, the language in the agreement stresses the principle of “compensation”—the notion that the extensions should be proportional to the delays.

12. Branstetter, Chatterjee, and Higgins (forthcoming) review the major features of the Hatch-Waxman Act and quantify the consumer welfare gains that have arisen as a consequence of Paragraph-IV generic entry into the US market.

Protection for Incremental Pharmaceutical Innovation

The TPP recognizes and rewards incremental pharmaceutical innovation by providing for five years of data protection for “combination” products that contain at least one new chemical entity or three years of data protection when previously approved products are proved to have efficacy in fighting diseases other than the one they were originally approved to treat. In addition, TPP member states are required to provide patent protection for at least one of the following: new uses, new methods of use, or new processes of existing products. Together these provisions ensure both patent protection and data protection for new medicines that build on or use previously discovered compounds.

Other Provisions Related to Drugs

The TPP goes beyond patents and data protection to strengthen trade secrets. It is the first US FTA to require criminal penalties and procedures for misappropriation of trade secrets, including by cyber means. Trade secrets are important in many industries, including pharmaceuticals. They play a particularly significant role in the biologics industry, where the exact procedures used to manufacture the drug are often a valuable and important determinant of its safety and efficacy. The TPP also provides civil, border, and criminal enforcement proceedings against trademark counterfeiting, seeks to expedite patent examination and marketing approval processes, and provides for a 12-month patent grace period during which inventors can disclose research findings or present results at academic conferences without forfeiting the ability to obtain patent protection. This measure is significant for biotechnology firms, whose products are often based on recent science and the work of academic scientists. The grace period provides freedom to publish, which already exists under US patent law but not international patent law.

General Enforcement Provisions

The TPP contains a wide range of provisions designed to strengthen the legal force and legal enforcement of IP protection across the board. It requires the creation of civil procedures to protect all the IP rights it enumerates, and it requires the establishment of criminal sanctions and procedures for trademark counterfeiting on a commercial scale. It also requires that judicial authorities possess the authority to adjudicate disputes and enforce judgments. The TPP requires injunctive relief, civil penalties in accordance with the economic losses incurred when IP is infringed (which directly addresses the problem of inadequate civil penalties), and payment of profits earned by infringers of copyrights and trademarks. It requires courts to have the power to collect evidence from alleged infringers and requires sanctions when parties to a legal dispute disclose confidential information being considered by the court.

DOES THE TPP FAIL TO INCREASE INCENTIVES FOR INNOVATION?

The pharmaceutical industry has criticized the TPP as offering insufficient protection for drug innovation. These complaints stem from the period of data protection for biologics. The industry wanted to incorporate the United States’ 12-year standard of protection. Instead, it got eight years of protection. Is the industry right to claim that anything less than 12 years will bring an innovation apocalypse?

Biologics are complex and costly to create. But complexity cuts both ways: Clinical trials are generally required to determine whether a generic version of the drug will have the same therapeutic impact as the original drug. Small molecule generic drugs almost never require such trials. Generic entry is, therefore, cheap and rapid and quickly leads to sharp price declines and huge revenue losses for the innovator. Because biosimilars require the time and expense of clinical trials, generic competitors will enter the biologics market later, less

frequently, and at a smaller price discount than for chemically synthesized drugs, even after patents and data protection expire—as has been the case so far in Western Europe, which has more experience with biosimilars than any other major market. The European experience suggests that the complexity of biologics will limit the intensity of generic competition in this space long after data protection (and patents) expire.¹³

The dispute over data protection for biologics obscures the reality that the TPP does more to promote pharmaceutical innovation than any trade agreement in US history. The agreement meaningfully enhances data protection within the current TPP region. All but two of the United States' TPP partners will have to guarantee an extended period of protection for biologics in order to conform to the new standards. Indonesia currently has no data protection. If it joins the TPP—and its current leader has expressed interest in the agreement—Southeast Asia's most populous nation, like every country that wants to join the agreement, will have to implement the TPP's strong standards.

Adoption of these standards is important. When innovative drugs are protected only by patents, the return to innovators hinges exclusively on the quality and effectiveness of the institutions enforcing patent rights. In many developing countries, these institutions are imperfect at best. Patent infringement can take a long time to detect, and winning an infringement judgment against a politically connected local firm can be very difficult and take more years than firms have on their patent clocks. Even when a judgment favors the incumbent patent holder, the infringer may simply ignore the ruling because it is not effectively enforced. Data protection is a much simpler form of monopoly protection to adjudicate and enforce.

As countries develop, they strengthen patent protection. The TPP will encourage that process by requiring health ministries to expedite resolution of patent disputes before allowing new drugs into the market. The agreement extends patent terms when drug companies encounter unreasonable regulatory delays. It requires all member states to provide measures to address the theft of trade secrets. The United States' TPP partners were willing to scupper the entire agreement rather than grant 12 years of data protection to biologics. If the US drug industry fails to support the TPP, it will have committed the classic error of letting the (unattainable) perfect be the enemy of the good.

WILL THE AGREEMENT THREATEN PUBLIC HEALTH BY REDUCING ACCESS TO ESSENTIAL MEDICINES?

NGOs and patient advocates have taken the opposite position of the pharmaceutical industry, arguing that the agreement will strengthen IP rights for new drugs too much, harming patient welfare in the process. Will the TPP create a public health disaster by destroying access to affordable medicines?

The impact of the TPP on drug prices and availability will be far more modest than the sweeping denunciations of its critics suggest, because it retains important safeguards to ensure access to life-saving medicines, especially in poor countries. Most drugs available for the treatment of disease around the world are already off patent. Even in the United States, generics account for more than 84 percent of all prescriptions. The TPP will have no impact on access to the vast majority of drugs for which patents have already expired. For drugs that are still protected by patents, member states will retain a far-reaching ability to influence the prices at which these drugs are sold within their jurisdictions. In Australia, New Zealand, and Japan, all of which have signed the TPP agreement, public agencies operating the national health insurance systems negotiate with international drug companies to lower the prices of patent-protected drugs sold locally. Nothing in the TPP will prevent these agencies from continuing to do so, and nothing in the TPP would prevent any other member state at any level of development from adopting similar policies.

13. Branstetter, Chatterjee, and Higgins (2014) explore the implications for innovation of the very different dynamics of past and future generic competition in biologics and small molecule drugs.

The provisions in the TPP will modestly extend the term of regulatory protection enjoyed by innovative new medicines, thereby delaying generic entry. But current international law allows patent rights to be overridden in the event of a public health emergency, and the TPP does nothing to limit that possibility. If an epidemic breaks out in any TPP member state and no effective generic treatment exists, any TPP member state would have broad leeway under international laws explicitly endorsed by the TPP to ensure access to a life-saving medication by invoking its right to force any patent holder, foreign or domestic, to license the technology to low-cost producers, ensuring broad access at reasonable prices. For the poorest countries that are party to the agreement, the TPP allows delays of up to 10 years to come into full compliance, and these countries have the option of requesting additional delays under certain circumstances.

Finally, the TPP text reflects a compromise that omits a number of controversial provisions opposed by NGOs and patient advocate groups. The final draft does not require patents for surgical procedures or prohibit the establishment or restrict the use of a pre-grant opposition process. A pre-grant opposition process is an administrative procedure that allows parties opposed to the grant of a patent to submit to the patent office evidence contesting the validity of a patent application. Industry favored a prohibition on the grounds that such procedures can introduce delays and uncertainty into the patent application process, but member governments retain the freedom to employ such procedures in the final agreement.

Most of the provisions criticized by TPP opponents have been incorporated into earlier US FTAs, going back all the way to the US-Jordan FTA, in force since 2001.¹⁴ Each of these agreements was denounced by the same groups that are denouncing the TPP, and each time the same stark warnings were voiced: Accession would be a disaster for public health in the developing countries joining the agreements. In his testimony on the TPP to the US International Trade Commission, Peru's ambassador to the United States, Luis Miguel Castilla, addressed these concerns, noting that opponents of Peru's TRIPS-Plus FTA warned of sharp price increases and loss of access to drugs. Instead, after implementation, the price of drugs in Peru grew by less than the rate of inflation, while total drug consumption expanded by more than a third between 2010 and 2014.¹⁵

My own empirical analysis shows that Peru's experience is not unique. Ph.D. student Rahul Ladhani, of Carnegie Mellon's Heinz College, and I analyzed the impact of these TRIPS-Plus FTAs on the average price of imported drugs. We found that their adoption had no statistically significant effect on overall drug prices. This result was not unexpected; it stems from the fact that US FTAs affect only a small fraction of the drug portfolio available in the typical partner country, namely, drugs introduced after the FTAs go into effect that are still protected by patents or data protection. Within a few years, these patents and data protections expire, and these drugs go generic.

It is theoretically possible that increases in the price of even a small fraction of drugs for a brief period of time could hurt public health. But the same kind of statistical analysis reveals that TRIPS-Plus FTAs have had no statistically significant impact on health expenditure as a share of GDP, life expectancy, or infant mortality. The TRIPS-Plus provisions in the TPP did not lead to a devastating collapse of drug access or a precipitous decline in public health in the United States' FTA partner countries before, and they will not do so now.

Like their counterparts in the drug industry, NGOs and patient advocates have fulminated against the eight-year compromise on data protection for biologics—for completely different reasons. These groups claim that the additional three years of data protection will deny consumers access to a large number of drugs at very

14. US FTAs, beginning with the US-Jordan FTA, generally required IP protections over and above those enumerated in the 1995 TRIPS Agreement and are, therefore, referred to as TRIPS-Plus FTAs.

15. See "Remarks by the Ambassador of Peru to the United States, His Excellency Luis Miguel Castilla, on occasion of the International Trade Commission Public Hearing on the Trans-Pacific Partnership," January 13, 2016. Ambassador Castilla cites IMS Health data in supporting his claims about the growth in the size of the Peruvian drug market after implementation of the US-Peru FTA.

low prices. The claim presumes that the market for biosimilars will evolve like the market for small molecule generics—a premise the European experience suggests is false. Even after data protection expires, the typical biologic will have a portfolio of patents defending it, which the TPP member state will have a legal obligation to honor. And even after patents expire, the complexity of biologics will motivate most health regulatory agencies that care about drug safety to require clinical trials somewhere in the world that demonstrate the safety and efficacy of the biosimilar.¹⁶ Such action will be a significant barrier to generic entry, ensuring that generic competition will be less frequent, arrive later in the life cycle, and involve a much less significant price discount relative to the innovator drug than has been typical in the small-molecule world. Furthermore, there just are not that many new biologic drugs approved in major markets. The year 2015 was a banner year for new biologic approvals, with the FDA approving 12 drugs in that category—the most in US history. Even so, the number represented only slightly more than a quarter of all new drug approvals for the year, and it may represent a high water mark that is not exceeded for some time. NGOs have likely exaggerated the negative impact of the eight-year compromise on patient welfare at least as much as the drug companies have exaggerated its negative impact on innovation.

CONCLUSION: THE TPP'S IP PROVISIONS REPRESENT A REASONABLE COMPROMISE

Nobel Laureate Joseph Stiglitz is among the most prominent academic critics of the TPP. He has reserved particular ire for its pharma IP provisions. At the same time that he has bitterly criticized the TPP, he has praised the US Hatch-Waxman Act for the balance it strikes between creating incentives for new drug innovation and ensuring access to drugs.¹⁷ Careful study of the TPP text shows that its IP chapter is, in essence, exporting the Hatch-Waxman model to a much broader Asia-Pacific context. It invites all 12 member states to enter into the same kind of bargain Hatch and Waxman struck decades ago. By entering into this agreement, member states are agreeing to pay a little more for new drugs for a brief period in return for new therapies that can be handed off, in generic form, to the next generation. This balance has worked for the United States. With the flexibilities built into the agreement, it will also work for the other TPP member states.

Beyond the contentious domain of pharmaceuticals, the IP provisions of the TPP offer a reasonable compromise. Copyright owners will get somewhat stronger protection, but with important exemptions, exceptions, and limitations on enforcement.¹⁸ Member states will be held to a higher standard in terms of enforcement, but the agreement still retains considerable leeway for differences in legal practice at the national level. Legal remedies—civil and criminal—will be required to protect trade secrets, but the agreement does not spell out or mandate specific penalties.

Given the differences in interests of the negotiating parties, this agreement represents a useful compromise. As in the critical realm of new medicines, it strikes an intelligent balance between access and incentives for innovation.

16. Some developing countries may rely on the biosimilar approval processes in more advanced nations, only approving a biosimilar for domestic consumption after the biosimilar has gone through the demanding approval process in Western Europe or the United States.

17. Stiglitz has made these points in many public statements, including in an interview with Democracy Now!, November 12, 2015, www.democracynow.org/2015/11/12/a_very_big_mistake_joseph_stiglitz.

18. The internet creates special challenges for copyright-protected products that can be expressed in digital form. Legal mechanisms that could strengthen copyright protections on the Internet have been challenged as restrictions of free speech or free expression. Some of these issues are discussed in [chapter 6](#) of this volume, on the TPP and digital trade.

APPENDIX 2A INNOVATION, INTELLECTUAL PROPERTY, AND THE US ECONOMY IN THE 21ST CENTURY

INNOVATION, GROWTH, AND PATENTS

Most economists believe that innovation, broadly defined, is the primary driver of long-run economic growth. Governments promote innovation by subsidizing advanced technical education, providing tax credits to firms that invest in research and development (R&D), underwriting basic research in universities and other public science institutes, and offering inventors a temporary, government-guaranteed monopoly right over the use of their new ideas known as a patent.

The United States lost its status as the world's leading exporter of goods years ago, but it remains the world's leading exporter of ideas—a reality captured, albeit imperfectly, in official trade statistics. The licensing revenue generated by the United States' IP overseas exceeded \$130 billion in 2014, the most recent year for which aggregate data are available. Its surplus in trade in ideas was an astounding \$88 billion—a larger surplus than generated by aircraft, agricultural products, or any other category of goods trade.¹⁹ Moreover, expert assessments of the quality of these data suggest that these figures almost certainly underestimate the true level of IP exports, perhaps by tens of billions of dollars.²⁰

The official numbers also reflect the reality of a world in which there are widespread weaknesses in IP enforcement outside the United States. Estimates by the bipartisan Commission on the Theft of American Intellectual Property suggest that the losses from worldwide theft of US IP could run as high as \$300 billion a year, a number on par with total US exports to Asia.²¹ Although these numbers are necessarily speculative, given the United States' clear revealed comparative advantage in innovation, there is little doubt that stronger IP protection in the rest of the world would benefit US producers of goods and services. The numbers also clearly show that TPP critics like Paul Krugman are simply wrong when they suggest that IP is a second-order issue for America's trade with the rest of the world.

PATENTS, NEW DRUGS, AND HUMAN HEALTH

New drugs have had a disproportionate impact on human well-being, and patents are especially critical to pharmaceutical innovation. In 1998 Yale University economist William Nordhaus circulated a remarkable essay called “The Health of Nations.” Drawing on economic theory and publicly available data, he concluded that improvements in health in the second half of the 20th century had a greater impact on human well-being than all other sources of consumption increases put together (Nordhaus 2002). The most important source of improvement in health care was the steadily expanding arsenal of effective medicines (Fuchs 1982). Although it is challenging to determine exactly how much of the improvement in human health is attributable to new drugs (because the expansion in their number came at the same time as declines in pollution, improvements in nutrition, and changes in health-affecting habits, such as smoking), every effort to determine a social rate of return on investment in new drugs yields very high numbers.²²

19. See Bureau of Economic Analysis, table 2.1 at

www.bea.gov/iTable/iTable.cfm?ReqID=62&step=1#reqid=62&step=6&isuri=1&6210=4&6200=160.

20. See Feenstra et al. (2010), a report to the Committee on Economic Statistics commissioned by the American Economic Association.

21. See Commission on the Theft of American Intellectual Property (2013). These numbers include sales lost to counterfeit merchandise and are not directly comparable to the IP licensing numbers.

22. For example, Lichtenberg (2007) finds that an increase in the stock of “priority-review” drugs increases the mean age

Medical innovation is not only uniquely valuable but also uniquely dependent on patent protection. This proposition might seem like common sense: Once the compound of a chemical drug is known, it can be easily mass produced at close to marginal cost by a large number of generic drug companies, including many based in low-cost developing countries. When patents expire, the innovating drug companies typically experience a massive loss of revenue and profit.

A vast array of empirical evidence shows that this is indeed the case. Cohen et al. (2002) surveyed inventing firms across a range of industries and found that pharmaceutical companies (and manufacturers of industrial chemicals) value patents more than inventors in any other industry. The inconvenient truth is that our life-saving drugs do not fall like manna from heaven. They require long-term, expensive, risky investments and the engagement of large teams of very talented researchers and clinicians, not to mention patients willing to gamble with unproven remedies.

THE END OF THE US PHARMACEUTICAL MARSHALL PLAN

Many economists and other policy analysts accept the rationale for reasonably strong patent protection in general—and drug patent protection in particular—in rich countries. The consensus among economists regarding the imposition of stronger patent rights in poor developing countries is much weaker. The idea that the rich should pay for innovation but that its fruits should be shared at very low cost with the global poor sounds particularly appealing in the context of medical innovation, where access can mean the difference between life and death. It is also appealing because a free pass for developing countries seems to have worked fairly well so far.

The world has long relied disproportionately on the US drug consumer to underwrite the cost of new drug development. Even today unofficial industry estimates suggest that the industry earns 60 percent of its profits in the United States. The United States has long provided strong IP protection for new drugs and refrained from imposing de facto price controls on patent-protected drugs. These efforts have kept US drug prices much higher than almost anywhere else in the developed world.

At the beginning of the postwar era, it probably made sense for the United States to offer up a kind of unofficial pharmaceutical Marshall Plan to the rest of the world. Incomes in the United States were higher than elsewhere, and expenditures on health care were a small fraction of GDP and household income. Because the science-based pharmaceutical industry was still at a relatively early stage of development, there was much low-hanging fruit for this industry to harvest. Hundreds of new drugs were developed in these years. At any reasonable value of a statistical life-year, the benefits reaped by the rest of the world from consuming drugs at a small fraction of the prices US consumers paid were staggering. These benefits exceeded those of the original Marshall Plan by orders of magnitude, and they extended to every part of the globe.

As appealing as this model may have been to activists, NGOs, and even some academic economists, it was not sustainable. The costs of R&D for new drugs rose as the low-hanging fruit was harvested and the industry shifted to more complex diseases. Health care costs rose at a faster pace, even as US wages stagnated, creating increasingly strong incentives for Americans to switch to generic drugs when they were available and putting strong pressures on large private insurers to use their market size to bargain for significant discounts on patent-protected drugs. An unusually productive era of pharmaceutical innovation partly insulated drug

at death of Americans by nearly five months. Longevity effects alone imply a rate of return to pharmaceutical R&D on the order of 18 percent, without taking into account the positive effects on quality of life, reductions in the costs of surgeries and nonpharmaceutical medical care, and benefits to patients outside the United States.

companies from the financial consequences of these shifts until the mid-1990s; the lower rate of successful product introduction since then has left drug companies increasingly vulnerable to the double challenges of increasingly aggressive generic competition and skyrocketing drug development costs. The larger, publicly traded drug companies have responded by cutting back their R&D.

As the US population ages, Medicare and Medicaid programs will come under increasing pressure to use their large size and market power to negotiate the same kinds of discounts on patent-protected drugs that their counterparts around the world have done routinely for decades. The profitability of the US market will almost certainly erode further. Now that the rest of the world has grown richer and healthier, thanks in part to US innovations, it is neither fair nor realistic for the world to expect that US consumers will continue to foot the bill. The large industrial nations other than the United States generally suffer from even greater fiscal and demographic challenges. No one expects slow-growing Western Europe or an increasingly indebted Japan to dramatically raise the prices they pay for the medicines of their aging populations. It is in this context that one needs to evaluate the push in the TPP and other recent trade agreements to strengthen IP protection for pharmaceuticals outside the United States.

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CHAPTER 3

TPP AND THE ENVIRONMENT

JEFFREY J. SCHOTT

For most of the postwar era, trade negotiators have focused on reducing barriers to imports, exports, and investment. Environmental issues were added to the negotiating agenda only after the signing of the North American Free Trade Agreement (NAFTA) in December 1992. At that time, incoming president Bill Clinton insisted that side agreements on the environment and other issues be appended to the trade pact before he would submit it to Congress for ratification. The NAFTA environmental side agreement became a pathbreaker for subsequent US bilateral and regional trade agreements and helped inspire a narrowly focused but important environmental agenda at the World Trade Organization (WTO). Recent accords, such as the Korea-US Free Trade Agreement (KORUS FTA), improved on the NAFTA precedents and included dedicated chapters on environmental issues, with obligations subject to binding dispute settlement procedures.

The environment chapter of the Trans-Pacific Partnership (TPP) covers a broader range of issues than any previous trade accord. It contains important new obligations to reduce fish subsidies, manage fisheries, and crack down on illegal trafficking in wildlife and illegal logging. It seeks to promote the conservation of biodiversity and enhance cooperation on advancing “low-emissions” economic growth—a euphemism for steps to combat global warming. TPP obligations commit participating countries to enforce important multilateral environmental agreements (MEAs) to which they are a party. Enforcement of those agreements has been a key area of concern for members of the US Congress since the 2007 bipartisan political accord between congressional Democrats and the George W. Bush administration, which established a baseline for US FTA objectives on the environment and other issues.¹

Like previous pacts, the TPP includes requirements to fully enforce domestic environmental laws and obligations not to deviate from existing practices in a manner that distorts trade and investment flows (Article 20.3.6). Like the KORUS FTA, TPP obligations on the environment are subject to the common dispute settlement procedures that apply to other TPP chapters. This result is notable: Binding dispute settlement procedures were included after US negotiators overcame the initial reluctance of all the other TPP countries to accept such strong enforcement provisions in this area. But its inclusion came at a price. In return for yielding

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1. On May 10, 2007, Democratic leaders in Congress and officials of the Bush administration reached an agreement on how pending US free trade agreements with Colombia, Korea, Panama, and Peru need to address environment and labor issues, among others (see Destler 2007). This bipartisan accord, often referred to as the May 10 Agreement, was substantially incorporated into the 2015 Trade Promotion Authority legislation that sets out US priority negotiating objectives.

to US demands for stronger dispute settlement procedures, other countries insisted that some provisions in the environment chapter not be cast as hard obligations (i.e., “should” instead of “shall”).²

Importantly from an environmental perspective, the TPP revises and updates investor-state dispute settlement (ISDS) provisions, which have drawn fire from environmental groups in the past. These groups charge that corporations could use ISDS provisions to challenge current environmental policies and other regulatory initiatives protecting the environment. Indeed, some groups claim that the threat of ISDS litigation in the environmental area outweighs all the gains for environmental protection in the TPP.³

Simply put, these concerns are overblown. As Hufbauer (2016) points out, there is little evidence of constraints on environmental policies resulting from ISDS litigation. Moreover, new TPP provisions affirming each member’s right to regulate in the public interest establish a strong barrier against future abusive litigation.

For all its new environmental protections, the TPP is not an environmental agreement. It does not update existing MEAs. Nor does it take the place of prospective accords on the mitigation of greenhouse gas emissions. Its value as the “greenest” trade accord ever negotiated is in its disciplines on trade and domestic policies and governmental actions that discourage abusive environmental practices (e.g., depletion of fish stocks) and strengthen the enforcement of MEAs by constraining subsidies and incorporating new obligations to deter the illegal taking and trade of wildlife. The TPP’s binding dispute settlement provisions also reinforce existing commitments not to lower environmental standards to encourage investment.

This chapter highlights the key areas advanced by TPP obligations. It does not provide a country-by-country assessment of how the TPP will affect the administration, implementation, and enforcement of national environmental laws and policies. Such environmental governance reforms could be as important as the new TPP rules for some developing-country members.

PROTECTING THE OCEANS

The TPP chapter on the environment makes a big splash with its innovative provisions limiting fishing subsidies and promoting sound management of fishery policies. In particular, it addresses problems related to (a) inadequate regulation of marine wild capture fishing that leads to overfishing and depletion of fish stocks, including increased bycatch or the capture of other marine life (e.g., dolphins or young fish) in the course of fishing; (b) subsidies that exacerbate the adverse effects of overfishing; and (c) illegal, unreported, and unregulated (IUU) fishing that affects trade and the environment (Articles 20.16.2 and 20.16.3).

Addressing the pervasive problem of fish subsidies is a major achievement. Subsidies to marine fisheries have contributed to the depletion of fish stocks. A 2009 study by the World Bank and the Food and Agriculture Organization (FAO) documented the extent of the damage done by overfishing. It estimated that overexploited or depleted fish stocks represent about a quarter of global marine catch and that global losses from overexploitation of marine resources could exceed \$50 billion a year. The TPP can help mitigate this problem because TPP countries rank among the world’s largest fish exporters, and subsidies provided by some TPP countries contribute to overfishing.⁴

2. As an example, US efforts to include bans on illegal wildlife trade as comprehensive as those in the US Lacey Act were only partially satisfied. That act, as amended in 2008, bars the acquisition or trade—domestic or foreign—of fish, wildlife, or plants (including illegally harvested wood products) that are taken, possessed, transported, or sold in contravention of US or foreign and international law. See “Lacey Act,” US Fish and Wildlife Service, www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/lacey-act.html (accessed on February 18, 2016).

3. See, for example, dissenting opinions to the December 2015 report of the US Trade and Environment Policy Advisory Committee (TEPAC) on the TPP, available at www.ustr.gov.

4. On this point, see WTO (2010), especially the section by Sumaila and Delaگران on subsidizing fisheries.

One of the most important new TPP obligations is the provision that bars granting or maintaining subsidies that benefit fishing activities “that negatively affect fish stocks that are in an overfished condition” (Article 20.16.5a) or are provided to IUU fishing vessels (Article 20.16.5b). The latter subsidies must cease immediately upon entry into force of the TPP. Subsidies covered by Article 20.16.5a already in place before the entry into force of the TPP “shall be brought into conformity” with TPP obligations within three years (though Vietnam may request a one-time two-year extension for its subsidy programs). The TPP doesn’t prohibit all subsidies, only those where stocks are already overfished or where IUU vessels are involved. But the rules require “best efforts” to refrain from providing new subsidies or extending existing programs that contribute to overfishing or overcapacity, and TPP members are required to notify all subsidies “to persons engaged in fishing or fishing-related activities” within one year of entry into force of the pact, and to update those notifications every two years thereafter (Article 20.16.9).

Another TPP priority is to combat IUU fishing by deterring trade in illegally harvested fish and inhibiting the transshipment at sea of such products. IUU fishing is essentially marine piracy that, according to estimates cited by the US Trade Representative (USTR 2011), generates annual global losses in the range of \$10 billion to \$23.5 billion. To inhibit such activity, the TPP commits each country to “support monitoring, control, surveillance, compliance and enforcement systems” to deter its flag vessels and nationals from IUU fishing and to “implement port state measures” that restrict entry to ports or access to port services by vessels engaged in IUU fishing practices (Article 20.16.14). TPP countries also commit to addressing diversion of such enforcement via transshipment at sea.

To be effective, measures to counter IUU fishing require concerted international action like those mandated by the 2009 FAO Agreement on Port State Measures to Prevent, Deter, and Eliminate IUU Fishing. That pact has not yet entered into force, pending ratification by a minimum number of signatories. The United States ratified it in February 2016. In a sense, the TPP provisions set out an interim agreement akin to but less comprehensive or binding than the Port State Measures Agreement. TPP members “endeavor to improve cooperation internationally,” but the trade pact does not require its members to adopt and implement the 2009 FAO agreement.

TPP members also commit to the conservation of sharks, marine turtles, seabirds, and marine mammals threatened by overfishing, illegal fishing, or bycatch. All member countries are required to adopt and effectively enforce measures that “should include, as appropriate” finning prohibitions for sharks (Article 20.16.4a) and “bycatch mitigation measures for marine turtles, seabirds, and other mammals” (Article 20.16.4b). Some environmental groups argue that the TPP does not explicitly ban shark finning and thus does not provide certainty that countries continuing this practice can be found in violation of their TPP obligations. But the language in Article 20.16 requires effective conservation measures for sharks and strongly indicates that countries “should” ban such practices, and the pact’s consultative procedures and institutional oversight body, the TPP Environment Committee, afford other TPP members the opportunity to name and shame countries that do not undertake and enforce such policies.

REINFORCING MEAs

Since the May 10 Agreement US negotiators have sought to include comprehensive rules, subject to binding dispute settlement, on trade-related environmental practices that would reinforce existing MEAs, including future amendments to those pacts. That accord cited seven MEAs: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the International Convention for Pollution from Ships (MARPOL); the Inter-American Tropical Tuna Convention (IATTC); the Convention on Wetlands (Ramsar Convention); the International Whaling Convention (IWC); the Convention on Conservation of Antarctic Ma-

rine Living Resources (CCAMLR); and the Montreal Protocol on Substances that Deplete the Ozone Layer (the Montreal Protocol). In the 2015 Trade Promotion Authority (TPA) law, Congress set as a principal US negotiating objective that a US trading partner “adopts and maintains measures implementing... its obligations under common multilateral environmental agreements” (Section 102 (b)(10)(A)(i) of HR 2146).

The US aim was to formulate TPP provisions that would obligate members to pursue domestic policies and enforcement mechanisms to implement MEA commitments to which they were a party. Failure to do so would breach TPP obligations and possibly subject that country to TPP dispute settlement. The goal was to better enforce existing MEA obligations to which a country already was a member. While desirable, neither the May 10 Agreement nor the TPA requires that all countries join and adhere to all seven MEAs listed earlier as a prerequisite for TPP membership.

Participation in the MEAs by the 12 TPP countries varies widely (table 3.1). The United States and Japan have signed all seven agreements, six other countries are party to all but one, and the rest adhere to only three or four. The only pacts ratified by all 12 TPP countries are CITES, MARPOL, and the Montreal Protocol. For the other four MEAs, TPP contains obligations applicable to and enforceable by all TPP members that are comparable to important commitments undertaken in those MEAs regarding inter alia protection of marine species and conservation of wetlands and other fragile ecosystems.

TPP Article 20.4 affirms the basic commitment of each country “to implement the multilateral environmental agreements to which it is a party.” This hortatory provision is augmented with language linked to specific MEAs.

