PIIE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

POLICY BRIEF

19-1 China Should Join the New Trans-Pacific Partnership

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January 2019

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Authors' Note: The authors are grateful for helpful comments by Wendy Cutler, Anabel Gonzalez, Marcus Noland, Sherman Robinson, and Steve Weisman.

A year after President Donald Trump's ill-advised pullout from the Trans-Pacific Partnership (TPP) trade agreement in early 2017, the remaining 11 Asian and Pacific countries agreed on a deal in spite of the absence of the United States. Renamed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the accord took effect on December 30, 2018, and provides rigorous, up-to-date rules for Asia-Pacific trade—but it excludes the region's two biggest economies, the United States and China. For the United States, staying out of the agreement has been costly—an estimated $133 billion in potential income will be lost annually[1] due to foregone trade opportunities. Meanwhile, in the vacuum left by the US withdrawal, several trade-oriented economies have become interested in joining the CPTPP. China could be one of them.

Chinese membership in the CPTPP would yield large economic and political benefits to China and other members. The CPTPP, in its current form, would generate global income gains estimated at $147 billion annually. But if China were to join, these gains would quadruple to $632 billion, or a quarter more than in the original TPP with the United States (see figure 2). They would be even greater if other Asia-Pacific economies joined as well. For example, a "CPTPP-16" agreement with five more members—say, Indonesia, Korea, the Philippines, Taiwan, and Thailand, all of which have expressed interest—would yield benefits of $449 billion per year without China and $1,225 billion with it.

These gains would be driven by a sharp expansion of trade among CPTPP members, estimated at around 50 percent. The region already has robust trade and investment connections, and the agreement would further reduce barriers that still saddle its trade, particularly between China, Japan, and South Korea. The net result—reported in detail below—would be to shift both the exports and imports of other CPTPP countries toward China. New intra-CPTPP trade flows would, in turn, strengthen production chains and make the region's manufacturing industries even more productive, also amplifying related service and innovative activities. Chinese exports to and imports from the United States would increase slightly, leading to a small net increase in China's bilateral trade surplus.

But to join the CPTPP, China would have to undertake unprecedented reforms and manage complex political challenges. It would have to reduce tariffs substantially and bring many policies into compliance with global norms. For example, under CPTPP rules China would be required to:

- make state-owned enterprises (SOEs) more transparent and subject to commercial considerations in business decisions;
- ensure greater intellectual property protection, particularly through trade secret and patent enforcement;
- free most foreign investors from the requirement to take on local partners;
- ease restrictions on electronic commerce and on cross-border data transfers; and

1. This estimate combines the loss of $131 billion income gains that would have resulted from the former TPP with $2 billion in losses generated by the current CPTPP (see table 1). These and other estimated benefits refer to annual real income gains in 2030, by which time the agreement will be fully implemented, and similar amounts beyond.

- bar discrimination between indigenous production and imports, such as those proposed in the "Made in China 2025" plan.

China has resisted these changes in the past, but it now faces a harsher economic environment and greater pressures from abroad. The reforms required by the CPTPP rule book, adopted in the context of a well-monitored and enforced agreement, would go a long way toward resolving current disputes with the United States and other countries and sustaining China's prominent role in international trade.

CPTPP membership offers China a chance to shape the global innovation economy while signaling clear commitment to outward-oriented reforms and global norms.

Adopting the CPTPP rule book would also do much more than ease political tensions. The required changes would be extensive and would invigorate China's outward-oriented reforms. Indeed, Canada, Japan, Vietnam, and other countries are using the requirements of the CPTPP to drive their respective economic reform agendas. In addition, the CPTPP would commit China to adopt breakthrough provisions on many aspects of 21st century trade. Some of these rules have been already included in new US agreements, such as the US-Mexico-Canada Agreement (USMCA), and may be carried into future reforms of the World Trade Organization (WTO). CPTPP membership offers China a chance to shape the global innovation economy while signaling clear commitment to outward-oriented reforms and global norms.

CPTPP: AN INTERNATIONAL FRAMEWORK FOR CHINESE REFORM

Given the withdrawal of the United States from the TPP, the challenges confronting the WTO, and the likely enlargement of the CPTPP (see figure 1), the agreement is now emerging as a key driver of trade policy in the Asia-Pacific region. China's trial balloons about joining are appropriate and noteworthy; the CPTPP offers rules that might ease US-China trade tensions as well as prepare China for deeper regional and global partnerships in the future.

A bold decision to join the CPTPP, or to adopt its essential framework, could yield multiple benefits for China and other countries. As estimated below, the direct economic gains would be substantial. And since the TPP was initially negotiated under US leadership, the agreement reflects salient international concerns about Chinese commercial policies. That is why the CPTPP is helpful in the China-US trade conflict—its text directly addresses practices such as subsidies of SOEs, weak intellectual property rights, and forced technology transfers.

Indeed, the CPTPP could offer a comprehensive framework for the negotiations between the United States and China that were launched at the G-20 Summit in Buenos Aires in December 2018. The United States had such frameworks in its earlier negotiations with South Korea and with Canada and Mexico, namely the existing Korea-US (KORUS) and North American Free Trade Agreements (NAFTA), respectively. Disagreements were limited to portions of these texts, and solutions were reached relatively quickly. Short of such a framework, US-China negotiations are too likely to focus on a "shopping list" of Chinese commodity purchases. The CPTPP could play a comparable role in the current negotiations since its content has been already vetted in many years of negotiations.

