Trans-Pacific Partnership (TPP) Countries: Comparative Trade and Economic Analysis

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Summary

The Trans-Pacific Partnership (TPP) is a proposed regional free trade agreement (FTA) among 12 countries: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. The negotiating partners have expressed an interest in allowing this proposed "living agreement" to cover new trade topics and to include new members that are willing to adopt the proposed agreement's high standards. Japan is the most recent country to seek entry into the TPP. The Administration gave Congress notice of its intent to negotiate with Japan in the TPP on April 24, 2013.

The TPP negotiations have been of significant interest to Congress. Congressional involvement includes consultations with U.S. negotiators on and oversight of the details of the negotiations, and eventual consideration of legislation to implement the final trade agreement. In assessing the TPP negotiations, Members may be interested in understanding the potential economic impact and significance of TPP and the economic characteristics of the other TPP countries as they evaluate the potential impact of the proposed TPP on the U.S. economy and the commercial opportunities for expansion into TPP markets.

This report provides a comparative economic analysis of the TPP countries and their economic relations with the United States. It suggests that the TPP negotiating partners encompass great diversity in population, economic development, and trade and investment patterns with the United States. This economic diversity and inclusion of fast-growing emerging markets presents both opportunities and challenges for the United States in achieving a comprehensive and high standard regional FTA among TPP countries.

The proposed TPP and its potential expansion are important due to the economic significance of the Asia-Pacific region for both the United States and the world. The region is home to 40% of the world's population, produces nearly 60% of global GDP, and includes some of the fastest-growing economies in the world. Including Canada, Mexico, and Japan, TPP negotiating partners made up 40% of U.S. goods trade in 2012, and the Asia-Pacific economies as a whole made up over 62%. The TPP would be the largest U.S. FTA to date by trade value.

The United States is the largest TPP market in terms of both GDP and population. In 2012, non-U.S. TPP partners collectively had a GDP of $11.9 trillion, just over 75% of the U.S. level, and a population of 478 million, about 50% larger than the U.S. population. Japan's entry (pop. 128 million and GDP $6 trillion) increases the significance of the agreement on both these metrics.

Unlike most previous U.S. FTA negotiations, the TPP involves countries with which the United States already has an FTA. The United States has FTAs in place with Australia, Canada, Chile, Mexico, Peru, and Singapore, which together account for over 80% of U.S. goods trade with TPP countries. Japan is by far the largest U.S. trade partner among TPP members without an existing U.S. FTA.

Other TPP partners also have extensive existing FTA networks. The Association of Southeast Asian Nations (ASEAN), of which Brunei, Malaysia, Singapore, and Vietnam are members, and its collective FTAs with other countries, accounts for the bulk of this interconnectedness. Moreover, ASEAN agreements with larger regional economies (e.g., China, Japan, and Korea) present a second possible avenue for Asia-Pacific economic integration; albeit one that currently excludes the United States.

Contents

Figures

Tables

Appendixes

Contacts

Introduction[1]

The Trans-Pacific Partnership (TPP) is a proposed regional free trade agreement (FTA) under negotiation between the United States and 11 other countries. Current participants include Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. In November 2011, Canada, Mexico, and Japan all expressed interest in the possibility of joining the TPP talks, and proceeded with consultations among the existing partners toward that end. Canada and Mexico joined the agreement in late 2012, and while Japan's entry process was somewhat more protracted, Japan is expected to begin participating in the TPP negotiations beginning in July 2013. The proposed agreement's ability to attract and incorporate new members may impact the ultimate global significance of its regional platform and the new trade rules it may come to embody.

Congress has a major role in the negotiation and implementation of FTAs. Throughout the negotiating process, Congress may conduct oversight hearings and consultations with U.S. trade negotiators, providing Members an opportunity to oversee and influence the development of the final TPP. Any final FTA must also be implemented by Congress before it can enter into force.

The United States has a number of objectives in the proposed TPP agreement.[2] These include:

- achieving a comprehensive and high standard regional FTA that eliminates and reduces trade barriers and increases opportunities for U.S. trade and investment;
- allowing the United States to play a role in developing a broader platform for trade liberalization, particularly throughout the Asia-Pacific region;[3] and
- providing the United States with an opportunity to establish new rules on emerging trade issues, such as regulatory coherence, supply chain management, state-owned enterprises, and increasing trade opportunities for small- and medium-sized businesses.[4]

This report focuses primarily on U.S. economic interests in the TPP agreement. It provides a comparative economic analysis of the countries currently negotiating the TPP and describes the U.S. trade flows with these countries at the bilateral level and in relation to the countries' economic linkages with the rest of the world. It also provides information on the existing trade agreements of TPP countries. As such, this report aims to serve as an introduction to the economic relationship these countries have, both individually and collectively, with the United States.

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[1] For more information on the negotiations and subjects of negotiation, see CRS Report R42694, *The Trans-Pacific Partnership Negotiations and Issues for Congress*, coordinated by Ian F. Fergusson.

[2] This report covers economic aspects of TPP countries and does not address U.S. foreign policy interests.

[3] Potential TPP membership has not been expressly defined, but some see members of the Asia-Pacific Economic Cooperation (APEC) forum as the most likely candidates. For a complete list of APEC members see **Table 1**.

[4] Letter from Ambassador Ronald Kirk, USTR, to The Honorable Nancy Pelosi, Speaker of the United States House of Representatives, December 14, 2009.

Economic Overview

Asia-Pacific Region

The Asia-Pacific region, defined for the purposes of this report as the current members of the Asia-Pacific Economic Cooperation (APEC) forum, has substantial global economic significance. Among its 21 member economies, APEC includes all 12 of the current TPP participants (**Table 1**). It is home to 40% of the world's population and nearly 60% of global GDP.[5] Moreover, the region's economies are growing quickly. In 2012, nine of these 21 economies had GDP growth above 5%, while GDP growth in the United States was 2.2%.[6] Along with increasing economic influence these economies account for a growing share of world trade. For example, Asia's share of world imports grew from 18.5% in 1983 to 30.9% in 2011.[7] The region is significant not just as a burgeoning market, but also as an integral part of global value chains. The East Asian members, in particular, are highly connected through intermediate goods trade and involve the United States in complex production networks spanning the Pacific. In 2009, for example, 64% of Asian non-fuel imports were in intermediate goods and over $600 billion in intermediate goods moved between Asia and North America.[8]

The Asia-Pacific region represents an important source and destination for U.S. trade and investment. Together, these economies represent over 60% of overall U.S. trade and about one-quarter of the stock of foreign direct investment (FDI) into and out of the United States.[9] Yet, there remains great potential for further U.S. economic engagement with the region. Some U.S. policy observers argue that the United States has fallen behind in its focus on market access abroad, particularly in emerging Asia and Latin America.[10] The proposed TPP, congressional approval of the U.S. FTAs with Colombia, Panama, and South Korea, and the Administration's National Export Initiative (NEI) goal of doubling exports by 2015, suggest a continued U.S. interest in opening markets and expanding U.S. economic engagement abroad.[11]

[5] Analysis by CRS. Data from the World Bank *World Development Indicators* and International Monetary Fund (IMF) *World Economic Outlook*, April 2013.

[6] Analysis by CRS. Data from the IMF *World Economic Outlook*, April 2013.

[7] World Trade Organization, *International Trade Statistics 2012*, 2012, p. 35. APEC does not include India, which is included in the WTO's definition of Asia, but does include some Latin American countries not included in this statistic.

[8] World Trade Organization and Institute of Developing Economies, *Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks*, 2011, p. 83.

[9] Analysis by CRS. Data from the U.S. International Trade Commission (ITC) and the Bureau of Economic Analysis (BEA).

[10] Council on Foreign Relations, *U.S. Trade and Investment Policy*, Independent Task Force Report No. 67, 2011, p. 3.

[11] Executive Order 13534, "National Export Initiative," March 11, 2010.

Table 1. APEC Members and Economic Statistics, 2012

	Member	GDP (in billions of U.S. dollars)	Population (in millions)	GDP/Capita (in U.S. dollars at PPP)	Real GDP Growth (%)
TPP Countries	Australia	$1,542	22.8	$42,640	3.58
	Brunei	$17	0.4	$54,389	1.30
	Canada	$1,819	34.8	$42,734	1.84
	Chile	$268	17.4	$18,419	5.47
	Japan	$5,964	127.6	$36,266	2.00
	Malaysia	$304	29.5	$16,922	5.61
	Mexico	$1,177	114.9	$15,312	3.95
	New Zealand	$170	4.4	$29,730	2.54
	Peru	$199	30.5	$10,719	6.28
	Singapore	$277	5.4	$60,410	1.32
	Vietnam	$138	90.4	$3,548	5.02
	Non-U.S. TPP Total	$11,874	478.0		
	United States	$15,685	314.2	$49,922	2.21
	Total	$27,558	792.2		
Other APEC	China	$8,227	1,354.0	$9,162	7.80
	Hong Kong	$263	7.2	$51,494	1.44
	Indonesia	$878	244.5	$4,977	6.23
	Papua New Guinea	$16	6.8	$2,797	9.09
	Philippines	$250	95.8	$4,430	6.59
	Russia	$2,022	141.9	$17,709	3.40
	South Korea	$1,156	50.0	$32,272	2.02
	Taiwan	$474	23.3	$38,749	1.26
	Thailand	$366	64.4	$10,126	6.44
	Total	$13,652	1,987.9		
APEC Total		$41,210	2,780.2		

Source: International Monetary Fund *World Economic Outlook*, April 2013.

Notes: GDP/Capita figures are in terms of purchasing power parity (PPP). GDP data at purchasing power parity (PPP) attempts to reflect differences in the cost of living among countries. This requires comparison of the prices of goods and services in each of the countries concerned. For example, consider Vietnam and the United States. In less developed countries, goods and services typically cost less than they do in more highly developed countries (i.e., one U.S. dollar converted to local Vietnamese currency would buy more goods and services there than it would in the United States). Nominal GDP figures converted into U.S. dollars do not take account of these price differences across countries. Hence, Vietnam's GDP/capita at purchasing power parity ($3,547) is more than twice its nominal GDP/capita in U.S. dollars ($1,527), according to the April 2013 edition of the IMF's *World Economic Outlook*.

TPP Countries

The 12 countries that constitute the current group of TPP participants are economically and demographically diverse. As shown in **Figure 1**, the United States is more than twice as large as any other TPP country in terms of its economy and population. Japan, the newest and next largest TPP country, has a GDP and population that are 38% and 41% of the U.S. level, respectively. GDP per capita at purchasing power parity (PPP), a rough measure of a country's level of economic development, ranges from just over $3,500 in Vietnam to over $60,000 in Singapore, more than $10,000 higher than that of the United States.[12] These countries vary greatly in their geography as well. They range from Australia, a large and resource-rich continent, to Singapore, a small, trade-dependent city-state. As discussed in the final section of this report, some of this economic and demographic diversity is reflected in both the type and intensity of trade and investment flows between the United States and TPP countries.