For the Montreal Protocol, Article 20.5 requires that TPP members “shall take measures to control the production and consumption of, and trade in, [substances that deplete the ozone layer].” Annex 20-A lists measures currently applied by TPP countries that are deemed to comply with this obligation; this “pre-clearance” also extends to future measures of “equivalent or higher level of environmental protection” (Article 20.5, footnote 4). If countries do not continue to control ozone-depleting substances, other TPP members can file a dispute that seeks enforcement of the TPP and Montreal Protocol commitments, provided that the failure to do so affects intra-TPP trade or investment (see footnote 5 to TPP Article 20.5). Some environmental groups fear that such provisos could hinder pursuit of legal remedies. In my view, the language merely sets a de minimis standard for litigation. Moreover, the TPP includes more than sticks to punish noncompliance with the Montreal Protocol. It also encourages countries to cooperate on matters such as alternatives to ozone-depleting substances and the combating of illegal trade in those products (Article 20.5.3).

Under TPP Article 20.6, similar provisions apply with regard to obligations under MARPOL, namely, that TPP members “shall take measures to prevent the pollution of the marine environment from ships” (Article 20.6.1). Annex 20-B lists existing measures.

COMBATING ILLEGAL TAKING AND TRADE IN WILDLIFE AND WILD PLANT PRODUCTS

The TPP covers commitments to (a) deter illegal taking and trade in logging and in wildlife and wild plant products and (b) cooperate more closely to strengthen environmental management of these resources, as required by MEAs such as CITES.⁵ The objectives are the preservation of endangered species, protection of biodiversity, and sound stewardship of wildlife and plant resources.

All TPP countries are involved as a source of supply of the illegal product, a transit point in the distribution chain, or a source of demand for the products. The TPP strategy is straightforward. It is based on the

5. The TPP defines taking as “captured, killed or collected and... harvested, cut, logged or removed” (Article 20.17, footnote 21).

Table 3.1 TPP countries that are signatories to multilateral environmental agreements (MEAs)

Agreement	New											Number of TPP countries that signed agreement	
	Australia	Brunei	Canada	Chile	Japan	Malaysia	Mexico	Zealand	Peru	Singapore	United States		Vietnam
CITES	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12
MARPOL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12
IATTC			✓		✓	✓	✓		✓		✓		5
Ramsar Convention	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
IWC	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8
CCAMLR	✓			✓	✓			✓		✓			5
Montreal Protocol	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12
Number of MEAs signed by each TPP country	6	3	6	6	7	4	6	6	6	3	7	4	

CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora; MARPOL = International Convention for Pollution from Ships; IATTC = Inter-American Tropical Tuna Convention; Ramsar Convention = Convention on Wetlands; IWC = International Whaling Convention; CCAMLR = Convention on Conservation of Antarctic Marine Living Resources; Montreal Protocol = Montreal Protocol on Substances that Deplete the Ozone Layer

Source: UN Information Portal on Multilateral Environmental Agreements, www.informea.org.

notion that environmental abuses could be substantially mitigated if trade in those illegally produced goods, a major source of profit from this illegal activity, could be restricted more effectively.

Challenges include deterring illegal logging from protected forests; depletion of fish stocks through illegal fishing activities; and the poaching of elephants, rhinos, and tigers, among other exotic animals. Poaching has reached crisis proportions, with illegal takings and kills of exotic animals supplying a multibillion dollar trade in ivory, rhino horns, tiger parts, and exotic animals. Illegal trade in wildlife products is substantial, although hard to quantify given the nature of the activity. The former CEO of World Animal Protection estimates the value of wildlife trafficking in Southeast Asia at \$8 billion to \$10 billion a year.⁶ Illegal logging generates revenues of the same order of magnitude, and IUU fishing brings in twice as much. The total value of trade of these illegal products could be \$20 billion to \$40 billion, according to the US Trade Representative (USTR 2011).⁷

Perhaps the strongest obligations in the environment chapter pertain to the broad subject of conservation and trade. Article 20.17.2 states that each TPP country “shall adopt, maintain and implement laws, regulations and any other measures to fulfil its obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).” If a country does not meet its CITES obligations through the implementation of its domestic laws and other measures and the inaction leads to illegal takings and trade of these species, other TPP members can file disputes seeking full CITES compliance. This language is what Congress sought in the May 10 Agreement in terms of beefing up enforcement of MEAs.

Article 20.17 not only reaffirms and reinforces CITES provisions and resolutions⁸ but also commits TPP countries to “maintain or strengthen government capacity and institutional frameworks to promote sustainable forest management and wild fauna and flora conservation” (Article 20.17.4b). In addition, TPP obligations go beyond protecting CITES-listed species by requiring each country to take measures aimed at deterring illegal trade and inhibiting the transshipment of illegal products through its territory, regardless of whether or not the species at issue is endangered. Article 20.17.5 requires that each country “shall take measures to combat, and cooperate to prevent, the trade of wild fauna and flora” taken or traded in violation of law, including “sanctions, penalties, or other effective measures... that can act as a deterrent to such trade.” Handling transshipment issues raised sensitive political issues in some countries (such as Malaysia), but the TPP text still requires that each TPP member “shall endeavour to take measures to combat the trade of wild fauna and flora transshipped through its territory that, based on credible evidence, were illegally taken or traded” (Article 20.17.5).

TPP disciplines that reinforce CITES and other MEAs are not a silver bullet to prevent abuses or stop trade altogether; the economic incentives to evade governmental measures are too lucrative for such a conclusive result. But TPP provisions in this area can have a big impact. They can deter some illegal activity by requiring more controls on the trade and transshipment of endangered wildlife and illegally harvested logs, raising the cost of and reducing the profit from such activities. More comprehensive results, however, will require greater efforts to reduce the demand for these products in the United States and other countries.

6. See Mike Baker, “TPP Deal a Chance to Protect Wildlife,” *Straits Times* (Singapore), June 23, 2015, www.straitstimes.com/opinion/tpp-deal-a-chance-to-protect-wildlife (accessed on February 19, 2016).

7. The consequences range far beyond environmental damage, as criminal groups and terrorist organizations use this trade to generate revenues (Froman 2015, 31).

8. CITES resolutions are nonbinding but cover important issues such as actions by Vietnam and Malaysia to protect rhinos. Article 20.17.3c states that TPP members shall “endeavor to implement, as appropriate, CITES resolutions that aim to protect and conserve species whose survival is threatened by international trade.”

CONSERVING BIODIVERSITY

TPP countries have important objectives but differing priorities with regard to the use and protection of biological diversity. Article 20.13.2 states that each TPP member “shall promote and encourage the conservation and sustainable use of biological diversity, in accordance with its law or policy.” It requires transparency of government programs and activities “related to the conservation and sustainable use of biological diversity” and establishes commitments to cooperate on “the protection and maintenance of ecosystems” and “access to genetic resources and the sharing of benefits arising from their utilization” (Article 20.13.6). It also recognizes the importance of “respecting, preserving and maintaining knowledge and practices of indigenous and local communities embodying traditional lifestyles” (Article 20.13.3).

MITIGATING GREENHOUSE GAS EMISSIONS

The TPP failed to adequately address the challenges to trade and economic growth posed by global warming. Despite a preponderance of scientific evidence that rapid increases in greenhouse gas emissions have contributed to a significant rise and increased volatility in the range of atmospheric and oceanic temperatures and that trade reforms could contribute to some mitigation of the problem, the TPP yielded little more than hot air on the topic. Sensible proposals to encourage the development and use of environmental technologies and renewable energy resources through new trade reforms and subsidy disciplines fell by the wayside. Indeed, climate change is not even mentioned in the agreement, because US negotiators bowed to demands from skeptical members of Congress who threatened to vote against the entire pact if the words “climate change” appeared in the text.⁹

Instead, the drafters of the TPP titled the section, “Transition to a Low Emissions and Resilient Economy,” noting that this process “requires collective action” and that TPP countries “shall, as appropriate, engage in cooperative and capacity-building activities” toward that end (Article 20.15). The text then provides an illustrative list of possible areas of cooperation, including energy efficiency, renewable energy sources, sustainable transport and urban infrastructure development, and deforestation.

Without dedicated funding for such activities, the TPP words are unlikely to translate into effective action. Tariffs on environmental goods will be phased out for TPP partners, but the opaque layers of nontariff barriers (NTBs), including subsidies, will continue to undercut the value of tariff reform and obstruct efforts to reduce overall emissions. Recognizing this problem, the TPP empowers the Environment Committee, established to “oversee the implementation of this Chapter” (Article 20.19.3) to discuss and “endeavor to address” NTBs that could affect trade in environmental goods and services (see Article 20.18.3).

CONCLUSIONS

The TPP produced a notable outcome on trade-related environmental issues. TPP countries have undertaken extensive obligations *inter alia* to eliminate damaging fish subsidies, to crack down on illegal trafficking in wildlife and illegal logging, to strengthen enforcement of MEAs to which they are a party and to assume new obligations in matters covered by other MEAs in which they are not a signatory, and to pursue conservation programs for specific marine species, wetlands, and forest and fisheries management. All of these obligations are enforceable under the TPP’s general dispute settlement procedures.

9. To be fair to US negotiators, the threat was not an idle one. New US trade legislation vetted in 2015 and passed by Congress in February 2016 amends US Trade Promotion Authority to require that US trade pacts “do not establish obligations for the United States regarding greenhouse gas emissions measures” (section 914(b) of HR 644). If they do, fast-track implementing procedures would not apply.

The coverage of the environment chapter of the TPP is extensive; it is a substantial improvement over both the NAFTA and the KORUS FTA in terms of the breadth and depth of obligations and enforcement provisions. Although the TPP does not resolve many compelling environmental problems, it does give environmental officials new tools to combat specific abuses and to conserve environmental resources. Compared with the status quo, and the grudgingly slow progress on global initiatives to reduce air pollution and protect land and marine resources, the TPP agreement provides innovative and concrete results that should help constrain and mitigate key environmental problems.

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CHAPTER 4

LABOR STANDARDS IN THE TPP

CATHLEEN CIMINO-ISAACS

The debate over the Trans-Pacific Partnership (TPP) has focused largely on its steps to liberalize trade and investment barriers in the 12 participating countries. But a crucial element of the accord, which may determine whether it gains enough votes for approval in Congress, aims to protect the rights of workers to organize and improve their working conditions in countries not particularly known for high labor standards. Ever since labor protection provisions were attached to the North American Free Trade Agreement (NAFTA), which entered into force in 1994, US trade agreements have included labor standards on the negotiating agenda, with recent pacts improving on the NAFTA precedents. Advocates for the labor movement are motivated by two principal goals: ensuring fair treatment of workers, so that they share in the benefits of a liberalized economy, and making it more difficult for producers in other countries to undercut and outcompete the United States through poor standards.

Many free trade agreements (FTAs) contain provisions that protect worker rights, unions, and worker safety. The quality of these commitments and their enforceability vary widely, however. The TPP includes the most ambitious set of labor provisions of all recent FTAs. It may not address all of the concerns of critics, but it moves the labor agenda incrementally forward by expanding the terms of the bipartisan agreement of May 10, 2007. That compromise, agreed to by congressional Democrats and the George W. Bush administration, established a benchmark at the time for new expectations by Congress for US FTA labor chapters and helped pave the way for approval of FTAs with Colombia, Panama, Peru, and Korea. The May 10 Agreement contained requirements that national laws enforce core labor standards of the International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work and that FTA labor provisions be subject to the same dispute resolution mechanisms—including trade sanctions—as the commercial obligations of the trade deal.

The TPP builds on that agreement with new provisions on issues of longstanding concern (such as working conditions in export processing zones [EPZs]¹ and trade in goods produced by forced labor) and bilateral side plans between the United States and TPP countries with weaker records on labor standards. The TPP labor provisions fall short of addressing all of the labor challenges within participating countries, but there is potential for them to improve labor practices, provided they are implemented.

The TPP labor chapter applies to all TPP members and commits them to uphold internationally recognized worker rights. It includes new provisions that obligate members to establish a minimum wage, set limits on working hours, and adopt occupational health and safety regulations. The TPP does not stipulate a baseline

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1. EPZs are zones with favorable regulatory regimes that aim to attract export-oriented companies and investment.

standard for these regulations, which are linked to labor costs and vary by a country's level of development. Instead, it leaves regulatory discretion to each country. TPP provisions call for upgraded labor protections such as enforcement of ILO labor rights in EPZs. Many EPZs concentrate in labor-intensive assembly production and have long been scrutinized for working conditions and labor compliance issues. The TPP also commits members to discourage imports of goods produced by forced labor through "initiatives considered appropriate." Supporters of the TPP note that these provisions constitute the first explicit protections on these issues in US trade pacts. Some language is vague, however, and could allow for abuses to continue. In an important omission, the TPP does not explicitly address protections for migrant labor (foreign-born workers who migrated for permanent or short-term employment), an area that is certain to be criticized because of the importance of such workers in Brunei, Malaysia, Mexico, and Peru, where they can be subject to forced labor and abusive recruiting practices.

Demand for strong labor standards has been driven by the fact that several developing countries, including Brunei, Malaysia, and Vietnam, have poor records, making critics wonder whether they will implement commitments made in the TPP. In many cases, these countries and others lack the resources, technical abilities, or political will to enforce even the labor laws that are already on their books.

To address these problems, as a parallel to the TPP's main labor chapter the United States negotiated bilateral Labor Consistency Plans with Brunei, Malaysia, and Vietnam that mandate tailored legal and institutional reforms to build capacity to comply with TPP obligations. Two features are particularly important: Specified reforms must be implemented before the TPP enters into force,² and the terms of the plans are enforceable and subject to dispute settlement. Critics argue that laws may change but enforcement is not guaranteed. These will be future challenges for ensuring the TPP's success.

For US trade policy and labor rights advocates, effective enforcement has become the central issue as the United States expands its FTAs with developing countries. TPP labor standards are enforceable through dispute settlement procedures, with recourse to trade sanctions if a country fails to comply. The enforcement provisions of the TPP labor chapter are built on a combination of cooperative, consultative, and dispute resolution mechanisms. Most of these processes replicate US FTAs with Korea and Peru, but the TPP adds new mechanisms and tightens some areas in an attempt to offer better procedural certainty. Among the labor plans for Brunei, Malaysia, and Vietnam, Vietnam has the most expansive implementation and monitoring guidelines, with three tiers of oversight that should serve as a check if political will to implement reforms proves lacking. Like any treaty, the strength of TPP labor commitments relies heavily on their implementation.

The Obama administration has branded the TPP an upgrade of NAFTA. By that metric the labor chapter is a significant improvement. US FTAs have evolved from commitments to simply enforce a country's own domestic labor laws to commitments to also uphold internationally recognized labor rights, from limited remedies for inadequate enforcement to fully enforceable through dispute settlement procedures. The diverse economic conditions of the 12 members of the TPP guaranteed that the labor provisions would be tough for negotiators to resolve. But for many countries, including Malaysia and Vietnam, the TPP labor commitments could potentially improve their weaker standards. Overall the labor provisions of US trade agreements have improved incrementally over time; future trade deals can be expected to build on the progress made in the TPP.

LABOR STANDARDS AND TRADE RULES

Labor standards are not a subject of World Trade Organization (WTO) rules and disciplines, because no multilateral consensus could be reached on this controversial issue.³ During the first WTO ministerial, in 1996,

2. There is one exception, related to Vietnam, discussed in a later section.

3. The only General Agreement on Tariffs and Trade (GATT)/WTO labor-related provision relates to restricting trade in goods made from prison labor. See "Trade and Labour Standards: Subject of Intense Debate," www.wto.org/english/thewto_e/minist_e/min99_e/english/about_e/18lab_e.htm (accessed on September 21, 2015).

developing-country members rejected the idea of putting labor on the negotiating agenda, fearing that such standards would undermine their economic development or be used by other countries to protect labor-intensive, import-competing industries (see VanGrasstek 2013). As a result, trade ministers agreed to renew their commitment to observe internationally recognized core labor standards but reaffirmed the ILO as the competent body to deal with labor issues.⁴ The ministerial declaration also denounced the “use of labour standards for protectionist purposes” and acknowledged “that the comparative advantage of countries, particularly low-wage developing countries, must in no way be put into question.” Other efforts to negotiate labor standards met similar resistance. The consensus to not take up a labor agenda and leave labor standards under the purview of the ILO was not matched with efforts to strengthen the ILO’s enforcement role (Elliott 2000).

Concerns over labor practices led countries to other avenues. The United States and the European Union include conditional labor clauses in their unilateral trade preference schemes (programs that offer market access to specified goods imports from least developed countries). Since 1984 the US Generalized System of Preferences (GSP) has conditioned qualification for the program for its 120 beneficiary countries on whether a country has “taken or is taking steps to afford to workers in that country (including any designated zone in that country) internationally recognized worker rights.”⁵ Many US region-specific preference programs followed suit.

Limited progress on the multilateral level also led countries to add reciprocal labor commitments in bilateral and regional FTAs. The United States was a pioneer in this regard: NAFTA (signed in 1992) was the first FTA to include labor obligations, albeit as a side agreement. The ILO (2013) reports that by 2013, 58 trade agreements included some kind of labor provision, up from 21 in 2005 and 4 in 1994 (for context, 250 agreements have been notified to the WTO).⁶

The incidence of labor provisions in FTAs varies by region. Nearly all countries in the Americas but less than half in the Asia-Pacific are covered by one or more trade deals with labor provisions. The majority of provisions are not enforceable, however. Rather than linking compliance with economic consequences, they provide a framework for dialogue, capacity building, and monitoring, as in EU FTAs. The use of trade sanctions is the exception rather than the norm.

The debate over the role of labor—“social clauses” in trade agreements—is not new. It featured prominently in the broader debate on the tradeoffs of globalization (for an overview, see Elliott 2011 and Salem and Rozental 2012).⁷ An extensive body of literature focuses on various aspects of the debate, including the impact of labor standards on trade and investment flows and the merits of including labor standards in trade agreements at all (see Bhagwati 1995, Rodrik 1996, Maskus 1997, and Brown 2000). Other studies evaluate evidence of a race to the bottom in standards or the flip side of concerns, the protectionist use of labor standards; a review of the literature finds a lack of compelling evidence of either (Salazar-Xirinachs and Martínez-Piva 2003, Elliott and Freeman 2003, Stern 2003). Elliott (2011, 428) concludes that standards and globalization can be complements: “Promoting global labor standards simultaneously with trade could spread the benefits of globalization more broadly, discourage the worst abuses of workers, and increase public support for trade agreements.”

Several studies attempt to measure the impact of FTA provisions on working conditions. Doing so is difficult, because of the challenge of measuring the practical application of labor standards across countries

4. Singapore Ministerial Declaration, WT/MIN(96)/DEC, adopted 13 December 1996, www.wto.org/english/thewto_e/minist_e/min96_e/wtodec_e.htm (accessed on September 21, 2015).

5. “Internationally recognized worker rights” are based on the ILO Declaration, except for “acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.”

6. ILO (2013) reports that 60 percent of FTA labor provisions are “promotional” (i.e., focus on capacity building or supervision) and 40 percent are “conditional” (i.e., involve compliance incentives or are backed by possible use of sanctions).

7. An extensive body of literature also assesses the distributional impact of trade liberalization on labor markets, for example, see Jansen, Peters, and Salazar-Xirinachs (2011). For such analysis on the TPP, see [chapter 1](#) of this volume.

(ratification of ILO conventions and the passage of new laws do not capture enforcement) (Ebert and Posthuma 2011). Many analyses use a case study approach and focus on narrower indicators, such as child labor.

Studies find that certain conditions increase the likelihood that labor obligations have a positive impact. They include enforceability by sanctions, positive incentives such as trade benefits or capacity-building assistance, and certain market or sectoral factors (Elliott and Freeman 2003, Polaski 2003, Berik and van der Meulen Rodgers 2010, Salem and Rozental 2012). Elliott and Freeman (2003) find that US GSP petitions had greater success in changing labor conditions in cases where human rights groups were involved, the targeted country was more politically open, and less politically sensitive labor standards were at dispute. ILO (2013) emphasizes the political will of the countries involved and advocacy of civil society as the most crucial factors. Most studies agree that the “stick” of a possible suspension of trade benefits for labor violations is much more effective when coupled with “carrots” of technical assistance.

EVOLUTION OF LABOR PROVISIONS IN US FTAS

The TPP has been branded an “upgrade of NAFTA”; by that metric the labor chapter is a significant improvement. A brief overview of past US practice is instructive. Labor provisions are not included in the core text of NAFTA; they appear instead as a side agreement that established the North American Agreement on Labor Cooperation (NAALC).⁸ NAALC was motivated by concerns over enforcement of national labor laws in Mexico, the first developing country among US FTA partners (Hufbauer and Schott 1993).

NAALC labor disputes are subject to different enforcement procedures than the main trade agreement. Complaints can be submitted to one of three national administrative offices (NAOs) (the United States’ NAO is the Department of Labor’s Office of Trade and Labor Affairs). If consultations fail to resolve the dispute it can be referred to a government-to-government dispute mechanism, but only for certain issues. Issues such as freedom of association, collective bargaining, and the right to strike are limited to NAO review and ministerial oversight, with no recourse to arbitration or penalties for noncompliance. Disputes over these issues account for the majority of labor submissions filed against Mexico.⁹ The one fully enforceable provision of NAALC is “to effectively enforce occupational safety and health, child labor, or minimum wage technical standards.”

In promoting consultation and cooperation on labor issues, NAALC represented a step forward. But it was criticized for being limited in scope. In a 10-year review, Hufbauer and Schott (2005, 128) concluded that by design it had limited impact on labor conditions: “The sheer size and complexity of the North American labor market are daunting, sovereignty concerns are overriding, and very little can be done to overcome enforcement shortcomings on an annual budget under \$2 million.”

Subsequent US FTAs—with Australia, Bahrain, Chile, Jordan, Morocco, Oman, Singapore, and the six Central American (CAFTA-DR) countries—improved on the NAFTA model by including labor chapters in the core agreements, but (with the exception of Jordan) the only enforceable obligation is to enforce a country’s own domestic laws (see Elliott 2011 and Bolle 2014 for overviews). CAFTA-DR represented the first time the United States included explicit measures for labor capacity building.¹⁰ Any penalty invoked for failing to implement or enforce labor standards was capped at \$15 million and put into a fund for the purpose of increasing capacity.

8. The Clinton administration delayed formal ratification of NAFTA, reopening negotiations in early 1993 to address labor (and environment) issues.

9. The track record of enforcement is discussed in more detail below.

10. Between 2005 and 2010, some \$142 million was designated to improve labor institutions, compliance, and measures against child labor. See “CAFTA-DR Labor Capacity Building,” USTR Factsheet, May 2011, <https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2011/may/cafta-dr-labor-capacity-building> (accessed on November 15, 2015).

THE MAY 10 AGREEMENT: A BASELINE FOR THE TPP

The lack of robust labor provisions in past FTAs meant wavering support for a new wave of trade agreements under negotiation with countries like Peru and Panama. To restore support in Congress, in 2007 the Bush administration and congressional Democrats negotiated the so-called May 10 Agreement, deemed a “historic bipartisan breakthrough” (for details, see Destler 2007). In addition to labor provisions, the deal covered environment, intellectual property, and other issues, providing template language for negotiating objectives in US FTAs. For labor the deal mandates that national laws enforce core labor standards of the ILO Declaration on Fundamental Principles and Rights at Work and that labor provisions are subject to the same dispute resolution mechanisms, including trade sanctions, as commercial obligations of the trade deal. In addition, a country cannot fail to enforce its labor laws on the basis of limited resources or decisions to prioritize other enforcement issues. These requirements were incorporated into then-pending FTAs with Peru, Colombia, Panama, and Korea, and served as the benchmark for expectations for the TPP.

The TPP labor chapter obliges all parties to ensure that national laws conform to the rights and principles of the ILO Declaration ([box 4.1](#)):

- freedom of association and the effective recognition of the right to collective bargaining,
- elimination of all forms of forced or compulsory labor,
- effective abolition of child labor, and
- elimination of discrimination in respect of employment and occupation.

The TPP could have gone one step further by adding the commitment to implement the eight fundamental conventions (treaties voluntarily ratified by ILO members) that correspond to the ILO Declaration (the European Union’s approach to labor in FTAs).¹¹ Doing so has been a key ask of the AFL-CIO. But US FTAs, including the TPP (Article 19.3.1), make explicit reference only to the declaration, in part because the United States itself has ratified only two of the eight conventions, out of concerns that ratifying others would conflict with US statutes and require contentious changes in domestic law.¹²

The ILO Declaration calls on members to respect the four areas of rights whether or not they have ratified conventions; however, countries are legally bound to comply only with ratified conventions. To be sure, ratification of ILO conventions is not necessarily a proxy for enforcement, and US law arguably complies with the rights and principles of the declaration itself. But experts disagree about whether US practice conforms with technical details of some of the ILO conventions—indeed, if otherwise the United States would probably have ratified more.¹³ For the time being it seems unlikely that the United States will depart from its practice of basing common labor standards in trade agreements on the declaration.

The United States’ convention record is an exception: Most TPP countries have ratified six or more fundamental conventions; Chile and Peru having ratified all eight ([table 4A.1](#)). Brunei is the only other country to have ratified just two.

11. In the EU-Vietnam FTA, concluded in December 2015, both sides commit to “make continued and sustained efforts towards ratifying, to the extent it has not yet done so, the fundamental ILO conventions” but also to “consider the ratification of other conventions that are classified as up to date by the ILO.”

12. The declaration’s “follow-up” procedure requires members who have not ratified core conventions to report annually on related labor rights. Regarding the status of US ratification, the latest ILO report was neutral if not upbeat, noting that while in the past the United States reported no plan to ratify other fundamental conventions, it is “intensifying its work of reviewing the legal feasibility” of ratifying five conventions and “speeding up the ratification” of No. 111 (on discrimination in employment and occupation). As for No. 111, there is reason to be skeptical about US ratification, as the convention was sent to the Senate for consideration in 1998 and there has been little movement since. For a summary, see USCIB (2007).

13. For example, Weissbrodt and Mason (2014, 1878) argue that the United States “tends to provide lower levels of coverage and protection for employees than required by ILO standards...especially visible in the right to strike, treatment of public employees, and rights of noncitizen workers.”

Box 4.1 Summary of 1998 ILO Declaration on Fundamental Principles and Rights at Work

a) Freedom of association and the right to collective bargaining

* All workers and employers have the right to freely form and join groups that support and advance their occupational interests.

* Freedom of association means workers can set up, join, and run their own organization without interference from the state. This includes the right to run their own activities, i.e., independently determine how best to promote and defend their interests, including recourse to strike, and independently affiliate with international organizations.

* Collective bargaining is a process through which employers and trade unions or representatives of workers discuss and negotiate their relations and the terms and conditions of work.

b) Elimination of all forms of forced or compulsory labor

* Forced labor occurs where work or service is exacted by the state or others with power to threaten workers with severe deprivations, such as withholding wages, physical violence or sexual abuse, and restricting people's movements.

* Labor trafficking and debt bondage are widespread practices behind forced labor, whereby the worker becomes dependent on an intermediary and labors in slave-like conditions.

c) Effective abolition of child labor

* The effective abolition of child labor is based on protection from economic exploitation, ensuring that children have the opportunity to develop physically and mentally to their full potential by eliminating work that jeopardizes education and development.

* To achieve effective abolition, a minimum age at which children can enter work should be enforced, typically not less than the age of completing compulsory schooling or 15 years. Certain types of work categorized as "worst forms of child labor" are to be fully prohibited for children under age 18, including slavery, trafficking, debt bondage, prostitution, and forced military recruitment.

d) Elimination of discrimination in respect of employment and occupation

* Discrimination at work denies opportunities and deprives societies of what workers can and could contribute. It can occur on the basis of sex, age, race, skin color, social origin, religion, political opinions, disability, or HIV status.

* Equality at work means all individuals are afforded opportunities to fully develop knowledge, skills, and competencies related to the economic activities they wish to pursue.

* Eliminating discrimination entails dismantling barriers and ensuring equal access to training, education and resource use and ownership. It also involves the conditions for setting up and running enterprises and the policies related to hiring, work conditions, pay and benefits, promotions, and employment termination.

Source: ILO, "Overview of the ILO Declaration on Fundamental Principles and Rights at Work," May 2014, www.ilo.org/wcmsp5/groups/public/--ed_norm/--declaration/documents/publication/wcms_095898.pdf (accessed on August 17, 2015).

Even after ratification, the track record of implementing labor standards varies. [Table 4A.2](#) summarizes the status of worker rights in selected TPP developing countries at the lower GDP spectrum, based on the latest State Department reports. Countries across the board suffer from inadequate standards in agricultural, informal, and migrant labor sectors. Brunei, Malaysia, and Vietnam stand out for major gaps with several ILO standards. These concerns prompted special attention in the TPP.

INNOVATIONS IN THE TPP

US participation in the TPP significantly upgraded the labor agenda. The original TPP template designed by the P4 (Brunei, Chile, New Zealand, and Singapore) was just a memorandum of understanding that exhorted but did not obligate countries to uphold labor standards and improve compatibility with international standards and to avoid using labor standards as protectionist tools or lowering them to attract investment (Schott, Kotschwar, and Muir 2012).

The TPP upholds precedents set by the May 10 Agreement. In this regard it reflects US pacts with Colombia, Korea, Peru, and Panama. But it also upgrades this template. The following sections highlight the innovations (summarized in [table 4A.3](#)).

Requirement of Laws on Acceptable Conditions of Work

In addition to implementing ILO core labor standards, the TPP obliges members to adopt and maintain laws and practices governing “acceptable conditions of work” in three areas: minimum wages, hours of work, and occupational safety and health regulations (Article 19.3.2). This is the first time the provisions have been explicitly stated as labor rights.¹⁴ The TPP does not stipulate a baseline standard for these regulations (often called “cash standards”), which are directly linked to labor costs and necessarily vary by country and level of development (Elliott and Freeman 2003). Instead, regulatory discretion is left to each country.

Critics contend that to be meaningful, “conditions of work” need to be more specific. That said, to take wages as an example, even in the United States there is no consensus on the “right” minimum wage. Moreover, only three TPP countries are party to the ILO Minimum Wage Fixing Convention (Charnovitz 2016). Most TPP countries have established minimum wages—except for Brunei and Singapore—and limits on working hours. Implementation of safety and health regulations often suffers from inadequate resources and systemic violations.