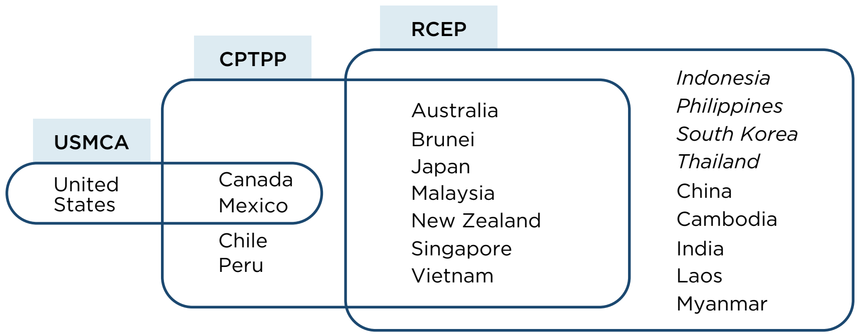
For example, an important point of contention between the United States and China involves the Chinese treatment of US firms in China, including especially the requirement that firms investing in some industries take on local partners and make technology transfers to them. These policies may have been justifiable at early stages in China's development but are difficult to reconcile with China's now competitive position in some key high-tech markets. Such policies have been long criticized by the United States and other countries in the Organization for Economic Cooperation and Development (OECD). Banning such practices became a priority in the Obama administration's work on the TPP, and the CPTPP sets a hard-fought benchmark for freeing investments from performance requirements.

China could commit to CPTPP rules by launching the process of joining the CPTPP while also proposing a bilateral accord with the United States on similar terms. CPTPP partners and the United States could then monitor and enforce the implementation of the agreement independently. Eventually, should China and the United States both become members, they could benefit from wider mutual concessions and joint enforcement. And if the United States fails to conclude a parallel agreement, CPTPP membership would still help China benefit from opening its economy and building stronger ties with other partners.

Chinese participation has been discussed unofficially since the early days of the TPP negotiations, so it's not surprising that there is renewed interest today.[2] Australia's

2. "Beijing 'looking into joining trans-Pacific trade pact' to hedge against the US," *South China Morning Post*, October 11, 2018, https://www.scmp.com/news/china/diplomacy/

Figure 1 Asia-Pacific regional groups



Regional groups discussed in the text, charts, and tables:

USMCA	US-Mexico-Canada Agreement
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
RCEP	Regional Comprehensive Economic Partnership
CPTPP16	CPTPP + RCEP economies shown in italics + Taiwan

former prime minister, Kevin Rudd, has also called for Chinese membership in the CPTPP as a way to outflank American negotiating demands.[3] And recent reports on China's potential offers to the United States have mentioned mechanisms similar to those already included in the CPTPP, such as the requirement for competitive neutrality in the treatment of state-owned and private enterprises.[4] Such reforms are also supported by many experts who argue that they will positively affect Chinese growth, especially in innovative sectors.

SHOULD CHINA JOIN THE CPTPP?

The trade confrontation between the United States and China presents unique economic and geopolitical reasons for Chinese interest in the CPTPP. By adopting the CPTPP rule book, China can address America's structural criticisms of its policy regime, in addition to offering specific market access concessions, such as lower tariffs and special purchases of US products. This is a credible, concrete response to international concerns, as well as a pathway to deeper integration in the Asia-Pacific region.

The CPTPP rule book would commit China to accelerate opening its economy. Figure 2 summarizes the likely global benefits of several relevant trade agreements by 2030. The first bar in the figure represents the original TPP agreement, which included the United States and was estimated to generate annual global income gains of $492 billion. The second bar shows the current 11-member CPTPP agreement and estimates its gains at $147 billion, about one-third of the original TPP. This sharp drop reflects the withdrawal of the United States from the TPP, which eliminated gains for the United States and reduced them for other countries.

The consequences of adding China to the current CPTPP are shown in the third bar of figure 2. Global income gains rise to $632 billion annually, or by $485 billion over the $147 billion gains generated by the CPTPP without China. The fourth bar shows what might happen to the CPTPP if five additional currently interested nonmember Asia-Pacific economies join. This 16-member agreement would have benefits of $449 billion, approximately matching the value of the original TPP with the United States. Adding China to this larger agreement would bring global gains to $1,225 billion (fifth bar). In such a larger agreement, adding China increases benefits by $776 billion ($1,225 billion less $449 billion).