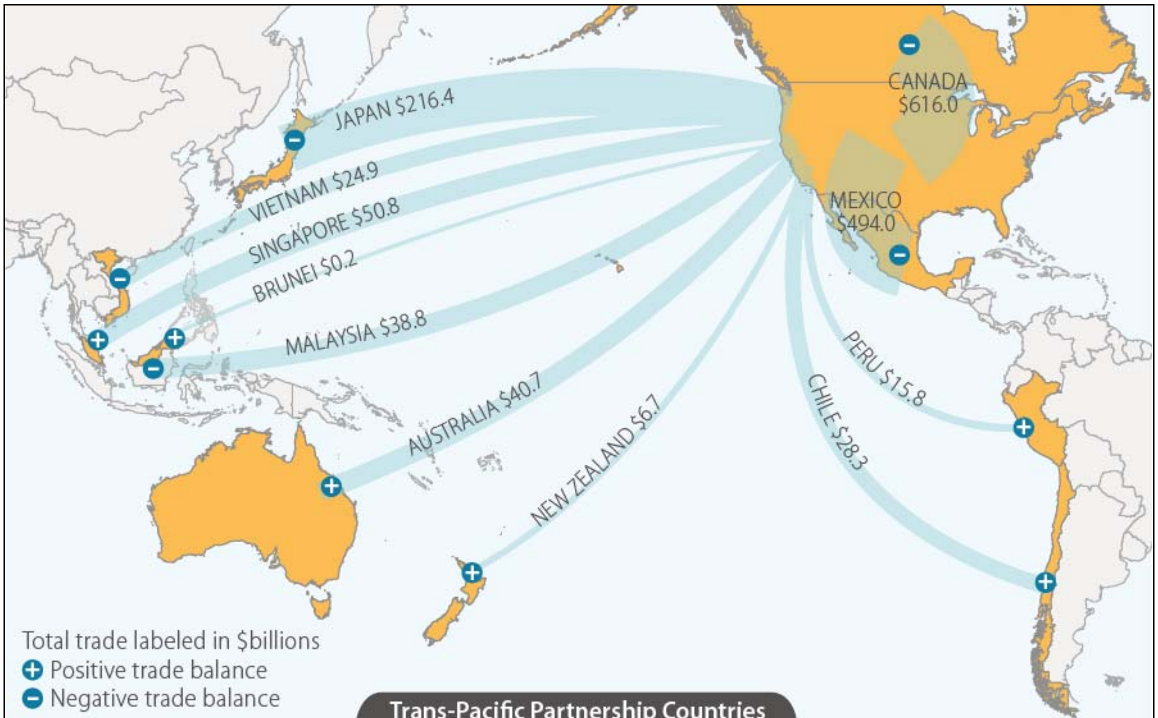
A potential TPP FTA may present an opportunity for the United States to expand its trade and investment with a large and fast-growing regional market. Non-U.S. TPP partners collectively represent a potential market with a population about 50% larger than the United States and several TPP economies have been growing rapidly over the past decade (*e.g.,* average GDP growth for 2002-2012 was 7.0% in Vietnam, 6.4% in Peru, 5.9% in Singapore, and 5.1% in Malaysia). U.S. trade and FDI flows with these countries have increased significantly. U.S. exports to TPP countries increased by more than 75% during this period, exceeding $159 billion in services in 2011 and $689 billion in goods in 2012.[13] U.S. imports from TPP countries increased by more than 50% since 2002 with services imports of nearly $82 billion in 2011 and goods imports of $843 billion in 2012. The annual flow of both inbound and outward foreign direct investment (FDI) between the United States and TPP countries was much higher in 2011 than 2001, although it has fluctuated throughout the decade. The flow of U.S. FDI abroad to TPP countries was $83 billion in 2011 with inward FDI at $61 billion. The stock of both U.S. FDI in TPP countries and inward FDI from TPP countries has doubled since 2002 ($355 billion to $843 billion and $270 billion to $596 billion).

The United States has consistently run a goods trade deficit with TPP countries and a services trade surplus (**Figure 2)**. The U.S. services trade surplus with TPP countries has steadily increased over the past decade while the U.S. goods trade deficit fell (became less negative) sharply during the recession and has yet to reach its pre-recession levels. In services, the U.S. trade surplus has increased from $33 billion in 2002 to $78 billion in 2011. In goods, the U.S. trade deficit in 2012 of $155 billion was slightly less than the deficit in 2002 of $167 billion, and significantly less than the peak deficit in 2007 of $247 billion. Crude oil, a major U.S. import from both Canada and Mexico, is a large and growing contributor to the overall trade deficit with TPP countries. Excluding trade in crude oil, the United States actually had an overall trade surplus (goods and services) with TPP countries in 2011.

[12] This adjusts international GDP figures to reflect differences in cost of living among countries. Hence, GDP figures for developing countries are typically higher in PPP terms.

[13] Services trade data not available for Brunei, Peru, or Vietnam.

Figure 1. Trans-Pacific Partnership Countries



Trans-Pacific Partnership Countries

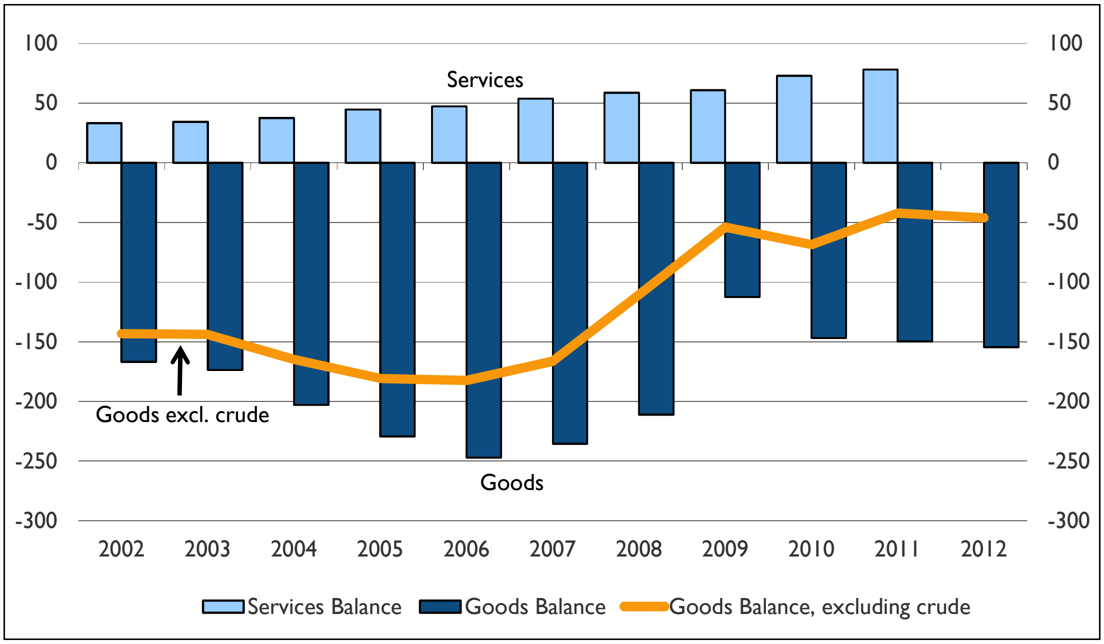
	U.S. FTA	Population (millions)	GDP ($billions)	U.S. Imports ($billions)	U.S. Exports ($billions)	Trade Balance ($billions)
Australia	✓	22.8	1,542	9.5	31.2	21.7
Brunei		0.4	17	0.1	0.2	0.1
Canada	✓	34.8	1,819	324.2	291.8	-32.5
Chile	✓	17.4	268	9.4	18.9	9.5
Japan		127.6	5,964	146.4	70.0	-76.3
Malaysia		29.5	304	25.9	12.9	-13.1
Mexico	✓	114.9	1,177	277.7	216.3	-61.3
New Zealand		4.4	170	3.4	3.2	-0.2
Peru	✓	30.5	199	6.4	9.4	2.9
Singapore	✓	5.4	277	20.2	30.6	10.3
Vietnam		90.4	138	20.3	4.6	-15.6
United States		314.2	15,685	Total U.S. Imports from TPP Countries **$843.6**	Total U.S. Exports to TPP Countries **$689.0**	Total U.S. Trade Balance with TPP Countries **-$154.6**

$U.S. dollars

Source: Analysis by CRS. FTA data from the United States Trade Representative (USTR). Population and GDP data from IMF, World Economic Outlook, April 2013. Trade data from the U.S. International Trade Commission (ITC).

Note: Does not include trade in services.

Figure 2. U.S. Goods and Services Trade Balance with TPP Countries
(in billions of U.S. dollars)



Source: Analysis by CRS. Data from the ITC and the Bureau of Economic Analysis (BEA).

Notes: Services trade data is only available through 2011 and is not available for Brunei, Peru, or Vietnam.

New and Potential TPP Participants

One of the United States' expressed interests in the proposed TPP FTA is its potential expansion to include other Asia-Pacific economies. In May 2011, the TPP trade ministers agreed "to consider the membership of any APEC members if and when they are ready to meet the high standards of the agreement."[14] In November 2011, Canada, Japan, and Mexico announced their intent to seek consultations with existing participants on the possibility of joining the negotiations. Canada and Mexico became official participants in late 2012, and Japan is expected to join the negotiations in July 2013. Thailand has also reportedly expressed interest in joining the negotiations, as have non-APEC countries such as Costa Rica and Colombia.[15]

The recent participation of Canada, Japan, and Mexico greatly expanded the size of the TPP in terms of U.S. trade. Using trade figures from 2011, the share of U.S. goods and services trade encompassed by TPP partners increased from 5% to 31% with the addition of Canada and Mexico, increased further to 36% with the addition of Japan, and though unlikely in the near future, expansion of the potential agreement to all of APEC would increase its share of U.S. trade to 56% (**Figure 3**).

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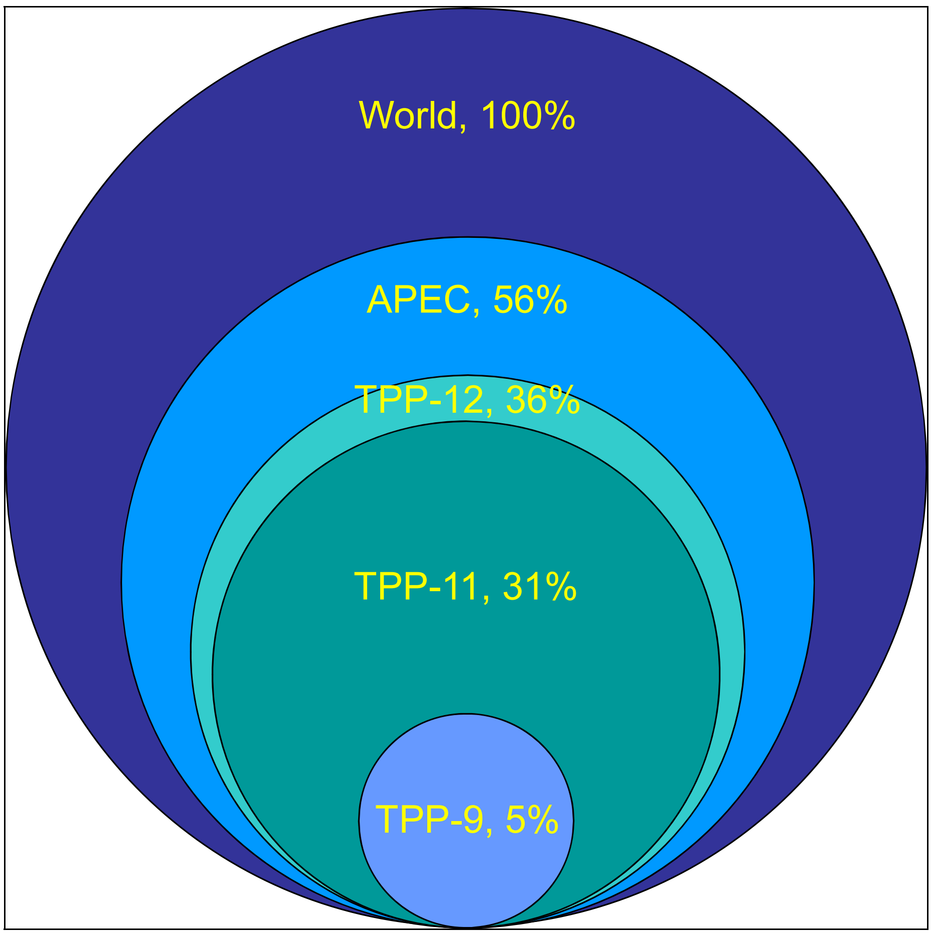
[14] USTR, "Joint Statement from Trans-Pacific Partnership Ministers Meeting on Margins of APEC in Big Sky, Montana," press release, May 2011

[15] White House, "Joint Press Statement between President Barack Obama and Prime Minister Yingluck Shinawatra," press release, November 18, 2012; http://www.ustr.gov/about-us/press-office/press-releases/2011/may/joint-statement-trans-pacific-partnership-ministers-meLucien O. Chauvin, "Canada Makes Strong Pitch to Join TPP; Colombia, Costa Rica Also Express Interest," *International Trade Daily*, April 7, 2012.

Japan's entry into the agreement is particularly significant. Japan is the third-largest economy in the world, the fourth-largest U.S. trading partner, and not party to an existing U.S. FTA, as opposed to Canada and Mexico, which are part of the North American Free Trade Agreement (NAFTA). Japan is now the second-largest country participating in TPP, both in terms of population (128 million) and GDP ($6 trillion). Some analysts argue that a TPP agreement with Japan will attract other potential Asia-Pacific countries and achieve the goal of membership expansion. Others contend that Japan's entry may complicate the negotiation process, adding a significant economic counterweight to the United States and perhaps slowing the overall speed of the negotiations. Japanese interest in the agreement may stem, in part, from a desire to remain competitive with South Korea in the U.S. market following the passage of the U.S.-South Korea FTA (KORUS). Nearly 70% of U.S. imports from the two East-Asian nations come from the same three commodity categories: vehicles, machinery, and electrical machinery.[16]

Figure 3. 2011 U.S. Goods and Services Trade, Shares of Total



Source: Analysis by CRS. Data from U.S. ITC and BEA.

Notes: TPP-9 refers to Australia, Brunei, Chile, Malaysia, New Zealand, Peru, Singapore, Vietnam, and the United States. TPP-11 refers to the TPP-9 plus Canada and Mexico. TPP-12 refers to the TPP-11 plus Japan. Services data is not available individually for smaller U.S. trading partners, including some TPP members. Therefore, the total share of trade encompassed by TPP partners may be slightly larger than that shown above.

