Chapter 1 Introduction

Purpose

This report examines the Trans-Pacific Partnership Agreement (TPP), 9 a major trade agreement potentially linking the United States with 11 other parties: Australia, Brunei (Brunei), Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. Prepared by the U.S. International Trade Commission (Commission or USITC), the report assesses the likely impact of the TPP agreement on the U.S. economy, specific industry sectors, and U.S. consumers, as required by the Bipartisan Congressional Trade Priorities and Accountability Act of 2015. 10 In particular, the statute requires the Commission to assess the likely impact of TPP on the U.S. economy as a whole and on specific industry sectors, including the impact it will have on the gross domestic product (GDP), exports, and imports; aggregate employment and employment opportunities; the production, employment, and competitive position of industries likely to be significantly affected by the TPP; and the interests of U.S. consumers.

The statute also requires the Commission to review available economic assessments of the agreement, including literature about any substantially equivalent proposed agreements. The Commission's report should describe the analytical methods used and conclusions drawn in this literature, and it should also discuss areas of consensus and divergence between the Commission's analyses and conclusions and those of other economic assessments reviewed.

Scope

The United States already has free trade agreements (FTAs) with 6 of the other 11 TPP parties: Australia, Canada, Chile, Mexico, Peru, and Singapore. The TPP would therefore result in five new FTA partners for the United States: Brunei, Japan, Malaysia, New Zealand, and Vietnam. The agreement is likely to affect most sectors of the U.S. economy either directly or indirectly. For example, the removal or reduction in the restrictiveness of a particular tariff or nontariff measure may not only affect the sector directly exposed to the liberalization, but it may also

⁹ USTR, Trans-Pacific Partnership Agreement (TPP), full text, https://ustr.gov/trade-agreements/free-tradeagreements/trans-pacific-partnership/tpp-full-text. All in-text citations to TPP articles, annexes, or notes are to this

¹⁰ On November 5, 2015, the U.S. International Trade Commission received a letter from the U.S. Trade Representative (USTR) requesting that the Commission provide a report to the President and Congress assessing the likely impact of the TPP Agreement under section 105(c) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (19 U.S.C. 4204(c)). See appendix A for the request letter from the USTR.

have indirect effects on upstream and downstream sectors.¹¹ This report will examine economy-wide effects of the TPP as well as selected sectoral effects, based on a quantitative analysis discussed further below. Per the statute, this report also includes qualitative discussion and analysis of the agreement's effects on selected industry sectors.

These sectors were selected based on different factors, including the extent of the sector's trade liberalization under the TPP, the importance of the sector in terms of trade with the TPP region, the apparent sensitivity of certain U.S. industries to increased trade, and industry and Commission views regarding potential sectoral effects. In total, over 20 industry sectors were analyzed and are included in this report. Agricultural sectors analyzed include dairy; sugar; beef; pork; poultry; grains; processed foods; fresh fruits, vegetables, and nuts; alcoholic beverages; and seafood. Manufacturing sectors analyzed include passenger vehicles; textiles and apparel; footwear; chemicals; and titanium metal. Services sectors analyzed include computer services; professional services; audiovisual services; express delivery; financial services, including banking and insurance; and telecommunications services. The report also includes analyses of the regulatory provisions of the TPP that would apply across sectors of the economy.

Analytical Approach

The main quantitative analysis used in this report is based on simulations from a dynamic computable general equilibrium (CGE) model of trade among the 12 TPP countries and the rest of the world. The CGE model is based on the Global Trade Analysis Project (GTAP) model, an economy-wide CGE model of world trade specified at the sector level. This quantitative analysis is limited to certain aspects of the agreement, as explained below.

The simulation analysis provides effects for U.S. GDP; U.S. exports, imports, production, and consumption in the aggregate and by sector; and U.S. employment and wages by labor type (skilled vs. unskilled labor). Because of the dynamic nature of the analysis, the estimated effects capture the impact of the TPP Agreement over time from entry into force, thus differentiating the effects of immediate commitments from the effects of commitments over longer timeframes. The estimated effects also capture the reinforcing impact of the TPP Agreement on the growth of the U.S. economy during the agreement's period of implementation.

¹¹ An upstream sector (e.g., textiles) provides output that is used as an input by a downstream (e.g., apparel) sector.

¹² Chapters 3, 4, and 5 present model results by sector for country groups, such as all TPP partners, or existing FTA partners in the TPP. Where warranted, additional detail on trade with specific partners is reported in the text.

¹³ The GTAP framework includes 57 sectors. Some of these sectors were further broken down, or disaggregated, while others were combined, to focus on sectors of interest. See chapter 2 and appendix G for more details.

When the Commission has assessed prospective FTAs in the past, it has used the CGE model to simulate the economy-wide and sectoral effects of the agreements regarding tariffs, tariff-rate quotas (TRQs), and selected nontariff measures (NTMs) for trade in goods. 14 The current analysis assessing the impact of the TPP Agreement not only estimates the impact of tariffs, NTMs, and TRQs on goods, but also estimates (1) the effect of NTMs on cross-border trade for certain services and (2) the effect of restrictive measures affecting foreign direct investment (FDI). These new analytical extensions to the modeling framework draw on a variety of databases and economic analyses to estimate the existing barriers and the impact of the TPP on these barriers, based on the text of the agreement. Figure 1.1 shows how the TPP's provisions, once quantified, are integrated into the dynamic CGE model to obtain results on economic outcomes that take into account TPP liberalization in goods, services, and investment. The analysis in chapter 2 and technical appendix G explains the inputs into the model and the analytical framework in more detail.

¹⁴ Tariff-rates guotas (TRQs) are a type of tariff restraint, with a lower tariff applied to in-quota imports and a higher tariff applied to over-quota imports. Even though TRQs have a specified access or quota level, they are generally defined as tariff barriers. Nontariff measures (NTMs) are policy measures other than tariffs, such as sanitary and phytosanitary regulations, that may have an effect on international trade.

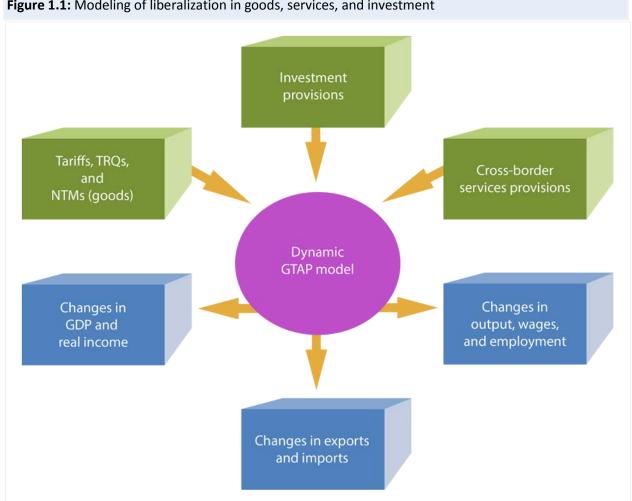


Figure 1.1: Modeling of liberalization in goods, services, and investment

Source: Compiled by USITC staff.