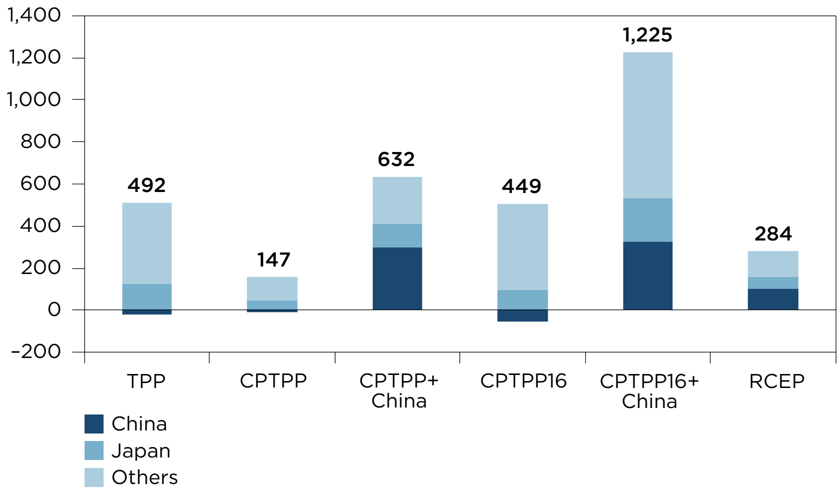
Finally, the sixth bar compares the Regional Comprehensive Economic Partnership (RCEP) to the CPTPP variants. RCEP is a large agreement—it includes China, Japan, and India—but has less ambitious provisions. Its gains are estimated to be $284 billion. Note, however, that

article/2168147/beijing-looking-joining-trans-pacific-trade-pact-hedge-against (accessed on January 15, 2019).

3. Kevin Rudd, "Prospects for US-China Relations in 2019," *Project Syndicate*, December 14, 2018, https://www.project-syndicate.org/commentary/united-states-china-relations-in-2019-by-kevin-rudd-2018-12 (accessed on January 15, 2019).

4. Such initiatives could involve leveling the playing field for different kinds of enterprises, removing self-sufficiency targets and other features of the "Made in China 2025" strategy, eliminating trade and inward foreign investment restrictions, and strengthening intellectual property rights, especially for foreign enterprises (Timmy Shen and Wu Hongyuran, "State Council Endorses 'Competitive Neutrality,'" December 26, 2018, Caixin Global, https://www.caixinglobal.com/2018-12-26/state-council-endorses-competitive-neutrality-101363735.html [accessed on January 15, 2019]).

Figure 2 Potential benefits of trade agreements compared: Real income increases in 2030



TPP = Trans-Pacific Partnership; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership; RCEP = Regional Comprehensive Economic Partnership

Note: Refer to figure 1 for trade agreement members. TPP members include the CPTPP plus the United States.

Source: Authors' simulations.

none of these estimates includes gains from the potential reentry of the United States in the CPTPP or from a new, bilateral China-US agreement.[5]

Adding China has such a large impact because of its massive economic scale, its robust ties with Asia-Pacific partners that reflect complementary economic structures, and the high quality of the CPTPP agreement, which would reduce major remaining impediments to trade between China and its partners. These factors lead to deeper relationships and substantial new trade. However, little of this new trade would result from the diversion of existing trade from countries outside the agreement. In fact, as reported in table 1, even nonmembers like Europe would benefit, due to productivity improvements in CPTPP exports and to liberalization and harmonization measures that affect not just members but all trade partners. Meanwhile, unless the United States develops a parallel agreement with China or joins the CPTPP itself, it is estimated to become the agreement's biggest loser.

Joining the CPTPP would also help China improve regional diplomatic relationships. In effect, China would be working with Asian neighbors and countries in the Americas to build an open regional system. All members would benefit from China's scale and increased market orientation. Chinese membership in the CPTPP might even enhance the RCEP,[6] a group targeting a less rigorous agreement focused on market access and connectivity rather than behind-the-border rules.[7] However, once RCEP is established, it may be upgraded over time, as is often the case with integration efforts led by the Association of Southeast Asian Nations (ASEAN). China's accession to the CPTPP would increase the overlap between the CPTPP and RCEP, stimulating more rigorous and perhaps eventually common rules.

From a geopolitical perspective, China's commitment to state-of-the-art trade rules would offer essential support for a rules-based multilateral system at a time when the United States seems to be walking away from it. Closer economic ties among China, Japan, South Korea, and Southeast Asia could ease regional political tensions and enhance East Asia's influence in global fora. Absent US leadership, pessimists might have predicted that Asia-Pacific economic cooperation would fray. Instead, the CPTPP and its enlargement could lend new energy to multilateral economic integration.

5. For example, Petri, Plummer, and Zhai (2014) estimate that a bilateral FTA between the United States and China would increase global income by $403 billion beginning in 2025, with the United States and China gaining $130 billion and $330 billion, respectively.

6. Peter A. Petri and Michael Plummer, "The case for RCEP as Asia's next trade agreement," Brookings Institution, November 6, 2018, https://www.brookings.edu/blog/order-from-chaos/2018/11/06/the-case-for-rcep-as-asias-next-trade-agreement/ (accessed on January 15, 2019).