[16] Analysis by CRS. Data from the ITC.

Existing Trade and Economic Agreements

TPP participants belong to various multilateral, regional, and bilateral trade and economic agreements. For example, all TPP countries are members of the World Trade Organization (WTO), with Vietnam joining most recently in 2007. In addition, TPP countries have a number of bilateral and regional FTAs in effect, of varying degrees, some of which include other TPP negotiating partners. The United States, for example, has FTAs with 20 countries including 6 TPP participants (Australia, Canada, Chile, Mexico, Peru, and Singapore). In total, there are more than 180 preferential trade agreements among Asia-Pacific countries, most of which do not include the United States.[17] The United States Trade Representative (USTR), as well as certain stakeholder groups, view the proposed TPP FTA as an opportunity for the United States to address this rapid rise in preferential trade agreements, with a goal of ensuring that U.S. goods and services remain competitive in the region and that the United States plays a central role in developing a framework for future regional free trade negotiations.[18] Given the potential for future expansion in TPP membership, the ability to influence the strength and coverage of the agreement at the beginning stage may be particularly advantageous.

Asia-Pacific Economic Cooperation (APEC)

TPP participants are part of a broader network of international partnerships within the Asia-Pacific.[19] The Asia-Pacific Economic Cooperation (APEC) forum is a primary vehicle for broader regional interaction on trade and economic issues in the Asia-Pacific region. The annual APEC Leaders (heads-of-state) meeting provides an opportunity for stakeholders throughout the region, including political and business leaders, to address regional impediments to trade and economic integration through non-binding commitments.[20] Although the organization itself does not negotiate trade agreements, its stated goals, known as the "Bogor Goals," include freer trade and investment throughout the region. Specifically, APEC views itself as an "incubator" of an eventual Free Trade Area of the Asia-Pacific (FTAAP) and supports the TPP as one step towards that goal.[21] APEC's 21 members include the three largest economies in the world and the four largest U.S. trading partners.[22]

Association of Southeast Asian Nations (ASEAN)

ASEAN is another major regional economic partnership that includes TPP countries. ASEAN members include Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the

[17] Ambassador Ronald Kirk, *2011 Trade Policy Agenda*, Office of the United States Trade Representative, March 2011, p. 4, http://www.ustr.gov/webfm_send/2597.

[18] Ibid. See also Emergency Committee for American Trade, *ECAT 2011 Agenda*, June 14, 2011.

[19] For more information on Asian regional partnerships see CRS Report RL33653, *East Asian Regional Architecture: New Economic and Security Arrangements and U.S. Policy*, by Dick K. Nanto.

[20] For more information on the most recent APEC meetings, see CRS Report R42842, *The Asia-Pacific Economic Cooperation (APEC) Meetings in Vladivostok, Russia: Postscript*, by Michael F. Martin.

[21] Carlos Kuriyama, *The Mutual Usefulness between APEC and TPP*, APEC Policy Support Unit, October 2011, p. 9.

[22] The three largest economies in the world as measured by nominal GDP are the United States, China, and Japan. The four largest trading partners of the United States are Canada, China, Mexico, and Japan. **Table 1** includes a complete list of APEC economies.

Philippines, Singapore, Thailand, and Vietnam. Unlike APEC, ASEAN has already created a free trade area among its members. However, import tariffs on intra-ASEAN trade are being removed at different rates in different ASEAN countries depending on levels of economic development.[23] According to the group's economic community blueprint, ASEAN members intend to promote further economic integration and freer flow of goods, services, investment, capital, and labor throughout their membership in the future.[24]

The association has also established FTAs collectively with non-ASEAN countries, including Australia, China, India, Japan, New Zealand, and South Korea. Talks have also begun on a potential single trade agreement that would encompass ASEAN and its six FTA partners, known as the Regional Comprehensive Economic Partnership (RCEP).[25] This agreement may present an alternative to the TPP in achieving freer trade throughout the Asia-Pacific region, though it may be less comprehensive in its trade liberalization ambitions. Some see these ASEAN economic partnerships that exclude the United States but include the other major economies of the Asia-Pacific as presenting a challenge to the United States' ability to retain its economic clout and full economic engagement with the region.[26] However, at least one study has shown that while there may be benefits to whichever country or country-group has more influence in setting the trade rules for the region, there would remain significant economic benefits for the two largest economies in RCEP and TPP, China and the United States, to merge the two separate efforts into one region-wide FTA.[27]

Free Trade Agreements

Table A-1 in the appendix shows free trade agreements of TPP countries that have either been concluded or are under negotiation. [28] While such a list provides a general overview of a country's proclivity toward economic openness, these FTAs may differ greatly in the extent of their tariff reduction, product inclusion, and trade rules. Due to this variation, a country may enter into a trade agreement as a member of a larger body (e.g., ASEAN-Australia) and also negotiate separate bilateral FTAs (e.g., Malaysia-Australia). The table includes both bilateral FTAs and larger regional agreements.

TPP participants have multiple FTAs in place throughout the Asia-Pacific and the world. As shown in **Table A-1**, nine of the twelve TPP countries have agreements in place or are in negotiations with China, the largest economy in the region not currently participating in the TPP negotiations. Nine TPP countries, including the United States, also have agreements or are negotiating with the European Union. TPP countries are also well connected to one another through their existing trade agreements. **Figure 4** shows that the number of agreements in force among TPP countries range from Canada with only four existing FTAs among the TPP countries,

[23] ASEAN Secretariat, *ASEAN Economic Community Factbook*, February 2011, p. 3.

[24] Association of Southeast Asian Nations, *Roadmap for an ASEAN Community 2009-2015*, April 2009, p. 22.

[25] "RCEP Partners Complete First Session of Talks; Set Next Session for September," *World Trade Online*, May 16, 2013.

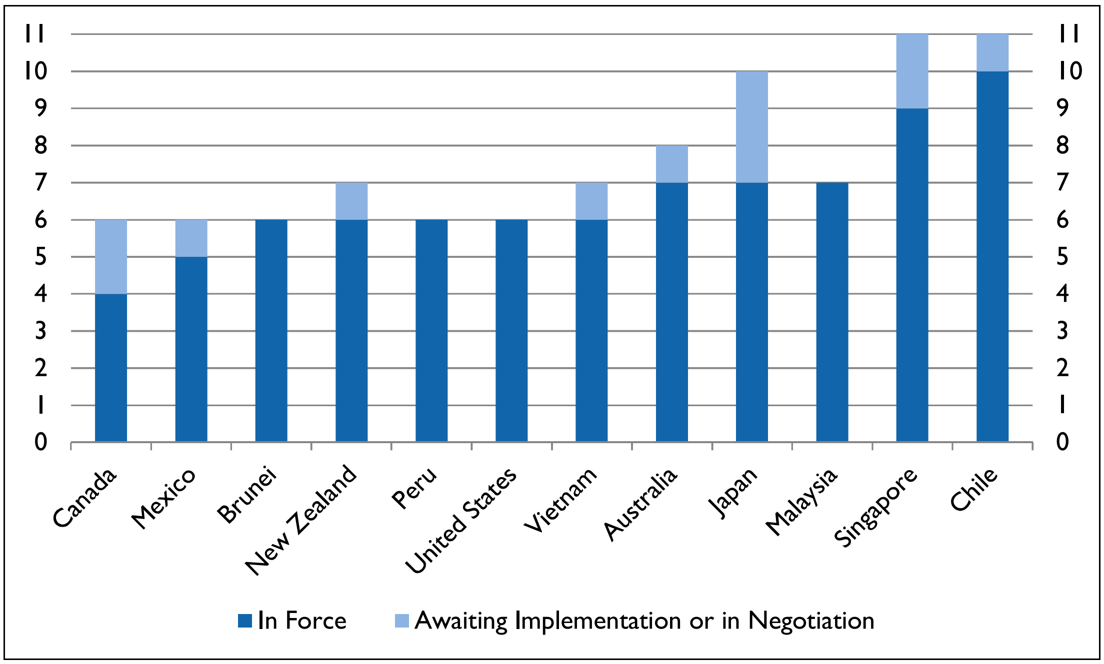
[26] "U.S. seeks to lead huge new Asia-Pacific trade bloc," *Oxford Analytica*, October 17, 2011.

[27] Peter A. Petri, Michael G. Plummer, and Fan Zhai, *The Trans-Pacific Partnership and Asia-Pacific Integration: A Quantitative Assessment*, East-West Center, Working Paper No. 119, October 24, 2011, p. 42, http://www.eastwestcenter.org/sites/default/files/private/econwp119_2.pdf.

[28] For basic information on the various structures of trade agreements, see CRS Report RL31356, *Free Trade Agreements: Impact on U.S. Trade and Implications for U.S. Trade Policy*, by William H. Cooper.

to Chile with 10 FTAs in place covering the entire TPP membership except Vietnam with whom it is currently negotiating a bilateral FTA. The FTA among Brunei, Chile, New Zealand, and Singapore that served as the starting point for the current TPP, known as the Trans-Pacific Strategic Economic Partnership agreement (P-4), and ASEAN, play a large part in this interconnectedness, each joining four of the TPP economies into a free trade area. The North American Free Trade Agreement (NAFTA) joins three TPP partners, Canada, Mexico, and the United States, and encompasses over 50% of all TPP goods trade. This preexisting network of trade agreements among TPP members suggests that the negotiating countries may envision benefits from a concluded TPP agreement that extend beyond those achieved in their existing agreements.

Figure 4. Existing Trade Agreements Among TPP Members



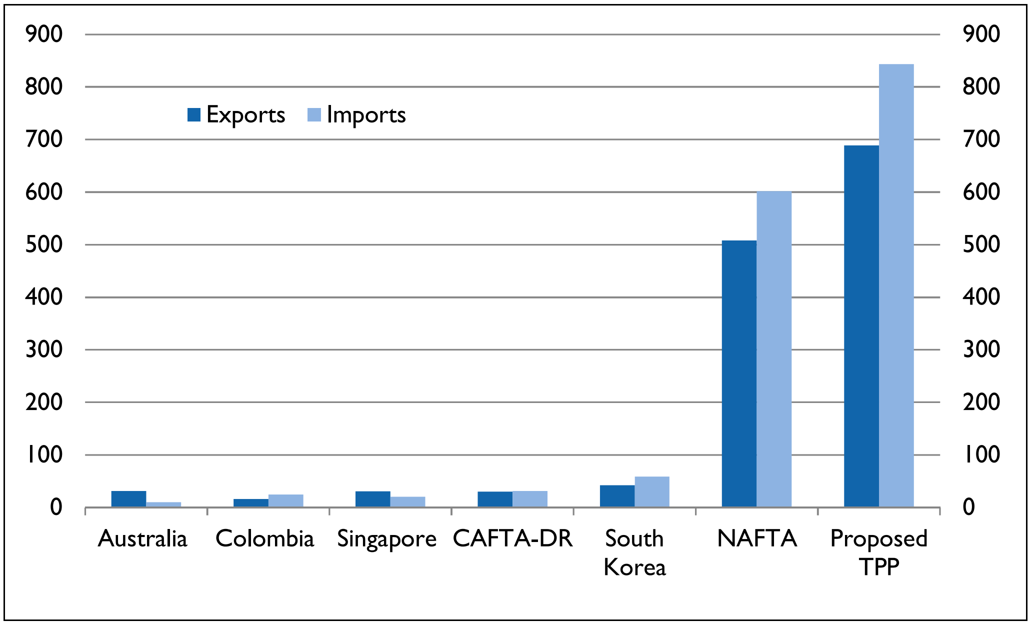
Source: Analysis by CRS. Data from individual TPP government websites.

U.S. FTAs and TPP

The United States currently has FTAs in force with 20 countries. **Figures 5 and 6** place the potential TPP agreement in context with these existing U.S. FTAs. Now that the members of NAFTA are part of the TPP negotiations, this potential FTA would be the largest U.S. FTA in terms of both goods and services trade. U.S. trade with TPP partners was larger than the level of U.S. trade with South Korea, the largest of the recent U.S. FTA partners, by a factor of fifteen in goods trade in 2012 and a factor of nine in services trade in 2011. However, as noted above, much of this U.S.-TPP trade is already covered by existing trade agreements. U.S. trade with FTA partners accounted for 81% of U.S.-TPP goods trade in 2012 and 68% of U.S.-TPP services trade in 2011. Japan is the largest U.S. trading partner in the negotiations without an existing FTA.

