

CHINA IN THE TPP
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This note reports on simulations adding China to a 16-country configuration of the TPP agreement (12 current members plus Indonesia, Korea, the Philippines and Thailand). China is added to this group of countries in 2018 to form TPP17. The results are compared to an FTAAP scenario based on the high-quality TPP template, in order to make it comparable with TPP17 assumptions. Note that most of our publications report results for the FTAAP based on a lower-quality average TPP/RCEP template. The scenarios are summarized in Table 1.

Adding China dramatically increases the global gains generated by the TPP. The effects are largest for China itself, raising its income by nearly \$900 billion relative to the TPP16 solution, or by approximately 5 percent of GDP. Incomes also rise for all other TPP members, but the increases are muted for middle-income, export-oriented Asian economies that also compete with China for other TPP markets.

Table 1. Scenario assumptions

Scenario	Membership
TPP12	2015: agreement among Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam.
TPP16	2015: agreement among the TPP12 plus Korea, Indonesia, the Philippines and Thailand.
TPP17	2018: China added to the TPP16.
FTAAP	2021: TPP17 agreement is joined by remaining APEC members (Hong Kong, Russia, Taiwan) and Other Asia.
RCEP	2014: agreement among China, Japan and Korea 2017: enlargement to include Australia, Brunei, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, Vietnam.

Notes: The template of all TPP agreements and the FTAAP is an average of recent US FTA templates. The template of the RCEP agreement is an average of recent ASEAN templates. Agreements are implemented starting in the year indicated over a 5-year period.

HIGHLIGHTS OF ADDING CHINA TO THE TPP

1. Adding China to a 16-member TPP increases global benefits from \$451 to \$1,908 billion per year, or from 0.4 percent to 1.8 percent of world GDP. China's benefits account for 2/3 of these changes, as Chinese gains increase from -\$82 billion under the TPP16 (suggesting trade diversion losses) to \$809 billion. These and other values are for 2025 relative to baseline projections, expressed in billions of 2007 dollars.
2. Every TPP16 economy benefits from adding China. The gains are roughly three times as high as under the TPP16 for Australia and the Americas. Gains more than double for Japan, Korea and Singapore. Smaller increments are estimated for Asian middle-income economies which are more competitive with China. Substantial additional losses are calculated for Taiwan, Hong Kong and the ROW, economies excluded from the TPP17.
3. The incremental benefits from expanding the TPP17 into the FTAAP are relatively modest, amounting to \$379 billion or 24 percent. These changes include significant gains for Hong Kong (\$121 billion), Taiwan (\$116 billion) and Russia (\$349), the principal expansion economies. However, losses are generated for some members of the TPP17 as well as excluded countries. Regions that lose from expanding the TPP17 into FTAAP include most Asian economies members of the TPP17 other than China, albeit by small margins.
4. The RCEP agreement, as observed in earlier simulations, is inferior to the TPP16 for all countries that participate in both. It is even more inferior to the TPP17 for countries that are members of both—for example, RCEP generates less than 1/3 the benefits for China than TPP does. These differences reflect the weaker template assumed for RCEP and the absence of the Americas, including especially the United States, from its membership. RCEP's clear beneficiaries are India and Other ASEAN, economies that are assumed to be omitted from the TPP.
5. Export effects from most scenarios are approximately twice as large as income gains. Economies with the largest export gains from the addition of China include China itself (\$1,729 billion), the United States (\$444 billion), and Japan (\$255 billion) in absolute terms, and Australia, Vietnam, Thailand and Korea in percentage terms.