7. For a comparison of the CPTPP and RCEP (as of November 2017), see Asia Trade Centre (2017).

Table 1 Real income effects of alternative integration initiatives

	2030 income (billions of dollars)	Change in billions of dollars					
		TPP	CPTPP	CPTPP+China	CPTPP16	CPTPP16+China	RCEP
Americas	**39,569**	**208**	**49**	**108**	**72**	**138**	**2**
Canada	2,717	37	22	46	29	55	0
Chile	463	4	3	10	5	11	0
Colombia	684	0	0	0	0	0	0
Mexico	2,169	22	16	48	33	74	0
Peru	442	11	10	14	11	17	0
United States	25,754	131	–2	–10	–6	–17	1
Latin America nie	7,341	3	0	1	–1	–2	0
Asia	**50,659**	**202**	**69**	**461**	**316**	**959**	**252**
Brunei	31	2	1	1	1	2	0
China	27,839	–18	–10	298	–53	325	101
Hong Kong	461	6	1	7	1	12	2
India	5,487	–5	–4	–15	–16	–38	56
Indonesia	2,192	–2	–1	–6	18	22	1
Japan	4,924	125	46	114	98	206	56
Korea	2,243	–8	–3	–15	84	128	23
Malaysia	675	52	21	49	36	64	6
Philippines	680	–1	0	–2	13	20	1
Singapore	485	19	13	21	19	30	2
Taiwan	776	1	0	–6	60	108	–3
Thailand	812	–7	–5	–13	30	42	3
Vietnam	497	41	11	27	25	41	2
ASEAN nie	283	–1	0	0	0	–1	1
Asia nie	3,272	0	0	1	–1	–1	0
Oceania	**2,854**	**21**	**15**	**25**	**22**	**31**	**7**
Australia	2,590	15	12	20	17	24	5
New Zealand	264	6	3	5	5	7	2
Rest of world (ROW)	**40,720**	**60**	**14**	**39**	**39**	**97**	**23**
Africa (Sub-Sahara)	4,068	0	0	–1	–1	–2	1
Europe	23,189	48	12	28	22	51	16
EMENA	10,001	9	2	9	15	40	5
Russia	3,371	2	0	2	2	7	1
ROW nie	90	0	0	0	0	0	0
World	**133,801**	**492**	**147**	**632**	**449**	**1,225**	**284**
Memorandum							
Income (members)		41,011	15,257	43,096	21,961	49,800	49,003
Δ (members)		465	157	652	486	1,174	260
Δ (nonmembers)		27	–10	–20	–37	50	24

(table continues)

Table 1 Real income effects of alternative integration initiatives (continued)

	Percent of income					
	TPP	**CPTPP**	**CPTPP+China**	**CPTPP16**	**CPTPP16+China**	**RCEP**
Americas	**0.5**	**0.1**	**0.3**	**0.2**	**0.3**	**0.0**
Canada	1.3	0.8	1.7	1.1	2.0	0.0
Chile	0.9	0.7	2.1	1.1	2.5	0.0
Colombia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	1.0	0.7	2.2	1.5	3.4	0.0
Peru	2.6	2.2	3.2	2.5	3.9	0.0
United States	0.5	0.0	0.0	0.0	–0.1	0.0
Latin America nie	0.0	0.0	0.0	0.0	0.0	0.0
Asia	**0.4**	**0.1**	**0.9**	**0.6**	**1.9**	**0.5**
Brunei	5.9	2.6	4.1	3.7	5.8	0.9
China	–0.1	0.0	1.1	–0.2	1.2	0.4
Hong Kong	1.2	0.2	1.5	0.3	2.5	0.4
India	–0.1	–0.1	–0.3	–0.3	–0.7	1.0
Indonesia	–0.1	–0.1	–0.3	0.8	1.0	0.0
Japan	2.5	0.9	2.3	2.0	4.2	1.1
Korea	–0.3	–0.1	–0.7	3.8	5.7	1.0
Malaysia	7.6	3.1	7.3	5.4	9.4	0.9
Philippines	–0.1	0.0	–0.3	1.9	2.9	0.2
Singapore	3.9	2.7	4.3	3.8	6.2	0.4
Taiwan	0.2	0.0	–0.8	7.8	13.9	–0.4
Thailand	–0.8	–0.6	–1.6	3.6	5.1	0.3
Vietnam	8.1	2.2	5.5	5.1	8.2	0.5
ASEAN nie	–0.4	0.0	–0.1	–0.1	–0.2	0.2
Asia nie	0.0	0.0	0.0	0.0	0.0	0.0
Oceania	**0.7**	**0.5**	**0.9**	**0.8**	**1.1**	**0.2**
Australia	0.6	0.5	0.8	0.7	0.9	0.2
New Zealand	2.2	1.1	1.9	2.0	2.6	0.6
Rest of world (ROW)	**0.1**	**0.0**	**0.1**	**0.1**	**0.2**	**0.1**
Africa (Sub–Sahara)	0.0	0.0	0.0	0.0	0.0	0.0
Europe	0.2	0.0	0.1	0.1	0.2	0.1
EMENA	0.1	0.0	0.1	0.1	0.4	0.0
Russia	0.1	0.0	0.1	0.1	0.2	0.0
ROW nie	0.2	0.1	0.2	0.0	0.1	0.1
World	**0.4**	**0.1**	**0.5**	**0.3**	**0.9**	**0.2**
Memorandum						
Income (members)						
Δ (members)	1.1	1.0	1.5	2.2	2.4	0.5
Δ (nonmembers)	0.0	0.0	0.0	0.0	0.1	0.0

nie = not included elsewhere; ASEAN = Association of Southeast Asian Nations; EMENA = Europe, Middle East, and North Africa; TPP = Trans-Pacific Partnership; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership; RCEP = Regional Comprehensive Economic Partnership

Note: Refer to figure 1 for trade agreement members. TPP members include the CPTPP plus the United States.