Figure 5. Top Existing and Potential U.S. FTAs by Goods Trade, 2012

(in billions of U.S. dollars)

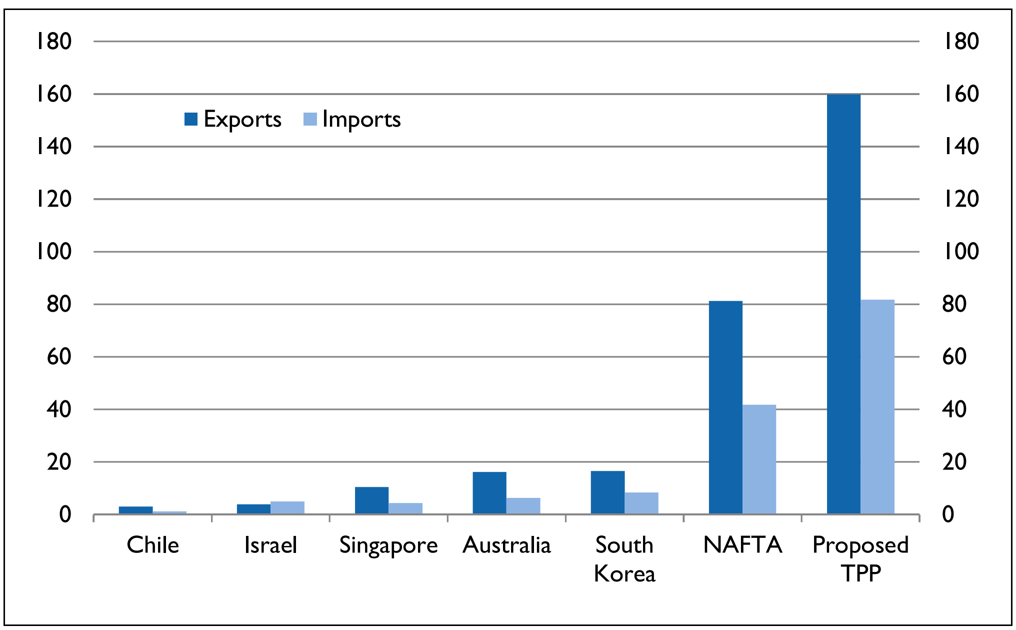


Source: Analysis by CRS. Data from ITC.

Notes: CAFTA-DR: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic.

Figure 6. Top Existing and Potential U.S. FTAs by Services Trade, 2011

(in billions of U.S. dollars)



Source: Analysis by CRS. Data from BEA.

Notes: CAFTA-DR: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic. Bilateral U.S. services trade data is not available for Brunei, Peru, and Vietnam.

Bilateral Investment Treaties

International economic relations include investment flows between nations, in addition to trade in goods and services. These investment flows can be the subject of negotiated disciplines in bilateral investment treaties (BITs) or FTAs.[29] The United States typically includes investment provisions in its FTAs, as with each of the six existing FTAs between the United States and TPP participants. Currently, no U.S. BITs are in place with the other five TPP countries.

Among TPP participants, Malaysia has been the most proactive in negotiating BITS, according to the latest United Nations data on international investment treaties. As of June 2012, Malaysia had 49 BITs in force, while Brunei and New Zealand had the lowest number of investment treaties with 3 and 2, respectively. The United States had 41 BITs in force as of June 2012 (**Table 2**).

Table 2. Bilateral Investment Treaties in TPP Countries

Aust.	Brunei	Canada	Chile	Japan	Malaysia	Mexico	N.Z.	Peru	Sing.	U.S.	Viet.
21	3	26	39	15	49	28	2	30	35	41	42

Source: Analysis by CRS. Data from United Nations Conference on Trade and Development (UNCTAD).

Notes: Only includes agreements that were in force as of June 2012.

Trade, Investment, and Tariff Patterns

This section examines trade and investment flows into and out of TPP countries as well as their tariff rates. Given the variation in geography, population, and economic development among TPP countries, the type and quantity of trade and investment varies greatly from country to country. Additionally, existing tariff structures among the TPP countries highlight the variation in their openness to trade and may identify some potential difficulties as well as opportunities in liberalizing trade between such diverse countries. The analysis and description that follows depends on the quality and scope of the relevant data. Hence, the most comprehensive examination is on merchandise trade.

U.S.-TPP Trade

Merchandise Trade[30]

Trade between the United States and other TPP countries represents about 40% of overall U.S. goods trade. Including the recently joined countries of Canada, Mexico, and Japan, the United States had a deficit in merchandise trade with TPP countries in 2012 (**Table 3**). Energy imports, particularly crude oil from Canada and Mexico, and imports of vehicles and parts from Japan

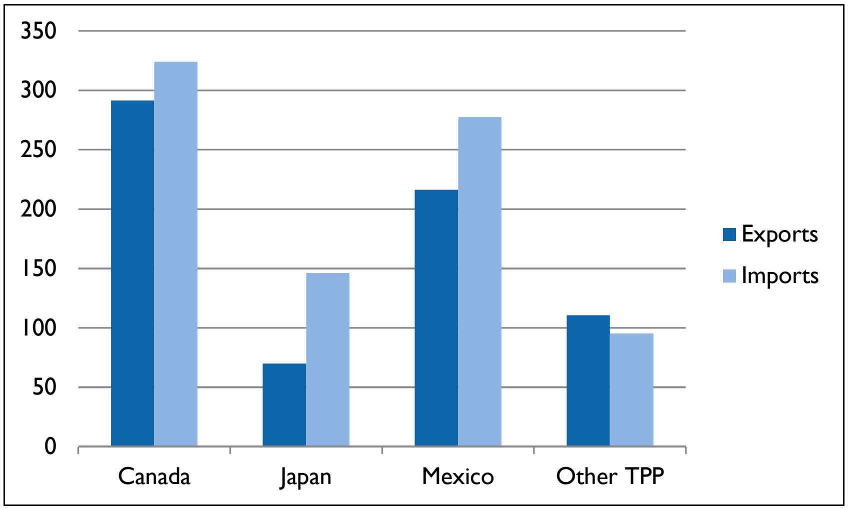
[29] CRS Report R43052, *U.S. International Investment Agreements: Issues for Congress*, by Shayerah Ilias Akhtar and Martin A. Weiss

[30] Exports reflect "total exports" and imports reflect "general imports." Data are also available based on "domestic exports" and "imports for consumption." The differences between these data has to do with the treatment of goods that enter U.S. territory from abroad and are re-exported with minimal modification while in the United States. These re-exports can be high in particular countries. For instance, they were above 10% of total exports to Singapore in 2010.

accounted for most of this deficit. Canada, Mexico, and Japan are the first, third, and fourth-largest U.S. trade partners overall. The majority of U.S.-TPP trade is concentrated with these three newest members. **Figure 7** below shows that U.S. bilateral trade each with Canada, Japan, and Mexico is greater than U.S. trade with all other TPP countries combined. In 2012, U.S. merchandise trade with these three countries accounted for nearly 87% of U.S. trade with TPP negotiating partners.

Figure 7. U.S. Merchandise Trade with TPP Countries

(2012, in billions of U.S. dollars)



Source: Analysis by CRS. Data from the ITC.

Notes: "Other TPP Countries" includes Australia, Brunei, Chile, Malaysia, New Zealand, Peru, Singapore, and Vietnam.

Table 3. U.S. Merchandise Exports to, Imports from, and Balance with TPP Countries

(in millions of U.S. dollars, 2012)

	Exports	Imports	Balance
Australia	31,208	9,536	21,672
Brunei	157	86	71
Canada	291,758	324,246	-32,488
Chile	18,886	9,381	9,505
Japan	70,046	146,388	-76,342
Malaysia	12,854	25,934	-13,080
Mexico	216,331	277,653	-61,322
New Zealand	3,223	3,439	-216
Peru	9,357	6,426	2,931
Singapore	30,561	20,224	10,337
Vietnam	4,623	20,266	-15,643
Total	689,004	843,579	-154,575

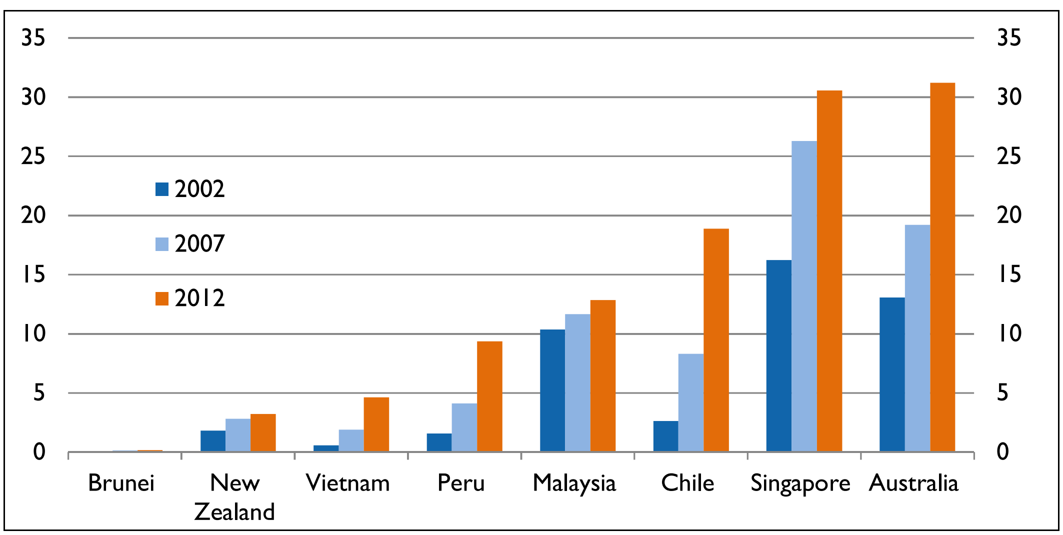
Source: Analysis by CRS. Data from the ITC.

Among the other eight TPP countries, Australia and Singapore are the major export markets for the United States, while Malaysia, Singapore, and Vietnam are the major import markets. In 2012, of the $111 billion in U.S. goods exports to these other TPP countries, over half went to Australia and Singapore, while almost 70% of the $95 billion in U.S. imports came from Malaysia, Singapore, and Vietnam. Over the past decade, substantial increases in trade between the United States and some of the smaller economies have occurred (**Figure 8** and **Figure 9**). For example, U.S. trade with Peru and Chile has quadrupled, and U.S. trade with Vietnam has increased more than 8-fold. **Figure 9** below highlights Vietnam's rapid rise in supplying goods to the United States, moving from the seventh- to second-biggest supplier of U.S. imports among these eight TPP countries, gaining more ground in the U.S. market than even recent FTA partners such as Peru and Chile. Much of this increase likely reflects the improved trade relations between Vietnam and the United States over the past decade. The United States granted Vietnam conditional normal trade relations (NTR) status in 2001 and then permanent NTR (PNTR) status in 2006 when Vietnam acceded to the WTO.[31]

In the past four years the U.S. trade balance with these eight TPP countries has switched from deficit to surplus. This surplus is due to both a decrease in imports and an increase in exports. Only in 2011 did U.S. imports from the region surpass their 2006 peak, while exports increased by more than $35 billion during the same period. In 2012, the U.S. merchandise trade surplus with these eight TPP countries was over $15 billion, double the 2010 surplus of $7.5 billion. The major contributors to this rising trade balance between the United States and these eight smaller TPP countries have been falling U.S. imports from Malaysia, and rapidly increasing exports to Australia, Chile, Peru, and Singapore, who like Canada and Mexico, are current U.S. FTA partners.

Figure 8. U.S. Goods Exports to TPP Countries excluding Canada, Japan, and Mexico

(in billions of U.S. dollars)

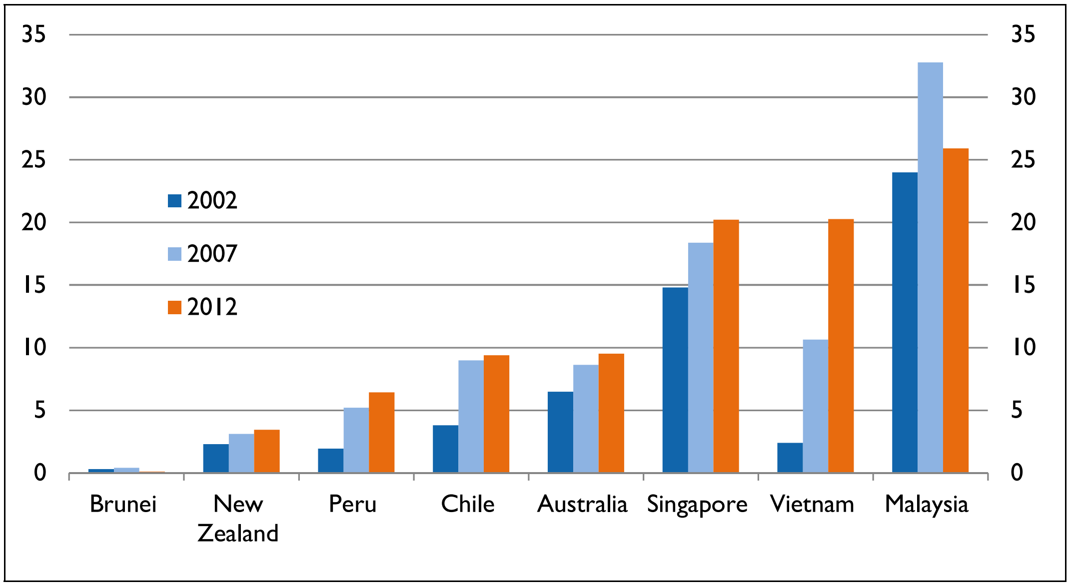


Source: Analysis by CRS. Data from the ITC.