Certain chapters of the TPP Agreement contain provisions that are difficult to quantify, such as commitments on government procurement, competition, state-owned enterprises, and intellectual property. Nevertheless, these provisions can affect U.S. GDP, exports and imports, employment, production, and consumers, by reducing costs, increasing the variety of goods and services, or improving producers' competitiveness. The report therefore assesses the impact of such provisions using a qualitative approach. This approach contrasts the commitments in TPP to current practices and/or obligations under existing U.S. trade agreements with TPP parties in order to highlight the extent of the changes introduced by TPP. It also incorporates testimony presented during the Commission's public hearing on January 13–15, 2016; written submissions from interested parties; and staff interviews with industry

representatives. 15 Such information is interwoven into most chapters of this report, complementing the report's quantitative assessments.

TPP Agreement Overview

TPP is a comprehensive agreement that covers trade in goods and services, rules of origin, trade remedies, customs facilitation, sanitary and phytosanitary measures, technical barriers to trade, foreign investment, intellectual property, government procurement, competition policy, and labor and environmental standards, among other areas. There are 30 chapters in the agreement, which are listed in table 1.1 along with the corresponding chapters where they are discussed in this report. The assessment in this report is based on a review of all 30 chapters, as well as various annexes and numerous side agreements that address bilateral trade issues between individual TPP parties.

The TPP Agreement includes several chapters that have not been included in previous U.S. bilateral FTAs. These address state-owned enterprises, temporary entry of businesspersons, cooperation and capacity building, competitiveness and business facilitation, development, small and medium-sized enterprises, and regulatory coherence.

¹⁵ See appendix C for the calendar of the public hearing. See appendix D for summaries of positions of interested parties provided for inclusion in this report.

Table 1.1: TPP chapters and annexes, and their coverage in the Commission report

TPP Chapter	covered
	Chapter 6
2. National Treatment and Market Access for Goods	Chapters 2, 3, and 4
	Chapter 4
-	Chapter 4
	Chapter 6
6. Trade Remedies	Chapter 6
7. Sanitary and Phytosanitary Measures	Chapter 6
	Chapter 6
9. Investment	Chapters 2 and 6
10. Cross-Border Trade in Services	Chapters 2 and 5
11. Financial Services	Chapter 5
12. Temporary Entry for Business Persons ^a	Chapter 6
13. Telecommunications	Chapter 5
14. Electronic Commerce	Chapter 5
15. Government Procurement	Chapter 6
16. Competition Policy	Chapter 6
17. State-Owned Enterprises and Designated Monopolies ^a	Chapter 6
18. Intellectual Property	Chapter 6
19. Labour	Chapter 6
20. Environment	Chapter 6
21. Cooperation and Capacity Building ^a	Chapter 6
22. Competitiveness and Business Facilitation ^a	Chapter 6
23. Development ^a	Chapter 6
24. Small and Medium-Sized Enterprises ^a	Chapter 6
25. Regulatory Coherence ^a	Chapter 6
	Chapter 6
27. Administrative and Institutional Provisions	Chapter 6
28. Dispute Settlement	Chapter 6
29. Exceptions and General Provisions	Chapter 6
	Chapter 6
Annex I: Cross-Border Trade in Services and Investment Non-Conforming	Chapters 2, 5, and 6
Measures	
Annex II: Cross-Border Trade in Services and Investment Non-Conforming	Chapters 2, 5, and 6
Measures	
Annex III: Financial Services Non-Conforming Measures	Chapters 2 and 5
Annex IV: State-Owned Enterprises and Designated Monopolies Non-	Chapter 6
Conforming Measures	

Source: USTR, TPP full text.

In addition to the full text of the agreement, as shown in the table, TPP parties also signed a Joint Declaration of Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries, to address member exchange rate policies (box 1.1).

^a Chapter not included in existing U.S. trade agreements.

Box 1.1: Exchange rates, international trade, and exchange rate agreements among TPP members

Effects of exchange rate movements on trade

A change in a country's exchange rate vis-à-vis its trading partners can alter the relative price of exports and imports in that country, for both intermediate and final goods. For example, a 10 percent rise in the value of the U.S. dollar (an appreciation) could cause the price paid by importers of U.S. exports to increase by as much as 10 percent. At the same time, it would lower the price of imports into the United States by as much as 10 percent. Thus, a currency appreciation against a trading partner can have an effect similar to a combined import tariff and export subsidy across all imported and exported goods by the trading partner, absent the fiscal implications of tariff revenues and subsidies paid.

The extent to which prices respond to changes in exchange rates is known in the economic literature as pass-through. In general, the empirical literature concludes that exchange rate pass-through is not "complete" and that the percentage change in prices of a traded goods is typically lower than the percentage change in the exchange rate. This may reflect various factors, such as exporting firms that change their margins to offset the effects of the exchange rate change; firms that set their prices in the local currency of the importing country so that they do not fluctuate with the exchange rate, at least in the short run; and the extent of global supply chains, which leads to lower pass-through when production costs are denominated in different currencies.^a

Exchange rate agreements among TPP members

Separately, but upon the release of the TPP text, finance ministers of TPP member countries also released the Joint Declaration of Macroeconomic Policy Authorities of Trans-Pacific Partnership Countries to promote cooperation and transparency surrounding members' exchange rate policies. The details of the declaration outline a set of rules under which members are called to (1) "commit to avoid unfair currency practices and refrain from competitive devaluation"; (2) "publicly report their foreignexchange intervention and foreign reserves data, some for the first time"; and (3) have senior macroeconomic policy officials "consult regularly to address macroeconomic issues, including to engage on efforts to avoid unfair currency practices."

While the declaration has no enforcement mechanism to oblige countries to make policy changes if they violate its provisions, the declaration itself is binding, as (1) it becomes effective immediately upon the entry into force of the TPP; (2) it requires countries seeking accession to the TPP to join the declaration; and (3) it is consistent with countries' rights and obligations under the International Monetary Fund (IMF) Articles of Agreement.^c But because the declaration is not part of TPP, it is not enforceable under TPP dispute settlement procedures (Chapter 28).