Strengthening Labor Protections in EPZs

Article 19.4(b) obligates members to enforce both ILO labor rights and acceptable conditions of work in special trade or customs areas, including EPZs. The Asia-Pacific region was a forerunner in the use of EPZs, which have supported the region’s rapid development since the 1970s. The World Bank (2008) estimates that 3,000 such zones exist across 135 countries—including Malaysia, Mexico, Singapore, and Vietnam in the TPP—directly employing 70 million workers (the majority in China). By nature, EPZs are strongly identified with trade and investment promotion and have long been scrutinized for working conditions and labor compliance issues (Elliott and Freeman 2003). Many EPZs concentrate in labor-intensive assembly production, such as textiles, apparel, and electronics. Some countries, such as Malaysia, have used lax labor standards as incentives, limiting the application of labor laws or restricting unions and freedom of association (Milberg and Amengual 2008). EPZs can also have positive spillover effects, however, developing skills and raising wages.

This TPP innovation refocuses attention on EPZ practices and, with an eye to the future, would apply to new TPP members with EPZs as the deal expands, e.g., Indonesia, the Philippines, and China.

Discouraging Imports of Goods Produced by Forced Labor

According to TPP Article 19.6, members “shall also discourage, through initiatives Parties consider appropriate, the importation of goods from other sources produced in whole or in part by forced or compulsory labor, including forced or compulsory child labor.” The language could have been much stronger, using prohibit instead of discourage and language that was less vague than initiatives considered appropriate. But the article is a step in the right direction toward limiting trade in goods produced by forced labor, and it applies to goods imported from non-TPP countries as well. According to the ILO, the Asia-Pacific has the largest number of forced laborers in the world—12 million (56 percent of the global total)—although many are not directly involved in trade and many live in non-TPP countries in South Asia.¹⁵ A few TPP countries are likely targeted by

14. Previous US FTAs do, however, note “acceptable conditions” within the definition of domestic labor laws.

15. “21 Million People Are Now Victims of Forced Labour, ILO Says,” ILO News, June 1, 2012, www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_181961/lang-en/index.htm (accessed on November 19, 2015).

the provision, particularly Malaysia, where forced labor is regularly used in electronics, its top export (Verité 2014). The US Department of Labor (2014) has flagged forced and child labor in Malaysia (palm oil and garment production); Mexico (sugarcane, tobacco, coffee); Peru (nuts, cocoa, bricks, gold, timber); and Vietnam (bricks, garments).

Protecting Migrant Labor

One area the TPP does not address explicitly is protection for migrant labor.¹⁶ While all workers in a TPP country, domestic and foreign, are technically covered by the labor provisions, the omission seems a lost opportunity for augmenting the labor chapter in general and the forced labor provision in particular.

A joint proposal by the TPP labor confederations offered guidance: “Parties shall provide migrant workers of another Party with the same rights and remedies under its labour laws as they relate to the core labour rights as well as wages, hours of work, occupational safety and health and workers compensation” (ITUC 2012). Migrant workers are often subject to forced labor, trafficking, and abusive recruitment practices. Migrant labor is widespread in nontradable sectors and domestic work but also increasingly used in supply chains across sectors. They are a major concern in Malaysian agriculture and electronics and Mexican agriculture and food-processing sectors, among others (Verité 2015). Protecting foreign workers could have helped mollify US concerns about TPP countries on the State Department’s Tier 2 list for human trafficking (e.g., Brunei, Mexico, and Peru); countries that do not fully uphold minimum protections but are improving compliance; and most importantly Malaysia, which remains on the Tier 2 Watch List because of the significant number of trafficking victims there.¹⁷ However, the bilateral labor plans for Brunei and Malaysia (discussed later) do include some specific provisions on migrant labor protections.

Bilateral Labor Plans

The participation of several developing countries with weak labor standards refocused attention on how these countries could meaningfully commit to implementing TPP labor terms. To this end, the United States negotiated bilateral Labor Consistency Plans with Brunei,¹⁸ Malaysia, and Vietnam. These plans lay out concrete legal and institutional reforms to help build capacity and political initiative.¹⁹ Two features make these plans more credible: The reforms must be implemented before the TPP enters into force (with one exception), and the plans are enforceable and subject to dispute settlement. The exception relates to Vietnam and involves a five-year transition period for permitting the cross-affiliation of unions. The United States can suspend future tariff phaseouts if Vietnam is found not to comply.

The United States has negotiated labor plans in the past. Critics contend that the plan negotiated with Colombia—the Colombian Action Plan Related to Labor Rights—has led to few meaningful changes on the ground and argue that the TPP labor plans will lead to similar outcomes (AFL-CIO 2014). It is clear that the

16. The “areas of cooperation” among TPP parties include “promotion of equality and elimination of discrimination in respect of employment and occupation for migrant workers” and “protection of vulnerable workers, including migrant workers” but these are not binding obligations (Article 19.10.6(n)).

17. Malaysia was recently upgraded from the lowest designation (Tier 3, countries that fail to combat human trafficking). The move was politically controversial because of the timing with the TPP and an explicit provision in the Trade Promotion Authority legislation that would negate fast-track protections for trade deals with Tier 3 countries. See “State Trafficking Report Upgrades Malaysia, Removing Roadblock for TPP,” *Inside U.S. Trade*, July 30, 2015, www.insidetrade.com (accessed on November 19, 2015).

18. Brunei accounts for less than 1 percent of US imports from the TPP-12. Compared with countries like Vietnam, it has therefore provoked fewer concerns related to expanded trade in import-competing industries. Vietnam accounts for 62 percent of US imports of apparel and clothing accessories from TPP countries and 86 percent of footwear imports.

19. For the texts of the plans, see <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text>.

Colombian labor plan did result in some improvements but also that the United States and Colombia have fallen short in completely fulfilling the goals of the action plan.²⁰

The Colombia case is a reminder of the challenges of achieving sweeping labor reforms. But a few distinctions are worth mentioning. The Colombia plan was not formally attached to the FTA but negotiated separately in 2011—as the AFL-CIO pointed out, the plan “was made even more ineffective because its terms were not incorporated into the trade agreement itself.” By contrast, TPP labor plans were negotiated alongside the agreement, and unlike the Colombia plan, are tied to its dispute settlement system. Moreover, the legal and institutional reforms outlined in the TPP plans are more specific and targeted.

A concern voiced in the United States is that although laws may change, enforcement of the plans is not guaranteed. Enforcement will be a challenge and the test of the TPP’s success. Resources and political will on both sides will be prerequisites. The plans build in mechanisms to monitor implementation, but independent oversight (discussed below) could be stronger. A basic feature is a standing committee made up of senior officials who must meet each year to assess compliance (for 7 years in Brunei and Malaysia and 10 years in Vietnam).

Brunei. Brunei has ratified only two fundamental conventions, and there are significant gaps between existing laws and ILO standards. The labor plan seeks to address systemic violations of rights to collective bargaining and freedom of association and severe restrictions on strikes. It mandates greater autonomy of union activity, protection against antiunion discrimination, and international affiliation of unions. Reforms also address forced and child labor, employment discrimination, and acceptable conditions of work, explicitly mandating a minimum wage as well as improved labor inspection procedures and remedies for labor violations. The plan specifies that Brunei “may request cooperation, advice and technical assistance” from the United States, TPP parties, or international organizations.

Malaysia. Forced labor practices and human trafficking are widespread in Malaysia, and protection of migrant workers is weak. To address these problems, the labor plan mandates reforms to prohibit the withholding of passports and rein in deviant recruitment practices, as well as new measures within antitrafficking legislation. Malaysian law systemically undermines the right to freedom of association and collective bargaining. The plan seeks to redress these regulations by limiting state discretion on union formation and reforming strike permissions and the right to judicial review. An explicit provision seeks to redress the use of subcontracting to circumvent the rights of association or collective bargaining. The plan commits both sides to “endeavor to secure funding for technical assistance” to aid implementation, but Malaysia is required to work with the ILO.

Vietnam. The reforms mandated for Vietnam are extensive. Current Vietnamese law recognizes only labor unions affiliated with the Viet Nam General Confederation of Labour (VGCL), and union activity is highly regulated. Reforms would permit the independent formation of unions, allow strikes, and significantly increase the autonomy of union activity. Reforms also center on strategies that supplement Vietnamese efforts to rein in forced and child labor. Vietnam is required to comply with transparency requirements, ranging from public disclosure of draft laws to union registrations and the number of applications denied to statistics on inspections—all important soft checks to supplement the monitoring of implementation. The plan commits both sides to “endeavor to secure funding for technical assistance” to aid implementation, but Vietnam is required to establish a comprehensive program with the ILO, the most involvement of all three plans.

20. For details on the progress according to USTR, see “The Colombian Labor Action Plan at Four Years: Progress and Continuing Challenges,” Tradewinds, April 2015, <https://ustr.gov/about-us/policy-offices/press-office/blog/2015/april/colombian-labor-action-plan-four-years-progress> (accessed on February 19, 2016).

Mexico. One criticism of the TPP is that there is no bilateral plan for Mexico, which resisted supplemental commitments throughout the TPP talks.²¹ Mexican practices of concern hold over from the NAFTA era and include the prevalence of employer-dominated unions, the use of “protection contracts” (collective bargaining agreements signed with little direct input from workers), and corruption of conciliation and arbitration boards. Two-thirds of NAALC disputes involve collective bargaining and association issues but are not subject to the full spectrum of dispute settlement, including arbitration or penalties. The United States and Mexico are discussing parallel reforms, but it is unclear what will emerge from the talks. Mexican President Peña Nieto signaled some political will to address the concerns, pointing to proposed legislation to ratify the ILO convention banning protection contracts and plans to reform labor boards, but without specifying much detail.²² Labor groups remain skeptical of a major overhaul of existing practices.

The absence of a plan notwithstanding, the TPP upgrades NAFTA. Under the agreement Mexico could face increased scrutiny or possibly be challenged should the status quo continue.²³ Moreover, the absence of a plan should not detract from the progress made with other countries in the TPP.

ENFORCEMENT MECHANISMS AND TRACK RECORD OF ENFORCEMENT

As in any treaty, the strength of TPP labor commitments relies heavily on their implementation. Enforcement of past FTA labor provisions has been scrutinized. The AFL-CIO acknowledges that US FTAs have made measured (though incomplete) progress toward higher standards but notes that enforcement “has been slow and cumbersome, and relies totally on the political will of governments” (AFL-CIO 2015, 1). Moreover, labor provisions require “active monitoring, investigation and oversight in order to be effective and provide the necessary impetus to comply.”

Before turning to the TPP approach, it is useful to consider the US track record of enforcing labor provisions. Critics contend that the limited number of labor petitions accepted by the Department of Labor, coupled with the fact that only one case is in dispute settlement, signal a shortcoming of US practice. The Obama administration sees the dispute settlement precedent with Guatemala as evidence that the US government is taking the issue seriously.

The precedent for enforcing labor provisions was set under the US GSP program, which includes a mechanism for filing complaints against beneficiary countries for labor violations, with the option to suspend GSP benefits based on a final determination by USTR (Athreya 2011). Though trade sanctions are advocated as a “stick” for compliance, the actual removal of trade preferences is often viewed as a last resort.²⁴ This rationale partly explains the low level of GSP suspensions and trade sanctions. By 2000, 32 GSP petitions related to labor conditionality had been accepted for review, and nearly half had been successful in influencing changes in the targeted country (Elliott and Freeman 2003). Before GSP was reauthorized, in June 2015, the United States was reviewing labor petitions against Georgia, Niger, the Philippines, Uzbekistan, Thailand, and other

21. “U.S., Mexico Continue Discussing Labor Reforms after TPP Conclusion,” *Inside U.S. Trade*, October 8, 2015, www.insidetrade.com (accessed on November 9, 2015).

22. “Pena Nieto Pushes Labor Reforms, but Unions Still See Shortcomings,” *Inside U.S. Trade*, December 15, 2015, www.insidetrade.com (accessed on December 16, 2015).

23. Article 1.2 (Relation to Other Agreements) addresses whether TPP obligations supersede existing FTAs, in this case NAFTA/NAALC. The language is somewhat vague and leaves the answer to be determined on a case-by-case basis. However, if a party brings a complaint citing TPP obligations, the decision will be based on those obligations. Whether Mexico may try to invoke NAALC is unclear.

24. As the International Labor Rights Forum (ILRF) puts it, petitions are viewed as a means to “bring labor rights abuses to the attention of the U.S. government, and... pressure recipient governments to review and respond to the labor situations in their countries,” but “by filing GSP petitions, [we do] not seek to devastate local economies or affect the job security of poor workers.” See “GSP,” ILRF, <http://old.laborrights.org/creating-a-sweatfree-world/changing-global-trade-rules/gsp> (accessed on February 2, 2016).

countries. One high-profile case of punitive action was the decision to suspend the GSP preferences of Bangladesh, which had long been under investigation for its labor practices. The decision came after a global outcry in April 2013, following the collapse of a garment factory that had had aberrant safety regulations, resulting in the death of more than 1,000 people.²⁵

Among US FTAs, none has processed as many labor complaints as NAFTA. Unions and international workers' rights groups in all three NAFTA countries have filed complaints. Of the 38 complaints, 22 were filed with the US NAO, of which half were dismissed or withdrawn. All but two were directed at alleged abuses in Mexico. Two-thirds of the 38 cases related to freedom of association and collective bargaining rights. These cases cannot be subject to formal arbitration or trade penalties. Even though complaints under NAALC have limited enforcement consequences, some resulted in joint action at the ministerial level.

Taking all US FTAs into account (not counting past cases already resolved under NAALC), the Department of Labor is currently processing seven formal complaints of alleged violations of labor provisions (table 4A.4). Two cases (against Peru and Mexico) are under review; three (against the Dominican Republic, Honduras, and Peru) have been processed, with a formal report issued by the Department of Labor and a monitoring plan underway for Honduras; one (against Bahrain) has resulted in formal bilateral consultations; and one (against Guatemala) is in formal dispute settlement. The case against Guatemala is the only one to have proceeded beyond consultations. The AFL-CIO and several Guatemalan worker organizations filed the original petition in 2008, alleging that the government had systematically failed to enforce its labor laws in several areas, including the rights to collective bargaining and freedom of association, and that violence against unions was unrelenting. The Department of Labor findings substantiated the claim in 2009. The United States requested consultations in mid-2010 and an arbitral panel in 2011. In August 2013 both sides agreed to an 18-point enforcement plan. Dispute settlement resumed after Guatemala failed to implement the terms of that plan. The arbitral panel recently set a new deadline of June 22, 2016, for issuing its initial ruling.

In a review of enforcement of labor provisions, the US Government Accountability Office (GAO 2014) concluded that US trade partners had indeed taken steps to improve labor rights pursuant to FTA obligations, backed by technical assistance from the United States. But the report also found continuing gaps in labor protections, as a result of a lack of capacity in partner countries to enforce labor laws, limited public awareness about the petition processes, and procedural shortcomings at the Department of Labor.²⁶ The GAO's recommendations included more proactive monitoring and a more coordinated approach between the US Trade Representative and the Department of Labor. The TPP seems to have heeded some of this critique by increasing ILO involvement and independent oversight, at least in the case of Vietnam.

THE TPP APPROACH

TPP Article 19.5.1 sets the baseline for the agreement's enforcement: "No Party shall fail to effectively enforce its labour laws through a sustained or recurring course of action or inaction in a manner affecting trade or investment between the Parties after the date of entry into force of this Agreement."²⁷ Enforcement of the TPP

25. GSP preferences have not been reinstated for Bangladesh. In early 2015 the USTR stated that "further progress is needed, including to address serious worker rights issues, before reinstatement." See "GSP Review of Bangladesh Recognizes Progress, Urges That More Be Done on Worker Safety and Rights," January 2015, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2015/january/gsp-review-bangladesh-recognizes> (accessed on September 30, 2015).

26. GAO (2014) reports that for each labor submission, the Department of Labor exceeded its six-month time frame for investigations by an average of about nine months and that delays resolving submissions "may have contributed to the persistence of conditions that affect workers and are allegedly inconsistent with the FTAs."

27. One criticism by labor advocates involves use of the language "sustained or recurring," which they allege prevents workers from addressing single egregious labor violations as they occur (LAC 2015). This condition remains the standard of past US FTAs including the May 10 Agreement and is maintained in the language of Trade Promotion Authority. The question of the

labor chapter is built on a combination of cooperative, consultative, and dispute mechanisms. The framework provides for consultations at the ministerial level, a national contact point for each country, and a standing labor council to facilitate a cooperation agenda. This framework is not new; most processes replicate the Korea-US FTA. The TPP tightens several areas in an attempt to offer better procedural certainty. It also builds review mechanisms into its labor consistency plans. TPP highlights include the following:

- *Labor cooperation*: The lengthy section on areas for cooperation is founded on capacity building and transparency. It includes a nonexhaustive list of 20 areas, including job creation, labor productivity, occupational safety and health, labor inspections, and collection of labor statistics. The list is ambitious but voluntary, meaning it may not result in measurable progress.
- *Cooperative labor dialogue*: This mechanism is new and intended as an outlet for engagement outside of formal dispute settlement, which can be cost- and time-intensive. Use of the mechanism does not prevent a country from requesting consultations. There is no mandated outcome, but suggested resolutions include an action plan, independent verification of compliance (e.g., by the ILO), and a cooperative program.
- *Labor council*: Like other US FTAs, the TPP establishes a labor council of senior officials at the ministerial level to guide cooperative activities and work programs. The council will meet within one year after TPP's entry into force and every two years thereafter. In the fifth year the council must conduct an implementation review. Previous US FTAs were nonspecific, with the council meeting "as often as it considers necessary."
- *Public engagement*: Unlike past FTAs, the TPP mandates that countries establish and consult a national labor advisory body made up of stakeholders on labor issues.
- *Public submissions*: This new section provides broad guidelines for processing labor complaints. The United States already has such procedures, but several countries do not. The TPP could have provided more explicit guidance on the timeline for processing submissions.
- *Labor consultations*: In post-2007 US FTAs, requirements for replying to requests and commencing consultations are guided by the broad language "shall commence promptly." The TPP narrows the scope for delays with timelines. Requests for consultations must be replied to within 7 days, consultations must begin within 30 days, and the labor council must convene within 30 days of a request. Similar to past practice, if a dispute is not resolved within 60 days, an arbitral panel under government-to-government dispute settlement can be requested (for details, see [chapter 9](#) of this volume). The AFL-CIO would welcome the right to initiate labor petitions directly with governments, as a parallel to investor-state dispute settlement procedures. That right would probably go a long way to alleviate concerns over weak labor enforcement, but the proposal has so far garnered little support.
- *Bilateral labor plans*: The TPP labor plans include implementation and review guidelines. Of the three plans, Vietnam's has the most expansive oversight. The mechanisms to

exact meaning of "sustained or recurring" was clarified somewhat in the dispute case against Guatemala. In the US submission, Guatemala's interpretation of the clause was rebutted, and the United States provided important clarifications that suggest the clause is not intended to be interpreted narrowly. The United States reiterated the meaning as "continuing or repeated in conduct" and noted that by design, either condition can be satisfied. It is not required that the infraction occur "over a prolonged period of time," such as multiple years, as Guatemala contended. Rather, "a course of action or inaction could be 'sustained' over the course of any segment of time—e.g., a few months, a year, or more—while an action or inaction may likewise 'recur' merely twice." See "In the Matter of Guatemala—Issues Relating to the Obligations under Article 16.2.1(1) of the CAFTA-DR," US Rebuttal Submission, March 16, 2015, https://ustr.gov/sites/default/files/US%20sub1.fin_.pdf (accessed on February 3, 2016).

assess that plan's implementation are established in three tiers, which should serve as a check if political will to implement reforms proves lacking in the future:

1. *Government oversight:* A standing committee composed of senior US and Vietnamese officials will monitor and ensure rapid response to compliance concerns. Ministerial review of the plan's implementation will occur at regular intervals (the 3rd, 5th, and 10th years following entry into force).
2. *ILO assistance:* Vietnam will establish a technical program with the ILO to support implementation of proposed reforms, and the ILO will issue a public report two years after entry into force, with biannual meetings thereafter for eight years.
3. *Independent monitoring:* A three-member labor expert committee made up of independent nongovernment experts (such as the ILO) will provide reports of the progress toward reforms, with recommendations to the senior officials committee two and half years after entry into force and every two years thereafter (after eight and a half years, reports can continue every five years).

CONCLUSION

Early US FTAs like NAFTA did not address labor issues in a robust way. Elliott and Freeman (2003, 89) put the shortfall another way: Those FTAs were “largely concerned with finding politically acceptable trade-labor mechanisms that permit trade agreements to proceed, while doing little to ensure that labor standards improve.” Over time US FTAs have attempted to narrow the gap by improving labor obligations as well as by supporting the efforts of developing-country FTA partners to implement commitments to international labor standards. These goals remain a major challenge, and the US track record has had its rough patches.

But the rough patches should not detract from the achievements made by the TPP. Although the TPP does not address all the concerns of labor rights advocates, it represents an important step forward. The bilateral plans negotiated alongside the TPP are a major innovative component, targeted to address the standard labor conditions of most concern. Implementation of the mandated reforms would deliver significant improvements in Brunei, Malaysia, and Vietnam. The monitoring mechanisms attached to Vietnam's plan in particular seem more proactive than past US efforts.

Overall, the labor provisions of US trade agreements have improved incrementally over time. Future agreements can be expected to build on the new TPP benchmark.

APPENDIX 4A

Table 4A.1 ILO fundamental worker rights conventions in force in TPP countries as of December 2014

TPP member	Per capita GDP, 2014 (dollars)	Freedom of association, right to organize and bargain collectively		Freedom from forced labor		Nondiscrimination in employment		Effective abolition of child labor and its worst forms	
		C87	C98	C29	C105	C100	C111	C138	C182
Australia	61,887	O	O	O	O	O	O	X	O
Brunei	41,344	X	X	X	X	X	X	O	O
Canada	50,271	O	X	O	O	O	O	X	O
Chile	14,528	O	O	O	O	O	O	O	O
Japan	36,194	O	O	O	X	O	X	O	O
Malaysia	10,934	X	O	O	O	O	X ^a	O	O
Mexico	10,230	O	X	O	O	O	O	X	X
New Zealand	42,409	X	O	O	O	O	O	X	O
Peru	6,551	O	O	O	O	O	O	O	O
Singapore	56,287	X	O	O	O	O	X ^a	O	O
United States	54,629	X	X	X	O	X	X	X	O
Vietnam	2,052	X	X	O	X	O	O	O	O

ILO = International Labor Organization, C = Convention, O = treaty in force, X = treaty not in force.

a. Malaysia and Singapore were original signatories to the convention but denounced it in 1990 and 1979, respectively.

Sources: World Bank's *World Development Indicators* database and ILO (2015).

Table 4A.2 Status of worker rights in selected TPP member countries

Country	Freedom of association and right to collective bargaining	Prohibition of forced and compulsory labor	Prohibition of child labor	Employment discrimination	Acceptable conditions of work
Brunei	<p>* Law permits workers to form and join unions but restricts collective bargaining and prohibits strikes.</p> <p>* Employers are prohibited from discriminating against workers because of union activities, but reinstatement is not required for dismissals.</p> <p>* Trade unions are permitted, but affiliation with international labor organizations requires state consent.</p> <p>* Unions must be registered with the government; the only registered union is the union of Brunei Shell Petroleum workers.</p>	<p>* Law prohibits forced or compulsory labor, with penalties of up to BND 1 million (\$75,000) and imprisonment.</p> <p>* Violations, in particular of forced labor involving migrant workers, are reported.</p>	<p>* Laws prohibit child employment under age 16.</p> <p>* Permission to work can be granted for children under 18 based on parental and state consent.</p>	<p>* Law does not explicitly prohibit discrimination with respect to employment and occupation.</p>	<p>* No minimum wage is mandated; wages are set via contract between employee and employer.</p> <p>* Occupational health and safety standards are generally enforced, but laxer enforcement is reported in sectors employing low-skilled labor, such as construction and maintenance.</p>
Peru	<p>* Laws provide for freedom of association, the right to strike, and collective bargaining, subject to certain limitations.</p> <p>* Employer intimidation and anti-union discrimination is prohibited and the reinstatement of workers fired due to union activity is required by law.</p> <p>* Workers are permitted to form and join unions without seeking prior authorization.</p>	<p>* Law prohibits forced or compulsory labor, but enforcement remains ineffective because of inadequate resources, inspections, and remediation.</p> <p>* Workers are subject to forced labor in mining, forestry, agriculture, and brick making sectors.</p>	<p>* Legal minimum age for employment is 14; certain work hours allowed for children 12 to 14 and 15 to 17 with special permission.</p> <p>* Work permits required for children under 18.</p> <p>* Violations are reported in informal sectors.</p>	<p>* Law prohibits discrimination based on race, gender, disability, language, or social status.</p> <p>* Violations occur but are often unreported because of lack of confidence in the legal system.</p>	<p>* Since 2012, the statutory monthly minimum wage is set at 750 new soles (\$268).</p> <p>* Law provides for 48-hour work week and requires overtime pay. Certain rights and benefits are guaranteed for adult domestic workers (8-hour work day, paid vacation, bonuses).</p> <p>* Occupational health and safety standards exist, but resources and expertise are insufficient to fully implement them.</p> <p>* Concerns remain over high threshold for employer accountability for workplace injuries and lax penalties for health and safety violations.</p>

(table continues)

Table 4A.2 Status of worker rights in selected TPP member countries *(continued)*

Country	Freedom of association and right to collective bargaining	Prohibition of forced and compulsory labor	Prohibition of child labor	Employment discrimination	Acceptable conditions of work
Malaysia	<p>* Law provides for limited freedom of association and allows some workers to form trade unions, subject to restrictions by sector (e.g., limits in high-tech and public sectors).</p> <p>* Employers are prohibited from interfering with union activities and must reinstate workers fired for such activity, but law is not effectively enforced.</p> <p>* Private sector strikes are permitted, but general strikes are prohibited.</p> <p>* In practice few protections are given to workers whose freedom of association is violated.</p>	<p>* Law prohibits forced or compulsory labor but is not effectively enforced.</p> <p>* Forced labor persists in plantation agriculture, fishing, electronics, garments, construction, and food sectors, as well as among domestic workers.</p> <p>* Debt bondage and passport confiscation of migrant workers is prevalent.</p>	<p>* Law prohibits employment of children under 14, with some exceptions.</p> <p>* Work limited to six hours a day.</p> <p>* Child labor is common in informal sectors of the economy.</p>	<p>* Law does not prohibit discrimination with respect to employment.</p> <p>* Discrimination is reported in employment of migrant workers, women, minorities, and people with disabilities.</p>	<p>* Minimum wage is set at RM 800 (\$245) a month in states of Sabah and Sarawak and RM900 (\$275) in peninsular Malaysia. Wage increases to RM920 and RM1,000 are planned for July 2016.</p> <p>* Law provides for caps on working hours, overtime pay, public holidays, and annual and maternity leave.</p> <p>* Occupational health and safety regulations exist but are violated and exclude maritime and armed forces.</p> <p>* Penalties are imposed for minimum wage violations, failure to insure migrants, and unreported accidents, but monitoring mechanisms are inadequate.</p> <p>* Migrant workers face poor working conditions and long delays in court proceedings over disputes.</p>

(table continues)

Table 4A.2 Status of worker rights in selected TPP member countries (continued)

Country	Freedom of association and right to collective bargaining	Prohibition of forced and compulsory labor	Prohibition of child labor	Employment discrimination	Acceptable conditions of work
Mexico	<ul style="list-style-type: none"> * Law provides for right to form unions, bargain collectively, and strike in both public and private sectors. * Protection contracts—collective bargaining agreements in which company creates an unrepresentative union in exchange for concessions—are prevalent and have prevented workers from exercising labor rights. * Workers report intimidation. 	<ul style="list-style-type: none"> * Law prohibits forced or compulsory labor. * Forced labor persists in some agricultural, industrial, and informal sectors, with migrant workers most vulnerable. 	<ul style="list-style-type: none"> * Law prohibits employment of children under 15. Work by children 15–17 permitted under certain conditions. * Enforcement effective in several small and medium-sized enterprises but inadequate in smaller companies in agriculture, construction, and the informal sector. * Cooperation agreement signed with ILO to address child labor in agricultural industry in Veracruz. 	<ul style="list-style-type: none"> * Law prohibits discrimination based on ethnic origin, gender, age, disability, health, social and migratory conditions, religion, opinion, sexual orientation, or social status. 	<ul style="list-style-type: none"> * Effective October 2015, a nationwide minimum wage was set at Mex\$70.10 a day (\$4.19 a day), previously the minimum wage was divided between Zone A (major cities and ports) and Zone B (all other municipalities). * Law provides for working hours, overtime pay, holidays, and paid annual leave. * Occupational safety and health regulations must be enforced, and workers are permitted to remove themselves from situations based on health or safety risk without losing their jobs. * Concerns over violations in agricultural sectors in certain states, treatment of temporary migrant workers, and working conditions in <i>maquiladoras</i>.

(table continues)

Table 4A.2 Status of worker rights in selected TPP member countries (continued)

Country	Freedom of association and right to collective bargaining	Prohibition of forced and compulsory labor	Prohibition of child labor	Employment discrimination	Acceptable conditions of work
Vietnam	<p>* Laws do not allow workers to organize or join independent unions, which they can join only under the purview of the Vietnam General Confederation of Labor (VGCL), the country's sole trade union, controlled by the state.</p> <p>* VGCL-affiliated unions may bargain collectively, but strikes are highly restricted; they are not permitted in "rights-based" disputes or at the sector or industry level, and all strikes must first abide by consultation and arbitration procedures.</p> <p>* Strikes are prohibited in businesses serving the public and those "essential to the national economy and defense"; the prime minister may suspend strikes based on these premises.</p>	<p>* Law prohibits forced or compulsory labor, with 3–10 years of imprisonment for violations.</p> <p>* Forced labor remains in practice at education and detention centers for drug offenders.</p>	<p>* Law defines underage employees as under 18 years and restricts child work in dangerous sectors.</p> <p>* Employment of people 15–18 (with limits on work hours) and 13–15 (limited to "light jobs") is permitted.</p> <p>* ILO survey reports 1.8 million child laborers (63 percent of economically active children).</p> <p>* ILO project on reducing child labor was announced in December 2014, with financial backing by the Vietnamese and US governments.</p>	<p>* Law prohibits discrimination based on sex, race, disability, social class, marital status, religion, and HIV/AIDS status.</p> <p>* Discriminatory hiring practices have been reported related to gender, age, and marital status.</p>	<p>* Minimum wage ranges from VND 2.15 million (\$96) to VND 3.1 million (\$138) a month. A 12.4 percent wage increase is planned for 2016.</p> <p>* Law sets work hours, mandatory breaks, annual leave, overtime pay, and related thresholds.</p> <p>* Regulations covering worker safety are broad; workers are not permitted to remove themselves from situations that endanger health or safety without losing their jobs.</p> <p>* Enforcement is inadequate because of limited funding and shortage of trained personnel.</p> <p>* Concerns have been raised that overtime thresholds are exceeded, migrant workers are mistreated, and workers face injuries as a result of unsafe conditions.</p> <p>* New law was approved in June 2015 that extends occupational safety and health protections to Vietnam's informal economy, which employs 60 percent of the labor force.</p>

Sources: US State Department, *Country Reports on Human Rights Practices for 2014*, www.state.gov/j/drl/rls/hrrp/humanrightsreport/ (accessed on August 11, 2015); "Viet Nam Enters a New Phase in Occupational Safety and Health," June 25, 2015, ILO News, www.ilo.org/hanoi/information/sources/Publication/newsitems/WCMS_379007/lang-en/index.htm (accessed on August 11, 2015); "Higher minimum wage reduces Malaysia's dependence on foreign workers, says minister Low," *Straits Times*, October 25, 2015, www.straitstimes.com/asia/se-asia/higher-minimum-wage-reduces-malaysia-dependence-on-foreign-workers-says-minister-low (accessed on February 26, 2016); "Vietnam's Minimum Wages to Increase in 2016," Vietnam Briefing, September 14, 2015, www.vietnam-briefing.com/news/vietnam-minimum-wages-increase.html/ (accessed on February 26, 2016); "United States and Viet Nam Launch Joint Programme with ILO to Combat Child Labour," March 2, 2015, ILO press release, www.ilo.org/pardev/donors/WCMS_329351/lang-en/index.htm (accessed on August 11, 2015).