Source: Authors' simulations. See Petri et al. (2017) for model specification.

COULD CHINA JOIN THE CPTPP?

As already noted, China would need to make hard decisions to accept CPTPP rules and market access commitments. The CPTPP is ambitious; it intends to set state-of-the-art rules on trade issues that have emerged outside the conventional policy framework over the last 25 years. Many of its core elements—the knowledge economy, service trade, and investment—are also prominent in US-China disputes. Further, the CPTPP includes rigorous enforcement clauses, and its members will likely insist that provisions be effectively implemented, especially by new entrants.

The CPTPP mirrors the TPP on which it was based, except for 22 measures that were suspended[8] and other differences noted in side letters between countries. The suspended measures include key interests of the United States, such as intellectual property protection and provisions on investment dispute resolution. These could be reactivated if the United States chose to return and other parties agreed to reintroduce them. In the meantime, the suspensions make it easier for others to join.

Even with these modifications, China will find CPTPP provisions challenging. Some specifically address members' concerns with Chinese policy. The chief difficulties will likely focus on chapters or articles on:

- *SOEs.* The CPTPP aims to create a level playing field for state-owned and controlled enterprises and their private competitors (Chapter 17). SOEs are required to follow commercial considerations, not to discriminate against foreign goods and services, and to meet high transparency requirements. Governments are prohibited from offering noncommercial assistance, including financial access and guarantees. Current Chinese policies are criticized for offering SOEs varied support, including low-cost loans from state-owned banks.
- *Intellectual property.* The TPP tightened rules on intellectual property over previous US agreements (Chapter 18), but some provisions championed by the United States were suspended in the CPTPP. Meanwhile, China's intellectual property system has improved considerably in recent years, and claims of copyright infringement have waned. But trade secret protection remains weak, and critics argue that foreign firms are at a disadvantage in patent enforcement. If China were to join the CPTPP, its intellectual property system would require further policy changes. Many of these would be consistent with China's efforts to strengthen its innovation system.
- *Investment rules.* The CPTPP prohibits using performance requirements for establishing or operating investments. This prohibition includes requiring the transfer of "a particular technology, a production process or other proprietary knowledge" as a condition for the approval of investments (Article 9.10). China is criticized for requiring investors to take on local partners and for making investment approvals conditional on technology transfers to the partners. These policies are being used to justify the Trump tariffs against China under Section 301 of the US Trade Act of 1974, which permits trade remedies against a broad range of unfair practices.
- *Electronic commerce.* The CPTPP includes pathbreaking provisions on cross-border data transfers. These require that "each Party shall allow the cross-border transfer of information by electronic means…for the conduct of the business" (Chapter 14 and particularly Article 14.11). The agreement also prohibits "data localization" requirements. Currently, China closely regulates and prohibits some data transfers and requires that data collected by service providers remain on local servers.
- *Labor rights.* Among other provisions, CPTPP members agreed to align laws and practices with the 1998 International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, including freedom of association and the promotion of collective bargaining (Chapter 19). These will be difficult for China to meet. For example, instead of voluntary associations, currently a single All China Federation of Trade Unions (ACFTU) represents all Chinese workers in bargaining.
- *Market access.* In addition to adopting challenging rules, China will have to make significant market access commitments. These could cover reductions in tariffs that are still high, including in product groups (such as automobiles) that were excluded from other Chinese free trade area (FTA) negotiations.

Chinese accession may also face opposition from current CPTPP members. Some will be concerned about Chinese competition in their markets, especially as trade barriers rise in the United States. Some may be subject to US political pressure. The new USMCA agreement contains a "poison pill" (Article 32.10) that allows members "to terminate this Agreement on six months' notice" with any country that

8. See the annex to the CPTPP preamble. The text of the CPTPP agreement used was obtained from the New Zealand Ministry of Foreign Affairs and Trade website: https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-concluded-but-not-in-force/cptpp/comprehensive-and-progressive-agreement-for-trans-pacific-partnership-text/ (accessed on January 15, 2019).

signs an FTA with a nonmarket economy.[9] This provision is aimed at China, and US negotiators intend to seek similar language in other US agreements in the future. However, the effects of this provision are not entirely clear; some argue that it mainly empowers incumbent members to influence the details of new trade agreements being negotiated by others. Canada has continued to discuss a potential FTA with China even after signing the USMCA.

In short, Chinese membership in the CPTPP won't happen easily or quickly. But regardless of the challenges in accession, a serious Chinese interest in membership—along with a process to implement necessary reforms—would signal a major, concrete commitment to adopting global norms.