[31] For more information on U.S.-Vietnam economic relations, please see CRS Report R41550, *U.S.-Vietnam Economic and Trade Relations: Issues for the 113th Congress*, by Michael F. Martin.

Figure 9. U.S. Goods Imports from TPP Countries excluding Canada, Japan, and Mexico

(in billions of U.S. dollars)



Source: Analysis by CRS. Data from the ITC.

At the aggregate level, oil and gas, primarily crude oil, are the largest category of U.S. imports from TPP countries. The other major import categories are motor vehicles, motor vehicle parts, nonferrous metal, and computer and communications equipment. The top export categories are motor vehicle parts, petroleum and coal products, motor vehicles, computer equipment, agriculture and construction machinery, semiconductors and electronic components, and aircraft. Similarities in these product categories among the top U.S. imports and exports may reflect the supply chains and production linkages that exist between the United States and Asia-Pacific countries. Even in petroleum products, for example, raw crude is the primary U.S. import, while refined petroleum products are the primary U.S. export. Other major supply chains include motor vehicle and electronic equipment production.

Considering bilateral flows, U.S. exports are largely in the same top product categories across countries and include those listed above. However, U.S. imports from TPP countries vary greatly. **Table 4** shows the top three imports/exports for each of the TPP countries, their value, and the percent of each country's total U.S. imports/exports that category represents. Top U.S. exports including motor vehicles and aircraft highlight the U.S. advantage in high-tech products.

U.S. imports from TPP countries reflect the dominant industries and relative strengths in each country. Agriculture and natural resource products are the top U.S. imports from Australia, Chile, New Zealand, and Peru. Malaysia and Singapore's exports to the United States consist primarily of manufactured products such as computers, semiconductors and electronic components, and chemicals. From Canada and Mexico the United States imports both raw materials, such as crude oil, and manufactured goods such as motor vehicles and parts. Vietnam, the TPP country with the lowest per capita GDP, specializes in the labor-intensive apparel and footwear industries, which represents 46% of its exports to the United States.

Table 4. Top U.S.-TPP Trade Categories

(in millions of U.S. dollars and percentage, 2012)

Country	Top U.S. Imports	Value	Percent of Total	Top U.S. Exports	Value	Percent of Total
Australia	(1) Meat	$1,574	17%	(1) Ag. & Constr. Machinery	$5,692	18%
	(2) Nonferrous Metal	$1,035	11%	(2) Aircraft & Parts	$2,206	7%
	(3) Metal Ores	$676	7%	(3) Motor Vehicles	$1,664	5%
Brunei	(1) Oil & Gas	$75	87%	(1) Aircraft & Parts	$31	20%
	(2) Apparel	$4	5%	(2) Ag. & Constr. Machinery	$20	13%
	(3) Chemicals	$3	3%	(3) Misc. Metal Products	$15	10%
Canada	(1) Oil & Gas	$82,257	25%	(1) Motor Vehicle Parts	$26,286	9%
	(2) Motor Vehicles	$46,499	14%	(2) Motor Vehicles	$24,826	9%
	(3) Petroleum & Coal Products	$18,782	6%	(3) Ag. & Constr. Machinery	$13,109	4%
Chile	(1) Nonferrous Metal	$3,627	39%	(1) Petroleum & Coal Products	$5,634	30%
	(2) Fruits and Nuts	$1,229	13%	(2) Ag. & Constr. Machinery	$2,040	11%
	(3) Farmed Fish	$564	6%	(3) Aircraft & Parts	$1,380	7%
Japan	(1) Motor Vehicles	$38,259	26%	(1) Aircraft & Parts	$8,468	12%
	(2) Motor Vehicle Parts	$15,229	10%	(2) Oilseeds & Grains	$5,269	8%
	(3) Semicon. & Elec. Components	$6,268	4%	(3) Pharmaceuticals & Medicines	$4,360	6%
Malaysia	(1) Semicon. & Elec. Components	$7,439	29%	(1) Semicon. & Elec. Components	$4,771	37%
	(2) Communications Equip.	$4,888	19%	(2) Aircraft & Parts	$1,215	9%
	(3) Computer Equip.	$2,109	8%	(3) Navigation & Electro-Medical	$625	5%
Mexico	(1) Oil & Gas	$37,328	13%	(1) Aircraft & Parts	$20,755	10%
	(2) Motor Vehicles	$35,347	13%	(2) Motor Vehicle Parts	$19,577	9%
	(3) Motor Vehicle Parts	$33,334	12%	(3) Computer Equip.	$14,457	7%
New Zealand	(1) Meat	$1,104	32%	(1) Aircraft & Parts	$511	16%
	(2) Dairy Products	$619	18%	(2) Ag. & Constr. Machinery	$184	6%
	(3) Beverages	$264	8%	(3) Motor Vehicles	$166	5%
Peru	(1) Nonferrous Metal	$2,281	35%	(1) Petroleum & Coal Products	$2,278	24%
	(2) Petroleum & Coal Products	$1,098	17%	(2) Ag. & Constr. Machinery	$973	10%
	(3) Apparel	$599	9%	(3) Computer Equip.	$698	7%
Singapore	(1) Pharmaceuticals & Medicines	$4,202	21%	(1) Petroleum & Coal Products	$4,405	14%
	(2) Computer Equip.	$3,087	15%	(2) Aircraft & Parts	$4,025	13%
	(3) Semicon. & Elec. Components	$2,020	10%	(3) Semicon. & Elec. Components	$2,452	8%
Vietnam	(1) Apparel	$6,946	34%	(1) Semicon. & Elec. Components	$559	12%
	(2) Footwear	$2,404	12%	(2) Oilseeds & Grains	$380	8%
	(3) Furniture	$1,995	10%	(3) Meat	$300	6%

Source: Analysis by CRS. Data from the ITC.

Notes: 4-digit North American Industry Classification System (NAICS) categories. Excludes "special classification" categories 9900 and 9800.

Services Trade[32]

A main focus of the proposed TPP FTA, billed as a "21st century" agreement, is emerging issues in international trade. Although covered in previous U.S. FTAs, trade in services, particularly as it relates to digital trade, is one such emerging issue. The United States, in which services provide 83% of non-agricultural jobs and over 65% of GDP, is considered to be particularly competitive in this sector.[33] Services, unlike goods, are typically intangible (e.g., financial, legal, accounting), making their trade more complex to measure than tracking a shipping container from location A to location B. As a result, trade in services data, collected by the Bureau of Economic Analysis (BEA), lack the detail provided for trade in goods. The analysis below only covers the TPP countries individually included in the BEA data: Australia, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, and Singapore. Elsewhere in this document, if not specified, trade simply refers to merchandise (goods) trade.

Cross-Border Trade in Services[34]

U.S. services trade with the eight TPP countries for which data are available presents the same pattern of competitiveness seen in U.S. services trade with the rest of the world. In 2011, the United States had a collective services trade surplus of more than $78 billion with these eight TPP countries. As with goods trade, Canada, Japan, and Mexico are the largest U.S. services trade partners among TPP members (**Figure 10)**. However, during the past decade U.S. services trade with other TPP countries, particularly Australia, have increased at a faster rate than those from Mexico, such that U.S. services trade with the other TPP countries, collectively, now exceeds U.S. trade with Mexico. While services exports from the United States to these eight TPP countries collectively have nearly doubled over the past decade, services exports to Australia have more than tripled from $4.8 billion to $16 billion. In 2011, the United States had a significant services trade surplus with all TPP countries for which individual data are available, except for New Zealand, with which it had a nearly balanced services trade (**Table 5**).

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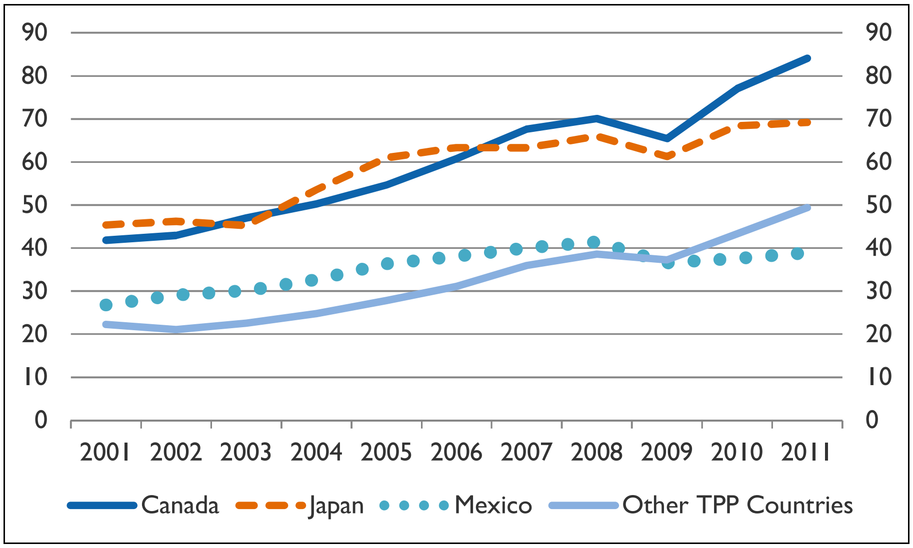
[32] For a more thorough discussion of U.S. trade in services see CRS Report RL33085, *Trade in Services: The Doha Development Agenda Negotiations and U.S. Goals*, by William H. Cooper.

[33] Ibid.

[34] The Bureau of Economic Analysis collects data on both "cross-border" services trade and services supplied through foreign affiliates of multinational companies. The following report provides details on the distinctions between these different types of service. Bureau of Economic Analysis, *U.S. International Services*, October 2011, http://www.bea.gov/scb/pdf/2011/10%20October/1011_services%20text.pdf.

Figure 10. Cross-Border U.S.-TPP Services Trade

(in billions of U.S. dollars)



Source: Analysis by CRS. Data from BEA.

Notes: "Other TPP Countries" includes Australia, Chile, Malaysia, New Zealand, and Singapore.

Table 5. U.S. Service Exports to, Imports from, and Balance with TPP Countries

(in millions of U.S. dollars, 2011)

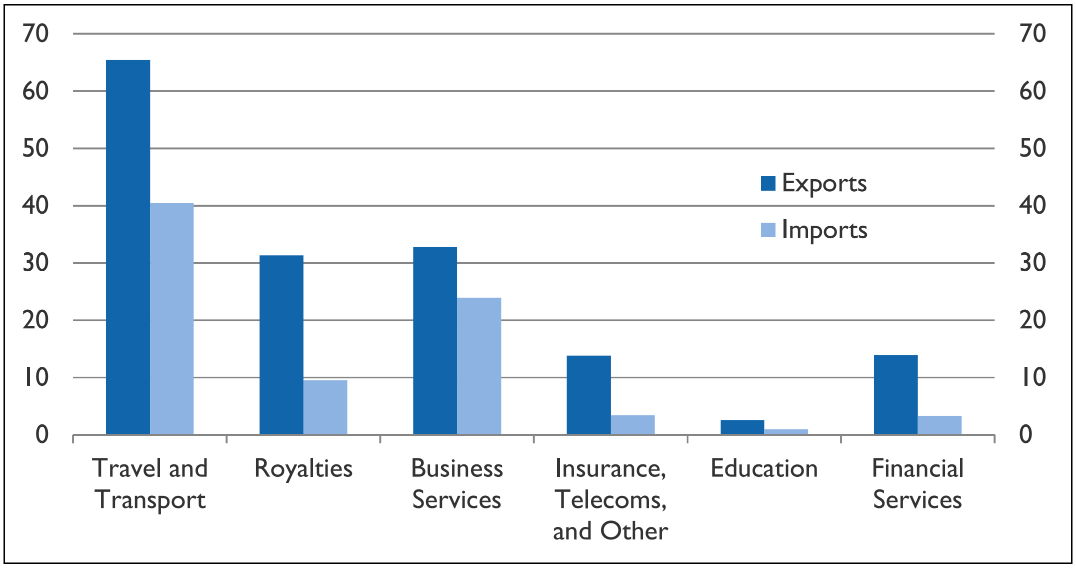
Country	Exports	Imports	Balance
Australia	16,088	6,315	9,773
Canada	56,076	28,028	28,048
Chile	3,016	1,233	1,783
Japan	44,393	24,772	19,621
Malaysia	2,571	1,361	1,210
Mexico	25,207	13,745	11,462
New Zealand	2,115	1,814	301
Singapore	10,451	4,442	6,009
Total	159,917	81,710	78,207

Source: Analysis by CRS. Data from ITC.