Table 4A.3 Coverage of labor provisions in US free trade agreements

Provision	NAFTA (1992)	US-Jordan FTA (2000)	FTAs with		CAFTA-DR (2004)	FTAs with Korea, Peru, and Panama (2006-07)	TPP (2016)
			Chile (2003), Singapore (2003), Australia (2004), Bahrain (2004), Morocco (2004), Oman (2006)	Singapore (2003), Australia (2004), Bahrain (2004), Oman (2006)			
Labor chapter in main text	X	O	O	O	O	O	O
Parties shall adopt and maintain fundamental international labor rights and shall not waive or derogate from laws implementing such rights (ILO Declaration) ^a	X	X	X	X	X	O	O
Parties shall adopt and maintain statutes and regulations governing "acceptable conditions of work" with respect to minimum wages, hours of work, and occupational safety and health	X	X	X	X	X	X	O
Parties shall discourage imports of goods made by forced or compulsory labor, including forced child labor	X	X	X	X	X	X	O
Parties shall not waive or derogate from agreed labor rights in special trade or customs areas, including export processing zones	X	X	X	X	X	X	O
Parties must effectively enforce their own labor laws	O	O	O	O	O	O	O
Normal dispute settlement procedures apply to all labor provisions	X	O	X	X	X	O	O
Sanctions and the suspension of trade benefits shall apply to labor provisions as all other enforceable commercial obligations	X	O	X	X	X	O	O

CAFTA-DR = Central American Free Trade Agreement–Dominican Republic, ILO = International Labor Organization, NAFTA = North American Free Trade Agreement,

TPP = Trans-Pacific Partnership, O = provision included, X = provision not included.

a. The ILO Declaration covers four fundamental principles and rights at work: freedom of association and the effective recognition of the right to collective bargaining; elimination of all forms of compulsory or forced labor; effective abolition of child labor and its worst forms; and the elimination of discrimination in respect of employment and occupation

Note: Year in parentheses indicates year agreement is signed.

Sources: Bolle (2014), USTR (2015), FTA texts (available at <https://ustr.gov/trade-agreements/free-trade-agreements>).

Table 4A.4 Labor complaint submissions against US trading partners under review by the US Department of Labor

Submission number	Date filed	Date accepted for review	Claimant	Defendant	Claim	Status
<i>Cases currently under review</i>						
US Submission 2011-02	11/14/2011	1/13/2012	Mexican Union of Electrical Workers (SME) and more than 90 labor organizations, including the AFL-CIO	Mexico	The government failed to uphold and enforce labor standards with respect to the rights to freely associate, organize and bargain collectively, and strike and it failed to prevent occupational injuries and illnesses. It forcibly removed SME members from workplaces and unilaterally terminated the state-owned electrical power company (Central Light and Power) along with the employment of unionized workers through a presidential decree, replacing the company with a nonunionized state-owned enterprise.	Department of Labor filed a review extension in June 2012 following a supplemental submission from the claimants with new allegations.
US Submission 2015-n.a.	7/23/2015	9/21/2015	International Labor Rights Forum, Peru Equidad, and seven Peruvian workers' organizations	Peru	The government failed to adopt and maintain the rights of freedom of association and collective bargaining in labor laws by permitting the unlimited consecutive renewal of short-term contracts, which are alleged to deter union activity. In particular, it failed to effectively enforce labor laws in nontraditional export and agricultural sectors with respect to freedom of association, the right to collective bargaining, and acceptable conditions of work.	Under review for 180-day period; report expected in March 2016.

(table continues)

Table 4A.4 Labor complaint submissions against US trading partners under review by the US Department of Labor (continued)

Submission number	Date filed	Date accepted for review	Claimant	Defendant	Claim	Status
<i>Cases reviewed with public report submitted</i>						
US Submission 2011-03	12/22/2011	2/22/2012	Father Christopher Hartley	Dominican Republic	The government failed to enforce labor laws related to the sugar industry with respect to (a) the right of association and the right to organize and bargain collectively; (b) the prohibition of forced or compulsory labor; (c) a minimum age for child employment and prohibition of the worst forms of child labor; and (d) acceptable conditions of work. Alleged labor abuses included forced and child labor, unsanitary living conditions, denial of benefits, hazardous working conditions, refusal to issue written contracts, and retaliatory firing for union affiliation.	A Department of Labor report issued in September 2013 found evidence of apparent and potential violations of labor laws, supporting the alleged claims. Additional concerns were raised about procedural shortcomings in labor inspections and the failure to follow guidelines. The Office of Trade and Labor Affairs (OTLA) made several recommendations to address the violations and engaged in joint efforts with the Dominican government to develop an implementation plan. Reviews of the implementation of report recommendations are ongoing at six-month intervals, with related reports submitted in April 2014, October 2014, and April 2015.
US Submission 2012-01	3/26/2012	2012	AFL-CIO and 26 Honduran unions and civil society organizations	Honduras	The government failed to enforce labor laws with respect to (a) the right of association and the right to organize and bargain collectively; (b) the minimum age for employment and elimination of the worst forms of child labor; and (c) acceptable conditions of work, in the automobile and agricultural sectors.	A Department of Labor report issued in February 2015 found violations of labor rights supporting the alleged claims. The OTLA recommended bilateral consultations pursuant to Article 16.4 of CAFTA-DR and a meeting by the Labor Affairs Council to develop a monitoring and action plan based on the report's recommendations. A monitoring and action plan was agreed to and signed on December 2015.

(table continues)

Table 4A.4 Labor complaint submissions against US trading partners under review by the US Department of Labor (continued)

Submission number	Date filed	Date accepted for review	Claimant	Defendant	Claim	Status
<i>Cases reviewed with public report submitted</i>						
US Submission 2010-03	12/30/2010	7/19/2011	Peruvian National Union of Tax Administration Workers	Peru	The government failed to comply with labor laws related to collective bargaining.	A Department of Labor report issued in August 2012 found that the Peruvian Ministry of Labor and Promotion of Employment fulfilled its duties during the collective bargaining processes but that the agency employing the workers failed to comply with some parts of Peru's collective bargaining law. Given the government's willingness to resolve the concerns raised, bilateral consultations were not recommended. Implementation monitoring by the Department of Labor is underway, with six-month interim reviews.
<i>Cases in consultation</i>						
US Submission 2011-01	4/21/2011	6/10/2011	AFL-CIO	Bahrain	The government failed to uphold freedom of association, dismissed workers who organized or participated in strikes, and discriminated against workers based on political opinion and religious affiliation.	A Department of Labor report issued in December 2012 found evidence of violations of labor rights, supporting the alleged claims. The OTLA issued nine recommendations to Bahrain and recommended bilateral labor consultations pursuant to Article 15.6.1 of the FTA. In May 2013 the United States officially requested consultations; two rounds were held, in May 2013 and June 2014.

(table continues)

Table 4A.4 Labor complaint submissions against US trading partners under review by the US Department of Labor (continued)

Submission number	Date filed	Date accepted for review	Claimant	Defendant	Claim	Status
<i>Cases in dispute settlement</i>						
US Submission 2008-01	4/23/2008	6/12/2008	AFL-CIO and six Guatemalan workers' organizations	Guatemala	The government failed to effectively enforce labor laws with regard to freedom of association, the right to organize and bargain collectively, and acceptable conditions of work, including enforcement of severance payments and other legal provisions.	A Department of Labor report issued in January 2009 found that Guatemala's actions violated its labor laws. Given the willingness of the government to discuss and attempt to resolve the violations, bilateral consultations were not recommended, and the Department of Labor continued interim evaluations. In July 2010 the United States requested consultations; after failure to resolve its concerns, an arbitral panel was convened in 2011. The two parties negotiated an 18-point enforcement plan in August 2013. After Guatemala failed to implement it, the United States resumed dispute settlement procedures. A decision is expected in June 2016.

CAFTA-DR = Central American Free Trade Agreement–Dominican Republic, FTA = free trade agreement

Sources: GAO (2014); US Department of Labor, "Submissions under the Labor Provision of Free Trade Agreements," www.dol.gov/lab/trade/agreements/fta-subs.htm (accessed on May 18, 2015); "Submissions under the North American Agreement on Labor Cooperation (NAALC)," www.dol.gov/lab/trade/agreements/naalc.htm (accessed on May 18, 2015); and various Department of Labor reports, available at www.dol.gov/lab/reports/.

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CHAPTER 5

OTHER NEW AREAS: CUSTOMS ADMINISTRATION AND TRADE FACILITATION, ANTICORRUPTION, SMALL AND MEDIUM-SIZED ENTERPRISES, AND MORE

CAROLINE FREUND

The Trans-Pacific Partnership (TPP) contains several agreements on trade regulations—many of them overlooked in the larger debate over the accord—designed to augment the gains from trade and spread them more evenly across participating countries and companies. The most important of these agreements is Chapter 5 on Customs Administration and Trade Facilitation, which aims to simplify and speed up the processing of trade at the border. It is the only agreement that includes binding commitments (i.e., commitments explicitly covered in the dispute settlement agreement). Six related chapters seek agreements to reduce impediments to trade that disproportionately affect specific groups, such as developing countries and small and medium-sized enterprises (SMEs), or propose arrangements to improve cooperation among the TPP countries in various areas. Among these “softer” agreements, Chapters 21–26 cover the following topics: cooperation and capacity building, competitiveness and business facilitation, development, SMEs, regulatory coherence, and transparency and anticorruption.

As tariffs have come down and lean retailing and global supply chains have become the norm, delays at the border have arguably become the main impediment to goods trade. The trade facilitation agreement eases the movement of goods across borders by eliminating excessive delays and opaque rules. Chapter 5 also provides the most tangible benefits to the parties the soft chapters aim to assist. For example, simplifying customs diminishes the potential for corruption by reducing the number of opportunities or stages at which a corrupt individual can intervene. It also allows SMEs to circumvent customs barriers that would be overly cumbersome for exporters of low-value shipments. Removing or easing border procedures is especially important for developing countries, because border delays in these countries tend to limit trade more than tariffs.

The soft chapters seek to ensure that potential benefits for special groups or key areas will be considered during implementation and in the event that liberalization continues in future agreements. The main contribution of these chapters is the creation of committees to evaluate the agreement with the special groups or topics in mind. Because there are no binding agreements, these chapters will not themselves affect trade significantly. They are thus of secondary importance.

CUSTOMS ADMINISTRATION AND TRADE FACILITATION

As tariffs have fallen, the costs of getting goods through customs have become much more evident. These costs vary widely across countries: According to the World Bank’s 2016 Doing Business Indicators, meeting border

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compliance requirements for importing goods requires 64 hours in Vietnam, 48 hours in Japan, 44 hours in Mexico, 37 hours in Australia, and 2 hours in Canada and the United States. Djankov, Freund, and Pham (2010) estimate that every day of delay reduces trade by about 1 percent. Hummels and Schaur (2013) estimate that every day a good spends in transit is equivalent to an ad valorem tariff of 0.6 to 2.1 percent. Reducing delays can thus have a meaningful effect on stimulating trade between the TPP countries.

Because of its growing importance, trade facilitation is the only area where the World Trade Organization (WTO) has made progress since the start of the Doha Development Agenda in 2001, with the Bali Package achieved at the end of 2013. The trade facilitation agreement in the TPP is not explicitly linked to the WTO Trade Facilitation Agreement (TFA), but it covers the same issues, such as publishing of customs information, cooperation among customs authorities, and customs and trade logistics, and in some cases it uses the same language. Both agreements encourage countries to have a single automated entry point and employ common World Customs Organization standards. The TPP TFA is shorter than the WTO TFA (9 pages rather than 30), but shorter does not mean weaker, as more words in trade agreements typically means more exceptions. In a number of places the TPP goes farther than the WTO TFA in its goals; in particular, it mandates strict time limits on goods at border transit, expedited shipments, and advance rulings. It does not allow special treatment for developing countries, as the WTO agreement does. [Table 5.1](#) highlights the key differences between the two agreements.

One of the most important steps for facilitating trade and reducing corruption is developing clear and simple rules. Chapter 5 requires members to publish customs laws and regulations. It also presents target time limits on customs clearance (48 hours for regular shipments, 6 hours for express shipments). The chapter also addresses delays that affect trade in complex goods. For some goods, tariff classification is difficult, but an advance ruling allows importers to determine the correct classification before importation, so there are no surprises at the border. Delays on such rulings restrict trade in these complex goods. The agreement establishes a strict time limit of 150 days on advance rulings in response to a written request from an importer or exporter in its territory.

One potential concern with the chapter is that in a number of places the language is less clear than the objective, with words like *encourage* and *endeavor* used frequently. Mandating countries to use a single entry point and employ World Customs Organization standards by a given deadline would have made the chapter stronger.

Another area where the agreement could have gone deeper is de minimis rules, which allow imports below a monetary value threshold to enter a country duty free. Such rules vary widely across countries (they are about \$15 in Canada, \$81 in Japan, and the United States just raised the de minimis to \$800, for example). The differences are confusing to exporters (especially small businesses) and discourage trade in low-value/low-volume goods and e-commerce. The administrative delay of customs is sometimes so great as to completely deter low-value trade. Instituting a common lower bound on the value of duty-free trade would have been desirable. Studies show that raising the de minimis to \$200 or above would expand trade and raise welfare, with small businesses and consumers receiving much of the gains (Hufbauer and Wong 2011).

Overall, the chapter is an important addition to the TPP agreement. If well implemented, it is very likely to do more to stimulate trade and strengthen supply chains than tariff reduction. It will also complement other aspects of the TPP, helping promote trade by SMEs, reduce corruption, and enhance development.

Table 5.1 Key differences between the WTO’s Trade Facilitation Agreement and the Trans-Pacific Partnership

Topic	WTO’s Trade Facilitation Agreement		Trans-Pacific Partnership	
	Article	Description	Article	Key differences
Publication of customs laws and regulations	1	Requires each party to publish procedures, fees, rules, and laws.	5.11	Similar; TPP requires publication in English, TFA in WTO language.
Consultations	2	Allows each party to comment on changes in customs rules or duties.	5.11	Similar; TPP and TFA encourage publication of new regulations and opportunity to comment.
Advance rulings	3	Requires advance rulings issued in reasonable time and information published.	5.3	TPP limits advance rulings to 150 days, TFA is “reasonable, time-bound.”
Procedures for appeal	4	Provides for the right of appeal.	5.5	Language allowing administrative or judicial appeal is similar.
Other measures	5	Provides guidelines for countries seeking to issue new regulations because of risk.	5.9	TFA offers more specific language on new regulations because of risk and time limit on any such regulations.
Disciplines and fees	6	Proposes disciplines on fees and penalties other than duties.	5.8	Language on penalties is the same; TPP adds finite time period in which customs proceedings can be initiated and restrictions on initiation outside of time period.
Release and clearance of goods	7	Issues guidelines on trade facilitation, fees, and treatment of expedited goods.	5.7, 5.9, 5.10	TPP includes goal of customs clearance in 48 hours, 6 hours for express shipments; TFA encourages members to publish average release times, but does not list targets; TFA includes language on appropriate risk criteria to discourage arbitrary use of risk management as trade barrier. TPP does not present risk management criteria.
Border agency cooperation	8	Encourages coordination with other customs agencies, especially bordering countries.	5.2	Similar, but TFA also covers border communication between neighboring countries.
Movement of goods	9	Smooths movement of goods between customs authorities within a territory.		Not in TPP.
Formalities	10	Issues guidelines on documentation, use of international standards, single window, pre-shipment inspection, customs brokers, and related areas.	5.6, 5.7	Similar; both encourage use of international standards and single electronic window. TFA includes additional restrictions, including on pre-shipment inspection and customs brokers.
Freedom of transit	11	Proposes disciplines on traffic in transit to other member.		Not in TPP.
Customs cooperation	12	Encourages exchange of information and protection of confidentiality.	5.2, 5.4, 5.12	Restrictions on information sharing differ. TFA allows postponement or refusal of information for various reasons. TPP states that a party can decline to provide information requested if the requesting party does not maintain agreed confidentiality.
Section II—Special and Differential Treatment	13–24	Gives special treatment to developing countries.		Not in TPP.

WTO = World Trade Organization

Sources: WTO Agreement on Trade Facilitation and TPP Chapter 5.

TRANSPARENCY AND ANTICORRUPTION

One of the most interesting soft additions to the TPP is Chapter 26 on Transparency and Anti-Corruption. Although the agreements in the chapter are not binding, the title is bold: Previous US trade agreements did not put “corruption” in the headlines. Other international agreements, such as the OECD Convention on Combating Bribery of Foreign Public Officials and the UN Convention against Corruption, address corruption. The advantage of putting anticorruption in a trade agreement is that stronger penalties could apply for failure to adhere. The drawback of the chapter is the absence of criteria on implementation. Enforcement was clearly a concern of some of the negotiating parties, as footnote 8 in the chapter explicitly leaves enforcement “subject to each Party’s laws and legal procedures” rather than to dispute settlement.

In many countries, being a customs official is a very lucrative position—but not because it is well paid. Customs officials determine the taxes due at border crossings and hence have authority to give some shipments beneficial treatment. A simple way to reduce payments is to bring goods into a country in a category that has lower tariffs. If, for example, the tariff on T-shirts is 25 percent and the tariff on button-down shirts is 2 percent, misclassifying a shipment of T-shirts as button-down shirts can save an importer 23 percent. Several studies reveal that import statistics show more goods entering in low-tariff product lines than the corresponding export statistics and that the gap is larger in poorer countries (Fisman and Wei 2004, Javorcik and Narciso 2008).

Corruption is even more of a problem for investors. Public officials preside over cumbersome regulatory regimes. The more opaque the rules, the easier it is for them to steer investment to or from particular investors. A wealth of research shows that countries with leaner business regulations have less corruption (Djankov et al. 2002).

Chapter 26 aims at reducing corruption by increasing transparency and tightening law enforcement. Both could especially benefit developing countries in the TPP, which lag in these areas and where corruption distorts business incentives. By streamlining rules and limiting delays, the trade facilitation chapter represents an important step in reducing graft. The anticorruption chapter goes farther, asking countries to “affirm their resolve to eliminate bribery and corruption in international trade and investment” (Article 26.6.1). It identifies illicit practices, such as offering and accepting bribes for special trade or investment treatment, as crimes and requires countries to adopt or maintain laws against such behavior. The addition of the chapter is aligned with the TPP’s goal to level the playing field for trade and investment.

The existence of Chapter 26 and its bold title highlight the frustrations of the business community and (some) governments with corruption. Naming the issue and listing the best practices for reducing corruption are important steps in addressing the problem. The North American Free Trade Agreement (NAFTA) has no such chapter, and the Korea-US free trade agreement included a related chapter entitled only “Transparency.” The TPP chapter thus represents a step forward. To make it more meaningful, future agreements will need to use the dispute settlement process embedded in the trade agreement to implement the rules.

SMALL AND MEDIUM-SIZED ENTERPRISES

Promoting exports by SMEs has been a stated goal of the Obama administration. It was a clear part of the National Export Initiative and (like anticorruption) a new chapter in a US trade agreement. While there is much in the TPP to assist SMEs, the main gains come from the lowering of traditional trade barriers and the trade facilitation agreement as opposed to Chapter 24 of SMEs.

Fixed costs in accessing international markets disproportionately hinder SMEs, because finding information, filing paperwork, and ensuring smooth delivery require roughly the same amount of time and energy irrespective of the size of the shipment. Large firms spread these costs over large volumes, making them minor. In contrast, administrative costs can make trade unviable for SMEs.

Such costs explain why among US SMEs that export, 59 percent export to only one market (Soroka 2014). The costs of accessing a new market are so large that many small businesses never attempt to do so. Most SMEs in the United States that export do so only to Mexico or Canada, because information about these markets is readily available and trade barriers are low. In contrast, the majority of large US firms that export do so to five or more markets. In 2012, of the more than 175,000 US companies that exported goods to countries in the TPP area, 97 percent were SMEs. Enabling these small firms to expand to new markets would give them a major boost.

Chapter 24 has two pillars: information sharing and cooperation. The first pillar requires countries to make information relevant to exporters or investors readily available. Included under this pillar are customs laws and procedures, as well as rules on foreign direct investment, taxation, business regulations, intellectual property, technical standards, and employment standards.

The second pillar creates a committee to keep SME issues live. The committee, which will meet once the first year and “as necessary” thereafter, will discuss capacity building, review SME progress, and generate ideas.

The transparency and cooperation proposed in the chapter are beneficial for all exporters and will address an important difficulty faced by SMEs. Most of these initiatives, however, are part of other chapters and repeated in the SME chapter, which itself does not break any new ground. For example, the expedited customs and simple and clear rules in the trade facilitation agreement will disproportionately help small exporters, who often find customs rules and delays too extensive to make exporting worthwhile. The provisions protecting electronic commerce are also important for small enterprises that trade via the internet.

In sum, the TPP provides many benefits to SMEs, but they come largely from chapters other than the chapter on SMEs. These firms will gain from the broader TPP agreement, which lowers tariffs, opens markets to service providers, and improves trade facilitation. To the extent the committee mandated by the chapter maintains a focus on SME issues, it will help ensure that SME concerns, which are often absent in business and trade decisions, are heard. For example, the committee could be used to keep pressure on harmonizing and raising *de minimis* rules, which would greatly benefit SMEs.

DEVELOPMENT, COOPERATION, AND CAPACITY BUILDING

The chapters on Development (Chapter 23) and Cooperation and Capacity Building (Chapter 24) recognize that the agreement is between countries at different levels of development and will thus be harder for some countries to implement than others. The chapters are to some extent placeholders for important issues; they offer few real commitments and are not subject to dispute settlement.

The main feature of the two chapters is the creation of committees to promote cooperation and development and provide a framework for technical assistance. It is useful to have groups focused on maintaining cooperation and enhancing development, but the agreement provides no clear budgets or mandates for the committees, leaving capacity building “subject to the availability of resources” (Article 21.5).

Trade in and of itself will enhance development. The agreement could have gone farther in creating a path for development assistance from the advanced countries to the developing countries. In particular, the TPP is missing what the European Commission calls “aid for trade” or “trade-related assistance.” Many provisions in the agreement—on anticorruption, intellectual property rights, overseas data storage, for example—represent the advanced-economy (often the US) view. The offer of grants or technical assistance to improve trade capacity for low-income countries would have both allowed the United States to get stronger commitments and created a more development-enhancing agreement (although it would have made the agreement more difficult to ratify).

COMPETITIVENESS, BUSINESS FACILITATION, AND REGULATORY COHERENCE

Chapter 22 on Competitiveness and Business Facilitation creates a committee to ensure that the agreement supports TPP supply chains. Like the other soft chapters, this one is not about creating rules but about ensuring that potential issues that may develop over time—in this case specific to the functioning of supply chains—are kept on the agenda.

Chapter 25 on Regulatory Coherence aims a bit higher. It lists “core good regulatory practices” as well as ways to implement domestic regulations and communicate with other TPP members. It does not harmonize or provide for the mutual recognition of any specific regulations. It requires countries to list their regulated activities, provide notice of any expected changes over the next year, and clearly delineate any new regulations and their justification. The chapter also establishes a committee to follow work on regulatory coherence and promote interagency cooperation.

Regulatory coherence is an important issue in trade, because different regulations mean that producers may have to duplicate production because of specific requirements that cannot be met simultaneously. For example, UN and US auto standards differ; as a result cars adhering to the US standard cannot be sold in markets using the UN regulations. Encouraging countries to clearly state regulations and changes in the system is helpful for exporters that must meet those restrictions. The chapter in the TPP, however, is limited and not subject to dispute settlement. The low priority given to coherence is captured by the following language: “In the event of any inconsistency between this Chapter and another Chapter of this Agreement, the other Chapter shall prevail to the extent of the inconsistency.”

CONCLUSIONS

The Customs Administration and Trade Facilitation chapter is an important part of the TPP. It will reduce the time goods spend in transit and limit incentives for customs officials to use delays and paperwork to elicit bribes. If well implemented, the chapter will be especially useful for the developing countries in the agreement. It is also likely to have spillovers for trade broadly, as trade with non-TPP members will also benefit from better trade facilitation.

The other chapters open discussion on important trade issues, especially those intended to make the agreement more inclusive. As TPP members have agreed to update commitments at periodic intervals, these chapters could become stronger and more binding over time. The benefits from these chapters will depend on whether they lead to serious discussion—and action—in the future.

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CHAPTER 6

TPP AND DIGITAL TRADE

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Of the 30 chapters in the Trans-Pacific Partnership (TPP), Chapter 14 entitled “Electronic Commerce” addresses a highly consequential but fast-changing aspect of international exchange and communication. Indeed, rapid technological change and a profusion of new business models have expanded the boundaries of electronic commerce far beyond the meaning the term held back in the 1990s, when the internet revolution had just begun. Nearly every industry now relies on services provided and data exchanged over the internet. These flows may do more to transcend national borders over the long term than trade and investment agreements themselves. The explosive growth of cross-border data flows, especially since the Great Recession, stands in sharp contrast to the muted growth of cross-border flows of goods. Reflecting the expansion of digitally enabled international commerce, recent studies have begun using the term “digital trade” to describe the full range of cross-border electronic commerce issues, from online commercial transactions to the ancillary aspects of protection of intellectual property rights, privacy, and the protection of national interests. This chapter also employs the term “digital trade” to encompass these different domains.¹

Despite its relatively short length, TPP Chapter 14 addresses a wide range of issues—a breadth and complexity that reflects the growing breadth and complexity of digital trade itself. Important provisions in Chapter 8, which addresses Technical Barriers to Trade, also have direct implications for digital trade. To provide a framework through which all these provisions can be analyzed, this chapter groups them into three categories, each reflecting a major thrust of the agreement.

A Free, Open Market for Digital Goods and Services. The TPP seeks to secure an open, level playing field for trade in digital goods and online services. It defines a digital good as “a computer program, text, video, image, sound recording or other product that is digitally encoded, produced for commercial sale or distribution, and that can be transmitted electronically”—for instance, downloaded software, digital media files, or search services. The TPP prohibits customs duties on digital goods, but duties can still apply on physical goods purchased through online distributors or retailers. Sales or value-added taxes may be imposed on digital goods and services, but they must be the same as those levied on domestically produced digital goods and services.

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1. For example, two recent comprehensive studies by the US International Trade Commission (USITC 2013, 2014) use this term in their titles.

Member states are prevented from favoring local suppliers of digital goods and services through discriminatory taxation or outright blocking of foreign websites.²

The agreement also takes a strong stand against “data localization.” Member states are required to permit cross-border data flows and are not allowed to require the establishment of local computing facilities as a condition of doing business.³ The agreement’s emphasis on free and open digital trade and its rejection of data localization are appropriate responses to the practical impossibility of providing sophisticated digital services to an internationally mobile customer base. Over time, an open, level playing field will lower costs and accelerate the development of new digital goods and services.

Protecting Innovation, Technology Choice, and Copyrights. While emphasizing free and open digital trade, the TPP also seeks to protect proprietary technologies from involuntary disclosure, insulate technology choice from political pressure, and protect copyrights in a world where the internet has weakened traditional enforcement mechanisms. The TPP protects source code from involuntary disclosure, providing an important degree of protection for digital innovation that is not covered by the TPP chapter on Intellectual Property. In its chapter on Technical Barriers to Trade, the TPP seeks to limit the ability of governments to manipulate the process of setting technical standards. This kind of manipulation can function as a trade barrier, limiting international commerce and constraining the technology choices of producers and consumers. The digital age poses special challenges for the enforcement of copyrights, and the TPP essentially takes the same approach as current US law in facing these challenges.

Protecting Privacy of Consumers. While preserving open markets for digital products and services, the TPP also seeks to protect consumer interests and address issues of data privacy. The TPP requires member states to establish laws protecting consumers from online fraud and spam. It protects the ability of firms to use strong encryption technologies to protect themselves and their customers, though there are important exceptions to that protection. It also requires member states to enact and enforce laws protecting online privacy, but it does not stipulate what those laws should be. As the TPP expands to incorporate new member states with strong data privacy laws, additional international agreements, like the EU-US Privacy Shield, may be necessary to reconcile a commitment to free data flows with very different national approaches to data privacy.

The next section provides a brief overview of the growing importance of digital trade, the dominant role played by US-based firms in this expanding domain, and the degree to which these two trends give the United States a greater stake in open and free digital trade than any other nation. The chapter then summarizes the main provisions in TPP Chapter 14, along with important complementary provisions in TPP Chapter 8 on Technical Barriers to Trade, and their implications for digital trade among TPP member states.

THE GROWING IMPORTANCE OF DIGITAL TRADE

Digital trade has surged in recent years, even as growth in conventionally traded goods has slowed significantly.⁴ From 1990 to 2007, goods trade grew about 6 percent a year—more than twice as fast as world GDP. When the global financial crisis struck, goods trade first declined dramatically, then recovered sharply. Since 2010 goods trade has slowed considerably, growing only about as fast as world GDP, and since 2015 it has slowed even more (Freund 2016).⁵

2. Member states are still allowed to regulate internet content and internet activity in the interests of national security or the protection of public morals. For instance, the United States can block child pornography, in accordance with its laws. This is permitted, because the same regulations and prohibitions apply to domestic and foreign-based websites and service providers.