DETAILED EFFECTS OF CHINESE MEMBERSHIP IN THE CPTPP

Estimates of the effects of Chinese membership in the CPTPP presented here in further detail are derived in the same manner as reported in Petri et al. (2017), Petri and Plummer (2016), and other earlier work on Asia-Pacific trade agreements. The novelty here is the focus on adding China to the current 11-member CPTPP group, and then to a 16-member configuration that would also include Indonesia, Korea, the Philippines, Taiwan, and Thailand.[10]

The analysis is based on a computable general equilibrium (CGE) model described on the website www.asiapacifictrade.org and in Petri, Plummer, and Zhai (2012). CGE models account for interactions among firms, households, and governments in multiple product markets in several countries and regions. They include tariffs and other parameters that can be changed to simulate the effects of trade policy changes. Price, output, trade, and income changes can be then calculated by comparing the results of a simulated trade agreement with baseline levels. A 19-sector, 29-region model is used in the simulations, structured on specifications developed by Zhai (2008). Detailed results are presented in tables 1–4 and discussed briefly below.

Real incomes. The global income gains from the CPTPP by 2030 range from $147 billion for the current 11-member configuration to $449 billion for a 16-member variant. The *incremental* gains from including China in these two different versions of the CPTPP would be $485 billion and $776 billion, respectively, representing 0.4 and 0.6 percent of world GDP. Note that these are permanent gains in income and, hence, are substantial; for example, they would be equivalent to investments of $12.1 trillion and $19.4 trillion, respectively, that generate a 4 percent annual return. Aggregate results are shown in figure 2, while results for individual economies are reported in table 1.

Despite large estimated effects on CPTPP members, the agreements examined have a modest impact on the rest of the world. The 11-member CPTPP scenario would have mild negative effects on some economies with similar comparative advantage patterns, such as China, India, Korea, and Thailand. Once China and other economies are included, the diversion effects further diminish and nonmembers gain as a group (see table 1). In all simulations trade diversion is overwhelmed by trade creation.

Exports and imports. Aggregate trade results are presented in table 2 and show that trade increases approximately 2 to 2.5 times as much as real income. For example, the CPTPP plus China variant (fourth column in the table) yields export gains of $1,214 billion, or 1.9 times real income gains of $632 billion. This multiplier is typical in trade models and reflects the fact that only a part of trade increases can be counted as net economic benefits.

The United States has focused attention in recent months on bilateral trade balances. Although bilateral balances have little economic significance, they can have political effects, so these are reported for the CPTPP plus China scenario in table 3. By construction, China's overall trade balance is unchanged across simulations (in this scenario both exports and imports rise by $649 billion), given the standard assumption that, in the long term, capital flows determine the trade balance and are unlikely to be affected by trade policy.

Table 3 shows how China's bilateral trade patterns are estimated to change by 2030 as a result of membership in the CPTPP. China's exports to other CPTPP members would increase by 53 percent and would grow even to nonmembers by 3 percent. China's exports would increase by large margins to Malaysia and Mexico (88 percent and 75 percent, respectively), and its imports would grow especially fast from Japan and Canada (111 percent and 97 percent, respectively). China had weak or no prior trade agreements with these latter countries but had complementary trade relations with them, so removing barriers has substantial effects. China's trade surplus with the United States, however, is not much affected, rising slightly by $8 billion.

9. The agreement is available on the US Trade Representative website: https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between (accessed on January 15, 2019).

10. We are aware of only one other study of the gains from the CPTPP by ImpactECON (2018). The results are approximately half as large as those reported here, mainly due to differences in assumptions about the effects of liberalization measures on economies that are not members of the agreement.

Table 2 Export effects of alternative integration initiatives

	2030 exports (billions of dollars)	Change in billions of dollars					
		TPP	CPTPP	CPTPP+China	CPTPP16	CPTPP16+China	RCEP
Americas	**7,068**	**478**	**72**	**140**	**103**	**210**	**0**
Canada	835	58	39	82	56	112	–1
Chile	147	8	6	19	8	21	–1
Colombia	120	1	0	0	0	0	0
Mexico	670	32	23	45	45	99	–2
Peru	135	14	12	19	15	25	0
United States	3,906	357	–10	–29	–22	–48	3
Latin America nie	1,255	9	1	4	1	3	0
Asia	**12,905**	**511**	**172**	**1,012**	**874**	**2,824**	**662**
Brunei	16	1	1	1	1	1	0
China	4,976	9	–9	638	–44	1,136	258
Hong Kong	357	4	1	–1	1	–2	–1
India	1,360	1	–3	–11	–13	–28	131
Indonesia	446	–4	–3	–9	49	76	17
Japan	1,190	276	97	283	225	508	135
Korea	1,089	–11	–6	–29	203	352	61
Malaysia	491	99	42	87	71	128	17
Philippines	184	–1	0	–4	29	51	4
Singapore	470	35	29	33	33	43	3
Taiwan	506	4	0	–14	170	309	–7
Thailand	561	–9	–7	–22	68	119	24
Vietnam	357	107	31	56	84	131	17
ASEAN nie	93	–3	0	–1	–1	–3	4
Asia nie	810	2	1	4	0	2	1
Oceania	**673**	**38**	**28**	**43**	**45**	**74**	**16**
Australia	589	29	23	36	37	64	14
New Zealand	84	9	5	7	8	10	3
Rest of world (ROW)	**15,503**	**79**	**14**	**19**	**10**	**4**	**–7**
Africa (Sub–Sahara)	883	5	1	3	0	2	1
Europe	9,706	49	8	1	–7	–38	–9
EMENA	4,021	20	4	12	14	34	1
Russia	851	5	1	3	2	7	1
ROW nie	43	0	0	0	0	0	0
World	**36,149**	**1,106**	**287**	**1,214**	**1,032**	**3,112**	**671**
Memorandum							
Exports (members)		8,890	4,984	9,960	7,769	12,745	11,905
Δ (members)		1,025	308	1,306	1,102	3,184	686
Δ (nonmembers)		81	–22	–91	–70	–72	–15