Views on currency practices and their potential impacts under the TPP

In hearing statements, a number of witnesses expressed concerns that TPP countries might deliberately adjust the value of their respective currencies to gain a competitive advantage in export markets. Common points of concern included the lack of any provisions on currency issues in the TPP agreements, as well as the lack of an enforcement mechanism under the Joint Declaration for countries that may appear to be engaging in unfair currency practices. Their views, as summarized by each witness, can be found in appendix D.d

^a Jabara, "How Do Exchange Rates Affect Import Prices?" 2009. Powers and Riker, "The Effect of Exchange Rates," 2015.

^b U.S. Treasury, "Joint Declaration of the Macroeconomic Policy Authorities," Fact Sheet, November 5, 2015.

Existing Tariff Levels and Commitments

The focus of the Commission's analysis of tariff commitments in TPP centers on countries with which the United States does not already have an FTA, as the bulk of tariff liberalization occurs within these countries. Some additional tariff and TRQ liberalizations were given to partners with which the United States already has an FTA. However, these additional liberalizations are small compared to the reductions made to the rates charged between the United States and countries with which the United States does not have an FTA. ¹⁶

Table 1.2 summarizes the United States' most-favored-nation (MFN)¹⁷ ad valorem tariff rates¹⁸ charged against imports from TPP parties with which the United States has no FTAs (Brunei, Japan, Malaysia, New Zealand, and Vietnam). This table shows that 39.5 percent of MFN lines have free (zero) rates of duty. Relatively few tariff lines are above 10 percent (about 9.6 percent of U.S. tariff lines).¹⁹

Table 1.2: U.S. MFN tariffs imposed on TPP partners with which the United States has no existing FTA, in 2010, by rate charged, percent of U.S. tariff lines

MFN ad valorem rate (percent)	Number of lines	Percent of total
0	3852	39.5
>0 to 5	2716	27.9
>5 to 10	2233	22.9
>10 to 25	825	8.5
>25 to 100	102	1.0
>100 to 500	12	0.1

Source: USTR, TPP full text; USITC calculations.

Note: Percentage are based on the total number of ad valorem tariff lines (91.8 percent of U.S. MFN tariff lines), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used. Percentages may not add to 100 due to rounding.

^c U.S. Treasury, "Joint Declaration of the Macroeconomic Policy Authorities," November 5, 2015. Brunei, Malaysia, Singapore, and Vietnam are granted special accommodations under the agreement that grant them extra time and relaxation of certain reporting requirements for data dissemination. All TPP countries are IMF member countries.

^d Parties mentioning currency issues in appendix D include Representatives DeLauro, Slaughter, DeFazio, and Lee; Representative Levin; the AFL-CIO Action Network; Americans Backing a Competitive Dollar; Citizens Trade Campaign; Coalition for a Prosperous America; Economic Policy Institute; Ideal Taxes; Teamsters; and United Steelworkers.

¹⁶ On a trade-weighted basis, the largest non-TRQ tariff reduction given to U.S. exports and charged against U.S. imports is less than 0.2 percent at the sector level per the model in this report.

¹⁷ In the United States the MFN rate is the duty applied under normal trade relations or NTR status.

¹⁸ Ad valorem tariff rates refer to duties expressed as a percentage of the appraised customs value of the imported good. Other types of tariffs, such as specific tariffs, may be levied in other terms, such as dollars per ton.

¹⁹ Shares shown are out of the total number of ad valorem tariff lines (91.8 percent of U.S. MFN tariff lines), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used.

Table 1.3 summarizes MFN ad valorem tariff rates charged against imports from the United States by partners with which the U.S. has no existing FTA. On average, 54.0 percent of tariff lines have free rates of duty, and the majority of tariff lines are 10 percent or less. Compared to the U.S. import tariffs, however, these countries have a higher frequency of tariff lines above 10 percent, particularly in Vietnam (36.7 percent of tariff lines) and Malaysia (23.5 percent).

Table 1.3: MFN tariffs applied on U.S exports by TPP partners with which the United States has no existing FTA, by rate charged, percent of tariff lines of respective schedule

MFN ad valorem rate					
(percent)	Brunei	Japan	Malaysia	New Zealand	Vietnam
0	75.8	42.6	60.9	58.0	32.6
>0 to 5	8.1	24.6	9.2	36.4	19.5
>5 to 10	1.2	21.5	6.4	5.6	11.1
>10 to 25	14.8	9.2	17.9	0.0	26.0
>25 to 100	(^a)	2.1	5.6	0.0	10.7
>100 to 500	0.0	(^a)	0.0	0.0	(^a)

Source: USTR, TPP full text; USITC calculations.

Note: Percentages are based on the total number of ad valorem tariff lines (98.5 percent of lines for Japan, more than 99 percent for other countries), and not the entire tariff schedule. If both percentage values and specific rates were included, percentage rates were used. Percentages may not add to 100 due to rounding.

Tariff Commitments Related to New FTA Partners

TPP will eliminate duties immediately on a wide range of goods traded among TPP partners, while eliminating duties on other goods over varying time horizons spanning as long as 30 years. TPP members make tariff commitments and give preferential TRQs multilaterally, bilaterally, or both. The tariff schedules of the United States and of all other TPP countries (including general notes and annexes) cover all goods.

Table 1.4 summarizes tariff commitments for the United States and TPP members with which the United States does not already have an FTA. Of all U.S. MFN tariff lines, 36.7 percent are already duty free, and, on average, 49.9 percent of remaining duties would be eliminated upon the agreement's entry into force. ²⁰ On average, 99.5 percent of tariff lines would be duty free after 15 years, and 99.6 would be duty free after 30 years. U.S. exports to Brunei and New Zealand will be completely duty free within 15 years of the implementation of TPP. Only Japan and Vietnam do not fully eliminate tariffs on certain goods—namely certain rice, beef, and dairy products—during implementation.

^a Less than 0.05 percent.

²⁰ Shares are expressed as a percentage of each country's total tariff schedule (as opposed to just the lines that are ad valorem tariffs as in tables 1.2 and 1.3). This means that shares in the "Already zero" row differ from those in tables 1.2 and 1.3, because the ones in table 1.4 are shares relative to the entire schedule.