3. Both these provisions contain important exceptions, described later.

4. A two-volume study by the USITC (2013, 2014) documents the significant and rising scale and scope of digital trade.

5. International capital flows have slowed even more since the global financial crisis and remain well below their precrisis peak (McKinsey Global Institute 2014).

In striking contrast, growth of international data flows has been explosive. According to the McKinsey Global Institute (2016), international data flows were 45 times larger in 2014 than in 2005, with most of the gains coming since 2010. The scale of data flows does not necessarily indicate underlying economic value, so these statistics should be interpreted with caution.⁶ That said, modern economic life is becoming steadily more digital: Commercial transactions, personal communications, social interactions, and consumption of entertainment are increasingly conducted online, not only in the postindustrial West but in some key emerging markets as well.

These trends have gathered force as the traditional boundaries between digital activity and the physical economy have blurred (Branstetter, Drev, and Kwon 2015). Reliance on physical information systems located inside a company's or organization's own building is giving way to cloud computing in which executives, staff, and customers access the data they need anytime, anywhere via the internet.⁷ Motor vehicles are increasingly interacting with the internet. The data captured enable auto insurance companies to identify safe driving practices and reward good drivers with lower premiums. Data have enabled the rise of ride-sharing services like Uber.⁸ Makers of traditional industrial goods, like GE, are using the ever-expanding "internet of things" to capture data on the real-time performance of their products around the world under a wide range of conditions and circumstances. These data help customers optimize the use of their equipment and allow manufacturers to create an even more effective next generation of products (Branstetter, Drev, and Kwon 2015). Small and medium-sized enterprises connect with customers all over the world through online platforms like eBay and Alibaba. This trend toward growing digitization extends to services; McKinsey (2012) estimates that, by 2012, 63 percent of global services trade was digitally enabled.

The digital revolution is creating international commercial opportunities in ways that conventional trade statistics fail to capture. Imagine a mid-sized architecture firm in Milwaukee that has developed a lucrative business designing luxury homes for wealthy Middle Eastern customers. Decades ago this firm would have been locked out of this opportunity because financial constraints would have prevented it from opening offices in Doha, Dubai, and Riyadh. The internet allows the firm to "walk" prospective clients through a three-dimensional representation of their new home design without designers or customers leaving their homes. Once the client is satisfied, a payment is made from the US bank account of the foreign client and detailed architectural designs are forwarded to a construction company. As long as the transaction amount is under \$6 million, there is no legal obligation to record it as a service export. Multiply this scenario by hundreds or even thousands of similar small and medium-sized businesses across the range of knowledge-intensive services and it is conceivable that tens of billions of dollars in unrecorded service exports occur every year.⁹

Recent research confirms the strong comparative advantage of US firms in many core dimensions of this ongoing revolution. Alaveras and Martens (2015) employ Alexa data for August–October 2014 to track page views of commercial websites, with a focus on international trade in online services within the European Union.¹⁰ They find that 54 percent of online services consumed within the European Union is imported from the United States, that the vast majority of the business of EU online service providers comes from customers

6. The McKinsey Global Institute (2016) asserts that global data flows created more value in the global economy than flows of goods in 2014.

7. See Sridhar (2009) for an early and accessible explanation of cloud computing.

8. See Grimm (2003) and Shorey (2011) for an engineering-based perspective on the rising software and data intensity of the automobile industry.

9. In a study commissioned by the American Economic Association's Committee on Statistics, Feenstra et al. (2010) conclude that official statistics may fail to capture some knowledge-intensive service export activity.

10. Alexa Internet, Inc., a wholly owned subsidiary of Amazon.com, provides commercial web traffic data and analytics.

in their home countries, and that the top 1 percent of EU online service providers account for only about 5 percent of online international trade.¹¹

In striking contrast, 32 percent of US online service providers export their services. Together they export about twice as much as they sell in the United States. US firms are leading the transition to cloud computing and the increasingly intensive use of “big data” to optimize business operations and identify new commercial opportunities. No nation has a bigger stake in—and more to gain from—an open and free digital economy than the United States. It is, therefore, not surprising that the United States has incorporated digital trade issues into the TPP, as well as the Transatlantic Trade and Investment Partnership under negotiation with the European Union and the Trade in Services Agreement.¹²

TOWARD A FREE AND OPEN MARKET FOR DIGITAL GOODS AND SERVICES

Perhaps the strongest theme within the Electronic Commerce chapter of the TPP is its strong commitment to free and open trade in digital goods and services. In keeping with other recent US free trade agreements, the TPP prohibits customs duties on digital goods. No member state currently levies significant customs duties on digital goods, but the prohibition eliminates the future possibility of toll charges and other levies on digital trade. The TPP also prohibits the favoring of national producers or suppliers of digital products through discriminatory taxation, outright blocking, or other forms of content discrimination. These important provisions prevent member states from using these policy instruments to limit consumer choice or tilt the playing field in favor of local producers.

More significantly, the TPP establishes freedom of data flows across member states and prevents member states from requiring digital service providers to locate computing facilities in a particular country as a condition for doing business in that country.¹³ Digital service providers lobbied hard against the accumulation of data localization requirements around the world. These legal provisions require that all data associated with citizens of a particular country be physically located in that country. Data localization requirements are sometimes paired with other restrictions on data flows that can limit the kind of data that can be brought into a jurisdiction, as well as data that can be taken out.

The practical difficulties posed by these restrictions on cross-border data flows can be illustrated with the case of a French businesswoman who spends two weeks in the United States on a trip that mixes business and tourism. While in the United States, she remains in touch with family and friends through Facebook and Gmail. She orders items for her home back in Paris, using Amazon or online retailers located in France. She uses Skype to communicate with colleagues and family. She uses the internet to access her bank accounts, execute stock trades, and view online media sites. In order for this woman to have access to her usual array of digital services, at least some of the data associated with her must reside—at least temporarily—on servers in the United States. It is impossible for online service providers to meet the needs of a globally mobile customer base using a physical data infrastructure that resides entirely in one country.

Even if millions of users did not travel internationally, arbitrary restrictions on data flows could raise the cost of providing digital services by forcing service providers to maintain an expensive, duplicative physical data infrastructure in multiple countries. Two recent studies attempt to quantify these aspects of the economic costs imposed by widespread data localization requirements. Using a computable general equilibrium

11. Using different data, the McKinsey Global Institute (2016) study concludes that US firms are also the dominant providers of online services in the major regions of the global economy outside Europe.

12. Aaronson (2016) provides a useful overview of the role of the United States in international internet governance and places the Electronic Commerce chapter of the TPP in the larger context of the United States’ commercial diplomacy in this domain.

13. The agreement provides room for exceptions to these provisions when they are undertaken in pursuit of a legitimate public policy objective, but these exceptions are themselves limited in scope.

(CGE) model that treats data localization requirements as a type of trade barrier, Bauer et al. (2014) seek to quantify the impact on output, investment, and welfare of recent or proposed data localization in seven jurisdictions. They find that the higher costs of data-intensive digital services resulting from data localization reduce investment by 0.5 to 4.2 percent and welfare by \$63 billion to \$193 billion, depending on the country. These impacts are large compared with the estimated impact of conventional trade barriers.

Another study, by the Leviathan Security Group (2015), estimates the cost to firms of obtaining online services if data localization were strictly enforced, given the current global distribution of digital infrastructure and services pricing. This very “micro” approach complements the work of Bauer et al. (2014). It suggests that strict enforcement of data localization requirements could raise costs by 30 to 60 percent.

Both these studies have their limitations, and their estimates of the macro- and micro-level costs of data localization are just that—estimates. Nevertheless, they strongly suggest that the impact of far-reaching data localization provisions on the cost of providing digital services is not trivial. Large companies may be willing and able to bear this burden in order to serve their larger markets; smaller companies would be more constrained. Strict enforcement of these provisions could limit the access of users around the world to the innovative online products and services of smaller companies, especially in smaller and poorer markets.

The greatest costs of data localization may have less to do with the price consumers pay for online services and more to do with their availability. Part of the promise of online commerce lies in the ability of firms to creatively link different datasets on different customers to find better ways of serving these customers or to create new products for them. Strict segregation of datasets by nationality and geography would limit this promise, potentially narrowing the range of new products and services and reducing the quality of existing ones.

This concern is not based solely on speculation. Evidence from the United States shows that limitations on data flows can inhibit the adoption and diffusion of technology. Federal and state legislation in the United States strongly protect the health and medical data of individual patients. These legal provisions were created with patients’ interests and welfare in mind. However, in a widely cited paper, Miller and Tucker (2009) find that US state privacy regulations restricting hospital release of health information reduced the adoption of electronic medical record (EMR) systems by hospitals by more than 24 percent. This finding suggests that well-intentioned legislative barriers to data exchange could undermine important public policy goals, such as the Obama administration’s emphasis on widespread use of EMR systems to eliminate unnecessary care, identify best-practice treatment, and increase the efficiency and effectiveness of the US healthcare system.

PROTECTING PROPRIETARY TECHNOLOGIES, TECHNOLOGY CHOICE, AND COPYRIGHTS IN A DIGITAL AGE

Protecting Proprietary Technology from Compulsory Disclosure

Some governments, including the Chinese, have sought to compel developers of the hardware and software that enables digital trade and communication to disclose their source code as a condition of market access. While the directives often come from government or national security agencies, which justify them on the grounds of national security, there is deep concern that valuable proprietary information will be shared with competing firms. The TPP limits the rights of member states to compel disclosure of such sensitive information and prohibits them from requiring disclosure of source code as a condition of market access. An exception to this provision is made for hardware or software that is part of “critical infrastructure.” This exception would allow governments to search for “backdoors,” security vulnerabilities, or malware embedded in the source code of devices that were important components of national energy, transportation, and telecommunications systems.

Insulating Technology Standards and Technology Choice from Political Interference

Digital trade requires a physical backbone of devices and software. Several provisions in the TPP's chapter on Technical Barriers to Trade seek to maintain and protect freedom of commercial operation with respect to that hardware and software through their focus on technical standards. The development of a global, integrated internet has required that a vast and expanding universe of different pieces of software and hardware be able to communicate with one another and that this interoperability be maintained even in the presence of rapid technological progress. International digital trade has been well served by an open, global process of technical standard formation in which the best technologies can be adopted without arbitrary political constraints imposed by governments that seek to favor local producers of information technology (IT) goods or software.

On several occasions China has allegedly sought to impose national technical standards that diverge from global ones in domains related to digital communications.¹⁴ Some critics have viewed these efforts as thinly disguised attempts to promote an indigenous technology at the expense of a global (and technically superior) standard. The proliferation of multiple technical standards could raise business costs, limit the returns to the firms creating the best technologies, and, in the most extreme cases, threaten the integrity of the internet as a unified system. The Technical Barriers to Trade chapter of the TPP curtails the ability of governments to interfere with or manipulate technical standards to restrict trade and constrain the technology choices of producers and consumers.

Protecting Copyrights in a Digital Age

The rise of the internet has severely eroded de facto copyright protection, even in jurisdictions where enforcement was once strong. The ease of unauthorized duplication and the practical impossibility of eliminating peer-to-peer file sharing have undermined traditional business models.

The music recording industry has been especially hard hit: According to the Recording Industry Association of America, US music sales fell 53 percent between 1999 and 2013, largely as a consequence of online piracy. Other media industries have also been affected. New business models for digital distribution of authorized content have emerged, but they provide much lower revenues for artists and copyright owners.¹⁵ The welfare impact of these developments on the United States is unclear, given the different interests of consumers and producers, but they have almost certainly limited US exports of copyrighted products.¹⁶ US artists account

14. One of the first major efforts to impose a Chinese domestic standard was in the realm of wireless computing. Starting in 2003, China sought to require that all firms support a domestic standard for wireless local area networking. Initially, it required foreign producers to implement this standard (referred to by the acronym WAPI), through "partnerships" with Chinese firms. The global IT industry reacted strongly to this move. After intensive lobbying by Western governments, in 2004 China indefinitely suspended its efforts to impose this standard, but it made a similar attempt to popularize a Chinese standard for 3G wireless telephony. Because of delays in developing this technology (known as TD-SCMA), the global industry moved on to an international 4G standard. These efforts were covered widely in the Western media at the time (for a summary, see MacGregor 2010).

15. While Apple's iTunes remains a popular site for users to purchase music online, many music fans are increasingly moving to music-streaming services. One of the most popular and prominent music streaming providers is Sweden-base Spotify, which pays its rights holders a fraction of a cent per play. The low level of remuneration led singer Taylor Swift to remove her entire body of work from the subscription service and write an op-ed in the *Wall Street Journal* criticizing the new business model for the lack of compensation it provides artists. Other high-profile artists, such as Led Zeppelin, have also steered away from the service. On the other hand, emerging artists may feel they cannot afford to forgo the visibility that the service (and its competitors) can provide (see Pamela Engel, "Taylor Swift Explains Why She Left Spotify," *Business Insider*, November 13, 2014, www.businessinsider.com/taylor-swift-explains-why-she-left-spotify-2014-11, and Sven Grundberg, "A Penny for Your Song? Spotify Spills Details on Artist Payments," *Wall Street Journal*, December 3, 2013, <http://blogs.wsj.com/speakeasy/2013/12/03/a-penny-for-your-song-spotify-spills-details-on-artist-payments/>).

16. According to the US Bureau of Economic Analysis, US exports of audio-visual and related products exceeded \$19 billion in 2014, despite widespread digital piracy of US-owned media products outside the United States (see table 2.1, "U.S. Trade in Services, by Type of Service," www.bea.gov/scb/pdf/2015/10%20October/1015_international_services_tables.pdf). If digital piracy were not so widespread, these exports would have been much higher.

for a large component of global music sales, which have plummeted along with sales inside the United States. Empirical research suggests that some legislative experiments, such as France’s HADOPI law, have had a statistically and economically significant effect in constraining unauthorized downloads of copyrighted material without substantially undermining consumer access to digital media or other online services, but these efforts have not restored the preinternet status quo.¹⁷

Toward the end of President Obama’s first term, Congress debated passage of copyright acts that would have made it much easier to limit unauthorized distribution of copyrighted material via the internet, but none of these acts was passed into law. US trade negotiators are unable to go beyond US law. The digital copyright standards in the TPP largely reflect current US law. Advocates for the free flow of digital information will welcome the exceptions to copyright law, present in current US statutes and reflected in the TPP, that apply to criticism, commentary, news reporting, teaching, scholarship, and research. The digital media industries will welcome the provisions for anticircumvention of technological protection, though these measures have their limits.¹⁸ The safe harbors granted to internet service providers, however, are not conditioned on a requirement that they monitor their systems for infringement, something the film and music industries have sought in the past. The TPP is, therefore, likely to have a limited impact on the challenging environment faced by producers of copyrighted media products.

PROTECTING CONSUMERS AND PRIVACY

Protecting Consumers from Online Fraud and Spam

The TPP includes commitments by parties to enact and enforce laws that protect consumers in member states from fraudulent and deceptive commercial activities online. It also requires member states to implement measures protecting consumers from unsolicited electronic communications.

Protecting Consumer Data Privacy through Secure Encryption

Data localization requirements are often justified as a way to safeguard consumer privacy, but US trade negotiators have pointed to encryption as a better way of addressing some legitimate privacy concerns. TPP Chapter 14 does not deal with encryption technologies, but Annex 8-B of Chapter 8 on Technical Barriers to Trade addresses data security through encryption. It prohibits member states from requiring that manufacturers of information technology products disclose their encryption algorithms as a condition for sale, import, or use within a member state’s territory. It also prohibits member states from requiring that producers partner with a local entity to develop or create their encryption methods or requiring manufacturers to incorporate a particular “cryptographic algorithm or cipher” that would allow the producer’s encryption methods to be compromised.

Some countries have blocked the use of particular encryption and cybersecurity tools on the grounds that they threaten national security. This practice can be a thin disguise for the efforts of authoritarian gov-

17. The HADOPI law (named after the acronym of the French administrative agency the statute created) creates a “graduated response” to piracy of copyrighted content over the internet in France. Upon receipt of a claim of copyright-infringing activity from a rights holder, the agency sends a notice by e-mail to the internet user suspected of these violations. The user’s internet service provider is required to monitor the account for rights violations. If more copyright-infringing behavior is observed, the agency sends a second notice six months later, this time by registered mail. If this notice fails to end the copyright-infringing behavior within a year, the law empowers the agency to direct the case to a court, which can fine the offender a maximum of €1,500. Under the original law, the court was also empowered to suspend internet service to the offender for one month; the government later revoked this penalty. According to the French minister of culture, as of 2013 HADOPI had sent 1 million e-mails and 99,000 registered letters and referred 134 cases of suspected infringement to the courts. Danaher et al. (2014) find that legal downloads from iTunes increased by more than 20 percent in France relative to other European countries after the law went into effect, suggesting a significant effect on user behavior.

18. For instance, the TPP does not preclude new exceptions, like cellphone unlocking.

ernments to limit access to news and information. However, even in Western democracies, law enforcement officials worry about the ability of criminals or terrorists to disguise their activities through the use of strong encryption technologies. Since 2010, a number of officials at the US Federal Bureau of Investigation (FBI) have underscored these concerns, using the phrase “going dark” to describe the increasing difficulty they face in intercepting and decoding the electronic communications of criminals and terrorists even when they have the warrants to do so. These concerns received new prominence in the wake of the terrorist attacks in Paris and San Bernardino, California. At the time of this writing, Apple was resisting a federal court order to assist federal investigators by decrypting information stored on the iPhone of Syed Rizwan Farook, one of the San Bernardino shooters, shining a media spotlight on this debate.

The TPP provides exceptions to its endorsement of data security through encryption. Nothing in the agreement prevents law enforcement authorities from compelling firms to decrypt data in the context of a legal investigation like the one the FBI is conducting of the San Bernardino shooting. However, the TPP does give Apple the freedom to build strong encryption technologies into its products.

Does this freedom compromise law enforcement? The question is the subject of a study by the Berkman Center for the Internet and Society at Harvard entitled *Don't Panic: Making Progress on the Going Dark Debate*.¹⁹ The experts who signed the report, including the former director of the FBI's National Counterterrorism Center, Matthew Olsen, argue strongly against the notion that increasing commercial use of strong encryption and cybersecurity technologies undermines US national security. They point to the range of information tools and surveillance options that are likely to remain even as strong encryption becomes more widespread, and they note that terrorists, foreign intelligence agencies, and criminals can exploit weak encryption, “backdoors,” and other flaws that allow entrée for law enforcement agencies. The endorsement of strong encryption technologies in the TPP is consistent with the conclusions of this report. Heightened concern over terrorism could make this point controversial as the agreement moves toward a congressional vote.

Reconciling Free Digital Trade with National Data Privacy Laws

The TPP requires member states to establish and maintain laws protecting consumer privacy, but it does not stipulate what those laws should be, leaving privacy regulation in the hands of national governments. The absence of a detailed set of uniform standards for data privacy has not been a major source of controversy among the current 12 member states, but it could prove to be an issue as the TPP expands to incorporate other countries in the region with different and more prescriptive data privacy laws.

In the United States, providers of healthcare services, financial services, and telecommunications services operate under specific and stringent federal laws and regulations governing the use of customer data. In other domains federal law allows broad leeway for service providers and customers to set the terms for protection and use of customer data. Federal authority enforces these provisions, but federal law does not stipulate what those contractual provisions should be.²⁰

South Korea's 2011 data privacy law is far more prescriptive, placing limits on what private parties can contract. A South Korea that is party to the TPP would have difficulty preventing the movement of data to jurisdictions—like the United States—where local privacy laws are far less detailed and prescriptive. In these circumstances, South Korean citizens might not receive the protections mandated under South Korean law.

For years US-based online service providers navigated the gulf between comprehensive and prescriptive European data privacy laws and the much less prescriptive regime in the United States through something

19. The full text of the report is available at https://cyber.law.harvard.edu/pubrelease/dont-panic/Dont_Panic_Making_Progress_on_Going_Dark_Debate.pdf.

20. Some states, notably California, have passed data privacy laws that are more prescriptive than federal laws.

called a safe harbor system. Under this system individual firms made arrangements with European regulators; the US Federal Trade Commission (FTC) agreed to be the extraterritorial enforcer of these arrangements in the United States. Although the most fervent advocates of consumer data privacy regarded this arrangement as inadequate, it allowed a reasonably efficient provision of digital services to European customers. In effect, it reconciled relatively free data flows with very different national privacy laws.

The European Court of Justice recently ruled this practice illegal, on the grounds that safe harbor does not protect the data of European citizens from surveillance by US national security agencies.²¹ This ruling set off a frenetic round of negotiations between the United States and the European Union.

At the time of this writing, the United States and the European Union had just concluded an agreement on a successor to the safe harbor, called the EU-US Privacy Shield.²² The new agreement must be approved by the data protection regulators of individual EU member states (which have reserved up to three months to comment on the agreement and potentially demand adjustments), and it could still be subject to legal challenges, like the one that ultimately brought down the original safe harbor agreement. If adopted, the agreement would provide an ongoing legal basis for the continued transfer of large amounts of data on EU citizens to servers and data-processing sites in the United States. The new agreement requires annual assurances from the US government that US security agencies will not receive indiscriminate access to the data of EU citizens, and it establishes an ombudsman within the US State Department as the first point of contact if Europeans believe that security agencies have misused their data. These provisions address the concerns voiced by the European Court of Justice in its ruling, but it will be some time before relevant parties on the European side fully vet this agreement.

As the TPP expands, the strong protections embedded in it for free data flows could collide with the growing diversity of data privacy protections across member states. While a safe harbor or privacy shield provision may be useful in navigating these conflicts, in the long run there could be pressure for greater harmonization of privacy laws across member states than the TPP currently provides.

SUMMARY OF TPP PROVISIONS AND IMPLICATIONS FOR FUTURE ACCESSION

The TPP's digital trade provisions seek to limit the ability of member states to restrict information and digital service flows across national borders. The deal clearly reflects the influence and interests of US-based digital service providers, but it also maximizes the opportunities for growth of digital trade and development of new digital products and services.

The right balance between commercial freedom and privacy protection for consumer data is a hotly contested issue; different countries have embraced very different positions in recent years. A regime that maximizes the possibilities for commercial experimentation, competition, and new product development is likely to serve consumer interests in the long run. The TPP certainly pushes digital trade rules in that direction.²³

21. This ruling was a legal victory for Austrian privacy activist Max Schrems, who first became aware of Facebook's collection and utilization of user data during a semester spent studying at Santa Clara University in Silicon Valley. He later founded the group "Europe versus Facebook" (<http://europe-v-facebook.org/>) and sued Facebook, lodging complaints that eventually led to the European Court of Justice ruling against the safe harbor agreement (European Court of Justice 2015). See Kashmir Hill, "Max Schrems: The Austrian Thorn in Facebook's Side," *Forbes*, February 7, 2012, www.forbes.com/sites/kashmirhill/2012/02/07/the-austrian-thorn-in-facebooks-side/#1e6a94aa6b30.

22. The new agreement was officially reached on February 2, 2016 (see Mark Scott, "U.S. and Europe in 'Safe Harbor' Data Deal, but Legal Fight May Await," *New York Times*, February 2, 2016, www.nytimes.com/2016/02/03/technology/us-europe-safe-harbor-data-deal.html?_r=0).

23. Goldfarb and Tucker (2012) provide an overview of the interaction between attempts to protect consumer privacy (often by limiting information collection or exchange by digital service providers) and the effects of these efforts on innovation in online services. They find that stringent privacy provisions can limit the extent and alter the direction of innovation in online services.

Of course, trade negotiations in the real world often involve a tradeoff between the degree to which an agreement can approach ideal rules and the number of countries that can be persuaded to accept a given set of rules. There is a potential conflict between the TPP's strong stance against limitations on international data flows and the very different levels of consumer data privacy protection across countries in the Asia-Pacific region. A country with strong data privacy laws, like South Korea, may need to establish special arrangements, like the EU-US Privacy Shield, to reconcile the requirement for free data flows with the requirement to enforce data privacy laws that are stronger than those in force in the United States. The current US-EU debate over the adequacy of the recently negotiated privacy shield is something countries will likely watch closely. In the long run, there may be ongoing pressure to harmonize consumer data privacy provisions across countries.

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CHAPTER 7

COMPETITION POLICY

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TRADE AND COMPETITION

In the long history of modern trade agreements, efforts to lower barriers to trade and investment have frequently been undermined by business practices in participating countries that typically go unaddressed by the trade accords themselves. Antitrust activities and collusive relationships between businesses in trading countries have effectively shut out access to markets by foreign competitors, frustrating the intent of trade negotiators.

Over the years trade agreements have sought to overcome this problem by including provisions regulating “competition policy” in signatory countries. Ideally, a strong competition policy can promote economic efficiency and overall economic welfare by maintaining and encouraging competition among market participants, thereby permitting access by foreign competitors. A third of the United States’ free trade agreements in effect to date include competition policy chapters, although the record of achievement of these provisions is mixed at best.¹

Two important chapters in the Trans-Pacific Partnership (TPP) address key priorities in this arena: Chapter 16 (Competition Policy) and Chapter 17 (State-Owned Enterprises and Designated Monopolies). These chapters aim to overcome the problems that have prevented more open access to goods, services, and investments intended by trade accords. They are essential to the TPP’s success in achieving economic integration and regulatory coherence and cooperation.

The TPP has achieved qualified success in strengthening international law on competition. Chapter 16 is essentially “soft” law, raising questions of enforceability. It uses words like should instead of imposing requirements, and it exempts infractions from the dispute settlement mechanism. In this respect the chapter respects the current preference of competition regulators for a model of cooperation and collaboration.²

By contrast, key parts of Chapter 17—which deals with state-owned enterprises (SOEs), some of the biggest culprits in stifling competition—are written as “hard” law, modeled on trade agreement-type commitments covered by dispute settlement and the threat of suspension of equivalent concessions in the event of a breach. Chapter 17 signals a new strategy to discipline SOEs through trade law commitments as distinct from antitrust principles.

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1. Of the 20 free trade agreements the United States has negotiated, 7 include a competition chapter (the North American Free Trade Agreement [NAFTA] and the agreements with Chile, Singapore, Australia, Peru, Korea, and Colombia).

2. This cooperative regulatory model is embodied in the International Competition Network (ICN), a virtual network of regulators that is described later.

These differing approaches make the TPP a laboratory for testing the effectiveness of sometimes competing, but ideally complementary, approaches. At the same time, TPP members retain wide latitude to assert unilateral jurisdiction over anticompetitive behavior they deem to have an effect on their economies.

Building on the provisions of existing free trade agreements, the most important contributions of the TPP, particularly from a stakeholder perspective, are the protections of procedural fairness in competition law enforcement in Article 16.2 and the new hard-law rules applicable to the behavior of SOEs. In addition, the TPP reinforces the view that the purpose of competition law is “to protect economic efficiency and consumer welfare” (as distinct from protecting competitors, particularly those that may be national champions) while promoting cooperation and coordination among national competition authorities. The encouragement of private rights of action in the agreement is both novel and necessary to provide redress, particularly in countries where the authorities enforcing competition laws may not be fully independent from political influence. Provisions on cooperation and technical assistance could well prove meaningful in promoting ongoing collaboration among regulators in the context of an agreement aiming at economic integration and overseen by political leaders keen on seeing concrete results.

The natural synergy between trade and competition is grounded in the fact that both policy arenas focus on exploiting the gains to productivity and economic growth from the efficient operation of markets. Traditionally, trade has addressed barriers to market access (tariffs, quotas, nontariff barriers), while competition was largely a domestic regulatory affair concerned with market structures and the anticompetitive behavior of market participants. The success of globalization, driven by both the reduction in trade barriers and technological advances in transportation, communication, and value-added production chains, has meant that powerful gains flow from contesting global markets. While trade negotiators have led these trends, market regulators have followed closely behind, honing their models and addressing the challenges of competing national regulatory domains with ever more sophisticated tools of investigation and regulatory cooperation.

The outcome of the TPP negotiations can be assessed through three prisms: How does it build on the history of efforts to develop international competition standards and cooperative arrangements? How does it look relative to peer agreements and minilateral, plurilateral, and multilateral arrangements? How is it positioned to address the major challenges facing international competition law and policy in the context of an ambitious economic integration agreement?

HISTORICAL CONTEXT FOR COMPETITION POLICY IN THE TPP

Three key historical developments provide a context for understanding the TPP and the impact of competition policy on international economic relations.

Failure of Hard-Law Competition Initiatives

Some scholars credit the European Community as the first jurisdiction in modern times to recognize the need for and articulate a framework for global competition law and policy (Fox 2011). This narrative invites one to forget (perhaps for good reason) the work of people like Sumner Wells and Harry Hopkins in the aftermath of World War II.

For its sheer ambition, the proposal of the United States for an International Trade Organization (ITO) was unprecedented. It represents the high ground, if not the gold standard, for international rules and institutional architecture in competition law. The ITO charter contained substantive provisions calling on states to take measures to ensure that enterprises do not engage in a set of “restrictive business practices” (identified in considerable detail) and “any similar practices which the Organization may from time to time decide are

restrictive business practices.”³ Moreover, it empowered the organization to investigate, make findings, call for remedial action, and report on remedial action taken. This authority was set in the context of an organization centered on trade, with comprehensive rules to ensure nondiscrimination and transparency, procedures for ongoing negotiations, and institutional provisions for decision-making and dispute settlement.⁴

There is room for debate over whether controversy regarding the competition provisions of the ITO contributed to its ultimate fate (compare the papers by Diebold 1952 and Gerber 2010). One factor that led to its demise was the growing sense that US economic power would allow the United States to assert its authority over global rule making through its willingness to assert jurisdiction over matters beyond its borders.

Jurisdiction-Based Regime for Global Competition

The jurisdiction-based regime of international regulation was a powerful tool for convergence around US norms until the emergence of challenges to US regulatory hegemony, first from Europe and increasingly from emerging markets, most notably China. Since 1944 and the now famous *Alcoa* case, US antitrust laws have been applied globally, through the effects doctrine, giving the United States a preeminent place in global antitrust regulation in the 21st century.⁵ The accessibility of US courts, US-style discovery, and high damage awards, combined with the expertise of US lawyers, judges, officials, and institutions, have come close to making the United States a world antitrust forum (Gerber 2010), even a regulatory superpower.