The composition of U.S. services exports to the eight TPP countries differs somewhat from the composition of U.S. services imports. **Figure 11** below shows that while the United States has a trade surplus in each of the six categories listed, some categories have relatively more balanced trade than others. For example, U.S.-TPP trade in the royalties' category including industrial processes and film and television distribution shows a large U.S. surplus—roughly 3 times as great as U.S. imports. In the categories of education, financial services, insurance, telecoms, and other private services, U.S. exports are also more than double U.S. imports. However, for business services trade, which includes services such as computer and data processing, management, and research and development, U.S. exports and imports are relatively balanced.

Figure 11. U.S.-TPP Services Trade, by Category

(in billions of U.S. dollars, 2011)



Source: Analysis by CRS. Data from BEA.

Notes: Services trade data not available for Brunei, Peru, and Vietnam.

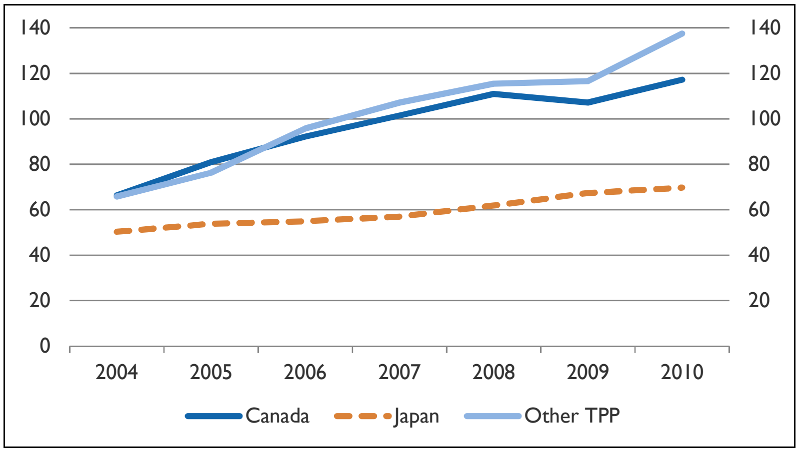
Services Supplied through Foreign Affiliates

In addition to trading services across international borders, countries also provide services to foreign residents by establishing a commercial presence in local markets. The BEA collects data on services supplied to foreign residents by majority-owned[35] foreign affiliates (MOFAs) of U.S. multi-national corporations (MNCs) (i.e., U.S. companies with operations in foreign countries). Typically, the value of U.S. services supplied through MOFAs is considerably larger than the cross-border trade in services discussed above. For instance, in 2010, more than $1 trillion in services were provided to foreign residents through foreign affiliates of U.S. companies, compared to $538 billion supplied through cross-border trade. At a smaller scale, the same pattern holds true for U.S. services provided to the eight TPP countries for which services data are available. During 2004-2010, the latest period for which consistent data are available, services supplied through U.S. MOFAs grew rapidly in most TPP countries, growing by nearly 80% in TPP countries as a whole. As with U.S.-TPP cross-border trade in services, in 2010, the majority of services supplied to TPP countries through U.S. MOFAs went to Canada (32%) and Japan (21%) (**Figure 12**).

[35] A majority-owned U.S./foreign affiliate is one in which the combined direct and indirect ownership interests of all foreign/U.S. parents of the U.S./foreign affiliate exceed 50%.

Figure 12. U.S. Services Supplied to TPP Countries through MOFAs

(in billions of U.S. dollars)



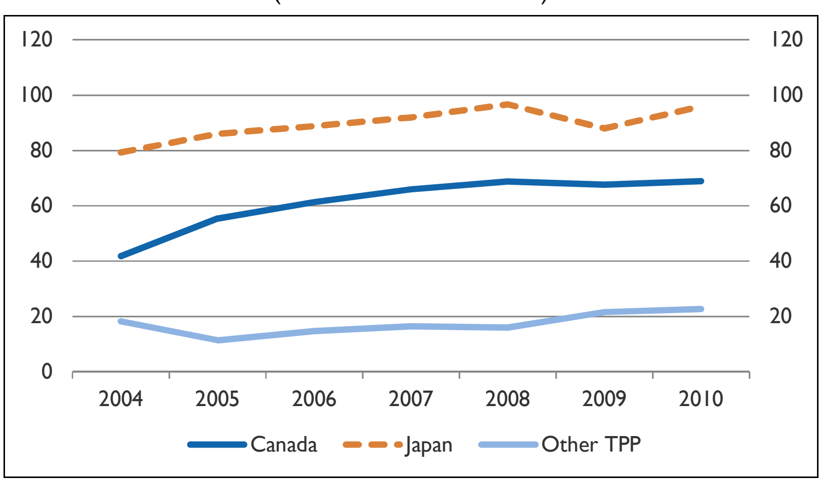
Source: Analysis by CRS. Data from BEA.

Notes: "Other TPP" includes Australia, Chile, Malaysia, New Zealand, and Singapore.

In 2010, the value of services supplied to U.S. residents through majority-owned U.S. affiliates (MOUSAs) of foreign MNCs (i.e., foreign companies that have established a commercial presence in the United States) was only about 60% of the value of services supplied abroad through MOFAs of U.S. MNCs. This same pattern is evident among all TPP countries except Japan: the value of services supplied to the United States through TPP MOUSAs, excluding Japan, are about half of those supplied to TPP countries from U.S. MOFAs. Conversely Japan's services supplied to the United States through its MOUSAs are one-third larger than the U.S. services supplied through MOFAs in Japan. This likely reflects the fact that Japan's investment in the United States has exceeded U.S. investment in Japan (see investment discussion below). Among TPP countries, Japan (51%) and Canada (37%) account for the vast majority of services supplied through MOUSAs (**Figure 13**).

Figure 13. TPP Country Services Supplied to the United States through MOUSAs

(in billions of U.S. dollars)



Source: Analysis by CRS. Data from BEA.

Notes: "Other TPP" includes Australia, Chile, Malaysia, New Zealand, and Singapore.

Aggregate TPP Trade

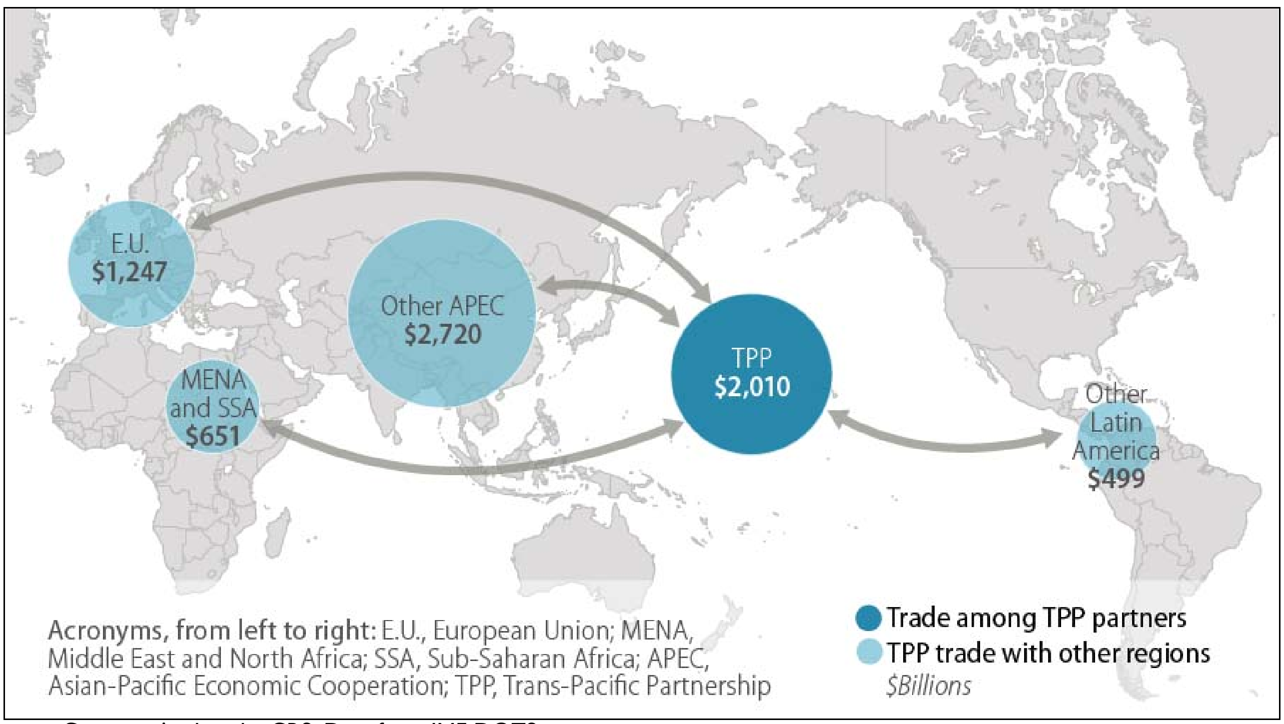
Who trades with TPP countries? **Figure 14** shows TPP countries' aggregate goods trade with each other and the rest of the world.

Goods trade among TPP partners was more than $2 trillion in 2012. As the largest country in the TPP, both in terms of population and GDP, U.S. trade with TPP partners accounts for much of the trade among TPP countries. Specifically, trade among the NAFTA countries, Canada, Mexico, and the United States, was nearly $1.2 trillion in 2012—over half of all intra-TPP trade. U.S. trade with Japan, the third largest bilateral trade partnership in the TPP, accounted for another $210 billion of total intra-TPP trade. See **Table A-2** in the appendix for intra-TPP trade data for each TPP country.

Even larger than intra-TPP trade, however, is TPP country trade with the other APEC members not currently party to the TPP negotiations. This goods trade amounted to over $2.7 trillion in 2012. Trade between China and the TPP countries, at over $1.4 trillion, made up over half of all TPP country trade with the other APEC members. In terms of goods trade, expansion of the TPP to include China and the other APEC members would encompass more TPP country trade than expanding the agreement in any other region including the European Union ($1.2 trillion) and Latin America ($499 billion).

Figure 14. Trade Among TPP Partners and with Other Regions

(in billions of U.S. dollars, 2012)



Source: Analysis by CRS. Data from IMF DOTS.

Notes: Regional groupings based on categories from the DOTS. These regional groupings are not an exhaustive list of all TPP trade partners. Data only includes goods trade data.

Investment Patterns

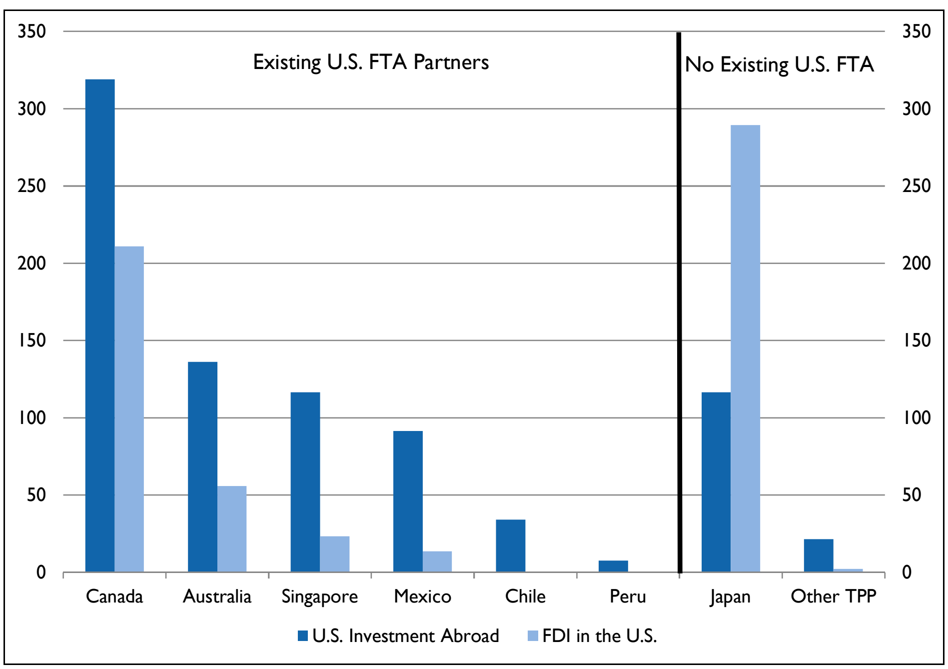
The proposed TPP FTA, like previous U.S. FTAs, is expected to include provisions on investment. As mentioned above, the FTAs the United States already has in place with six of the TPP countries (Australia, Canada, Chile, Mexico, Peru, and Singapore) include investment provisions. However, no other bilateral investment treaties (BITs) exist between the United States and the remaining TPP countries.