Table 1.4: Tariff commitments with TPP partners with which the United States has no existing FTA, percent of tariff lines of respective schedule

		Brunei	Japan	Malaysia	New Zealand	Vietnam
U.S. tariff	Already zero	36.7	36.7	36.7	36.7	36.7
lines applied	Eliminated at entry into force	90.7	83.9	89.7	87.7	78.8
on TPP	Eliminated after 15 years	100.0	99.2	99.8	99.0	99.6
partners	Eliminated after 30 years	100.0	99.8	99.8	99.0	99.7
	Subject to TRQs	0.0	0.2	0.2	1.0	0.3
TPP partner	Already zero	75.2	39.4	64.7	58.3	32.9
tariff lines	Eliminated at entry into force	91.7	83.6	85.6	94.9	66.3
applied on	Eliminated after 15 years	100.0	93.2	99.1	100.0	97.8
U.S. exports	Eliminated after 30 years	100.0	94.7	99.8	100.0	98.0
	Partially reduced or unchanged	0.0	3.5	0.0	0.0	0.1
	Subject to TRQs	0.0	1.8	0.2	0.0	1.9

Source: USTR, TPP full text; USITC calculations.

Note: Percentages are based on each country's total tariff lines (as opposed to just the lines that are ad valorem tariffs, as in tables 1.2 and 1.3). Some lines subject to TRQs are slated to be completely eliminated by the time the agreement is fully implemented.

Organization of the Report

The rest of this chapter provides an economic overview of the TPP region. ²¹ Chapter 2 reports quantitative estimates of the likely impacts of the TPP on the U.S. economy as a whole and on broad sectors of the economy, taking into account trade and investment liberalization under the agreement. It also reviews relevant literature, including analyses of the economic effects of the proposed TPP agreement, as well as analyses of substantially similar agreements, and compares the Commission's findings with findings from the studies reviewed. Chapters 3, 4, and 5 present industry-specific assessments for selected agricultural, manufacturing, and services industry sectors, respectively, combining quantitative and qualitative analyses. Chapter 6 gives a qualitative assessment of other regulatory chapters of the agreement not quantified in this report.

TPP Regional Economic Overview

The Trans-Pacific Partnership Agreement encompasses 12 countries spread around the Pacific Rim (figure 1.2) that account for a large proportion of the world's economic activity, its trade in goods and services, and its international financial flows. The signatories of TPP are a varied group of countries ranging widely in size, development, and specializations. Geographically, Canada is the largest, while Singapore is the smallest. The population of the TPP countries exceeded 810 million people as of July 2015. The United States currently has free trade

²¹ See appendix F for country profiles for each of the TPP parties.

²² CIA, *World Factbook*, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html (accessed December 15, 2015).

agreements with 6 of the other 11 signatory countries: Australia (2005), Canada (1989), Chile (2004), Mexico (1994), Peru (2009), and Singapore (2004).



Figure 1.2: TPP member countries

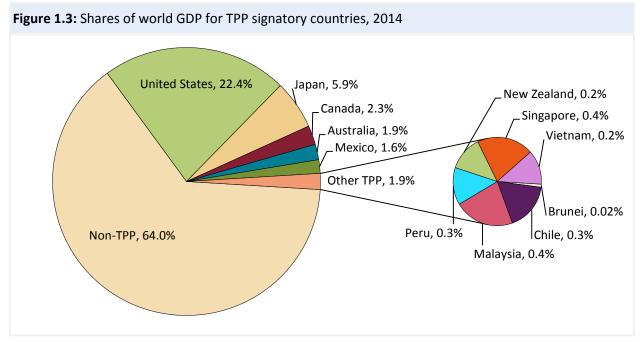
Source: Office of the United States Trade Representative (accessed December 15, 2015).

GDP

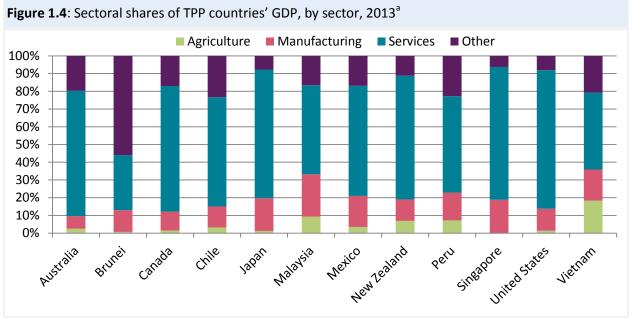
In total, signatory TPP countries' GDP in 2014 was valued at \$28.0 trillion. This represents 36.0 percent of the world's total economic activity in that year (figure 1.3). The United States accounted for the largest portion of this total (\$17.4 trillion), while Brunei accounted for the smallest (\$17.3 billion). The five TPP signatory countries with the largest GDPs in 2014 were the United States, Japan, Canada, Australia, and Mexico. These five countries represented nearly 95 percent of the TPP region's collective GDP in 2014, with the United States accounting for more than 62 percent of the total.

TPP countries' sectoral specializations also varied among signatories in 2014 (figure 1.4). Among TPP countries, Vietnam had the largest portion of its GDP—nearly 20 percent—attributable to agriculture. Malaysia is the TPP country in which manufacturing represented the largest share of GDP. Services represented a majority of all the TPP countries' economic activity except for Vietnam and Brunei, with the United States having the most services-based economy: services represented nearly four-fifths of U.S. GDP in 2014. Brunei's focus on petroleum products (included in the "other" category in figure 1.4) made it the only TPP country with a majority of

its economic activity attributable to industries other than agriculture, manufacturing, or services. ²³



Source: World Bank, World Development Indicators (accessed January 20, 2016). Corresponds to appendix table J.1.



Source: World Bank, World Development Indicators (accessed July 7, 2015). Corresponds to appendix table J.2.

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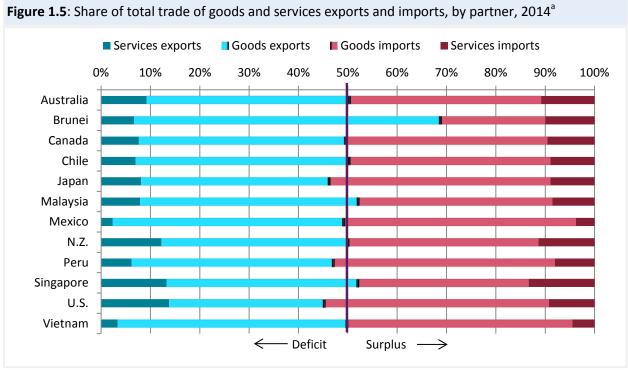
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^a "Other" industries are defined as construction, mining (including petroleum products), electricity, gas, and water. Data for Canada and Peru are based on 2010 data and data for New Zealand are based on 2011 data.

²³ "Other" industries are defined as construction, mining (including petroleum products), electricity, gas, and water.