In recent times, the attention of regulators has focused increasingly on the review and approval of mergers and acquisitions. Following the US lead, other countries and country groups, particularly the European Union, have stepped up to assert jurisdictional claims. Mergers have become an opportunity for any state with a jurisdictional hook to insist on a negotiated settlement as the price for approval, notwithstanding comity agreements negotiated to allay jurisdictional interests.

Because the United States was a first mover in the development of international competition law and developed considerable experience in its application, a jurisdiction-based model was an inevitable, and even necessary, contribution to the evolution of the law. However, as other countries assumed a greater role in international commerce and developed their own ideas about unilateral assertion of jurisdiction, problems posed by competing jurisdictional regimes based on assertions of sovereignty became apparent, from the disproportionate role of political and economic power to the opportunities for harassment of legitimate business deals. This trend in turn has led to renewed efforts to achieve convergence through agreement and regulatory collaboration. But jurisdictional prerogatives remain an important factor in negotiations insofar as unilateral action is the default mechanism in the event that agreements on substantive rules fail.

International Competition Network, Soft Law, and the Quest for Convergence

The most recent—and by some accounts most effective—efforts at policy convergence have come through the more modest efforts of national regulators to gain cooperation on best practices, principally through the International Competition Network (ICN), which brings together regulators, government officials, and the private sector in a virtual network. Formed in 2001, it focuses on the dissemination of understanding and best practices rather than top-down rule making. It can be seen as the triumph of regulatory cooperation over

3. “Draft Charter for the International Trade Organization of the United Nations,” Article 44, (3) (a-g).

4. There is irony in the fact that it was the United States that both proposed and disposed of this initiative, setting up the dynamic between policy and politics that continues to this day.

5. The 1982 Foreign Trade Antitrust Improvements Act (FTAIA) limits the effects test by requiring that effects be “direct, substantial and reasonably foreseeable” (15 USC §6a (1982)).

international hard law.⁶ Fifteen years after it was created, the ICN appears to be where the action is in regulatory cooperation around competition policy, because its membership is not limited (like the Organization for Economic Cooperation and Development [OECD]) and it is more active than the OECD or the United Nations Conference on Trade and Development (UNCTAD) in building consensus around substantive rules (Hollman and Kovacic 2011).

The ICN represented a change in strategy away from hard-law mechanisms like the World Trade Organization (WTO) in favor of regulatory collaboration, technical assistance, and the promulgation of best practices adopted on a voluntary basis. It came after almost a decade of debates between the European Union, which sought expansion of the WTO to cover competition, and the United States, which opposed WTO involvement in antitrust issues.⁷ The success of the ICN is based on its “stronger capacity to promote broad adoption of global standards” through its innovative structure, in which regulators, government officials, and private sector experts engage over specific projects. However, the “extent of adherence to the network’s recommended practices remains unclear” (Hollman and Kovacic 2011, 276).

A critical question is how the TPP will fit into this network. Will it compete with its rivals for attention and resources? Hollman and Kovacic stress that these mechanisms are dynamic and ongoing and that their effectiveness depends entirely on the willingness of their “shareholders” (namely, the governments whose budgets fund them) to commit resources, especially the time and attention of the senior officials who are engaged day to day in implementing their countries’ competition laws. In this regard the TPP may be redundant unless it can play a role in adherence and enforcement, the hard-law side of the equation, thanks to its economic weight and the political engagement of government leaders, not simply its regulators.

SUBSTANTIVE PROVISIONS OF THE TPP DEALING WITH COMPETITION

Objectives

The key objective of the Competition Policy chapter is to promote “economic efficiency and consumer welfare” (Article 16.1). The “Parties recognize the importance of cooperation and coordination between their respective national competition authorities to foster effective competition law enforcement in the free trade area” (Article 16.4).

These objectives are relatively uncompromised by reference to competing objectives, even though some countries do not see competition policy in quite the same terms as the United States, which views it in terms of the efficiency of markets and the protection of consumers. Taylor (2009) points to the challenge of balancing market efficiency with the various distributional objectives advanced by some states as a counterbalance to market efficiency. He cites a 1998 WTO study⁸ identifying 10 distributional objectives in domestic competition law, from employment to regional development and “the diffusion of economic power via the protection of smaller enterprises” (Taylor 2009, 315).

The TPP appears to have avoided the problem of explicit reference to competing objectives, but Article 16.1.1 cites the Asia-Pacific Economic Cooperation (APEC) principles, which TPP parties “should take into account.” The APEC principles contain language that recognizes that policy and regulation “may have objectives other than promoting competition,” that the members will have “flexibility” to “take into account their diverse

6. Anderson (2011) identifies four rationales for international cooperation in competition law and policy: avoidance of conflicts or comity, efficiency of enforcement, mutual learning and voluntary convergence, and political market failures that result in underresourcing important institutions.

7. Competition was initially included in the Doha negotiations when they were launched in 2001; it was dropped at the Cancun ministerial in 2003.

8. WTO Secretariat, “Synthesis Paper on the Relationship of Trade and Competition Policy to Development and Economic Growth,” WT/WGTTPC/W/80, September 18, 1998.

circumstances,” that “exemptions and exceptions from a competition driven regulatory framework may be necessary and that these will be implemented in a way that minimizes economic distortion.”⁹ These competing objectives may be especially relevant if China seeks membership in the TPP, because its competition law gives more weight to social considerations and distributional fairness (Taylor 2009).

Definition of Anticompetitive Activity

Like US free trade agreements—and in contrast to the approach of the European Union—the TPP avoids identifying specific anticompetitive practices (Teh 2009, Tschaeni and Engammare 2013). The decision not to identify them was as much a strategic choice as a tactical one. US regulators see significant risks in articulating standards when countries have already implemented them in domestic law. According to Assistant Attorney General for Antitrust Bill Baer, the international community has moved closer to agreement regarding action against cartels—the preoccupation of the ITO a half century ago—in that “there is near unanimity about the importance of fighting price fixing, bid rigging and market allocation” (Baer 2015). Merger enforcement is following a similar pattern, with progress among authorities in “deciding when and how to evaluate consolidation” and collaboration among regulators in the OECD and ICN for resolving questions about how to evaluate harm, determine affected markets, and develop best practices to answer them.

An important area the TPP did not tackle is anticompetitive single-firm conduct, an area that Baer argues “is important to get right.” Baer cites Joel Klein, former assistant attorney general in the Antitrust Division of the US Department of Justice, who notes that “we need a common language even if we cannot achieve pure convergence.”¹⁰ Referring to the dangers of both overregulation and underregulation, Baer identifies “a broad consensus that market power—some call it dominance—should be at the heart of any unilateral conduct violation.” The important thing, he argues, is that discussions about what constitutes market power occur among enforcers outside the context of individual cases, in conferences like those organized by the OECD and the ICN. Whether the TPP becomes a forum in which enforcers and governments engage or is relegated to the sidelines of international regulatory consensus-building activities remains to be seen.

Procedural Fairness in Enforcement

Transparency, procedural fairness, and even-handed application of antitrust principles are other areas in which progress toward international consensus has been made (Baer 2015). The TPP includes a set of explicit rules, including the right to counsel, a reasonable opportunity to be heard and to present evidence, the right to offer expert analysis, the right to cross-examine any testifying witness, and the right to appeal/seek review from a court or independent tribunal. These provisions are drawn from the work of the ICN and the OECD.¹¹ A number of private sector interests have sought coverage of these procedural issues, which stand as one of the important achievements of the TPP.

Private Rights of Action

The TPP gives private petitioners a soft-law assurance of a right to bring an action for redress directly or, where this is not available, at a minimum a hard-law right to petition the authority for action. The provisions of Article 16.3 state that “each Party should adopt or maintain laws or other measures that provide an independent

9. *APEC Principles to Enhance Competition and Regulatory Reform*, Auckland, September 13, 1999.

10. Joel I. Klein, “Time for a Global Competition Initiative?” Remarks prepared for the 10th Anniversary Conference of EC Merger Control, September 14, 2000, www.justice.gov/atr/speech/time-global-competition-initiative.

11. See *ICN Guidance on Investigative Process*, International Competition Network, 2015, www.internationalcompetitionnetwork.org/uploads/library/doc1028.pdf, and *Procedural Fairness and Transparency: Key Points*, OECD Competition Committee, 2012, www.oecd.org/competition/mergers/50235955.pdf.

private right of action” that would provide a right to redress for injury caused by a violation of national competition laws in the form of “injunctive, monetary and other remedies.” This language breaks new ground in the realm of international competition law and appears to be unprecedented in free trade agreements, in both TPP and non-TPP states, although a number of TPP states have such remedies in their domestic laws. The language is somewhat soft: “Each Party should adopt or maintain laws or other measures that provide an independent private right of action” (Article 16.3.2). However, if a party does not have such a law, it “shall” ensure the right to request an investigation of a violation and “to seek redress from a court or other independent tribunal following a finding of violation by the national competition authority” (Article 16.3.3).

This language responds in particular to the demand of private interests in countries that do not have competition authorities that are sufficiently independent to ensure a right of redress for violations of their laws. How effectively it will work will depend in large part on the willingness of private parties to use the provision, especially when faced with judicial authorities that may themselves not have the independence from political influence to ensure a fair and impartial proceeding. Moreover, the Transparency and Anti-Corruption chapter of the TPP could come into play to protect private parties from undue political influence in regulatory investigations.

Cooperation and Consultations

The provisions on cooperation are general. They focus on the exchange of information and enforcement at the level of the parties and acknowledge that competition authorities may enter into cooperation arrangements on mutually agreed terms. They follow a familiar pattern in US free trade agreements, which emphasize the importance of collaboration among competition authorities covering technical cooperation, comity, investigations, and information sharing.¹²

Transparency

Transparency is an important public policy concern and private sector issue, as demonstrated by the inclusion of a strong general transparency and anticorruption chapter (Chapter 26) as well as a section in the competition policy chapter (Article 16.7) that supplements the general provisions with language specific to competition. However, several provisions in Article 16.7 use soft-law language, in which the parties “recognize the value” of transparency and “endeavor to maintain and update information” on national competition laws, policies, and enforcement activities in the APEC Competition Law and Policy Database. By contrast, the agreement includes hard-law requirements regarding information requests from parties and final decisions finding violations of competition laws. These requirements mandate writing that sets out findings of fact and reasoning, including economic analysis and publication (unless not practical), subject to the protection of confidential information.

Although transparency provisions are rarely the subject of disputes,¹³ all the provisions in the competition policy chapter are subject to exclusion from dispute settlement. This compromise may be minor, given the important new rules on SOEs in Chapter 17, which are subject to dispute settlement. Nevertheless, in this respect the TPP sets a lower standard than the Korea-US and US-Singapore free trade agreements, which allow dispute settlement with regard to the transparency provisions in their competition chapters.¹⁴ Under Article 1.2, US

12. Both the US Justice Department and the US Federal Trade Commission have bilateral agreements with Australia, Canada, Chile, Mexico, and Japan (see www.justice.gov/atr/antitrust-cooperation-agreements and www.ftc.gov/policy/international/international-cooperation-agreements).

13. The recent dispute with China regarded its compliance with requirements for subsidy notifications.

14. The exemptions in both the Korea and Singapore free trade agreements exclude only specific provisions of their competition chapters. They do not refer to the transparency provisions.

rights under the higher standard agreements would apply, so the United States would be able to assert—and be subject to—the higher standard with respect to Singapore and Korea.

Dispute Settlement

The provision on dispute settlement in the competition chapter is straightforward on its face: “No party shall have recourse to dispute settlement... for matters arising under this Chapter.” A number of questions are raised by this exclusion from the dispute settlement mechanism. Why include competition provisions if they are not enforceable? Does exclusion mean that dispute settlement in the TPP will never address competition policy issues? Are there ways other than the dispute settlement mechanism to ensure enforcement?

Competition provisions in the TPP are necessary to address real concerns about the interaction between trade and competition policy. Although trade agreements tend to be top-down agreements that force economies to accept obligations as they are implemented in law by executive authority, they are compatible with the more bottom-up approach of regulatory cooperation, in which a range of incentives—peer pressure, reputation, market disciplines, financial assistance conditionality, name and shame, capital market and membership sanctions—are used to motivate compliance with standards. Brummer (2012) analyzes similar factors at play in international financial regulation in what is widely recognized as soft law. The history of the ICN demonstrates that the need to solve common problems can be a powerful force for convergence (Hollman and Kovacic 2011). That is not to say that there will not be resistance, particularly when competition authorities demonstrate their independence in taking a stand opposed to that of the authorities in another country, as was the case when the EU competition authorities prevented the merger of General Electric and Honeywell, which the US antitrust authorities had been prepared to approve. Differences will inevitably arise in the context of large, complex, and dynamic markets, but the relationships—legal, official, and personal—and the stakes involved in making integration agreements a political success will mitigate these differences.

Consumer Protection

Article 16.6 builds on the Korea-US free trade agreement but identifies in detail the particular offense to which it should apply—namely, fraud. According to US negotiators, all the TPP countries have consumer protection laws. Inclusion of these provisions responds to interests that wanted to see them included in the TPP. They found a comfortable home in the competition chapter, reflecting the fact that competition authorities in some TPP countries have dual competition and consumer protection missions, as does the US Federal Trade Commission. Interestingly, the article on consumer protection is the only one in the competition chapter that refers to the objective of “creating efficient and competitive markets” in addition to “enhancing consumer welfare in the free trade area” (Article 16.6.1). The parties agree not only to enforce consumer protection laws but also to direct those laws to “proscribe fraudulent and deceptive commercial activities,” including misrepresentation, failure to deliver products, and charging consumers without authorization. The article includes broad language to promote cooperation and coordination among parties, including in enforcement matters, through their relevant national regulators.

Curiously, the procedural fairness provisions applicable to enforcement of competition law do not apply to consumer fraud investigations, which were not a particular concern of stakeholders at the time the agreement was crafted. Including them could be a useful improvement for the future.

State-Owned Enterprises and Designated Monopolies

Chapter 17 represents a more revolutionary approach to rule making than the more modest evolutionary approach of the competition chapter.¹⁵ The obligations are aimed at improving on the General Agreement on Tariffs and Trade (GATT)/WTO rules governing state trading enterprises (Article XVII), which rely on what scholars and panels consider weak and ambiguously drafted provisions on nondiscrimination and commercial considerations. Chapter 17 represents a critically important development in trade law and a major accomplishment of the TPP. However, the impact of these new rules will depend on how the definitions, exceptions for nonconforming measures, and treatment of subfederal entities affects US commercial interests. The provision, like other provisions, will be part of an ongoing negotiation that in the case of SOEs is scheduled to take place in five years.

The SOEs chapter is separate from the competition chapter. How consequential this distinction will be may depend on whether competition authorities cede significant responsibility for the anticompetitive behavior of entities that enjoy a degree of state sanction for their activities.

CONCLUSION AND POLICY IMPLICATIONS

The real story behind the TPP—and what makes it a true 21st century agreement—is the combination of hard-law and soft-law mechanisms to promote coherence and convergence around principles, rules, and procedures in critical regulatory areas, like competition. The model is pragmatic, flexible, and dynamic. Its ultimate success will be measured by the extent to which it contributes to economic integration across the TPP countries.

Inclusion of competition policy in the TPP is an example of trade as a model, magnet, and laboratory for experimentation. The big differences between the TPP and cooperative arrangements like the ICN and OECD are threefold: The TPP involves governments, not simply regulatory authorities, from a wide range of countries; it covers a broad scope (and hence has more levers to pull); and it may include future negotiations in which the overriding interest of states is to enlist the power of economic integration to promote economic growth and public policy objectives. The failure of the Doha Development Agenda and the state of the WTO as a negotiating forum make this opportunity to develop new rules an increasingly important concern.

One thinks of trade agreements as being about rules and law. But the success of the TPP will be as much about relationships and a shared strategic vision. This lesson has been internalized in the regulatory cooperation networks that seek to bring together the expertise of politically independent regulators in pursuit of solutions to common regulatory problems. The TPP creates a big tent within which political leaders, economic and trade officials, and regulators each play a role in the context of a set of soft and hard rules and procedures.

The success of the TPP in advancing competition policy will depend in large part on questions that are not answered by a textual analysis, even one informed by history. Ultimately, it will depend on whether the close relationship between trade and competition will create a problem-solving dynamic that is harmonious and leads to greater economic integration. The TPP represents a work-in-process style agreement that could provide a platform for ongoing efforts toward greater regulatory coherence, inaugurating an era of permanent, ongoing negotiations in the context of a modern trade agreement in which the relationships and strategic importance of the agreement seek to catalyze the evolution of substantive obligations. Ultimately, the TPP will be judged by its impact on multilateral rules, including the appeal of the approach to new members, especially China and ultimately the WTO.

15. [Chapter 8](#) of this volume, by Sean Miner, examines Chapter 17. It is therefore, not explored in detail here.

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CHAPTER 8

COMMITMENTS ON STATE-OWNED ENTERPRISES

SEAN MINER

The rise of state-owned enterprises (SOEs) in many countries has alarmed the business world. Private firms observe that SOEs enjoy distinct advantages while operating in their domestic markets and abroad, allowing them to unfairly capture market share. These advantages include government support and protection in the form of favorable regulations, lax enforcement of competition policies, preferential treatment when making purchases or sales, and outright subsidies. Moreover, the sheer size of some SOEs, their opacity, and close connections with political leaders have fueled suspicions that governments will continue to ensure a favorable business environment for these enterprises.

International trade rules under the World Trade Organization (WTO) and various free trade agreements (FTAs) have attempted to discipline the behavior of SOEs, but with limited success (Bergsten, Hufbauer, and Miner 2014). By comparison, the provisions in the Trans-Pacific Partnership (TPP) are more ambitious. Chapter 17 in the TPP agreement establishes comprehensive standards for the management of SOEs, more than in any prior international agreement. Although exemptions for subcentral SOEs and those under a revenue threshold will limit some of its ability to create a completely level business environment, the TPP represents a major step in defining the rules of commercial engagement for SOEs. The main goal of the TPP rules is not to prohibit SOEs, rather to discipline policies that give SOEs an unfair advantage over private firms.

All TPP countries have SOEs, including the United States (e.g., Amtrak and the United States Postal Service [USPS]), though most (except Malaysia and Vietnam) have less than a few dozen, primarily in industries such as energy production and distribution. To be sure, the commitments on SOEs will likely have a small effect on countries where SOEs have a less prominent role; however, countries like Vietnam with a vast state sector will need to drastically change their behavior.

Notably, Chapter 17 seems to have been written with China's potential entry into the TPP in mind. China has the largest state-owned sector in the world with over 100,000 SOEs, and complaints about the unfair advantages enjoyed by Chinese SOEs have been mounting over the years. The chapter is designed so that any prospective members must accept obligations on all SOEs, including subcentral SOEs, and negotiate any exceptions from the ground up. This could give the original TPP members some leverage when negotiating China's entry.

Chapter 17 basically prohibits SOEs from discriminating against other TPP firms when buying or selling goods or services. The TPP seeks to ensure that SOE purchases and sales are made only on the basis of commercial considerations. The text also prohibits the use of noncommercial assistance, namely subsidies, to

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support SOEs in many cases. The prohibition of harmful subsidies and favoritism will ensure that many SOEs operate on a more level playing field as any advantages over private firms are reduced, thus creating a more competitive business environment. Moreover, the TPP ensures that local courts have jurisdiction over SOEs in civil claims concerning commercial matters, and administrative bodies that regulate SOEs must ensure compliance in an impartial manner.

The TPP contains groundbreaking provisions on transparency that will require countries to provide other TPP members a list of all SOEs or otherwise list them on a public website. Each member must also provide information on specific SOEs upon the request of other TPP parties. For example, TPP members must disclose the percentage of government shares held in an SOE, the titles of government officials serving as officers or on the board, annual revenues, special legal benefits, and information on any policy or program that provides subsidies.

All SOE provisions are subject to the dispute resolution mechanism of the TPP, meaning that any violation could ultimately result in trade sanctions. A committee will be set up to monitor and review the implementation of SOE provisions, meeting at least annually. Moreover, the TPP countries commit to “further negotiations” within five years of entry into force to extend the application of disciplines on subcentral SOEs and subsidies.

The SOE provisions in the TPP exempt enterprises with an annual revenue below 200 million Special Drawing Rights (SDRs), about \$280 million, in any of the past three years; certain subsidies; country-specific nonconforming measures; official export credit agencies, like the US Export-Import Bank; and many SOEs owned by subcentral governments. Sovereign wealth funds, including Singapore’s Temasek, are largely exempt from Chapter 17 except that they, like governments, are also barred from providing subsidies to SOEs. Last, services provided by SOEs in their domestic market are also exempt, thus any subsidies received by USPS, Japan Post, or Amtrak, for example, will not be disciplined as long as the SOE operates only in its home market.

DEFINING SOES

Many SOEs have mixed ownership and it may not be clear whether the government has an important say in company operations. A big concern are SOEs where the state is not the majority shareholder but still effectively controls them. Could an enterprise with that structure evade the Chapter 17 disciplines? This question makes the TPP definition of SOEs crucial. The TPP defines an SOE as an enterprise:

- (a) that is principally engaged in commercial activities; *and*
- (b) in which a Party [a State]:
 - i. directly owns more than 50 percent of the share capital;
 - ii. controls, through ownership interests, the exercise of more than 50 percent of the voting rights; *or*
 - iii. holds the power to appoint a majority of members of the board of directors or any other equivalent management body.

While this definition is narrower than the one in the US-Singapore FTA, it is sufficiently broad to cast a wide net over the most troublesome enterprises. The enterprise must engage in commercial activity—in other words, sell or purchase goods or services—which leaves out regulatory agencies and other entities that merely grant licenses or permits.

The second part of the definition is more nuanced, since an entity that meets any of the three criteria will be considered an SOE. The first and second provisions are clear: If a state owns or has a voting share of more than half of the enterprise, it is an SOE. This covers the vast majority of enterprises considered to be state-owned. However, the third provision provides reasonable scope for encompassing enterprises where it may not be so

clear whether an enterprise is state-owned. It asks whether the state has control over the board of directors, or a similar body in charge of hiring top-level managers. Effectively, if the state can appoint a majority of the board of directors, the enterprise is considered an SOE and will be covered by TPP provisions. This criterion includes enterprises where the state owns no shares or has no equity voting rights but controls hiring of the top management. It also likely includes firms that are highly dependent on regulatory approval or public funds and the government effectively selects the board. In practice, proving that a state controls the board or similar entity may be difficult, and the complaining party will be responsible for making a convincing argument.

Chapter 17 also covers designated monopolies, including any private monopoly designated as such after the agreement enters into force, or a government monopoly that is owned or controlled by the state. This definition covers national oil and gas firms, monopoly providers of electricity, and other enterprises that are the sole provider of a good or service.

SOEs IN CURRENT TPP MEMBERS

The majority of the TPP members have a small state-owned sector, usually comprising a few dozen firms and mainly confined to traditional state-owned sectors like energy production and distribution, mineral extraction, or lending related to mortgages or other local development financing.

The commitments on SOEs will have little effect on those countries, but Vietnam is a different story, due to its significant state sector. SOEs make up over 30 percent of Vietnam's GDP and use 60 percent of the bank loans.¹ According to the Organization for Economic Cooperation and Development (OECD), in 2012 Vietnam had over 3,300 SOEs, employing 1.5 million people, around 15 percent of total employment.² Of these, around 1,500 are subcentral SOEs, though they employ less than 25 percent of the 1.5 million SOE workers. These enterprises are smaller, averaging 260 employees, compared with around 800 for centrally owned SOEs. OECD data show that in 2012 the value of centrally owned SOEs was around \$100 billion, compared with \$10 billion for subcentral SOEs.

Malaysia has around 330 centrally owned SOEs and 100 subcentrally owned SOEs.³ These SOEs employ around 400,000 people, and as of 2005, were valued at nearly \$20 billion, or 15 percent of Malaysia's GDP of \$144 billion that year.⁴

Mexico has the next largest state-owned sector, with nearly 70 SOEs in 2012, valued at over \$80 billion, though the vast majority of the value is dominated by energy firms like Pemex, Mexico's state-owned oil company.

NONDISCRIMINATORY TREATMENT AND COMMERCIAL CONSIDERATIONS

Nondiscriminatory treatment and commercial considerations are among the main disciplines on SOEs and are explained in Article 17.4. The TPP has refined the definition of commercial considerations from previous trade agreements, removing some ambiguity. It defines commercial considerations as:

1. The GDP figure includes five state-owned banks. See "Breakthrough made in TPP negotiations on Vietnamese SOEs," *VietNamNet Bridge*, October 18, 2010, <http://english.vietnamnet.vn/fms/business/87015/breakthrough-made-in-tpp-negotiations-on-vietnamese-soes.html> (accessed on December 1, 2015).

2. Data from OECD Database on National Practices and Regulations with Respect to State Enterprises, <http://qdd.oecd.org/subject.aspx?Subject=8F22EF7D-B780-4570-A4B1-7E0CB3AD7E04>.

3. *Ibid.*

4. GDP data from the World Bank's *World Development Indicators*, <http://data.worldbank.org/data-catalog/world-development-indicators>; and SOE data from the OECD, <http://stats.oecd.org/>.

price, quality, availability, marketability, transportation, and other terms and conditions of purchase or sale; or other factors that would normally be taken into account in the commercial decisions of a privately owned enterprise in the relevant business or industry. (Article 17.1)

SOEs must act in accordance with these considerations and accord equal treatment when purchasing or selling a good or service. They cannot favor domestic enterprises over foreign ones in their business dealings. Similar clauses apply to designated monopolies.

The last part of the definition—taking into account the commercial decisions of private firms in the relevant industry—makes it much easier for the complaining party to build a case that an SOE was acting for the state rather than as a private firm.

NONCOMMERCIAL ASSISTANCE

Private firms and business groups have long targeted noncommercial assistance, or subsidies, because of the unfair advantages it gives to SOEs. Noncommercial assistance is explicitly defined as “assistance to a state-owned enterprise by virtue of that state-owned enterprise’s government ownership or control.” Assistance means direct transfers like grants, debt forgiveness, favorable loans, guarantees, favorable equity investment, or cheaper goods or services than those commercially available. “By virtue of that state-owned enterprise’s government ownership or control” is defined as government assistance that goes “predominantly” or “disproportionately” to the SOEs of that state.

To be clear, the TPP does not ban subsidies, only those provided to SOEs that cause “adverse effects” to another firm, similar to conditions that apply to private firms. Importantly, SOEs are also prohibited from providing noncommercial assistance to any of their own SOEs, such as subsidiaries or other linked SOEs through the sometimes complex state-owned networks. Moreover, SOEs operating in another TPP member’s territory are prohibited from causing “material injury,” or even the threat of material injury, or “material retardation of the establishment of such an industry,” to a domestic industry there through the use of noncommercial assistance, or subsidies.

The TPP lays out very specific instances where subsidies are deemed to adversely affect another firm, making prosecution of a violation easier. It defines these conditions more narrowly than the WTO Agreement on Subsidies and Countervailing Measures (ASCM). The main points are that if the sale of a manufactured good from an SOE that received a subsidy “displaces or impedes” the sale, or significantly undercuts the price, of a like good from an enterprise of another Party, then the subsidy is found to violate the TPP agreement.

Another notable aspect of “adverse effects” is that a private firm from a TPP country competing with an SOE in selling goods in a non-TPP country market is protected against subsidies in that third party as well. Annex 17-C calls for “further negotiations” within five years to extend the disciplines on subsidies and to address adverse effects caused in a non-TPP country by the supply of services by an SOE.

Article 17.6 contains an exception that a service supplied by an SOE in its home territory “shall be deemed to not cause adverse effects.”⁵ So SOEs like the USPS and Amtrak operating in the United States are not subject to the TPP disciplines, and subsidies provided to them could not be found to be harming other enterprises competing with them there. This exemption is an important consolation by the negotiators that could have important limitations after the expansion of the TPP. This means it might be more difficult to impose similar restrictions on the large state-owned service sector in a country like China.

5. Article 17.6.4 of Chapter 17 of the TPP text states: “A service supplied by a state-owned enterprise of a Party within that Party’s territory shall be deemed to not cause adverse effects.”

The exemption, however, does not cover cross-border activity, so if USPS expanded abroad, any subsidies that adversely affected another firm could be found violating the chapter disciplines. The provisions state that SOEs that supply services abroad will be forbidden from receiving subsidies that “displace or impede” the sale, or significantly undercut the price, of a like service supplied by another party, as mentioned above. This is the first time disciplines on subsidies for services have been established for SOEs in cross-border activity.

TRANSPARENCY

The TPP makes significant strides in the area of transparency, mandating that the public or at least TPP members have access to more information on SOEs. First, all TPP members must provide other members, or otherwise make publicly available on a website, a list of all their SOEs, so there is no discrepancy between entities that are SOEs and those that are not.^{6,7} And they must also either provide TPP members or make publicly available on a website the designation of new monopolies or the expansion of a monopoly. Upon a TPP member’s request, a state must promptly provide a host of details of an SOE or designated monopoly, including:

- a) percentage of shares that a party, its SOEs, or designated monopolies cumulatively own, and percentage of votes that they cumulatively hold, in the entity;
- b) a description of any special shares or special voting or other rights, that the party, its SOEs, or designated monopolies hold, to the extent the rights are different than the rights attached to the general common shares of such entity;
- c) the government titles of any government official serving as an officer or member of the entity’s board of directors;
- d) the entity’s annual revenue and total assets over the most recent 3-year period for which information is available;
- e) any exemptions and immunities from which the entity benefits under the party’s law; and
- f) any additional information regarding the entity that is publicly available, including annual financial reports and third-party audits, and that is sought in the written request.

Additionally, the parties must, upon request, promptly provide information on any policy or program that provides subsidies, allowed or not.⁸ The response must include specific information: the form and annual amount of the subsidy (grant, loan, etc.), name of agencies and SOEs that have received or could receive a subsidy under the program or policy, the legal basis for the policy or program, and in the case of a subsidized loan, the amount of the loan and the interest rate. Moreover, in the case of policies or programs providing subsidies like intermediate inputs, the response must specify the price charged of the good or service affected and, in the case of equity capital, the amount invested and the shares received.⁹

This extensive list of obligations could change the opaque nature of many SOEs and constrain future practices. As many SOEs thrive on their close relationship to the government and beneficial policies, these obligations may make some forms of subsidies hard to swallow for the public of some nations. One objective

6. Vietnam, Malaysia, and Brunei are given longer phase-in periods to be subject to these conditions. Vietnam and Malaysia won’t have to publish the full list of their SOEs until five years from entry into force of the TPP, meaning those with revenue of over SDR 200 million (\$280 million) in one of the last three years. But within six months of entry into force, both countries will have to publish the SOEs with revenue of over SDR 500 million in one of the last three years. Brunei will have three years to publish the SOEs that had revenue of over SDR 500 million in one of the last three years.