(table continues)

Table 2 Export effects of alternative integration initiatives (continued)

	Percent of exports					
	TPP	**CPTPP**	**CPTPP+China**	**CPTPP16**	**CPTPP16+China**	**RCEP**
Americas	**6.8**	**1.0**	**2.0**	**1.5**	**3.0**	**0.0**
Canada	7.0	4.6	9.8	6.7	13.4	–0.1
Chile	5.3	4.3	13.0	5.7	14.2	–0.4
Colombia	0.9	0.1	0.1	0.0	–0.1	0.0
Mexico	4.7	3.5	6.7	6.7	14.7	–0.2
Peru	10.3	9.0	14.1	10.8	18.3	–0.2
United States	9.1	–0.3	–0.7	–0.6	–1.2	0.1
Latin America nie	0.7	0.1	0.3	0.1	0.2	0.0
Asia	**4.0**	**1.3**	**7.8**	**6.8**	**21.9**	**5.1**
Brunei	9.0	3.5	5.3	4.9	7.8	0.9
China	0.2	–0.2	12.8	–0.9	22.8	5.2
Hong Kong	1.0	0.2	–0.3	0.2	–0.5	–0.3
India	0.1	–0.2	–0.8	–1.0	–2.1	9.6
Indonesia	–1.0	–0.6	–2.0	11.1	17.1	3.8
Japan	23.2	8.1	23.8	18.9	42.7	11.4
Korea	–1.0	–0.6	–2.6	18.7	32.4	5.6
Malaysia	20.1	8.6	17.6	14.4	26.1	3.4
Philippines	–0.4	–0.2	–2.1	16.0	27.6	2.2
Singapore	7.5	6.2	7.1	7.0	9.1	0.6
Taiwan	0.8	–0.1	–2.7	33.6	61.2	–1.5
Thailand	–1.6	–1.3	–3.8	12.0	21.1	4.2
Vietnam	30.1	8.8	15.7	23.5	36.8	4.8
ASEAN nie	–2.8	–0.4	–0.6	–1.5	–3.0	3.8
Asia nie	0.2	0.1	0.5	–0.1	0.2	0.1
Oceania	**5.6**	**4.2**	**6.3**	**6.6**	**10.9**	**2.4**
Australia	4.9	4.0	6.0	6.3	10.8	2.3
New Zealand	10.2	5.8	8.5	9.2	11.9	3.1
Rest of world (ROW)	**0.5**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**
Africa (Sub–Sahara)	0.5	0.1	0.3	0.0	0.3	0.1
Europe	0.5	0.1	0.0	–0.1	–0.4	–0.1
EMENA	0.5	0.1	0.3	0.3	0.8	0.0
Russia	0.5	0.1	0.4	0.3	0.8	0.1
ROW nie	1.1	0.3	0.3	–0.2	–0.6	–0.1
World	**3.1**	**0.8**	**3.4**	**2.9**	**8.6**	**1.9**
Memorandum						
Exports (members)						
Δ (members)	11.5	6.2	13.1	14.2	25.0	5.8
Δ (nonmembers)	0.3	–0.1	–0.3	–0.2	–0.3	–0.1

nie = not included elsewhere; ASEAN = Association of Southeast Asian Nations; EMENA = Europe, Middle East, and North Africa; TPP = Trans-Pacific Partnership; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership; RCEP = Regional Comprehensive Economic Partnership

Note: Refer to figure 1 for trade agreement members. TPP members include the CPTPP plus the United States.

Source: Authors' simulations. See Petri et al. (2017) for model specification.

Table 3 Shifts in China's bilateral trade by 2030: CPTPP + China

	Exports (billions of dollars)			Imports		
	Current (billions of dollars)	**Change** (billions of dollars)	**Percent change**	**Current** (billions of dollars)	**Change** (billions of dollars)	**Percent change**
Americas	**1,522**	**185**	**12**	**953**	**170**	**18**
Canada	84	52	62	83	80	97
Chile	27	8	28	51	23	45
Colombia	21	1	3	8	0	4
Mexico	109	82	75	30	39	129
Peru	28	13	45	24	8	35
United States	1,022	23	2	450	15	3
Latin America nie	231	8	3	307	5	2
Asia	**1,497**	**373**	**25**	**1,828**	**401**	**22**
Brunei	1	1	43	2	1	26
China	0	0	0	0	0	0
Hong Kong	89	2	2	216	–3	–2
India	152	4	3	156	9	6
Indonesia	66	1	1	80	–2	–2
Japan	378	209	55	279	310	111
Korea	193	2	1	313	–9	–3
Malaysia	88	77	88	96	55	58
Philippines	33	0	0	38	0	0
Singapore	56	20	36	109	19	18
Taiwan	103	0	0	222	–7	–3
Thailand	89	–1	–1	84	–1	–2
Vietnam	90	54	60	46	24	52
ASEAN nie	22	0	1	11	0	–1
Asia nie	136	5	3	175	4	2
Oceania	**164**	**31**	**19**	**334**	**23**	**7**
Australia	148	26	18	312	22	7
New Zealand	16	5	29	21	2	9
Rest of World (ROW)	**1,937**	**61**	**3**	**1,870**	**55**	**3**
Africa (Sub-Sahara)	119	4	4	217	3	2
Europe	1,160	35	3	674	44	7
EMENA	475	16	3	818	5	1
Russia	168	5	3	154	3	2
ROW nie	14	0	2	8	0	3
World	**5,119**	**649**	**13**	**4,986**	**649**	**13**
Memorandum						
Members	1,024	545	53	1,051	583	55
Nonmembers	4,095	104	3	3,934	67	2