Trade in Goods and Services

In addition to variations in GDP, TPP countries vary considerably in their international trade patterns. Brunei, the smallest of the TPP countries by GDP, ran the largest trade surplus among TPP countries in 2014 as a percentage of its total trade, followed by Malaysia and Singapore (figure 1.5). The United States ran the largest trade deficit, both in absolute dollar value (\$494 billion) and relative to its total trade. Singapore's imports of services accounted for a larger proportion of its total trade than those in any other TPP country (13.4 percent of total trade), whereas the United States had the largest share of services exports relative to its total trade (13.8 percent). Brunei had the largest share of trade attributable to goods exports (62.1 percent of total trade); Mexico, the largest share attributable to goods imports (47.1 percent).



Source: UN, Comtrade (accessed January 8, 2016); USITC DataWeb/USDOC (accessed December 31, 2015); ASEAN, ASEANstats database (accessed December 14, 2015); UN, Service Trade Statistics Database (accessed December 14, 2015); OEDC, OECD.Stat (accessed January 27, 2016); USDOC, BEA, table 2.2, "U.S. Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015. Corresponds to appendix table J.3.

Note: The distance between the black bars and the 50 percent line indicate the country's total trade surplus or deficit. For example, Australian imports and exports were nearly balanced, whereas Brunei ran a trade surplus of approximately 18 percent.

^a Services data for Japan and New Zealand are based on 2013 data.

Size of Trade in Goods

TPP countries accounted for 28 percent of world merchandise imports and 24 percent of world merchandise exports in 2014. More than two-fifths of TPP country trade is with other TPP countries. The United States is a partner in 6 of the 10 largest bilateral trade flows among TPP member countries. These include, in order of value of goods in 2014, trade flows between the United States and Canada, Mexico, Japan, Singapore, Malaysia, and Australia. The other four largest bilateral trade flows in 2014 consist of Malaysia-Singapore, Japan-Australia, Japan-Malaysia, and Japan-Singapore trade.

In 2014, the United States' largest TPP trading partners were Canada and Mexico. These three countries are the members of the North American Free Trade Agreement (NAFTA), which entered into force in 1994. The United States' next-largest trading partner among TPP signatories is Japan, with which the United States does not have a free trade agreement (figure 1.6). The United States maintained a trade surplus with four TPP countries—Singapore, Australia, Chile, and Peru—all of which have free trade agreements with the United States.

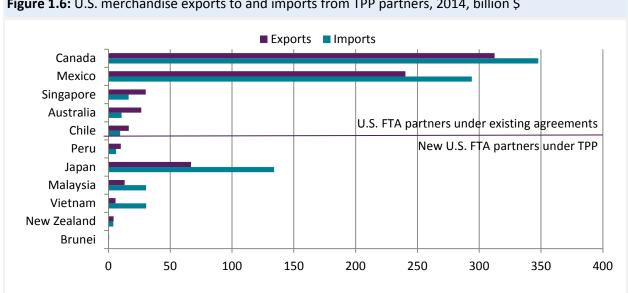


Figure 1.6: U.S. merchandise exports to and imports from TPP partners, 2014, billion \$

Source: USITC DataWeb/USDOC (accessed January 25, 2016). Corresponds to appendix table J.4.

In total, TPP countries accounted for 44.8 percent of U.S. total exports and 37.6 percent of U.S. general imports in 2014. 24 Canada, Mexico, and Japan were three of the top four trading

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²⁴ "General imports" measures the total physical arrivals of merchandise from foreign countries, whether such merchandise enters the U.S. customs territory immediately or is entered into bonded warehouses or a U.S. Foreign Trade Zone (FTZ) under Customs custody. "Total exports" measures the total physical movement of goods out of the United States to foreign countries whether such goods are exported from within the U.S. customs territory or from a Customs and Border Protection (Customs) bonded warehouse or a FTZ.

partners with the United States in 2014 (China was the first-ranked import source and thirdranked export destination). Singapore and Australia were the fourth- and fifth-ranked U.S. export destinations among TPP countries in 2014, whereas Vietnam and Malaysia were the fourth- and fifth-ranked sources for U.S. imports among TPP countries (figure 1.7).

U.S. Total Exports, 2014 Mexico Canada 14.8% 19.3% Japan Singapore 4.1% 1.9% Peru Vietnam 0.6% Australia 0.4% 1.6% **New Zealand** Malaysia 0.3% 0.8% Brunei Non-TPP Other 0.03% 55.2% 3.1% Chile 1.0% Total exports: \$1.62 trillion U.S. General Imports, 2014 Canada 14.8% New Zealand Mexico Japan Vietnam 0.2% 12.5% 5.7% _1.3% Peru 0.3% Chile Malaysia 0.4% 1.3% Other 2.0% Australia 0.5% Non-TPP 62.4% Singapore_ Brunei 0.7% 0.001% General imports: \$2.35 trillion

Figure 1.7: U.S. total export destinations and import sources from TPP partners and the rest of the world, 2014

Source: USITC DataWeb/USDOC (accessed January 25, 2016). Corresponds to appendix table J.5.

Sectoral Trade in Goods

TPP signatory countries typically did not specialize in one type of good in trading with other TPP signatories (table 1.5). Looking at a broad measure of trade—the 2-digit HS chapter—Japan's

exports to TPP countries were concentrated in two chapters (HS 85, electrical machinery, and HS 87, vehicles) to TPP partner countries, while those of others such as Canada and Peru were concentrated in as many as seven.²⁵ The United States fell into the midrange, with exports concentrated in five chapters; its largest intra-TPP export categories include those encompassing mineral fuels and electrical, mechanical, and transportation machinery (HS 27, 84, 85, 87, and 88). TPP countries' imports from other TPP signatories were even less concentrated, with between five and eight different categories represented in each country's largest intra-TPP import sector.

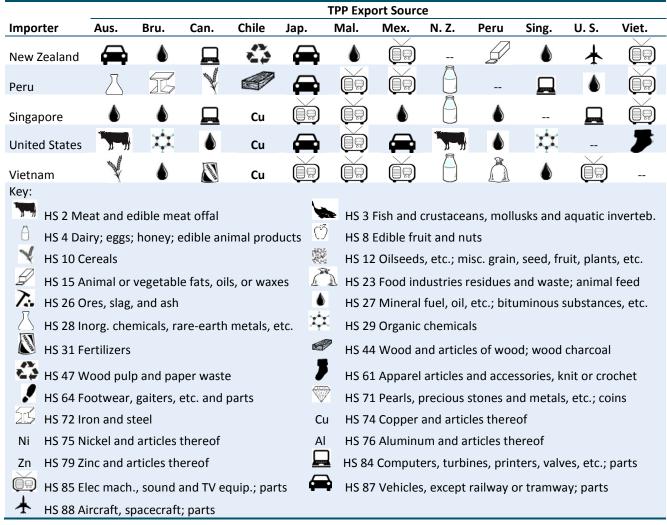
Similar export and import trends generally are apparent when examining a more detailed breakdown of trade categories (4-digit HTS headings). For example, U.S. goods classified under HTS headings 8800 (aircraft, spacecraft, and parts) and 2710 (non-crude petroleum products) were the ones that seven TPP partner countries imported the most (four countries for 8800 and three for 2710). The top import categories for the other four countries—Australia, Canada, Malaysia, and Vietnam—were motor vehicles (Australia, 7.5 percent of Australia's imports from the United States), imported parts for certain vehicles (Canada, 5.6 percent), and integrated circuits (Malaysia, 33.5 percent, and Vietnam, 6.9 percent). More details about each TPP partner country's top export and import categories, based on 4-digit HTS headings, are presented in appendix F.