Nearly all of the top U.S. investment partners in the TPP are covered by an existing FTA and the stock (accumulated value) of U.S. investment in these countries exceeds their investments in the United States (**Figure 15)**. Japan, however, does not have an existing U.S. FTA, and uniquely among TPP countries, Japanese investment in the United States is nearly twice the level of U.S. investment in Japan. As discussed above, this pattern can also be seen in U.S.-Japanese services trade through affiliates.

TPP-U.S. FDI flows in 2011 show that Canada was by far the largest U.S. investment partner accounting for nearly 40% of total inward and outward U.S. FDI. Australia (22%), Japan (16%), Mexico (7%), and Singapore (7%) were the other top U.S. investment partners among TPP countries (**Table)]**. Flows of FDI can vary significantly from year to year. From 2010 to 2011 outward U.S. direct investment in TPP countries increased slightly from $71 billion to $83 billion, while inward U.S. FDI from TPP countries more than doubled from $28 billion to $61 billion.

Figure 15. U.S. FDI with TPP Countries (Stock)

(in billions of U.S. dollars, 2011)



Source: Analysis by CRS. Data from BEA.

Notes: "Other TPP" includes Brunei, Malaysia, New Zealand, and Vietnam.

Table 6. U.S. FDI with TPP Countries

(in millions of U.S. dollars, 2011)

Country	U.S. Direct Investment Abroad (Flow)	FDI into the U.S. (Flow)	U.S. Direct Investment Abroad (Stock)	FDI into the U.S. (Stock)
Australia	$13,684	$17,446	$136,249	$55,862
Brunei	$-1	$-1	$55	$-3
Canada	$40,410	$18,661	$318,964	$210,864
Chile	$4,274	$-20	$34,187	$362
Japan	$5,062	$18,598	$116,533	$289,490
Malaysia	$1,940	$214	$13,903	$646
Mexico	$8,310	$2,491	$91,402	$13,763
New Zealand	$409	$1,165	$6,741	$1,660
Peru	$1,464	$16	$7,753	$234
Singapore	$7,571	$2,546	$116,616	$23,528
Vietnam	$108	$-39	$747	$20

Source: Analysis by CRS. U.S. FDI data from BEA. World FDI data from the United Nations Conference on Trade and Development (UNCTAD).

Notes: Flows represent the annual value of investment, while stocks represent the accumulated value of investment. For detailed definitions of investment variables see: http://www.bea.gov/about/overview_international.htm.

Tariff Patterns

TPP negotiating partners are striving for a high standard and comprehensive FTA that addresses trade barriers beyond tariffs. Traditional tariff barriers, however, still exist among TPP members and can be an impediment to expanded trade. While tariffs are only one form of potential trade barrier, they are relatively easy to compare and can provide a general picture of a country's openness to trade.

As all TPP members are members of the WTO, one relevant tariff to consider is the applied most-favored nation (MFN) tariff.[36] The MFN concept is a WTO principle that requires member countries to non-discriminately apply their tariff rates to other members.[37] The average *applied* MFN tariff then is simply the average, among all products, of the tariff rates actually applied to other countries, as opposed to *bound* rates, which are essentially caps, or the maximum level that may be imposed under WTO commitments.[38] Often, applied rates are well below bound rates. For

[36] Tariff rate data are also available by trade-weighted averages. In their construction, these averages weight tariffs by the percentage of a country's overall trade in that particular tariff line. Tariffs, by their nature, can discourage trade in the particular products to which they apply. Hence, trade-weighted tariff averages tend to be lower than simple tariff averages, which weight all tariff lines equally.

[37] An exception to this rule is allowed in the case of FTAs, like the proposed TPP. The WTO allows FTA partners to provide preferential tariff treatment to one another below the MFN rates. For more information see, CRS Report RL31356, *Free Trade Agreements: Impact on U.S. Trade and Implications for U.S. Trade Policy*, by William H. Cooper.

[38] http://www.wto.org/english/thewto_e/glossary_e/glossary_e.htm.

example, Chile's average MFN applied rate is 6% compared to an average bound rate of 25%. Both levels are important and the proposed TPP FTA aims to eventually reduce and eliminate tariffs at both the applied and bound level.

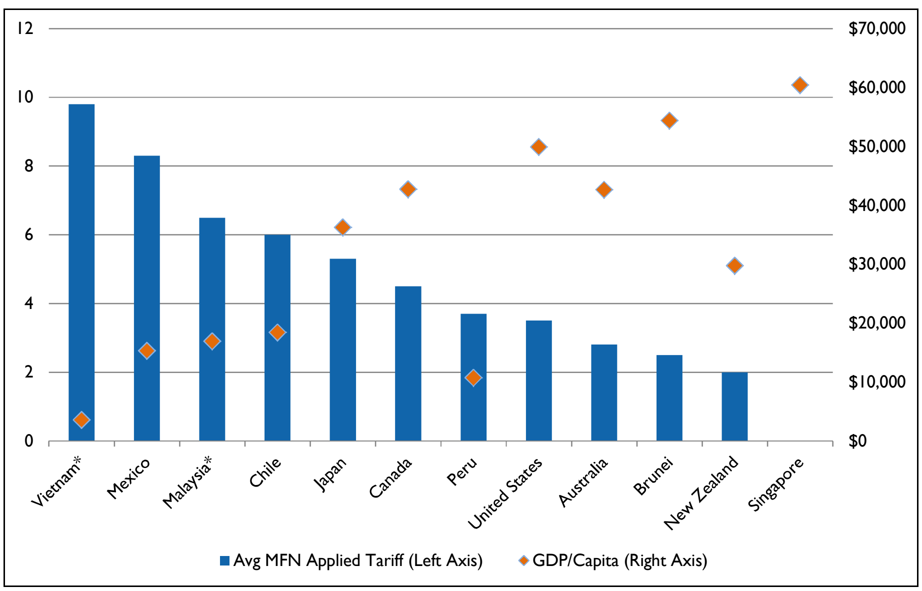
The average applied MFN tariffs vary greatly among TPP countries.[39] Vietnam has an average rate of almost 10%, while Singapore charges tariffs on so few items that it has an average rate of 0%. **Figure 16** below shows the average MFN tariffs for TPP participants as reported in the most recent WTO tariff profiles. Per capita GDP, a rough measure of economic development, is graphed on the right axis, revealing that, in general, the more highly developed TPP countries tend to be those with the lower tariff levels. Hence, movement towards zero tariff rates will require a greater reduction in applied tariffs among the less developed members.

Although average tariff rates among all products are below 10% for TPP countries, some industrial and agricultural sectors have relatively high tariffs. For example, the average applied MFN tariff rate on Canadian dairy products is 247%, even though the overall Canadian average applied MFN tariff rate is only 4.5%. **Table 7** below provides the product category with the highest tariff rate for each TPP country. These include dairy, clothing, beverages/tobacco, sugar, and electrical machinery.

Uniquely among the TPP members, Chile and Singapore have little variation in tariffs at the industry level. Singapore has an average tariff of 0% in every category except beverages and tobacco. Chile has a higher but still uniform tariff structure, with an average tariff of 6% in all but one product group.

Figure 16. Average Applied Tariffs and GDP/Capita

(tariffs in percent (left axis-2011), GDP/Capita in U.S. dollars (right axis-2012))



Source: IMF *World Economic Outlook* and WTO Tariff Profiles 2012.

Notes: (*) Indicates tariff data is from 2010. GDP per capita based on purchasing power parity (PPP).

39 Great variation also exists for bound rates among TPP countries, ranging from 36% in Mexico to 3.5% in the United States.

Table 7. Highest Tariffs by Product Category

(tariffs in percent, 2011)

Country	Product	Avg. Applied MFN Tariff (%)
Australia	Clothing	8.9
Brunei	Electrical machinery	13.9
Canada	Dairy Products	246.8
Chile	Most Products	6.0
Japan	Dairy Products	178.5
Malaysia	Beverages and tobacco	119.7
Mexico	Sugars and confectionery	59.3
New Zealand	Clothing	9.6
Peru	Clothing	13.0
Singapore	Beverages and tobacco	2.4
United States	Dairy	19.1
Vietnam	Beverages and tobacco	43.6

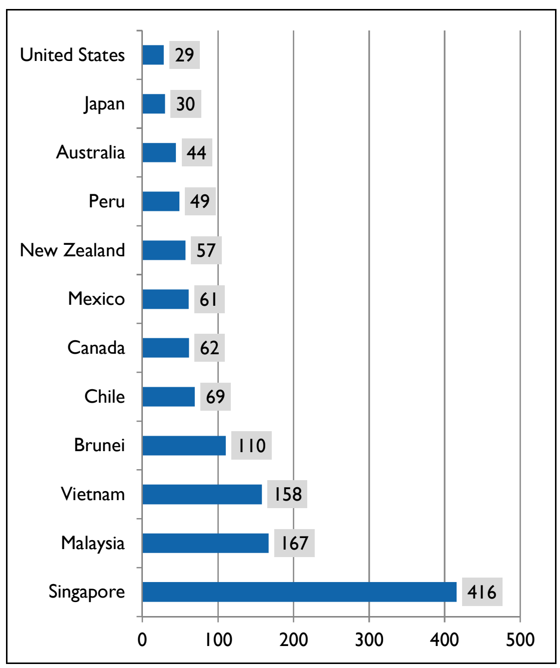
Source: WTO Tariff Profiles 2012.

Notes: Product category average tariffs based on both ad-valorem tariffs (percentage of overall value) and non-ad valorem tariff equivalents (other types of tariffs converted to percentage). These category-specific averages are at the 4-digit HTS level, and do not necessarily represent the highest tariffs on a specific product (e.g., although the overall average U.S. clothing tariff is lower than the 19.1% average U.S. dairy tariff, tariffs on some specific clothing articles are higher).

When considering tariff rates, it is useful to consider the overall importance of trade in a nation's economy. Trade-to-GDP ratios, shown in **Figure 17** provide one such measure. The figure shows a great range in trade-to-GDP ratios among TPP countries. Singapore's trade-to-GDP ratio of over 400% implies that the country's imports and exports are four times larger than its total domestic production of goods and services. Such a high figure likely reflects Singapore's importance as a regional shipping hub, re-exporting products that merely pass through its borders, as well as its importance in international supply chains, perhaps domestically producing only a portion of the components in the manufactured goods it exports. Given this significant reliance on international trade, it is less surprising that Singapore would have such a low average applied tariff level. The United States, the TPP country with the largest population and economy, and, hence, the largest domestic market, has a trade-to-GDP ratio of less than 30%, indicating the

Figure 17. Trade-to-GDP Ratios

(in percent, 2009-2011)



Source: WTO Trade Profiles 2012.

lowest reliance on trade among any of the TPP countries. The United States, however, has one of the lowest average applied tariff rates among the TPP countries, suggesting that the importance of trade in a country's economy is not the only determinant of its openness to trade. The variation in trade-to-GDP ratios is another indicator of the diversity among the TPP countries, which may ultimately be reflected in their trade policy priorities.

Conclusion

The proposed Trans-Pacific Partnership FTA would be a significant FTA for the United States and could eventually become the platform for a broader Asia-Pacific free trade area, an area that encompasses 40% of the world's people and over half of global production. TPP would be the largest U.S. FTA based on trade flows, and with the entry of Japan, a significant share of U.S.-TPP trade is not currently covered by an FTA. Due to the great diversity among the TPP participants, there may be challenges in achieving a comprehensive and high standard agreement. TPP countries vary in terms of population, economic development, and geography.

In goods, services, and investment flows, Canada is the top U.S. partner among TPP countries, with Mexico and Japan as the next largest partners in most categories. Australia, Malaysia, and Singapore are the other top U.S. partners in merchandise trade among TPP countries, and Australia and Singapore are also major U.S. partners in services trade and investment flows among TPP countries. Vietnam, given its significant population and quickly growing economy, may hold the greatest potential for increased economic relations with the United States moving forward. Malaysia, Mexico, Chile, and Peru also represent growing economies that have populations above 20 million. Chile, Peru, and Mexico's potential for increased U.S. economic exchange due to the TPP, however, may be somewhat lessened given their existing FTAs with the United States.

Appendix.