nie = not included elsewhere; ASEAN = Association of Southeast Asian Nations; EMENA = Europe, Middle East, and North Africa; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership

Note: Refer to figure 1 for list of CPTPP members.

Source: Authors' simulations. See Petri and Plummer (2017) for model specification.

Table 4 Shifts in China's sectoral trade and output by 2030

	Base (billions of dollars)	Change (billions of dollars)			Percent change		
		TPP	CPTPP	CPTPP+China	TPP	CPTPP	CPTPP+China
China exports							
Primary sectors	33	0	–1	2	–1.3	–1.9	5.3
Nondurable manufactures	702	–9	–5	140	–1.3	–0.7	20.0
Durable manufactures	4,074	11	–5	466	0.3	–0.1	11.4
Domestic services	40	1	0	4	2.8	1.0	9.1
Traded services	127	6	2	26	4.5	1.4	20.9
Total	4,976	9	–9	638	0.2	–0.2	12.8
China imports							
Primary sectors	2,155	1	–2	25	0.0	–0.1	1.1
Nondurable manufactures	846	10	2	144	1.2	0.2	17.0
Durable manufactures	813	10	0	215	1.2	0.1	26.4
Domestic services	158	0	0	13	–0.1	–0.2	8.5
Traded services	900	–10	–7	239	–1.1	–0.8	26.6
Total	4,871	11	–8	636	0.2	–0.2	13.1
China output (value added)							
Primary sectors	3,476	–3	–2	56	–0.1	0.0	1.6
Nondurable manufactures	1,871	–10	–4	25	–0.5	–0.2	1.3
Durable manufactures	4,518	–10	–5	156	–0.2	–0.1	3.5
Domestic services	11,623	–18	–6	183	–0.2	–0.1	1.6
Traded services	6,351	2	3	–33	0.0	0.0	–0.5
Total	27,839	–40	–13	386	–0.1	0.0	1.4

TPP = Trans-Pacific Partnership; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership
Note: Refer to figure 1 for trade agreement members. TPP members include the CPTPP plus the United States.
Source: Authors' simulations. See Petri et al. (2017) for model specification.

On the whole, the simulations show that a CPTPP with China would create strong economic relationships within that group, shifting other members' trade toward China. For example, Mexico's exports to the United States would fall slightly, while its trade with China would rise sharply. If US tariffs adopted in 2018 on Mexican steel and aluminum exports to the United States were to remain in effect, these results would be further amplified. Contrary to concerns expressed by the US administration, the estimates do not suggest that Mexico would become a "back door" to Chinese exports to the United States.

Sectoral composition of trade. The sectoral effects of Chinese membership are reported in table 4 and reflect well-established patterns of China's comparative advantages. On the export side, China's exports would grow especially fast in durable manufactures such as electronics and machinery. On the import side, changes are more evenly distributed, with a significant share of increased imports falling in services. Imports of nondurable manufactures would also grow due to demand for consumption goods and light intermediate inputs. Imports of durable manufactures would be concentrated in final capital goods, such as aircraft and machinery, and in supply-chain inputs of sophisticated components. Such deeper integration in the CPTPP group would increase the productivity and profit potential of manufacturing industries located there.

CONCLUSIONS

The CPTPP agreement has begun to reshape the Asia-Pacific trade landscape. Economic and political benefits associated with the CPTPP will likely lead to its enlargement, amplifying its benefits in a virtuous cycle. Several economies have expressed interest in joining the CPTPP, and China has signaled interest. Chinese adoption of CPTPP rules would generate benefits all around, potentially easing US-China tensions. It would firmly commit China to opening up, diversifying its trade, and cementing its role as a market economy.

To be sure, full Chinese accession to the CPTPP would be a complex, long-term project. Assuming China would join on similar terms to those now in place, it would have to undertake wide-ranging reforms, including in politically sensitive areas. CPTPP members, in turn, would have to adjust to large changes—for example, their trade is estimated to increase by one-half. But handled wisely, Chinese accession would offer benefits all around.

Even if Chinese accession is not imminent, the CPTPP is a valuable benchmark for committing the alignment of Chinese policies with emerging global norms. Meanwhile, Japan and other CPTPP members, along with many US observers, continue to anticipate the eventual return of the United States to the agreement. The convergence of Chinese and US policies toward common CPTPP rules would dramatically enhance the agreement's economic and geopolitical significance.

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