Table 1.5: Largest intra-TPP partner country merchandise trade sector, by 2-digit HTS chapter, 2014

						TPP Exp	ort Sourc	e				
Importer	Aus.	Bru.	Can.	Chile	Jap.	Mal.	Mex.	N. Z.	Peru	Sing.	U.S.	Viet.
Australia				Cu		•		•	(Parallel			
Brunei			★	J	\rightleftharpoons				J	•		1
Canada		苁		Cu								7
Chile					\rightleftharpoons				7.			
Japan	•			7:.				Al	7:			
Malaysia	Ni			Cu					Zn			
Mexico	•	7						ð	•			

²⁵ The international Harmonized System (HS) of classifying internationally traded goods is administered by the World Customs Organization. The HS serves as the foundation for the import and export classification systems used in the United States. The United States' import classification system, the Harmonized Tariff Schedule (HTS) is administered by the Commission, whereas the U.S. export classification system, the Schedule B, is administered by the U.S. Census Bureau, Foreign Trade Division. Both the HTS and Schedule B rely on the international HS codes for their 4- and 6-digit headings and subheadings. Greater commodity detail is provided at the 4-digit and 6-digit levels than at the 2-digit (HS chapter) level. HTS and Schedule B subheadings will be the same for each importing country's import classification system.

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Source: UN, Comtrade (accessed January 25, 2016).

Size and Share in Trade of Services

Trade in services in TPP countries is not as large as trade in merchandise, but it still plays a substantial role in total trade flows. Overall, TPP countries exported more than \$1.2 trillion in services and imported nearly \$1.1 trillion in services during 2013/14 (table 1.6). ²⁶ The United States generated the highest values in total services trade, including more than half of all TPP countries' services exports to the world. The TPP countries with the next highest values in services trade with the world were Japan and Singapore, followed by Canada.

In terms of trade shares, the United States accounted for the majority of Canadian and Mexican exports and imports of services in 2014. Japan's services trade with the United States in 2013

²⁶ Data for 2014 are not available for Japan and New Zealand. Data presented represent the most recent data available (i.e., 2013) for these two countries.

was also robust, accounting for more of Japan's intra-TPP services trade than all other TPP countries combined.

Table 1.6: TPP partner country services trade import and export values and shares attributable to the United States, other TPP countries, and non-TPP countries, 2013/14

	Trade with	world		Share of	exports to:		Share of in	nports from:
_	Exports	Imports	U.S.	Other TPP	Non-TPP	U.S.	Other TPP	Non-TPP
	Billion	\$				Percent		
Australia	54.2	63.5	10.0	22.9	66.1	18.2	20.6	62
Brunei	1.1	1.7	(a)	(^a)	(a)	(^a)	(^a)	(^a)
Canada	86.6	107.7	55.6	6.3	38.1	57.5	6.5	36.1
Chile	12.5	15.9	9.0	12.5(lb)	78.5(ub)	23.0	6.5(lb)	70.5(ub)
Japan	147.0	162.3	24.8	17.4	57.8	30.2	10.8	59.0
Malaysia	41.9	45.3	6.8	(^a)	(a)	4.0	(^a)	(^a)
Mexico	20.1	31.9	88.3	(a)	(a)	93.5	(^a)	(^a)
N. Zealand	13.5	12.6	12.1	36.1	58.0	16.0	43.8	44.5
Peru	5.8	7.6	(a)	(a)	(a)	(^a)	(^a)	(^a)
Singapore	140.4	141.6	8.4	(^a)	(a)	4.2	(^a)	(^a)
United States	710.6	477.4	(a)	25.1(lb)	74.9(ub)	(^a)	20.5(lb)	79.5(ub)
Vietnam	10.9	14.5	(a)	(^a)	(a)	(^a)	(^a)	(^a)
TPP Total:	1,244.6	1,081.9	(^a)	(^a)	(a)	(^a)	(^a)	(^a)
Rest of world	1,340.4	1,208.1						
World	2,585.0	2,290.0						

Source: ASEAN, ASEANstats database (accessed December 14, 2015) for value data for ASEAN members; USDOC, BEA, table 2.2, "U.S. Trade in Services, by Type of Service and Country or Affiliation," October 15, 2015, for U.S. data; OECD, OECD.Stat (accessed January 27, 2016) and UN, Service Trade Statistics Database (accessed December 14, 2015) for other countries' values and TPP country share data; WTO, "International Trade Statistics 2015" (accessed February 11, 2016).

Note: (lb) signifies a lower bound, and (ub) signifies an upper bound. These designations are used when data incorporating all TPP countries were not available. Data for 2013 are used when 2014 data were not available. Share data for Malaysia and Singapore are based on 2014 U.S. BEA and ASEAN data.

Sectoral Trade in Services

TPP countries varied considerably in the types of services that were exported and imported. The largest sectors were travel, transportation, and other business services, each accounting for at least 10 percent of total services trade for nearly all TPP countries. Some countries' exports and imports were more heavily concentrated in certain services sectors, however. Tables 1.7 and 1.8 present the share of services sectors that accounted for more than 1 percent of each country's total services exports and imports, respectively. The majority of five TPP countries' services exports were concentrated in travel services (Australia, Malaysia, Mexico, Peru, and Vietnam). These countries typically are tourist destinations with less diversified services sectors. For other countries, such as Brunei, Chile, and Singapore, transportation services exports

^a Data not available.

accounted for a large share, although not a majority, of their services trade. 27 Imports of travel services represented the largest share of services category in countries like Australia, Brunei, and New Zealand, where per capita income is relatively high but consumption of other foreign services, such as transportation, is low.