Table 1. Income gains under alternative scenarios, 2025

	2025	2025 Change from baseline (\$b)					2025 Change from baseline (%)				
	Baseline	TPP12	TPP16	TPP17	FTAAP	RCEP	TPP12	TPP16	TPP17	FTAAP	RCEP
Americas	24,867	101.7	160.8	468.0	452.3	2.5	0.4	0.6	1.9	1.8	0.0
Canada	1,978	8.7	12.4	33.2	31.4	-0.1	0.4	0.6	1.7	1.6	0.0
Chile	292	2.5	3.5	7.8	8.6	0.0	0.9	1.2	2.7	3.0	0.0
Mexico	2,004	9.9	31.2	91.1	76.3	2.8	0.5	1.6	4.5	3.8	0.1
Peru	320	3.9	5.4	8.4	7.7	0.0	1.2	1.7	2.6	2.4	0.0
United States	20,273	76.6	108.2	327.6	328.2	-0.1	0.4	0.5	1.6	1.6	0.0
Asia	34,901	125.2	299.8	1442.1	1653.4	627.0	0.4	0.9	4.1	4.7	1.8
Brunei	20	0.2	0.4	1.7	1.4	1.2	0.9	1.8	8.4	7.1	5.8
China	17,249	-34.8	-82.4	808.6	837.1	249.7	-0.2	-0.5	4.7	4.9	1.4
Hong Kong	406	-0.5	-1.3	-1.9	118.8	46.8	-0.1	-0.3	-0.5	29.3	11.5
India	5,233	-2.7	-6.9	-29.3	-37.1	91.3	-0.1	-0.1	-0.6	-0.7	1.7
Indonesia	1,549	-2.2	62.2	82.0	60.3	17.7	-0.1	4.0	5.3	3.9	1.1
Japan	5,338	104.6	128.8	237.3	233.1	95.8	2.0	2.4	4.4	4.4	1.8
Korea	2,117	-2.8	50.2	136.3	132.7	82.0	-0.1	2.4	6.4	6.3	3.9
Malaysia	431	24.2	30.1	45.4	44.7	14.2	5.6	7.0	10.5	10.4	3.3
Philippines	322	-0.8	22.1	30.6	22.5	7.6	-0.2	6.9	9.5	7.0	2.3
Singapore	415	7.9	12.3	27.1	26.5	2.4	1.9	3.0	6.5	6.4	0.6
Taiwan	840	-1.0	-6.4	-31.5	83.8	-16.1	-0.1	-0.8	-3.8	10.0	-1.9
Thailand	558	-2.4	42.5	64.9	43.7	15.5	-0.4	7.6	11.6	7.8	2.8
Vietnam	340	35.7	48.7	71.9	81.1	17.3	10.5	14.3	21.2	23.9	5.1
Other ASEAN	83	-0.4	-0.5	-1.1	4.6	1.6	-0.4	-0.6	-1.3	5.5	1.9
Oceania	1,634	10.7	14.6	41.3	39.4	21.7	0.7	0.9	2.5	2.4	1.3
Australia	1,433	6.6	9.8	34.1	32.5	19.8	0.5	0.7	2.4	2.3	1.4
New Zealand	201	4.1	4.7	7.2	6.9	1.9	2.0	2.4	3.6	3.4	0.9
Others	41,820	-14.1	-24.2	-43.4	213.4	-6.8	0.0	-0.1	-0.1	0.5	0.0
Europe	22,714	-3.7	-4.9	0.9	-40.9	5.1	0.0	0.0	0.0	-0.2	0.0
Russia	2,865	-1.4	-3.0	-8.8	339.5	-5.3	0.0	-0.1	-0.3	11.9	-0.2
ROW	16,241	-9.0	-16.3	-35.5	-85.2	-6.6	-0.1	-0.1	-0.2	-0.5	0.0
WORLD	103,223	223.4	450.9	1908.0	2358.5	644.4	0.2	0.4	1.8	2.3	0.6
<i>Memorandum</i>											
TPP12	33,045	285.0	395.6	892.8	878.6	155.1	0.9	1.2	2.7	2.7	0.5
TPP16	37,591	276.9	572.6	1206.5	1137.9	277.9	0.7	1.5	3.2	3.0	0.7
RCEP	35,290	137.4	322.1	1516.8	1490.2	617.9	0.4	0.9	4.3	4.2	1.8
APEC	58,951	239.2	479.5	1973.0	2517.1	553.0	0.4	0.8	3.3	4.3	0.9

Note: Estimates include both trade and FDI effects. The table follows definitions explained in Petri, Plummer and Zhai (2012).