7. This exempts SOEs with reported revenue of less than SDR 200 million in all of their last three years. Ten of the 12 TPP members are exempt from having to list subcentrally controlled SOEs.

8. The written request for information must include an explanation of how the policy or program may affect trade or investment between the parties.

9. Any party may request that any information submitted under the article of transparency be kept confidential.

of the transparency obligations is to “name and shame” the agencies and SOEs involved, with the hope that the thought of the subsidy being made so public may deter the subsidy in the first place. Another objective is to simply keep track of all the government-provided subsidies.

SUBCENTRAL SOEs

SOEs owned by the subcentral level of government are not subject to most of the TPP obligations. Similar to a negative list, Annex 17-D notes which obligations will not apply to each country’s subcentral SOEs.¹⁰ Table 8.1 shows exemptions for subcentral SOEs in each of the 10 countries in the annex. Notably, Singapore and Brunei are not listed in this annex as they have few levels of subcentral government; therefore, TPP provisions would cover any subcentral SOE in those two countries. Malaysia, Mexico, and Vietnam are the only countries not subject to any transparency obligations for subcentral SOEs.

Current and future subcentral SOEs in the United States (e.g., New York Port Authority and the New Jersey Turnpike Authority), like in most other TPP countries, are exempt from many of the provisions prohibiting subsidies and discrimination in purchases and sales. Specifically, US subcentral SOEs are exempt from the obligation that SOEs must purchase and sell based only on commercial considerations as well as non-discrimination. Similarly, they are exempt from clauses prohibiting the use of subsidies that adversely affect production and sale of a like good, supply of a service in another TPP country, or the supply of a service in a territory outside of the TPP.

TPP negotiators missed an opportunity here. Many US multinationals complain that in countries like China, where subcentral SOEs are both large and prevalent, local government subsidies to local SOEs remain a big problem. While China is not a member of the TPP, it may well try to join one day, and it could demand similar exemptions. For foreign multinationals operating in current TPP members, however, subsidies to subcentral SOEs are less of a problem mainly because they are not great in number or size. While there is little to stop a TPP member from restructuring future SOEs at the subcentral level, and growing the state-owned sector in that manner, doing so may be more difficult than it sounds.

Subcentral SOEs in most TPP countries are still prohibited from receiving subsidies that cause *injury* to another country’s domestic industry. This obligation ensures some protection from large subcentral SOEs that may be receiving assistance at home and undercutting the manufacturing industry of another country. One example of this behavior is when a firm “dumps” products into the market of another country, inhibiting the growth of the industry there.

Explicitly listing exemptions in the annex, however, may give the original TPP members an advantage when negotiating with prospective TPP members. Prospective members will have to basically start from zero, meaning they have to accept the entire text as is, where subcentral SOEs are still subject to the provision, and must negotiate any exceptions for subcentral SOEs one by one, which will likely make it difficult to negotiate broad exceptions. This is harder on the prospective member than if the exceptions for subcentral SOEs were simply in the main chapter rather than in the annexes. All original members have to agree to accept new members into the TPP, making negotiations to secure many exemptions difficult, especially if the prospective member has a large state sector.

To address the notable holes left by subcentral exemptions in Annex 17-D, Annex 17-C calls for “further negotiations” within five years of entry into force to extend the disciplines to the activities of subcentral SOEs. Depending on how negotiations progress for new members at that time, the original members could look to bring in more disciplines for subcentral SOEs.

10. The 10 countries listing exceptions in Annex 17-D are Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, United States, and Vietnam.

Table 8.1 Subcentral SOE exemptions

SOE obligations	New									
	Malaysia	Mexico	Japan	Zealand	Canada	United States	Vietnam	Chile	Peru	Australia
Buys or sells a service or product with only commercial considerations	x	x	x	x	x	x	x	x	x	x
Makes purchases using national treatment	x	x	x	x	x	x	x	x	x	x
Sells according to national treatment	x	x	x	x	x	x	x	x	x	x
Treats investors according to national treatment	x	x	x	x			x			
Designated monopolies act with commercial considerations	x	x	x	x	x	x		x	x	x
Designated monopolies treat others according to national treatment	x	x	x	x	x	x		x	x	x
Designated monopolies sell according to national treatment	x	x	x	x		x		x	x	x
Designated monopolies will not engage in anticompetitive practices	x	x	x	x		x		x	x	x
Domestic courts must have jurisdiction over SOEs										
Subcentral regulatory bodies must treat SOEs and private firms impartially	x				x	x				
Cannot use subsidies that cause adverse effects	x	x	x	x	x	x	x	x	x	x
SOEs cannot give subsidies to other SOEs that cause adverse effects	x	x	x	x	x	x	x	x	x	x
Cannot give subsidies for goods production that cause injury to another country's domestic industry			x	x	x					
Transparency: Must make publicly available a list of all SOEs	x	x	x	x	x	x	x	x	x	x
Transparency: Must notify new or expanded designated monopolies	x	x					x			
Transparency: Upon request, must provide detailed information on specific SOEs	x	x					x			
Transparency: Must provide information on new policies or programs that provide subsidies	x	x			x		x			

x = exempt

Source: TPP Chapter 17, Annex 17-D.

EXCEPTIONS AND NONCONFORMING MEASURES

Besides the aforementioned exceptions for revenue threshold and disciplines for subcentral SOEs, a number of other entities are not subject to certain conditions. Article 17.9.1 and Annex IV exempt specified SOEs from obligations on nondiscriminatory treatment and commercial considerations and noncommercial assistance. Each country has an annex that lists the entity that undertakes the nonconforming measures (NCMs), as well as the obligations concerned, the scope of the exception, and if applicable, measures relevant to certain regulations.

Some NCMs are more significant than others. Singapore and noticeably Japan have no schedule for NCMs in Annex IV. Many of the NCMs for the other 10 countries include some exemptions in preferential treatment and subsidies for indigenous persons, national oil, gas, and electricity companies, as well as some development banks. For example, Malaysia has major exemptions for providing preferential treatment to the Bumiputera, or native Malay population, as well as its national oil and gas SOEs and some development banks. The United States has exemptions for Fannie Mae and Freddie Mac, or other mortgage financing institutions, as well as the Federal Financing Bank, a bank operating under the Treasury Department that provides financing to the federal government and the public. The United States also has an exemption for a national infrastructure bank, allowing it to provide financing at below market rates.

Vietnam has the most NCMs, although the exemptions don't appear to be broad enough to cause major harm to other firms operating in Vietnam. For example, all SOEs are exempt from certain commitments on preferential treatment or subsidies, but most of the activities related to those exemptions include helping underdeveloped areas, small and medium-sized enterprises (SMEs), and providing financing for restructuring to SOEs as long as it does not lead to a significant advantage in the market. Other NCMs relate to the oil, electricity, or mineral SOEs and also to several development banks.

CHINA'S POTENTIAL ENTRY INTO THE TPP

Both Japanese prime minister Shinzo Abe and US president Barack Obama have alluded to China possibly joining the TPP in the future, and indeed there have been calls within China to study what China would have to do to join the agreement. To be sure, China would face hurdles in any potential application to join the TPP, namely accepting disciplines on labor (free association), data flows, SOEs, and opening the service sector to more foreign direct investment. But the disciplines in the TPP also match some of the domestic reforms China is looking to implement—in SOEs in particular. To improve the efficiency of SOEs, China should introduce more competition into the market that they operate in, as well as reduce some of unfair advantages that SOEs enjoy over private firms.

To be clear, any real prospect of China joining the TPP would come many years down the line, and the application process would be difficult. China would start from a tough negotiating position on SOEs, and given the strength of the vested interests there, it will be a wide canyon to cross to come to an agreement on such strict disciplines for SOEs. Moreover, China would likely demand similar exemptions to its subcentral SOEs. China's SOEs earned nearly \$6 trillion in the first 10 months of 2015.¹¹ Centrally owned SOEs accounted for \$3.5 trillion, and subcentral SOEs made up over \$2 trillion, or 40 percent. Thus the subcentral SOEs in China are formidable and currently contribute to the uneven business environment there, to the chagrin of private firms.

11. “2015年1-10月全国国有及国有控股企业经济运行情况”[Nonfinancial SOEs], Chinese Ministry of Finance, November 23, 2015, http://qys.mof.gov.cn/zhengwuxinxi/qiyeyunxingdongtai/201511/t20151120_1574607.html (accessed on December 2, 2015).

It's possible that the size and number of subcentral SOEs, nearly 100,000 as of 2012, would prompt some members to insist on imposing more disciplines for them regarding the use of subsidies and nondiscrimination.¹² Additionally, China would push for a long list of NCMs, where all the current members have a relatively short list of enterprises with exemptions. As all current members would have to agree to allow new members in, any country could block entry and hold out for stronger disciplines.

The United States, however, will likely push for China to adhere to stricter rules and disciplines on transparency as well as to accept more commitments by China's subcentral SOEs. As the United States Trade Representative (USTR 2014) noted, China "continues to provide injurious subsidies to its domestic industries, and some of these subsidies appear to be prohibited under WTO rules." Similarly, USTR noted that China submitted its first subsidies notification to the WTO in 2006, nearly five years late and "notably incomplete." China's history of incomplete and late notices will provide significant impetus to business organizations and members of Congress to push the US government for binding provisions to ensure that China follows the rules of the TPP.

China and the United States are currently negotiating a bilateral investment treaty (BIT), and the United States will likely pursue disciplines on SOEs at least somewhat close to what was achieved in the TPP. If the United States and China can agree on the BIT, it could represent an incremental step towards China meeting the SOE obligations in the TPP. However, the BIT talks have been stuck in the mud for some time and are unlikely to conclude before President Obama leaves office. But the progress of the BIT negotiations can be seen as a test case for China's appetite to move closer to the TPP standards.

CONCLUSION

The TPP commitments on SOEs aim to dramatically reduce the unfair advantages SOEs enjoy. The fact that the chapter is subject to the dispute settlement chapter should discourage serious violations, as the threat of trade sanctions looms for violators. This threat may have more teeth than that for violations in other international agreements in regards to obligations on SOEs simply because of the well-defined definitions and obligations and the better enforcement provisions. The dispute settlement process in the TPP will be much more limited in the amount of time a case can take, than, for example, the dispute settlement process in the WTO, and can prevent defending parties from dragging out the process. The ability of governments to assist SOEs will now be limited, due to obligations forbidding subsidies and discrimination that harm other TPP firms. These obligations should help level the playing field for firms competing with SOEs from TPP countries in, and outside, the TPP market, as subsidies to SOEs for goods that adversely affect firms from a TPP party, anywhere in the world, are also forbidden. Similarly, firms engaging in business with SOEs will likely be treated more fairly when buying or selling goods or services to SOEs. The clause limiting SOEs to commercial considerations is stronger than in previous agreements and will make violations easier to prosecute.

The groundbreaking commitments on transparency sets a new standard for agreements in the future. All TPP members will have a list of each other's SOEs, but more importantly, they can request additional information at any time. To be sure, compliance and implementation of these obligations at the beginning of the agreement will be key, and TPP members will have to be diligent in ensuring their partners implement the obligations fairly.

One concern is that the exceptions for subcentral SOEs, the revenue threshold of \$280 million, and the nonconforming measures could significantly water down the commitments. But these are less of a concern, since most TPP members have few subcentral SOEs and the NCMs are fairly limited in scope. The revenue

12. Data from OECD Database on National Practices and Regulations with Respect to State Enterprises, <http://qdd.oecd.org/subject.aspx?Subject=8F22EF7D-B780-4570-A4B1-7E0CB3AD7E04>.

threshold does provide a window for smaller SOEs; however, if the subsidies they receive allow them to grow quickly, they will eventually be over the threshold and, therefore, subject to the commitments. That said, one troublesome area is subcentral SOEs in Vietnam, which number around 1,500. But with the total value of subcentral SOEs at \$10 billion and average value of \$650,000, they remain well below the threshold.

The TPP sets a solid foundation for expanded SOE disciplines, but there is room for improvement. Indeed, the text calls for further negotiations: Within five years the parties must reconvene to consider extending the commitments on subcentral SOEs. The further negotiations also apply to the disciplines on noncommercial assistance and adverse effects, as well as to the effects of SOEs that supply services outside their domestic market. While the TPP made progress in restricting harmful subsidies provided to SOEs for goods manufacturing, members will also look to expand the obligations on services supplied by SOEs.

Overall, the TPP's SOE commitments went beyond those previously agreed to in international agreements, and they have provided a good foundation for the rules governing SOE behavior well into the future.

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CHAPTER 9

DISPUTE SETTLEMENT MECHANISM

JENNIFER HILLMAN

Free trade agreements (FTAs) have generally not produced the flood of disputes over interpretation of their provisions that has surrounded the multilateral agreements overseen by the World Trade Organization (WTO). Nevertheless, most FTAs include procedures for resolving disputes among signatories. The Trans-Pacific Partnership (TPP) is no exception. Its dispute settlement mechanism, found in Chapter 28, addresses how the United States and the 11 other participating countries can lodge complaints over alleged failures to implement the agreement's provisions and outlines remedies available to aggrieved parties, including retaliation by raising tariffs.

Seeking to assure TPP skeptics concerned that the agreement is a toothless accord with weak remedies for violations, the Office of the US Trade Representative (USTR) maintains that the chapter on dispute settlement “provides rigorous implementation” of its provisions and “a strong mechanism to enforce US rights when there are failures of implementation.”¹ The dispute settlement chapter, it claims, “ensures that the dispute settlement system—using tariff retaliation when necessary—applies to the full range of issues covered by the agreement, from market access to labor, environment, services trade, intellectual property rights, and others. And it ensures that the dispute settlement system has strong rules against bias and conflict of interest; is transparent and open to the public; and encourages resolution of complaints when possible through cooperation and consultation.”

While these claims by the USTR may be overly optimistic, the text of Chapter 28 reflects real learning from past mistakes in setting up FTA dispute settlement systems and offers genuine hope for a strong, efficient, and effective system for resolving TPP disputes.

The Chapter 28 dispute settlement mechanism is designed to be a faster, more transparent, and more comprehensive hybrid of the WTO's Dispute Settlement Understanding and the dispute settlement provisions in a number of US bilateral and regional trade agreements.² It will be faster, because the TPP process is set up to take a maximum of 350 days from the initial request for consultations to the issuance of a final panel

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1. USTR's Chapter Summary, Chapter 28 Dispute Settlement, <https://medium.com/the-trans-pacific-partnership/dispute-settlement-a5b4569a9a55#.n3ga3ke91> (accessed on January 15, 2016).

2. The TPP has two separate dispute settlement chapters. Chapter 28, analyzed here, applies to disputes between governments. Chapter 9 covers disputes between private parties and governments over commitments in the investment chapter of the TPP. For an assessment of the investor-state dispute settlement (ISDS) provisions in the TPP, see chapter by Hufbauer in *PIIE Briefing 16-1*, 2016.

report, a process that can take up to 20 months at the WTO. It will be more transparent, because the TPP was designed to avoid the moniker of “secret star chamber” and the ambiguities of the WTO with respect to the role of nongovernmental organizations by presuming that all proceedings are open to the public and allowing the submission of *amicus curiae*. It will be more comprehensive, because it will allow for the resolution of issues regarding labor, environment, cross-border data flows, and state-owned enterprises, which are not covered by the dispute settlement systems of the WTO or the North American Free Trade Agreement (NAFTA).

The TPP negotiators worked to balance a strong and effective regional dispute settlement system against the reality that most trade disputes are litigated before panels of the WTO rather than bilateral or regional trade tribunals. The system allows parties to choose between the WTO and a TPP panel to adjudicate or resolve disputes, but it also requires that the parties live with their decision once it is made. To give an initial boost of predictability to the TPP system, the agreement requires TPP panels to consider the interpretations already handed down by WTO panels or the WTO Appellate Body when considering WTO-like obligations incorporated into the TPP.

Chapter 28 appears to avoid the pitfalls of less-than-binding systems in prior agreements, such as NAFTA, by strengthening the panel appointment process so that member countries cannot block appointments. It avoids the WTO’s sequencing problems by setting out a quick compliance review mechanism that does not require parties in a dispute over compliance to start new proceedings from the beginning. It adds a compliance option by permitting the violator of an agreement to pay a fine that can be put into a fund to promote greater trade between the disputing parties.

The TPP’s Chapter 28 dispute settlement mechanism differs in two key ways from the WTO’s dispute settlement system. First, it does not contain any appeals mechanism. Second, it does not include the equivalent of the WTO’s Dispute Settlement Body to ride herd over compliance with dispute settlement rulings. The absence of these two mechanisms may make the process faster and less bureaucratic. However, it may also discourage some countries from using the TPP system if their dispute can be resolved at the WTO, where the availability of the appeals process may give them comfort that an erroneous panel decision can be corrected and where they have the support of all WTO members, not just the disputing parties, in urging compliance with adverse rulings.

Whether or not the Chapter 28 dispute settlement mechanism lives up to its billing remains to be seen. The true test will be whether TPP members use it early and often or revert to form and take their disagreements to Geneva. Because the TPP contains a number of new disciplines not included in the WTO agreements and therefore not subject to resolution at the WTO, there is real reason to believe that at least in these areas, parties can and will put the TPP’s dispute settlement provisions to the test.

SUMMARY OF DISPUTE SETTLEMENT PROVISIONS IN THE TPP

The TPP’s dispute settlement system calls for the resolution of government-to-government disputes through a multiphase process that starts with consultations between the parties to the dispute. If these consultations fail to resolve the matter, the TPP allows the parties to establish a three-person panel to examine the facts and the applicable law of the TPP in order to make findings and recommendations to resolve the matter, with the findings ultimately set forth in a final report. If that report indicates that a party’s measure is inconsistent with the TPP or that a party failed to carry out its obligations or impaired the benefits that were to accrue to other parties under the TPP, that party must, whenever possible and within a reasonable period of time, eliminate that inconsistency or impairment. If the party refuses to do so, the dispute settlement provisions call for the payment of compensation to the aggrieved party, retaliation by the winning party, or the payment of a fine, either directly to the winning party or to a fund designed to support initiatives that facilitate trade between the parties.

Scope and Application

The provisions of Chapter 28 apply only to disputes under certain chapters of the TPP ([table 9A.1](#)). They are also limited to disputes regarding the interpretation or application of the TPP, to disputes in which one party considers that a measure (or proposed measure) by another party violates the agreement's provisions, or to disputes in which one party believes that it has not received the benefits to which it is entitled under seven of the TPP's chapters.³

Certain matters are entirely off-limits for dispute resolution under the TPP's general dispute settlement procedures. They include the following:

- trade remedies (antidumping and countervailing duties) (Article 6.8),
- investments (Chapter 9 includes separate provisions for investor-state dispute settlement [ISDS]),
- temporary entry for business persons (Article 12.10),
- cooperation and capacity building (Article 21.6),
- competitiveness and business facilitation (Article 22.5),
- development (Article 23.9),
- small and medium-sized enterprises (Article 24.3), and
- regulatory coherence (Article 25.11).

The general dispute settlement procedures also do not apply to the joint declaration on currency manipulation, the annexes to the TPP, a number of related instruments, or interpretations of New Zealand's Treaty of Waitangi. Other chapters place conditions or limitations on the use of Chapter 28 dispute settlement proceedings. For example, the sanitary and phytosanitary measures (SPS) chapter conditions access to Chapter 28 by requiring that disputes first be addressed through the SPS' Cooperative Technical Consultations (CTC) and permitting formal dispute settlement proceedings to commence only if the CTC process fails to resolve the matter. Given that the CTC process is expected to take up to 180 days, SPS cases can be expected to move more slowly than many others. Similarly, the TPP labor chapter contemplates that disputes first be considered by the Labor Council representatives of the disputing parties. The technical barriers to trade (TBT) chapter prohibits access to the Chapter 28 dispute settlement process to resolve disputes covered by provisions of the WTO's TBT Agreement that were incorporated into the TPP (TPP Article 8.4).

For other matters the dispute settlement provisions apply but are modified. For financial services (Chapter 11), the dispute settlement process is split between disputes over investments in financial services, which are largely governed by the ISDS provisions in Chapter 9, and disputes over noninvestment financial services, which can be brought under Chapter 28 but with modifications to ensure that the panelists have expertise or experience in financial services law or practice or the regulation of financial institutions. In addition, if the respondent state in an investment dispute invokes any of the exceptions for measures adopted for prudential reasons (found in Article 11.11) and the governments of the responding state and the investor's state are not able to reach a joint determination on the validity of the defense within 120 days, either government can request the establishment of a Chapter 28 panel to consider whether and to what extent there is a valid defense to the investor's claim under Article 11.11.

3. The last category covers disputes over measures that are not inconsistent with the TPP but that are nonetheless perceived as depriving a party of the benefits to which it believes it is entitled under Chapter 2 (National Treatment and Market Access), Chapter 3 (Rules of Origin and Origin Procedures), Chapter 4 (Textiles and Apparel), Chapter 5 (Customs Administration and Trade Facilitation), Chapter 8 (Technical Barriers to Trade), Chapter 10 (Cross-Border Trade in Services), or Chapter 15 (Government Procurement). The agreement provides that the TPP members "shall consider" whether to add Chapter 18 (Intellectual Property) to this last category after the date on which the current moratorium on non-violation complaints under Article 64 of TRIPS Agreement has been lifted by WTO members.

For electronic commerce, the application of Chapter 28 dispute settlement procedures to Malaysia or Vietnam for certain obligations is delayed for a two-year period. Vietnam also obtained a delay in the applicability of Chapter 28 dispute settlement procedures to certain intellectual property protection obligations for three years or more, depending on the particular rule at issue.

The dispute settlement procedures are modified with respect to the chapter on transparency and anticorruption. Matters that fall under the application and enforcement of anticorruption law (Article 26.9) and transparency and fairness for pharmaceutical products and medical devices (Annex 26-A) are not subject to Chapter 28 dispute settlement at all. Other matters can be brought to a Chapter 28 dispute settlement panel only if they are considered inconsistent with the TPP or represent a failure to carry out an obligation in a manner affecting trade or investment between two or more TPP parties. Consultations under this chapter can include third parties that have a trade or investment interest in the matter and are supposed to include officials of the relevant anticorruption authorities.

Despite these limitations, the TPP's dispute settlement provisions are far more comprehensive than the dispute settlement provisions of NAFTA or a number of other bilateral or regional agreements. For example, disputes under the TPP chapter on labor (Chapter 19) and the environment (Chapter 20) are subject to the binding dispute settlement mechanism provided for in Chapter 28; neither issue is directly covered by dispute settlement processes in NAFTA or the Central American Free Trade Agreement–Dominican Republic.

Overlap with the WTO

The TPP explicitly recognizes the overlap between the substantive obligations undertaken by the parties under the TPP and the obligations each of the TPP parties has undertaken as members of the WTO in two ways. The first is the choice of forum. Under Article 28.4, the complaining party is given its choice of forum for disputes that arise under the TPP, the WTO, or any other trade agreement. Once the choice is made, no other forum can be used for the same dispute.

The second is recognition of WTO jurisprudence. Article 28.12 provides that for WTO obligations that were incorporated by reference into the TPP, TPP panels shall consider interpretations set forth in reports of panels and the WTO Appellate Body.

Both provisions are significant. The first is a clear acknowledgment of what has become the practice of countries throughout the world, which is to favor the WTO's dispute settlement provisions over the dispute settlement mechanisms built into their free trade agreements. For example, almost all of the nontrade remedy disputes between the United States, Mexico, and Canada have ended up before WTO panels rather than NAFTA tribunals. In 30 years, just three disputes between NAFTA parties were settled under that agreement's Chapter 20. In contrast, 34 cases went before the WTO.⁴

The second provision also shows significant deference to the WTO and its dispute settlement system. The TPP may be trying to encourage parties to use its dispute settlement system by piggybacking on the stability and predictability that has come from many years of WTO decisions as reassurance to TPP parties that they are unlikely to get results from TPP disputes that differ greatly from what they would get under the WTO system. In the absence of this provision, it is likely that most disputes between TPP countries would be heard in Geneva under the WTO rules rather than by a TPP panel.

4. Ten of these disputes could have been resolved under NAFTA Chapter 20, and 24 could have been resolved under NAFTA Chapter 19.

Panel Selection and Qualification

The TPP sets forth the general qualifications of the members of dispute panels. They must have expertise or experience in law, international trade, or other matters covered by the TPP; be chosen strictly on the basis of objectivity, reliability, and sound judgment; be independent of and not affiliated with or take instructions from any party; and comply with the code of conduct in the Rules of Procedure (Article 28.10.1). Panelists should also not have participated in proceedings pursuant to Article 28.6 (Good Offices, Conciliation, and Mediation) (Article 28.10.2).

For disputes arising under Chapter 19 (Labor), Chapter 20 (Environment), or Chapter 26 (Transparency and Anti-Corruption), panelists should have expertise or experience relevant to the subject matter of the dispute.⁵ Chapter 11 (Financial Services) requires panelists to have expertise in financial services law or practice, which may include the regulation of financial institutions (Article 11.21.2).

Procedural Steps

The procedural steps included in the TPP are similar to those in a number of recent US free trade agreements, NAFTA, and, to a lesser extent, the WTO ([table 9A.2](#)).

Consultations

The TPP's dispute settlement process starts with consultations. Parties are enjoined to make every attempt to reach a mutually satisfactory resolution through consultations initiated by the complaining party, which must request the consultations. The request must identify the measure being objected to and the legal basis for the complaint (Article 28.5.1). The responding party must reply within seven days and enter into consultations in good faith (Article 28.5.2). A third party may participate in the consultations if it considers that it has a substantial interest in the matter (Article 28.5.3).

At any time, parties may agree to voluntarily undertake alternative methods of dispute resolution, such as good offices, conciliation, or mediation (Article 28.6). These resolution mechanisms may proceed even during the panel process (Article 28.6.4).

These consultation provisions mirror the provisions of the WTO and NAFTA, which had some success in their early days in resolving disputes through consultations. Recent cases, however, have seen the consultation mechanism become either a purely pro forma exercise to fulfill the requirement for a 60-day consultation period or a discovery mechanism to seek documents or evidence about the measures at issue in a dispute. It is not clear how seriously the TPP countries will take the opportunity to resolve their disputes at the early (but required) consultation stage.

Panel Establishment

If disputes are not resolved in consultations, the party that requested consultations may request the establishment of a panel, made up of three members. The complaining and responding parties each appoint one panelist; the third panelist (who is the chair) is appointed by agreement of the two parties. The TPP rules provide an elaborate system of what to do if any of these three appointments cannot be made; action or inaction by the parties thus cannot block the establishment of a panel.

5. An exception is panelists selected from the roster of panel chairs or appointed under Article 28.9.2(d)(i)–(iii) and (v) (Dispute Settlement).

The process involves two lists. The first (the party-specific indicative list) identifies potential panelists from each TPP country. It can include an unlimited number of names. The second (the roster of panel chairs) includes at least 15 potential panel chairs. Each TPP country can nominate up to two potential panel chairs to the roster. If the responding party fails to appoint a panelist, the complaining party can appoint a panelist from the responding party's indicative list. If the parties cannot agree on a chair, the two panelists can, by common agreement, appoint a chair; if they do not agree, they can appoint a chair with the agreement of the disputing parties. If the two panelists fail to appoint a panel chair, the disputing parties select the chair by random selection from the roster of panel chairs. If that process fails, either party can ask an independent TPP third party to select the chair from the roster of panel chairs.

The rules clearly contemplate that all TPP countries will be able to quickly produce a slate of qualified potential panelists for their own party-specific list as well as add a name or two to the list of potential panel chairs. Failure to do so means that a country will end up with a panelist from the roster of panel chairs rather than one from its own country. Coming up with a slate should not be difficult for most TPP countries.⁶

The chair of the panel cannot be a national of any of the disputing parties or a third party, unless agreed otherwise by the disputing parties (Article 28.9.3). The text also provides for the appointment of replacement panelists in case a panelist resigns, is unable to serve on the panel, or violates the code of conduct.⁷

Panel Process

The TPP agreement does not set out detailed rules of procedures. Instead, it requires that the TPP Commission—made up of ministers or senior officials from each TPP party, created under Chapter 27—establish the procedural rules (Article 27.2.1(e)). The TPP does, however, provide certain minimum requirements to be included in the TPP Commission-written rules:

- a. The parties shall have the right to at least one hearing before the panel.
- b. That any hearing before the panel shall be open to the public, unless the disputing parties agree otherwise.
- c. That each party has the right to provide an initial and rebuttal written submission.
- d. That panels shall, on a best-efforts basis, release written submissions, oral submissions, and written responses to the public at the time of filing or after the final panel report is issued.
- e. That panels shall grant opportunities for nongovernmental entities located in the territory of any disputing party to provide written views.
- f. That panels shall protect confidential information.
- g. That English shall be the primary language of the panel proceedings, unless the disputing parties agree otherwise.
- h. That hearings shall be held in the capital of the responding party, unless the parties agree otherwise.

As with the WTO's dispute settlement process, the panel may seek information and technical advice from experts and receive *amicus curiae* briefs, which the disputing parties shall have the opportunity to comment on (Article 28.15). Panels are established to make objective assessments of the matters before them and make the necessary findings, determinations, and recommendations, as called for in the terms of reference and necessary

6. Three countries (Brunei, Singapore, and Vietnam) have no one on the WTO indicative list of potential panelists, suggesting that they may have trouble quickly coming up with a well-qualified roster (see WTO Indicative List of Governmental and Non-Governmental Panelists, available at WT/DSB/44/Rev.31).

7. See Article 28.9.9. The code of conduct is covered in Article 28.10.1(d) (Dispute Settlement).

for the resolution of the dispute (Article 28.12.1). Panels are supposed to make decisions by consensus; if they are unable to do so, they may make decisions by majority vote (Article 28.12.4).

The ultimate level of transparency in the TPP system will become clear once the TPP Commission promulgates the formal rules of procedure. The minimum requirements already reveal, however, that the TPP's dispute settlement process should be more open and transparent than the dispute settlement systems of the WTO, NAFTA, and many other free trade agreements. The presumption in the WTO is that all proceedings will be entirely confidential unless the parties agree otherwise. The presumption in the TPP is the opposite—proceedings are presumed to be open to the public unless the parties agree to close them. *Amicus* submissions, now accepted in certain circumstances following significant controversy at the WTO, are presumed to be admissible in the TPP.