Table 1.7: Largest services export categories, by TPP country, 2013/14

Service exported	Aus.	Bru.	Can.	Chil.	Jap.	Mal.	Mex.	N.Z.	Peru	Sing.	U.S.	Viet.
		Percent of services exports										
Manufacturing services	**	**	**	**	**	5.8	**	**	**	**	**	**
Maintenance/repair	**	**	**	**	**	**	**	**	**	5.7	3.2	**
Transportation	8.8	48.5	15.1	51.0	26.9	11.4	4.0	18.2	26.2	31.9	12.7	22.0
Travel	56.5	30.5	20.6	18.3	10.3	53.9	69.3	49.1	51.8	13.7	24.9	67.1
Telecom/computer/info	5.1	2.2	12.6	3.8	1.8	6.5	1.0	5.5	2.9	3.8	5.1	3.8
Construction	**	**	**	**	6.6	2.0	**	**	**	1.3	**	**
Insurance	**	1.4	2.0	2.6	**	1.1	13.9	**	6.9	2.8	2.5	**
Financial	2.6	**	5.6	**	3.1	**	**	4.1	1.2	14.6	12.3	1.6
Royalties/license fees	1.5	**	5.2	**	21.5	**	11.4	2.8	**	2.2	18.3	**
Other business services	16.3	17.3	33.6	23.4	27.8	16.8	**	13.8	8.3	23.4	18.2	2.7
Personal, cultural, recreation	2.7	**	2.8	**	**	**	**	4.5	**	**	**	**
Government	3.5	**	1.6	**	1.8	**	**	1.4	2.6	**	2.9	1.3
Other ^a	1.0	0.0	0.9	0.9	0.2	2.6	0.4	0.5	0.8	0.6	0.0	1.5

Source: UN, Service Trade Statistics Database (accessed December 14, 2015) for 2013 data for Australia, Chile, Canada, Japan, Mexico, New Zealand, and Peru; ASEAN, ASEANstats database (accessed December 14, 2015) for 2014 data for Brunei, Malaysia, Singapore, and Vietnam; USDOC, BEA, table 2.2, "U.S. Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015.

^a "Other" includes data for services that accounted for less than 1 percent of service exports for that country in 2013/2014, and ** signifies that the service category in question accounted for less than 1 percent of service exports for that country or is not included in the data maintained by that country.

²⁷ Travel services are measured through foreign nationals' purchases of goods and services, such as food, lodging, and recreation, while traveling abroad. Transportation services cover sea, air, and land transportation for both passengers and freight, including pipelines and auxiliary services such as the operation of ports, when those services are supplied by residents of one country to residents of another. International air passenger fares are included in the transportation services category, rather than travel services.

Exports and imports of transportation services are driven by the volume of merchandise trade, but are recorded according to the ownership of the transportation services provider. Countries such as the United States that import a large amount of foreign goods on foreign-owned ships, for example, will also import a large amount of transportation services (though these services may be provided by a third country). Conversely, countries like Singapore that export large amounts of transportation services may or may not also be exporters of the goods they are transporting.

Table 1.8: Largest services import categories, by TPP country, 2013/14

Service imported	Aus.	Bru.	Can.	Chil.	Jap.	Mal.	Mex.	N.Z.	Peru	Sing.	U.S.	Viet.
					Pei	rcent of	f services imports					
Transportation	23.1	31.4	20.7	48.1	28.9	28.1	39.8	25.7	38.0	27.8	19.7	53.8
Travel	40.3	34.4	32.0	12.6	13.5	27.3	28.6	30.9	21.0	16.9	23.2	14.9
Telecom/computer/info	3.0	1.2	5.2	4.7	3.9	6.8	**	6.5	6.3	5.2	7.0	1.9
Construction	**	**	**	**	4.6	5.9	**	**	**	**	**	7.3
Insurance	1.1	1.0	4.1	6.6	4.2	6.1	15.1	4.2	10.6	3.4	10.5	7.1
Financial	1.8	**	4.2	**	2.2	**	**	2.9	1.3	3.1	4.1	3.3
Royalties/license fees	5.6	**	10.7	9.2	11.0	3.2	4.6	7.6	2.8	15.7	8.8	3.9
Other business services	15.8	17.0	20.8	18.5	29.9	18.5	1.0	20.0	17.6	26.5	20.1	6.4
Personal, cultural, recreation	4.1	**	1.9	**	**	2.0	**	**	**	**	**	**
Government	5.2	13.9	**	**	1.1	**	8.8	1.0	2.1	**	5.1	1.3
Other ^a	0.0	1.2	1.4	0.2	1.5	2.1	2.1	1.2	0.4	1.5	1.6	0.1

Source: UN Service Trade (accessed December 14, 2015) for 2013 data for Australia, Chile, Canada, Japan, Mexico, New Zealand, and Peru; ASEANstats Database (accessed December 14, 2015) for 2014 data for Brunei, Malaysia, Singapore, and Vietnam; and BEA, table 2.2, "Trade in Services, by Type of Services and by Country or Affiliation," October 15, 2015.

^a "Other" includes data for all services that accounted for less than 1 percent of service imports for that country in 2013/2014, and ** signifies that the service category in question accounted for less than 1 percent of service exports for that country or is not included in the data maintained by that country.

Foreign Direct Investment

TPP countries hold \$9.6 trillion in total outward foreign direct investment (FDI) stock, and over \$8.6 trillion in inward FDI stock. ²⁸ This accounts for 37.2 percent of the world's outward FDI and 33.1 percent of the world's inward-bound FDI. The largest net outward-investing countries were the United States and Japan, whereas the countries with the largest net stock of inward FDI were Singapore and Mexico (table 1.9).

Table 1.9: Value of inward-bound and outward-bound FDI in TPP countries, and shares accounted for by other TPP countries and the United States

	Stock	of inward-facing F	DI	Stock of outward-facing FDI				
		Share accounted	for by:		Share accounted	d for by:		
Partner country	Value	TPP	U.S.	Value	TPP	U.S.		
	Billion \$	Percent	Percent	Billion \$	Percent	Percent		
Australia	564.6	43.0	23.7	443.5	40.7	25.2		
Brunei	6.2	76.2	37.2	0.1	12.1	0.0		
Canada	631.3	52.7	49.4	714.6	51.7	42.2		
Chile	207.7	24.0	15.9	89.7	13.1	3.9		
Japan	170.6	40.6	30.5	1,193.1	45.6	32.3		
Malaysia	133.8	43.2	7.7	135.7	23.0	0.3		
Mexico	338.0	55.1	47.9	131.2	37.6	33.5		
New Zealand	76.8	74.2	7.9	18.7	82.2	16.8		

²⁸ The OECD distinguishes between the two types of foreign direct investment stocks as follows: "The outward FDI stock is the value of the resident investors' equity in and net loans to enterprises in foreign economies. The inward FDI stock is the value of foreign investors' equity in and net loans to enterprises resident in the reporting economy."