Table 2. Export increases under alternative scenarios, 2025

	2025	2025 Change from baseline (\$b)					2025 Change from baseline (%)				
	Baseline	TPP12	TPP16	TPP17	FTAAP	RCEP	TPP12	TPP16	TPP17	FTAAP	RCEP
Americas	4,163	166.1	260.2	799.0	865.4	-8.1	4.0	6.3	19.2	20.8	-0.2
Canada	597	13.8	17.7	34.8	35.2	-2.4	2.3	3.0	5.8	5.9	-0.4
Chile	151	3.7	4.5	9.4	10.9	-1.3	2.4	3.0	6.2	7.2	-0.8
Mexico	507	19.1	40.1	108.4	109.3	-0.5	3.8	7.9	21.4	21.5	-0.1
Peru	95	6.0	7.4	12.1	12.4	-0.2	6.3	7.8	12.7	13.1	-0.3
United States	2,813	123.5	190.5	634.4	697.6	-3.7	4.4	6.8	22.5	24.8	-0.1
Asia	10,403	186.6	517.8	2691.8	3516.9	1420.0	1.8	5.0	25.9	33.8	13.7
Brunei	9	0.2	0.3	0.9	0.8	0.9	2.6	3.8	10.1	8.4	10.5
China	4,597	-43.7	-107.8	1621.5	1970.7	638.3	-1.0	-2.3	35.3	42.9	13.9
Hong Kong	235	-1.3	-3.6	-12.6	108.9	39.9	-0.6	-1.5	-5.4	46.4	17.0
India	869	-5.2	-13.2	-44.8	-60.7	237.9	-0.6	-1.5	-5.2	-7.0	27.4
Indonesia	501	-3.9	98.3	146.3	152.4	52.6	-0.8	19.6	29.2	30.4	10.5
Japan	1,252	139.7	202.5	458.2	486.8	225.1	11.2	16.2	36.6	38.9	18.0
Korea	718	-7.0	94.5	264.1	269.9	173.6	-1.0	13.2	36.8	37.6	24.2
Malaysia	336	40.0	44.2	55.7	55.0	20.2	11.9	13.2	16.6	16.4	6.0
Philippines	163	-1.4	33.5	41.0	39.6	10.8	-0.9	20.6	25.1	24.3	6.6
Singapore	263	11.3	13.3	4.4	-1.4	-5.7	4.3	5.1	1.7	-0.5	-2.2
Taiwan	712	-4.0	-17.5	-89.3	224.3	-40.3	-0.6	-2.5	-12.5	31.5	-5.7
Thailand	476	-5.1	82.7	121.3	108.9	34.7	-1.1	17.4	25.5	22.9	7.3
Vietnam	239	67.9	92.1	128.6	152.0	29.9	28.4	38.6	53.8	63.6	12.5
Other ASEAN	34	-0.9	-1.6	-3.3	9.9	2.1	-2.7	-4.6	-9.8	29.1	6.2
Oceania	392	15.2	20.4	65.4	69.4	45.5	3.9	5.2	16.7	17.7	11.6
Australia	332	11.1	15.7	58.1	62.0	42.8	3.4	4.7	17.5	18.7	12.9
New Zealand	60	4.1	4.7	7.3	7.4	2.7	6.8	7.8	12.1	12.3	4.4
Others	13,457	-62.7	-143.7	-431.1	-252.7	-73.7	-0.5	-1.1	-3.2	-1.9	-0.5
Europe	7,431	-32.2	-75.6	-236.9	-368.3	-41.6	-0.4	-1.0	-3.2	-5.0	-0.6
Russia	1,071	-3.6	-9.3	-29.9	381.6	-6.2	-0.3	-0.9	-2.8	35.6	-0.6
ROW	4,955	-26.9	-58.8	-164.3	-266.0	-25.9	-0.5	-1.2	-3.3	-5.4	-0.5
WORLD	28,415	305.2	654.7	3125.1	4199.0	1383.7	1.1	2.3	11.0	14.8	4.9
<i>Memorandum</i>											
TPP12	6,654	440.5	633.1	1512.0	1628.0	307.8	6.6	9.5	22.7	24.5	4.6
TPP16	8,512	423.0	942.0	2084.8	2198.7	579.4	5.0	11.1	24.5	25.8	6.8
RCEP	9,848	207.1	559.3	2859.1	3253.2	1465.9	2.1	5.7	29.0	33.0	14.9
APEC	15,126	370.4	803.8	3574.4	4884.1	1211.2	2.4	5.3	23.6	32.3	8.0

Note: The table follows definitions explained in Petri, Plummer and Zhai (2012).