Initial Report

Like the WTO, the TPP process provides for both an initial report and a final report. Disputing parties have the opportunity to comment on the initial report, and the panel is obligated to consider those comments. The panel is entitled to modify its initial report or to conduct any further examination it considers appropriate. The final report of the panel must be issued within 30 days of the issuance of the initial report.

Final Report

The disputing parties are given a heads-up copy of the final report 15 days before the report is released to the public (Article 28.18.1). The panel's final report should contain the following:

- a. findings of fact;
- b. determination on whether (i) the measure at issue is inconsistent with the obligations under the TPP; (ii) a party has otherwise failed to carry out its obligations under the TPP; or (iii) a disputing party's measure is causing nullification or impairment of a benefit that the complaining party or parties could have reasonably expected to accrue to it under certain chapters of the TPP;
- c. any other determination requested in the terms of reference;
- d. recommendations for the resolution of the dispute, if the parties jointly requested them; and
- e. the reasons for the findings and determinations.

Separate opinions may be furnished on matters not unanimously agreed upon (Article 28.17.6). However, the identity of the panelists in the majority and the minority may not be disclosed (Article 28.18.2).

Compliance

Much like the WTO and NAFTA dispute settlement provisions, the TPP provides that the ideal method of complying with the panel finding is full implementation through the removal or amendment of any measures found to violate the agreement. If doing so is not possible, the losing party can pay compensation for the trade benefits lost as a result of the offending measure or agree to suffer retaliation, with the prevailing party suspending TPP benefits. The TPP provides an addition to nonimplementation: payment of a monetary assessment. Relief and remedies under the TPP are prospective only; no compensation is owed for trade damages that took place before the end of the reasonable period of time for compliance.

Full Implementation

If the panel rules against the responding party, that party is supposed to, whenever possible, eliminate the nonconformity within a reasonable period of time (Articles 28.19.2–3). As under the WTO dispute settlement system, the disputing parties are encouraged to agree on what constitutes a reasonable period of time; if there is no agreement, the chair of the panel conducts an arbitration to determine the reasonable period of time, up to a suggested maximum period of 15 months (Article 28.19.5).⁸

Nonimplementation

Chapter 28 provides for three options if a party cannot or does not fully eliminate its nonconformity:

- pay compensation to the complaining party,
- permit retaliation in the form of a suspension of benefits, or
- pay a monetary assessment.

All three options are intended to be temporary. They are applied as an incentive to encourage full compliance and applicable only until full compliance is achieved.

If the losing party does not intend to eliminate its nonconformity, it can instead pay compensation to the complaining party, with the amount of compensation to be mutually agreed upon by the parties. Compensation can also be paid if there is a disagreement over whether actions taken by the responding party constitute complete elimination of the nonconformity (Article 28.20.1).

If the parties cannot agree on compensation, or the complaining party considers that the responding party has failed to observe the terms of the agreement on compensation, the complaining party may suspend benefits it provided to the responding party under the TPP (Article 28.20.2). Chapter 28 contemplates that benefits will be suspended in the same subject matter as the dispute (i.e., tariff concessions on goods are suspended if the dispute was about goods), but it permits cross-retaliation in another sector if the matter is “serious enough” and retaliation in the same subject matter is not practicable or likely to be effective.⁹

If the responding party believes the amount of retaliation to be manifestly excessive, it can request the reconvening of the panel. The panel can either affirm the level of benefits sought to be suspended or determine the level of benefits it considers appropriate (Article 28.20.5).

Like the United States’ recent free trade agreement with Korea (KORUS), the TPP dispute settlement chapter includes the option of making a monetary payment in lieu of suffering retaliation. Once a losing party is informed of the intended suspension of benefits, it may opt to make quarterly payments of a mutually agreed upon amount to the complaining party in order to stop the retaliation from going into effect. If the parties are unable to agree on the amount, it can be automatically set at 50 percent of the level of benefits that were to have been suspended.

Chapter 28 also provides that rather than make the payments to the complaining party, the disputing parties can send the payments to a fund designed to support initiatives to facilitate trade between the parties by further reducing unreasonable trade barriers or assisting with carrying out obligations under the TPP (Article 28.20.8).

8. Like the comparable WTO provision, Chapter 28 provides that the panel chair shall take as a guideline that the reasonable period of time should not exceed 15 months but provides that the period may be shorter or longer, depending on circumstances. At the WTO 15 months has become the default period.

9. Article 28.20.4(c)(ii) clarifies that the TPP agreement encompasses a number of distinct subject matters, including goods, financial services, nonfinancial services, and each section of Chapter 18 on Intellectual Property.

Compliance Review

If the responding party believes that it has fully implemented its compliance obligations, it can ask the panel for a report (to be issued within 90 days) indicating whether full compliance has been achieved. If the report confirms that there has been full compliance, the complaining party must reinstate any benefits that had been suspended (Article 28.21).

One major difference between the TPP and the WTO is that the TPP lacks a more political body to ride herd over compliance, in a manner similar to the WTO's Dispute Settlement Body. Monthly meetings of the Dispute Settlement Body (to which all WTO members belong) provide members with an opportunity to review the status of compliance and engage in "naming and shaming" of members that promised to bring their measures into compliance but failed to do so. For the TPP, all issues regarding compliance are settled only by the parties to the dispute.

Time Frames

The TPP dispute settlement process is designed to be quick by international dispute settlement standards ([table 9A.3](#)). If the parties do not extend any of the dates by agreement, a dispute should be completed in less than a year (350 days). If the losing party then takes the suggested maximum period of 15 months to implement the ruling of a TPP panel, the entire process, including implementation, should be completed in 26–27 months. This process is faster than the 35 months suggested under the WTO rules and considerably faster than the actual time frames achieved at the WTO.

CONCLUSION

The TPP's dispute settlement system is designed to be broader, deeper, faster, and more transparent than either the WTO's Dispute Settlement Understanding or any prior bilateral or regional free trade agreement. It covers more chapters and issues than prior dispute settlement systems (including systems on labor, the environment, cross-border data flows, and state-owned enterprises) but leaves out some key issues, including the side agreement on currency manipulation, trade remedies, and many of the new issues included in the TPP itself, such as capacity building, competitiveness and business facilitation, and regulatory coherence.

Its process of appointing panelists is designed to mirror most international arbitrations. The compliance mechanism is based on more recent agreements, with a strong push for eliminating any nonconformity with TPP obligations while providing for three options (pay compensation, suffer retaliation, or pay a monetary assessment) in the absence of compliance.

Whether the goals and aspirations for the TPP's dispute settlement system will be met remains to be seen. The biggest hurdle will be convincing the TPP parties to use the system rather than simply turning, perhaps out of habit, to the WTO. Parties will have an incentive to use the TPP mechanism if it turns out to be faster and more effective than the WTO, if it offers fewer opportunities to block or significantly delay key steps in the process, and if disputes center on areas where the TPP adds new substantive disciplines that are covered by Chapter 28.

APPENDIX 9A

Table 9A.1 TPP provisions subject to Chapter 28 dispute settlement

TPP Chapter	Subject to Chapter 28
02 National Treatment and Market Access	Yes
03 Rules of Origin and Origin Procedures	Yes
04 Textiles and Apparel	Yes
05 Customs Administration and Trade Facilitation	Yes
06 Trade Remedies	No
07 Sanitary and Phytosanitary Measures ^a	Yes
08 Technical Barriers to Trade ^a	Yes
09 Investment	No
10 Cross Border Trade in Services	Yes
11 Financial Services ^a	Yes
12 Temporary Entry for Business Persons	No
13 Telecommunications	Yes
14 Electronic Commerce ^a	Yes
15 Government Procurement	Yes
16 Competition Policy	Yes
17 State-Owned Enterprises (SOEs)	Yes
18 Intellectual Property	Yes
19 Labor	Yes
US-Brunei Labor Consistency Plan	Yes
US-Malaysia Labor Consistency Plan	Yes
US-Vietnam Plan for Enhancement of Trade and Labor Relations	Yes
20 Environment	Yes
21 Cooperation and Capacity Building	No
22 Competitiveness and Business Facilitation	No
23 Development	No
24 Small and Medium-Sized Enterprises	No
25 Regulatory Coherence	No
26 Transparency and Anti-Corruption ^a	Yes
27 Administrative and Institutional Provisions	n.a.
28 Dispute Settlement	n.a.
29 Exceptions	n.a.
30 Provisions	n.a.

(table continues)

Table 9A.1 TPP provisions subject to Chapter 28 dispute settlement *(continued)*

TPP Chapter	Subject to Chapter 28
Annexes	
Annex I: Non-Conforming Measures	No
Annex II: Non-Conforming Measures	No
Annex III: Financial Services	No
Annex IV: State-Owned Enterprises	No
Related instruments	
<i>Market access related</i>	
US-Australia letter exchange re recognition of free trade agreement tariff rate quotas in TPP	Yes
US-Australia letter exchange on sugar review	No
US-Canada letter exchange on agricultural transparency	Yes
US-Chile letter exchange on distinctive products	No
US-Chile letter exchange regarding recognition of free trade agreement tariff rate quotas in TPP	Yes
US-Japan letter exchange on distinctive products	No
Japan to US letter on safety regulations for motor vehicles	No
US-Japan letter exchange on operation of simultaneous buy-sell mechanism	Yes
US-Japan letter exchange on operation of whey protein concentrate safeguard	Yes
US-Japan letter exchange regarding standards of fill	Yes
US-Japan letters related to preferential handling procedure	No
US-Malaysia letter exchange on auto imports	Yes
US-Malaysia letter exchange on distinctive products	No
US-New Zealand letter exchange on distinctive products	No
US-Peru letter exchange on distinctive products	No
US-Peru letter exchange on tariff rate quotas and safeguards	Yes
US-Vietnam letter exchange on distinctive products of US	No
US-Vietnam letter exchange on distinctive products of Vietnam	No
<i>Textiles and apparel related</i>	
US-Brunei letter exchange on textiles and apparel	Yes
US-Malaysia letter exchange on registered textile and apparel enterprises	No
US-Singapore exchange on letters on textiles and US-Singapore free trade agreement	No
US-Vietnam letter exchange on registered textile and apparel enterprises	Yes
<i>Sanitary and phytosanitary (SPS) related</i>	
US-Chile SPS letter exchange regarding salmonid eggs	No
US-Canada letter exchange on milk equivalence	No
US-Vietnam letter exchange on catfish	No
US-Vietnam letter exchange on offals	No

(table continues)

Table 9A.1 TPP provisions subject to Chapter 28 dispute settlement (*continued*)

TPP Chapter	Subject to Chapter 28
<i>Intellectual property (IP) related</i>	
US-Australia letter exchange on selected IP provisions	No
US-Australia letter exchange on Article 17.9.7(b) of the Australia-United States Free Trade Agreement (AUSFTA)	No
US-Canada letter exchange on IP border enforcement	Yes
US-Chile letter exchange re geographical indications	No
US-Chile letter exchange re Article 17.10.2 of US-Chile Free Trade Agreement	Yes
US-Japan letter exchange re copyright term	No
US-Malaysia letter exchange re Articles 18.41.50 and 18.41.52	No
US-Malaysia letter exchange re geographical indications	No
US-Mexico letter exchange re geographical indications	No
US-Mexico letter exchange re tequila and mezcal	No
US-Peru letter exchange re Article 16.14.3 of US-Peru Trade Promotion Agreement	No
US-Vietnam letter exchange on biologics	Yes
US-Vietnam letter exchange re geographical indications	No
<i>Services, financial services, and e-commerce</i>	
US-Chile letter exchange regarding express delivery services	No
US-Vietnam letter exchange on pharmaceutical distribution	Yes
US-Vietnam letter exchange regarding electronic payment services	Yes
US-Australia letter exchange on privacy	No
<i>Temporary entry</i>	
US-Japan letter exchange re temporary entry	
<i>Government procurement</i>	
US-Australia letter exchange on AUSFTA government procurement thresholds	No
US-Canada letter exchange re government procurement thresholds	Yes
US-Canada-Mexico letter exchange re government procurement procedures	Yes
<i>State-owned enterprises</i>	
US-Singapore letter exchange on state-owned enterprise transparency	No
<i>Environment</i>	
US-Chile understanding regarding fisheries subsidies and natural disasters	No
US-Malaysia exchange of letters on committee to coordinate implementation of environment chapters	No
US-Peru understanding regarding biodiversity and traditional knowledge	No
US-Peru understanding regarding conservation and trade	No
<i>Joint declaration on currency manipulation</i>	
	No
<i>Annex on transparency and procedural fairness for pharmaceutical products and medical devices</i>	
US-Australia letter exchange on transparency and procedural fairness for pharmaceuticals and medical devices	No
US-Japan transparency and procedural fairness for pharmaceuticals and medical devices	No
US-Peru understanding re transparency and procedural fairness for pharmaceuticals and medical devices	No

n.a. = not applicable

a. Subject to dispute settlement but with certain conditions.

Source: TPP final text, <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text>.

Table 9A.2 Comparison of dispute settlement mechanisms in the TPP, WTO, and NAFTA

Feature	TPP	WTO	NAFTA
Panel composition (how many)	Three members (Article 28.9)	Three members, unless the parties agree otherwise	Five members
Panel composition (set list or by agreement)	Each party appoints one member and endeavors to agree on the appointment of the chair. The roster is used in cases where panelists are not nominated or the parties cannot agree on a chair (Article 28.9).	The Secretariat shall propose nominations for the panel to the parties to the dispute. The parties shall not oppose nominations except for compelling reasons (Article 8.6). If there is no agreement on the panelists, the Director General shall determine the composition of the panel (Article 8.7).	Panelists shall normally be selected from the roster (Article 2011).
Limitations on composition	Cannot be a national of any of the disputing parties or a third party (Article 28.9)	Citizens of members who are parties or third parties shall not serve on the panel, unless parties to the dispute agree otherwise (Article 8.3).	Party-appointed panelists chosen shall be citizens of the other party or parties (Article 2011).
Voting	Ideally by consensus; if consensus cannot be reached, decisions are by majority vote (Article 28.11).	Not applicable	Not disclosed (Article 2017.2)
Jurisdiction	Disputes regarding the interpretation or application of the agreement; actual or proposed measure that is or would be inconsistent with the obligations of the agreement or failure of a party to carry out its obligations under the agreement; instances in which a party considers that a benefit it could reasonably have expected to accrue is being nullified or impaired (Article 28.3)	Situations in which a member considers that any benefits accruing to it are being impaired by measures taken by another member (Article 3.3)	Interpretation or application of the NAFTA; instances in which a party considers that an actual or proposed measure of another party is or would be inconsistent with the obligations of the agreement (Article 2004). Disputes regarding any matter arising under both NAFTA and the General Agreement on Tariffs and Trade (GATT), any agreement negotiated thereunder, or any successor agreement may be settled in either forum at the discretion of the complaining party (Article 2005.1).
Appeals	None	To the Appellate Body (Article 17). Appeal shall be limited to issues of law covered in the panel report and legal interpretations developed by the panel (Article 17.6).	None
Binding nature of results	Binding on the parties (Article 28.18)	Adopted at the Dispute Settlement Body meeting by reverse consensus (adopted unless there is a consensus not to do so) unless a party appeals (Article 16.4). The Appellate Body reports adopted by reverse consensus are binding on the parties to the dispute (Article 17.14).	Upon receipt of the final report, parties must agree on the resolution of the dispute, which normally shall conform with the determinations and recommendations of the panel (Article 2018).

(table continues)

Table 9A.2 Comparison of dispute settlement mechanisms in the TPP, WTO, and NAFTA (continued)

Feature	TPP	WTO	NAFTA
Applicable law	The Agreement (Article 28.11)	WTO Agreement and other covered agreements	The Agreement, GATT, and related subsequent agreements
Choice of forum (if violation under other international trade agreement to which disputing parties are party)	Complaining party may select the forum (Article 28.4).	WTO exclusive jurisdiction for alleged violations of WTO Agreement and other covered agreements (DSU Article 23)	Discretion of the complaining party. If the third party requests or the dispute involves specified environmental agreements; sanitary and phytosanitary measures; or environmental, health, safety, or conservation standards, it must be resolved through the NAFTA dispute settlement mechanism (Article 2005).
Confidentiality	Open to the public, unless disputing parties agree otherwise (Article 28.12)	Panel deliberations shall be confidential (Article 14.1); proceedings of the Appellate Body shall be confidential (Article 17.10).	Panel hearings, deliberations, initial reports, and all written submissions to and communications with parties shall be confidential (Article 2012).

NAFTA = North American Free Trade Agreement; WTO = World Trade Organization

Sources: TPP Article 28, <https://ustr.gov/sites/default/files/TPP-Final-Text-Dispute-Settlement.pdf>; WTO Understanding on Rules and Procedures Governing the Settlement of Disputes, www.wto.org/english/tratop_e/dispu_e/dsu_e.htm; and NAFTA Chapter 20, www.nafta-sec-alena.org/Home/Legal-Texts/North-American-Free-Trade-Agreement.

Table 9A.3 Time required to settle disputes under the dispute settlement systems of the TPP and the WTO

Procedural step	TPP Chapter 28	WTO's Dispute Settlement Understanding
Initial dispute		
Consultations	60 days (30 for perishable goods)	60 days (20 for perishable goods)
Establishment of panel	60 days from request for consultations	Second meeting of Dispute Settlement Body (usually no more than 50 days)
Request for appointment of panelists	20 days from establishment of panel	20 days from establishment of panel
Appointment of panelist (or panel chair) if parties do not agree	20–65 days	10 days (director general appoints)
Panel consideration and issuance of preliminary report	150–180 days (120–150 for perishable goods)	6–8 months
Issuance of final panel report	30 days to parties, 45 to public	3 weeks
Total time excluding appeal	350 days	12–15 months
Appeal		
Appeals report	Not applicable (no appeals process)	60–90 days
Adoption of final report	Not applicable	30 days
Total time including appeal	350 days	16–20 months
Other		
Arbitration over reasonable period of time	90 days from referral (60 days after final report)	90 days after adoption of report
Implementation	15 months maximum	8–15 months
Total		
Time between request for consultation and end of reasonable period of time for compliance	26–27 months	More than 35 months

WTO = World Trade Organization

Note: Times can be extended far beyond the time frames noted here if the parties agree to the extensions or, at the WTO, the panel decides to take additional time to issue its report.

Sources: TPP Chapter 28, <https://ustr.gov/sites/default/files/TPP-Final-Text-Dispute-Settlement.pdf>; WTO Understanding on Rules and Procedures Governing the Settlement of Disputes, www.wto.org/english/tratop_e/dispu_e/dsu_e.htm.

CHAPTER 10

TPP AND EXCHANGE RATES

C. FRED BERGSTEN AND JEFFREY J. SCHOTT

The Trans-Pacific Partnership (TPP) has achieved an important distinction in the history of trade policy. It is the first ever free trade agreement linked explicitly to macroeconomic policies and exchange rates. The Joint Declaration of the Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries, while not part of the TPP agreement itself or covered by its dispute settlement procedures, is an important step toward discouraging or even preventing countries participating in the pact from intervening in exchange markets to gain trade advantages through the manipulation of their currency values.¹ In addition, the Trade Facilitation and Trade Enforcement Act (discussed below), which President Barack Obama signed into law in February 2016, further improves the United States' ability to combat currency manipulation by trading partners. More specifically, the new law requires the Treasury to undertake “enhanced engagement” and follow-up actions with countries that persistently manipulate their currency values and rack up large current account surpluses as a result. Its language effectively strengthens the Treasury's tools to deal with the problem.

Despite these agreements and actions, many in Congress—and several presidential candidates—continue to disapprove of the TPP on the ground that it lacks adequate protections against currency manipulation. Until recently China was a major currency manipulator. Although it is not a signatory to the TPP, opponents of the trade deal say they want to guard against the possibility that it might join in the future and return to its earlier currency practices. Critics want to establish the toughest possible provisions on this issue to deter future abuses.

This chapter argues that the joint declaration on currency and the new Trade Facilitation and Trade Enforcement Act have achieved significant progress in the cause of stopping currency manipulation. The commitments in the declaration, for example, are far-reaching in rejecting competitive devaluations and persistent exchange rate misalignments. In addition, the requirements for more transparency and public disclosure of data on exchange rate policies, including currency intervention, should make the “naming and shaming” of manipulators more effective. The declaration, released with the TPP text on November 5, 2015, taken together with new trade legislation passed by Congress in February 2016, should thus strengthen the Treasury Department's ability to deter currency manipulation by the United States' trading partners, including any future members of the TPP. That said, currency manipulation remains an important concern in international trade, but it should not become a reason for opposing the TPP.

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1. For the full text, see “Joint Declaration of the Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries,” www.treasury.gov/initiatives/Pages/joint-declaration.aspx.

The term *currency manipulation* usually refers to actions taken by a country to artificially depress the value of its currency. A country does so by buying dollars, in order to keep the currency from rising, which increases its exports and reduces its imports. The practice was widespread during the decade preceding 2012–13, averaging as much as \$1 trillion annually and producing large trade surpluses in China and other countries. The economic effects on the United States and other deficit countries were highly adverse.²

Manipulation declined dramatically over the past decade, especially by the major economies in Asia, virtually disappearing in 2015 and early 2016. China and a number of former manipulators have, in fact, been selling dollars to keep their exchange rates from falling more sharply, and worries about the economic weakness of many of those countries have superseded earlier fears of their competitive strength. *Very few, if any, countries, whether or not members of the TPP, could be indicted for currency manipulation at the current time.*

It would, nevertheless, be highly desirable to put new rules and policies in place to deal with currency manipulation and deter any recurrence of past policies. World trade rules have long obliged countries to avoid currency manipulation because it dilutes the impact of negotiated liberalization. But enforcement of these obligations depends on certification by the International Monetary Fund (IMF) that a country's exchange rate policies were contravening IMF obligations to avoid competitive devaluation as well as distorting trade flows. No multilateral enforcement actions to counter currency manipulation have been taken in the 70-year history of the postwar economic system.

Concerned about the past currency practices of China, Japan, and other US trading partners, Congress adopted two principal negotiating objectives regarding exchange rates when it enacted Trade Promotion Authority (TPA) in June 2015 authorizing President Obama *inter alia* to negotiate and ratify the TPP. With respect to currency practices in general, the TPA set as a principal objective of the TPP “that parties to a trade agreement with the United States avoid manipulating exchange rates in order to prevent effective balance of payment adjustment or to gain an unfair competitive advantage over other parties to the agreement...” With respect to unfair currency practices, the principal objective should be “to seek to establish accountability through enforceable rules, transparency, reporting, monitoring, cooperative mechanisms, or other means to address exchange rate manipulation involving protracted large scale intervention in one direction in the exchange markets and a persistently undervalued foreign exchange rate to gain an unfair competitive advantage in trade over other parties to a trade agreement.” These objectives are to be pursued consistent with IMF and World Trade Organization (WTO) obligations.

The new accord on currency is in a document entitled “The Joint Declaration of the Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries.” It contains commitments by each TPP member to “foster an exchange rate system that reflects underlying economic fundamentals,” “avoid persistent exchange rate misalignments,” and “refrain from competitive devaluation.” To increase the prospect that macroeconomic authorities will meet these objectives, the joint declaration requires each country to make regular and public disclosures of its foreign exchange reserves, interventions in spot and forward currency markets, portfolio capital flows, and related actions. Some participants (Brunei, Malaysia, Singapore, and Vietnam) will comply with these obligations with a delay or only in part.

In addition, the joint declaration establishes a new Group of TPP Macroeconomic Officials to monitor the exchange rate and macroeconomic policies of the TPP countries. The member countries are to meet together at least annually and issue reports on “that meeting and any conclusions that reflect the collective views of the Group.” Along with the augmented data, such reviews can be timely and effective in helping to deter currency manipulation.

2. See C. Fred Bergsten and Joseph Gagnon, *Currency Manipulation, the US Economy, and the Global Economic Order*, *PIIE Policy Brief 12-25*, December 2012, Peterson Institute for International Economics, Washington.

The consultations on macroeconomic policies can and undoubtedly will address monetary policies such as quantitative easing (QE), as practiced recently by the United States and currently by Japan, as well as direct intervention in the currency markets. Some US officials and members of Congress have expressed concern that other countries might seek to characterize QE as “currency manipulation,” on the ground that it can lead to currency depreciation. It is certainly possible that some countries might raise that issue. But there is widespread international agreement that there are fundamental differences between QE and manipulation. QE pursues domestic economic goals through the use of domestic policy instruments, whereas manipulation refers to direct intervention in the markets for foreign currencies to affect the trade balance. QE increases global as well as domestic demand by increasing the growth of the country involved, whereas manipulation simply shifts demand from one country to another by reorienting and indeed distorting trade flows. QE thus strengthens the economies of trade partners, whereas manipulation weakens them. Accordingly, the fear that the new declaration and its consultative group could successfully challenge the use of macroeconomic policy instruments by the United States or any other TPP member is groundless.

These new commitments will take effect upon entry into force of the TPP, which will, therefore, increase the arsenal of tools to counter currency manipulation. Adhering to this declaration will be a requirement for countries that seek to accede to the pact in the future.

The commitments undertaken in the joint declaration are not enforceable through the dispute settlement procedures of the TPP, as advocated in amendments to TPA that were narrowly defeated in the US Senate. The negotiators opted for an early warning system via enhanced reporting requirements and frequent monitoring and consultations to deter future episodes of currency manipulation instead of the “hard deterrence” approach preferred by some members of Congress, which would have involved binding dispute settlement, with the possible imposition of trade sanctions against the offending country. The Obama administration argued that the latter approach was not negotiable and that an effort to achieve it would have torpedoed the entire TPP negotiation.

The Trade Facilitation and Trade Enforcement Act includes an amendment sponsored by Senators Michael Bennet, Orrin Hatch, and Tom Carper—worked out with the administration—that significantly expands Congress’ mandate to the administration on these issues.³ It requires the Treasury to launch “enhanced engagement” with major trading partners of the United States that meet several objective criteria: a significant bilateral trade surplus with the United States, a material current account surplus, and engagement in persistent one-sided intervention in the foreign exchange market (the assessment of which should be substantially aided by the disclosure commitments in the joint declaration). This use of objective criteria represents a significant improvement over the operational language of the previous legislation, which required subjective judgment of countries’ intent in determining whether to designate them formally as “currency manipulators.”

The new law further requires that the president implement one or more of four specific policy measures against designated countries that do not adopt corrective policies within a year, presumably judged against the same set of objective criteria. One of these measures is that the US Trade Representative (USTR) “take into account” such a country’s currency practices in determining whether to include that country in future US trade agreements. These new US legal requirements apply to all trading partners of the United States, not just those participating in the TPP or other US trade agreements. The Treasury will provide an initial clue on how it plans to implement its new mandate when, as required by the amendment, it “publicly describes” by May 2016 “the factors used to assess” the key terms and concepts in the law.

3. The currency chapter of the Trade Facilitation and Trade Enforcement Act, although it was passed several months later, was explicitly seen as part of the trade policy package that enabled Congress to pass Trade Promotion Authority in the summer of 2015.

In sum, the joint declaration and the Bennet-Hatch-Carper amendment to the new trade legislation substantially meet the negotiating objectives set out in the TPA.⁴ The Treasury should now be more effective in deterring TPP (and other) countries from embarking on new episodes of currency manipulation. Added together, these measures protect the trade deal's benefits for the United States and the world economy.

Doubts, nevertheless, remain in some quarters that the steps adopted so far are adequate to address the manipulation problem. Presidential candidates of both parties have cited the absence of stronger disciplines on manipulation as a chief reason for their opposition to the TPP as a whole (though none of them has recognized that the practice of manipulation virtually disappeared over the past two years). So have a number of members of Congress, including Republican Senator Rob Portman of Ohio, the USTR under President George W. Bush and a strong supporter of TPA last summer, who recently announced his opposition to the TPP largely because of this issue.

It is virtually inconceivable that the TPP could be renegotiated to include "enforceable currency disciplines," or any other major new issue, now that the agreement has been signed by the 12 participating countries and several of their parliaments have begun the ratification process. Any effort to do so would unravel the whole agreement. Even if a meaningful currency chapter could be added, the United States would have to give up many of its important and hard-won concessions on other issues in return. In any event US currency objectives are better served by policies that apply to all of its trading partners, as with the Bennet-Hatch-Carper amendment, rather than just the subset involved in the TPP. Some of the major sources of previous manipulation, notably China, are not members of that agreement (although they might conceivably join at some point in the future).

If additional steps are necessary to achieve passage of the TPP, US officials and congressional leaders could turn to other options available under domestic law for deterring currency manipulation that are consistent with US international obligations. One policy option, initially proposed by one of us (C. Fred Bergsten), would be an announcement by the Treasury Department that it would henceforth fight fire with fire, carrying out countervailing currency intervention against countries that sought to depress their exchange rates against the dollar, as included (as "remedial currency intervention") in the currency bill passed by the Senate in 2011. The Treasury could do so by buying the currencies of manipulators in amounts equal to their purchases of dollars. This approach would neutralize the impact of the manipulation and effectively deter any such efforts. Very little if any countervailing intervention would, therefore, ever have to be actually carried out, with the possible exception of an initial salvo or two to demonstrate the credibility of the new US policy. The Obama administration has so far not supported this policy.

Another widely discussed option is to revive the idea of applying countervailing duties against imports subsidized by currency manipulation, as passed by the Senate in its initial version of the Trade Facilitation and Trade Enforcement Act (and previously by the House in 2010 and the Senate in 2011) but dropped from the conference report before final passage. The argument in favor of this approach is that currency manipulation has the same effect on traded goods as subsidies that are routinely subject to countervailing duties. However, WTO rules do not define manipulation as a countervailable subsidy, and the application of such duties based on calculations of currency manipulation would almost certainly be challenged by offending countries and lead them to retaliate against US exports. Countervailing duties also have the shortcoming that they would cover only the import side of US trade whereas currency manipulation by other countries adversely affects US exports as well.

4. As argued by the majority of the President's Advisory Committee for Trade Policy and Negotiations (ACTPN) in its report on the Trans-Pacific Partnership to the president and Congress in December 2015.

In its consideration of the TPP, Congress should take note of the fact that very few, if any, countries in the world trading system are now manipulating their currencies. Accordingly, there would probably be no need to apply new policies to oppose currency manipulation in the near future. The steps adopted so far should also assure Congress and others that the United States would no longer countenance manipulation from TPP partners or other countries in the longer run as well. Members of Congress and a new administration who are genuinely concerned about the problem should thus support the TPP without fear that its benefits might be diluted by currency manipulation.