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	Stock	of inward-facing FD		Stock of outward-facing FDI				
		Share accounted f	or by:		Share accounted for by:			
Partner country	Value	TPP	U.S.	Value	TPP	U.S.		
Peru	79.4	55.8	15.3	4.2	(^a)	(^a)		
Singapore	912.3	54.6	37.9	576.4	21.8	5.2		
United States	2,901.0	24.9	(^a)	4,920.7	20.6	(a)		
Vietnam	91.0	73.1	5.2	7.5	10.7	4.5		
TPP total:	8,621.6	(^a)	(^a)	9,633.4	(^a)	(a)		
Rest of world	17,417.2	(^a)	(^a)	16,241.4	(^a)	(^a)		
World:	26,038.8	(^a)	(^a)	25,874.8	(^a)	(a)		

Source: UNCTAD, FDI/TNC Database (accessed December 10 and 18, 2015) for values except those for the United States, which come from BEA historical cost data, and for Brunei's and Vietnam's share data (based on 2012 shares); USDOC, BEA, "Direct Investment Positions for 2014: Country and Industry Detail," 2015 for U.S. historical cost values; IMF, Coordinated Direct Investment Survey (accessed December 28, 2015) for non-U.S. shares.

Note: FDI data are not available for all TPP countries. Therefore, shares data should be considered a lower bound.

Globally, the stock of total U.S. inward FDI (\$2.9 trillion) is roughly three-fifths of the total outward FDI held by the United States (\$4.9 trillion). In other words, the size of U.S. investments abroad is substantially larger than the size of foreign investments in the United States. On the other hand, the share of U.S. inward FDI that originates in TPP countries (24.9 percent) is larger than the share of outward U.S. FDI that has TPP countries as its destination (20.6 percent). Overall, TPP countries account for over \$1 trillion of U.S. outward FDI stock. Among TPP countries, the largest destination for U.S. outward FDI is Canada (7.8 percent of total), followed by Australia and Singapore (3.7 percent each) (figure 1.8). The majority (87.8 percent) of U.S. FDI from TPP countries originates in Japan and Canada. The largest TPP investor in the United States is Japan, which accounts for 12.9 percent of total inward U.S. FDI stock.

^a Undetermined or unavailable data.

Shares of U.S. outward-bound FDI stocks in TPP countries Australia Canada Japan Mexico 2.2% 2.2% Singapore 3.7% Other TPP 1.1% Non-TPP 79.3% 2014: \$4.9 trillion Shares of U.S. inward-bound FDI stocks held by TPP countries Australia Canada 1.6% 9.0% Japan Mexico 12.9% 0.6% Singapore 0.7% Non-TPP Other TPP 75.1% 0.1% 2014: \$2.9 trillion

Figure 1.8: Shares of outward-bound and inward-bound FDI stocks, by TPP country, 2014

Source: USDOC, BEA, "Direct Investment Positions for 2014: Country and Industry Detail," 2015 (accessed December 28, 2015). Corresponds to appendix table J.6.

Free Trade Agreements in the TPP Region

Among the TPP countries, there are a number of FTAs currently in force. Some are fully implemented, while others are still being phased in. Among the 66 country pairs within the TPP region, 42 country pairs trade under FTAs (table 1.10). The United States has FTAs with 6 of the 11 partners. Canada has the fewest FTAs with TPP countries (4), whereas Chile has FTAs with all 11 TPP countries. The earliest FTA for any of the TPP countries dates back to 1983 (Australia-New Zealand Closer Economic Relations Trade Agreement), while the most recent entered into effect in 2015 (Japan-Australia Economic Partnership Agreement).

Table 1.10: Country pairs in TPP with existing FTAs, year of entry into force

		Americas						Asia/	Oceania		
	U.S.	Can.	Mex.	Chile	Peru	Aus.	Brunei	Japan	Mal.	N. Z.	Sing.
Canada	1989										
Mexico	1994	1994									
Chile	2004	1997	1999								
Peru	2009	2009	2012	2009							
Australia	2005			2009							
Brunei				2006		2010					
Japan			2005	2007	2012	2015	2008				
Malaysia				2012		2010	1992	2006			
New Zealand				2006		1983	2010		2010		
Singapore	2004			2006	2009	2010	1992	2002	1992	2001	
Vietnam				2014		2010	1995	2008	1995	2010	1995

Source: WTO, RTA-IS database (accessed February 11, 2016); World Bank, Global Preferential Trade Agreements Library (accessed February 11, 2016).

Bibliography

- Association of Southeast Asian Nations (ASEAN). ASEANstats database. http://aseanstats.asean.org/ (accessed December 14, 2015).
- Central Intelligence Agency (CIA). *World Factbook*.

 https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html
 (accessed December 15, 2015).
- International Monetary Fund (IMF). Coordinated Direct Investment Survey (CDIS) database. http://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5 (accessed December 28, 2015).
- Jabara, Cathy L. "How Do Exchange Rates Affect Import Prices? Recent Economic Literature and Data Analysis." Rev. ed. U.S. International Trade Commission. Office of Industries Working Paper. Publication ID-21, October 2009.
- Organisation for Economic Co-operation and Development (OECD). OECD.Stat database. http://stats.oecd.org/ (accessed January 27, 2016).
- ——. "Foreign Direct Investment." https://data.oecd.org/fdi/fdi-stocks.htm (accessed April 5, 2016).
- Powers, William, and David Riker. "The Effect of Exchange Rates on the Costs of Exporters When Inputs Are Denominated in Foreign Currencies." *International Trade Journal* 29 (2015): 3–18.
- United Nations (UN). Comtrade database. Via the World Integrated Trade Solution (WITS). http://unstats.un.org/unsd/tradekb/Knowledgebase/Use-UN-Comtrade-via-World-Integrated-Trade-Solution-WITS (accessed December 31, 2015).
- ——. Service Trade Statistics Database. http://unstats.un.org/unsd/servicetrade/default.aspx (accessed December 14, 2015).
- United Nations Conference on Trade and Development (UNCTAD). FDI/TNC Database. http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics.aspx (accessed December 10 and 18, 2015).
- U.S. International Trade Commission (USITC) Interactive Tariff and Trade DataWeb (DataWeb)/U.S. Department of Commerce (USDOC). http://dataweb.usitc.gov (accessed various dates).



Chapter 1: Introduction