Table A-1. Trade Agreements in TPP Countries

Country or Group	Existing Trade Agreements	Agreements in Negotiation or Awaiting Implementation
Australia	ASEAN-*Australia-New Zealand*	China
	Chile	Gulf Cooperation Council[a]
	Malaysia	India
	New Zealand	Indonesia
	Singapore	*Japan*
	Thailand	PACER[b]
	United States	RCEP[c]
		South Korea
		TPP[d]
Brunei*	AFTA[e]	RCEP[c]
	Japan	TPP[d]
	P-4[f]	
Canada	*Chile*	Andean Community[g]
	Colombia	Caribbean Community[h]
	Costa Rica	Dominican Republic
	EFTA[i]	El Salvador, Guatemala, Nicaragua
	Israel	European Union[j]
	Jordan	Honduras
	NAFTA[k]	India
	Panama	*Japan*
	Peru	Morocco
		Singapore
		South Korea
		TPP[d]
		Ukraine
Chile	*Australia*	India
	Canada	Pacific Alliance[l]
	Chile-Central America[m]	Thailand
	China	TPP[d]
	Colombia	*Vietnam*
	Ecuador[n]	
	EFTA[g]	
	European Union[j]	
	Japan	
	Malaysia	
	Mexico	
	P-4[f]	
	Panama	

Country or Group	Existing Trade Agreements	Agreements in Negotiation or Awaiting Implementation
	Peru	
	South Korea	
	Turkey	
	United States	
Japan	ASEAN - Japan	*Australia*
	Brunei	*Canada*
	Chile	China-Japan-South Korea
	India	Columbia
	Indonesia	Gulf Cooperation Council[a]
	Malaysia	Mongolia
	Mexico	RCEP[c]
	Peru	TPP[d]
	Philippines	
	Singapore	
	Switzerland	
	Thailand	
	Vietnam	
Malaysia*	AFTA[e]	D-8[o]
	Australia	European Union[j]
	Chile	RCEP[c]
	India	TPS-OIC[p]
	Japan	Turkey
	New Zealand	TPP[d]
	Pakistan	
Mexico	Central America[q]	Pacific Alliance[l]
	Chile	*Singapore*
	Colombia	South Korea
	EFTA[g]	TPP[d]
	European Union[j]	
	Israel	
	Japan	
	NAFTA[k]	
	Peru	
	Uruguay	
New Zealand	ASEAN-*Australia-New Zealand*	Gulf Cooperation Council[a]
	Australia	India
	China	RCEP[c]
	Hong Kong	Russia-Belarus-Kazakhstan
	Malaysia	South Korea
	P-4[f]	TPP[d]
	Singapore	
	Thailand	

Country or Group	Existing Trade Agreements	Agreements in Negotiation or Awaiting Implementation
Peru	Andean Community[i] *Canada* *Chile* China EFTA[g] European Union[j] *Japan* *Mexico* Panama *Singapore* South Korea Thailand *United States*	Costa Rica El Salvador Guatemala Honduras Pacific Alliance[l] TPP[d]
Singapore*	AFTA[e] *Australia* China EFTA[g] India *Japan* Jordan *New Zealand* P-4[f] Panama *Peru* South Korea *United States*	*Canada* Costa Rica European Union[j] Gulf Cooperation Council[a] *Mexico* Pakistan RCEP[c] Taiwan TPP[d] Ukraine
United States	*Australia* Bahrain CAFTA-DR[r] *Chile* Colombia Israel Jordan Morocco *NAFTA*[k] Oman Panama *Peru* *Singapore* South Korea	European Union TPP[d]
Vietnam*	AFTA[e] *Japan*	*Chile* EFTA

Country or Group	Existing Trade Agreements	Agreements in Negotiation or Awaiting Implementation
		European Union RCEP[c] South Korea TPP[d]
ASEAN (Association of Southeast Asian Nations)	*Australia* and *New Zealand* China India *Japan* South Korea	European Union[j] RCEP[c]

Source: Websites of TPP member countries; WTO online trade agreements database; and Organization of American States, Foreign Trade Information System.

Notes: Agreements with other TPP countries are in italics. TPP countries that are also members of ASEAN are marked with an asterisk(*). Collective agreements, to which the individual ASEAN members are party, are listed above. There are additional partial scope economic agreements with TPP countries not included here.

a. Gulf Cooperation Council: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.

b. Pacific Agreement on Closer Relations (PACER): Australia, Cook Islands, Federated States of Micronesia, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

c. Regional Comprehensive Economic Partnership (RCEP): ASEAN members, Australia, China, India, Japan, New Zealand, South Korea.

d. Trans-Pacific Partnership (TPP): Australia, Brunei, Canada, Chile, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam.

e. ASEAN Free Trade Area (AFTA): Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam.

f. Trans-Pacific Strategic Economic Partnership (P-4): Brunei, Chile, New Zealand, Singapore.

g. European Free Trade Association (EFTA): Iceland, Lichtenstein, Norway, Switzerland.

h. Caribbean Community (CARICOM): Antigua & Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Suriname, Trinidad & Tobago. Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Turks and Caicos Islands are Associate Members.

i. Andean Community: Bolivia, Colombia, Ecuador, Peru.

j. European Union (EU): Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

k. North American Free Trade Agreement (NAFTA): Canada, Mexico, United States.

l. Pacific Alliance: Chile, Colombia, Mexico, Peru.

m. Chile-Central America: Chile, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua.

n. Pacific Alliance: Chile, Colombia, Mexico, Peru.

o. Developing Eight (D-8): Bangladesh, Indonesia, Iran, Malaysia, Egypt, Nigeria, Pakistan, Turkey.

p. Trade Preferential System-Organization of Islamic Conference (TPS-OIC): 57 Islamic Countries.

q. Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua.

r. Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR).

Table A-2. Intra-TPP Merchandise Trade

(in millions of U.S. dollars, 2011)

Country	Exports to	Value	Imports from	Value
Australia	Japan	49,797.00	United States	32,395.30
	United States	9,724.86	Japan	21,708.00
	New Zealand	7,674.43	Singapore	16,513.50
	Singapore	7,404.74	Malaysia	10,985.10
	Malaysia	5,252.97	New Zealand	8,282.99
	Vietnam	1,849.60	Vietnam	3,587.94
	Canada	1,718.83	Canada	2,619.11
	Mexico	912.14	Mexico	2,250.67
	Chile	447.57	Chile	1,357.04
	Peru	145.92	Brunei	1,193.87
	Brunei	36.56	Peru	114.03
Brunei	Japan	5,447.67	Singapore	1,700.44
	Australia	1,085.34	Malaysia	763.16
	New Zealand	786.15	Japan	206.38
	Vietnam	179.30	United States	172.92
	Singapore	118.54	Australia	40.21
	United States	80.91	Vietnam	17.62
	Malaysia	47.80	New Zealand	4.88
	Canada	6.74	Canada	4.75
	Mexico*	0.01	Mexico*	4.50
	Chile	0.01	Chile	0.00
	Peru	0.00	Peru	0.00
Canada	United States	339,021.00	United States	257,405.00
	Japan	10,378.30	Mexico	28,093.40
	Mexico	5,396.34	Japan	16,546.50
	Australia	2,037.46	Peru	4,056.97
	Singapore	908.75	Malaysia	2,451.10
	Chile	789.20	Australia	2,286.87
	Malaysia	783.06	Chile	1,848.91
	Peru	537.45	Vietnam	1,779.86
	New Zealand	385.95	Singapore	1,570.49
	Vietnam	370.26	New Zealand	587.78
	Brunei	4.31	Brunei	7.41
Chile	United States	9,585.65	United States	17,390.80
	Japan	8,355.56	Japan	2,615.14

Country	Exports to	Value	Imports from	Value
	Peru	1,798.79	Mexico	2,608.74
	Mexico	1,349.82	Peru	2,069.52
	Canada	1,267.93	Canada	1,036.51
	Australia	1,224.51	Australia	474.58
	Vietnam	371.20	Malaysia	208.52
	Malaysia	207.77	Vietnam	205.45
	Singapore	60.52	Singapore	82.55
	New Zealand	39.58	New Zealand	65.65
	Brunei	0.00	Brunei	0.01
Japan	United States	142,053.00	United States	78,230.60
	Singapore	23,289.70	Australia	56,509.00
	Australia	18,418.60	Malaysia	32,872.60
	Malaysia	17,701.20	Vietnam	15,099.60
	Vietnam	10,729.10	Canada	12,697.80
	Mexico	10,571.70	Chile	9,332.01
	Canada	10,265.00	Singapore	8,763.28
	Chile	1,993.44	Brunei	5,992.44
	New Zealand	1,956.90	Mexico	4,400.98
	Peru	1,037.89	New Zealand	3,031.64
	Brunei	187.61	Peru	2,795.94
Malaysia	Singapore	30,944.40	Singapore	26,081.10
	Japan	26,878.60	Japan	20,217.70
	United States	19,739.00	United States	15,904.40
	Australia	9,437.31	Vietnam	5,213.96
	Vietnam	3,827.05	Australia	4,732.35
	Mexico	1,481.94	Canada	931.38
	New Zealand	1,172.06	New Zealand	784.35
	Canada	947.79	Mexico	282.46
	Brunei	693.78	Chile	208.45
	Chile	136.47	Brunei	52.58
	Peru	114.41	Peru	25.40
Mexico	United States	287,824.00	United States	203,621.00
	Canada	10,938.40	Japan	19,420.70
	Japan	2,613.17	Canada	10,878.80
	Chile	2,251.56	Malaysia	5,209.17
	Peru	1,527.75	Chile	1,652.87
	Australia	1,086.42	Singapore	1,508.26

Country	Exports to	Value	Imports from	Value
	Singapore	724.49	Australia	1,027.90
	Malaysia	202.84	Peru	483.97
	New Zealand	102.43	New Zealand	368.55
	*Vietnam	84.10	*Vietnam	1,153.99
	*Brunei	4.50	*Brunei	0.01
New Zealand	Australia	7,856.79	Australia	5,837.80
	United States	3,443.69	United States	3,578.58
	Japan	2,608.57	Japan	2,476.20
	Malaysia	717.63	Singapore	1,823.69
	Singapore	683.37	Malaysia	1,412.57
	Canada	459.77	Brunei	864.77
	Vietnam	368.42	Canada	470.07
	Mexico	229.26	Vietnam	263.40
	Peru	108.98	Mexico	205.50
	Chile	60.56	Chile	51.17
	Brunei	4.43	Peru	34.74
Peru	United States	6,072.64	United States	10,293.10
	Canada	3,688.15	Chile	1,978.67
	Japan	2,541.77	Mexico	1,680.52
	Chile	1,881.39	Japan	1,141.67
	Mexico	439.97	Canada	591.20
	Australia	103.66	Australia	160.51
	Vietnam	85.19	Malaysia	125.85
	New Zealand	31.58	New Zealand	119.88
	Malaysia	23.09	Singapore	46.38
	Singapore	12.38	Vietnam*	113.30
	Brunei	0.00	Brunei	0.00
Singapore	Malaysia	50,431.50	Malaysia	40,418.40
	United States	22,709.40	United States	38,818.10
	Japan	18,825.70	Japan	23,639.40
	Australia	17,140.40	Australia	4,912.52
	Vietnam	10,382.90	Vietnam	2,249.43
	New Zealand	2,108.33	Mexico	1,684.34
	Brunei	1,545.85	Canada	1,243.33
	Mexico	1,193.29	New Zealand	699.09
	Canada	1,192.61	Chile	139.05
	Chile	58.38	Brunei	130.39

Country	Exports to	Value	Imports from	Value
	Peru	42.17	Peru	13.62
United States	Canada	291,758.00	Canada	328,719.00
	Mexico	216,331.00	Mexico	280,025.00
	Japan	70,046.50	Japan	150,401.00
	Australia	31,208.30	Malaysia	26,652.00
	Singapore	30,560.70	Vietnam	21,369.60
	Chile	18,885.80	Singapore	20,455.10
	Malaysia	12,854.30	Chile	10,096.50
	Peru	9,357.40	Australia	9,851.60
	Vietnam	4,623.40	Peru	6,679.90
	New Zealand	3,223.30	New Zealand	3,623.50
	Brunei	157.20	Brunei	89.00
Vietnam	United States	19,426.90	Japan	11,802.10
	Japan	13,726.90	Singapore	11,421.20
	Malaysia	4,739.96	United States	5,085.74
	Australia	3,261.76	Malaysia	4,209.76
	Singapore	2,044.94	Australia	2,034.56
	Canada	1,618.06	Chile	408.32
	New Zealand	239.45	Canada	407.29
	*Mexico	1,153.99	New Zealand	405.27
	Chile	186.78	Brunei	197.23
	*Peru	113.30	Peru	93.71
	Brunei	16.01	*Mexico	84.10

Source: Analysis by CRS. Data from IMF's Direction of Trade Statistics.

Notes: (*) Indicates data was not available through the IMF and was sourced from World Trade Atlas.

Direction of Trade Statistics data considers trade flows from each individual country's perspective, whenever possible. Countries can differ in their classification methods, particularly classification of trade flows that pass through a third-party before reaching their final destination. Hence, Country A's reported imports from Country B may not equal Country B's reported exports to Country A.

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