Should the United States Rejoin the Trans-Pacific Trade Deal?

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Background

- Before the Trans-Pacific Partnership (TPP) entered into force, the United States withdrew from the trade accord.
- 11 other TPP signatories decided to revive the agreement, which led to the implementation of the Comprehensive and Progressive Agreement for TPP (CPTPP).
- Economic and political incentives for the US to reengage with the Trans-Pacific trade deal
  - Economic: Welfare ↑, small sectoral adjustments
  - Geopolitical factors are important for trade accords – Hinz (2017), Eichengreen et al. (2021)

Objectives of this study

- The objectives of this paper are

1. to estimate economic welfare effects under three alternative scenarios of TPP/CPTPP
2. to evaluate the extent of real GDP losses to the US from its withdrawal from TPP and expected US gains if it rejoins CPTPP
3. to examine whether the US economy would have to undergo considerable sectoral adjustments from its participation in CPTPP

Previous studies

- A number of studies have quantified the effects of TPP/ CPTPP using a CGE model – e.g., Ferrantino et al. 2020; Gilbert et al., 2018; Lee and Itakura, 2018; Li and Whalley, 2021; Petri et al., 2012; Petri and Plummer, 2016; World Bank, 2016.
- Petri and Plummer's (2016) estimates of welfare gains in 2030 range from 0.5% in the United States to 8.1% in Vietnam.
- All studies show that smaller and more open member countries are expected to attain relatively large welfare gains.

The model and its dimensions

- The dynamic GTAP model, developed by Ianchovichina and McDougall (2012), is used in this study.
- In many aspects, standard assumptions are used – e.g. constant returns to scale, perfectly competitive markets, and product differentiation by country of origin (Armington assumption).
- The model incorporates international capital mobility and ownership of domestic equity and foreign equity.
- ***Time dimension***: The model spans the period 2014-2035. It is calibrated to a 2014 base year using version 10 of the GTAP data base.

The model and its dimensions

- ***Regional aggregation***:

1. United States
2. Japan
3. China
4. Korea
5. Taiwan
6. Singapore
7. Brunei, Malaysia
8. Indonesia, Philippines
9. Thailand
10. Vietnam
11. Rest of ASEAN
12. Australia
13. New Zealand
14. India
15. Canada, Mexico
16. Chile, Peru
17. United Kingdom
18. European Union
19. Rest of world

The model and its dimensions

- ***Sectoral aggregation***:

1. Agriculture
2. Mining
3. Food products
4. Textiles and apparel
5. Petro and chemical prod.
6. Metals
7. Electronic products
8. Electrical equipment
9. Machinery
10. Motor vehicles
11. Other transport equip.
12. Other manufactures
13. Construction and utilities
14. Trade and transport
15. Other services

Baseline scenario

- **Real GDP** projections: IMF's *World Economic Outlook Database*. The data on **foreign income** and **international capital mobility**: IMF's *Balance of Payments Statistics*. Projection for **population**: UN *World Population Prospects Database*. Projection for **labor**: based on the working-age population (15-64 years old).
- Baseline includes the trade accords that have already entered into force, including all the **ASEAN+1 FTAs**, **EU-Korea**, **Korea-US**, **China-Korea**, **EU-Japan** and **US-Japan** trade agreements. We assume that tariffs are cut by **80%** among the member countries of the FTAs that are being implemented.
- Productivity is assumed to increase by 1% a year in all sectors of each region.

Policy scenarios

	2018	2019-2021	2022-2024	2025 – 2035
Scenario 1		**CPTPP7 (2019-)**		
			CPTPP12 (2022-)	
				CPTPP16 (2025-)
Scenario 2		**CPTPP7 (2019-)**		
			CPTPP12 (2022-)	
				CPTPP17 (2025-)
Scenario 3	**TPP8 (2018-)**			
			TPP13 (2022-)	
				TPP17 (2025-)

Scenario 1: CPTPP without US participation

Scenario 2: The US joining CPTPP in 2025

Scenario 3: Hypo. scenario assuming the US had never withdrawn from TPP

CPTPP7: Australia, Canada, Japan, Mexico, New Zealand, Singapore and Vietnam

CPTPP12: CPTPP7 plus Brunei, Chile, Malaysia, Peru and the UK

CPTPP16: CPTPP12 plus Indonesia, Philippines, Thailand and Taiwan

CPTPP17: CPTPP16 plus the United States

Policy shocks

- **Tariff reductions** are based on the actual TPP tariff commitment schedules for each commodity in member countries compiled by International Trade Centre (2016).
  - The timeline differs significantly across commodities.
  - While tariffs are reduced to zero in most commodities within 10 years, in several commodities some tariffs will remain after 2035.
- **25% cut in ad valorem tariff equivalents of nontariff barriers (NTBs) on services trade**
  - average of the gravity-model estimates of Wang et al. (2009) and the values employed by the Michigan Model of World Production and Trade.

Policy shocks

- **25% cut in time cost of trade** – e.g. shipping delays arising from regulatory procedures and inadequate infrastructure (Hummels and Schaur, 2013; Minor, 2013).
- **Gradual increase in productivity in agric. and manufac. sectors from 1% a year (baseline) to 1.1% a year** over a 10-year period after a member starts implementing the TPP/CPTPP.
  - While 0.1% point is rather small, TPP/CPTPP is only one of many FTAs. We assume that marginal increase in productivity resulting from TPP/CPTPP to be 0.1% point, after taking into consideration all FTAs included in the baseline.

Policy shocks

- Import liberalization results in an increase in productivity
  - through greater competition in liberalized sectors
  - larger imports of intermediate and capital goods
  - increasing the quality and variety of intermediate inputs available to domestic producers
- Previous studies – Trefler (2004); Chen et al. (2009); Amiti and Khandelwal (2013); Halpern et al. (2015); Ahn et al. (2016).

The welfare effects of policy scenarios, 2030 and 2035

(% changes in utility relative to real income)

	Scenario 1		Scenario 2		Scenario 3	
	2030	2035	2030	2035	2030	2035
United States	0.0	0.0	0.2	0.4	0.4	0.4
Japan	1.1	1.3	1.2	1.5	1.2	1.5
China	0.0	0.0	0.1	0.1	0.1	0.1
Korea	0.1	-0.1	0.1	0.0	0.2	0.0
Taiwan	1.0	2.2	1.2	2.6	1.3	2.6
Singapore	1.8	2.2	1.9	2.4	2.0	2.4
Brn, Malaysia	1.2	1.7	1.2	1.8	1.1	1.7
Indones, Phil	0.5	1.2	0.4	1.1	0.4	1.2
Thailand	1.6	3.6	1.7	4.0	1.9	4.1
Vietnam	2.0	2.4	2.7	3.3	3.2	3.5

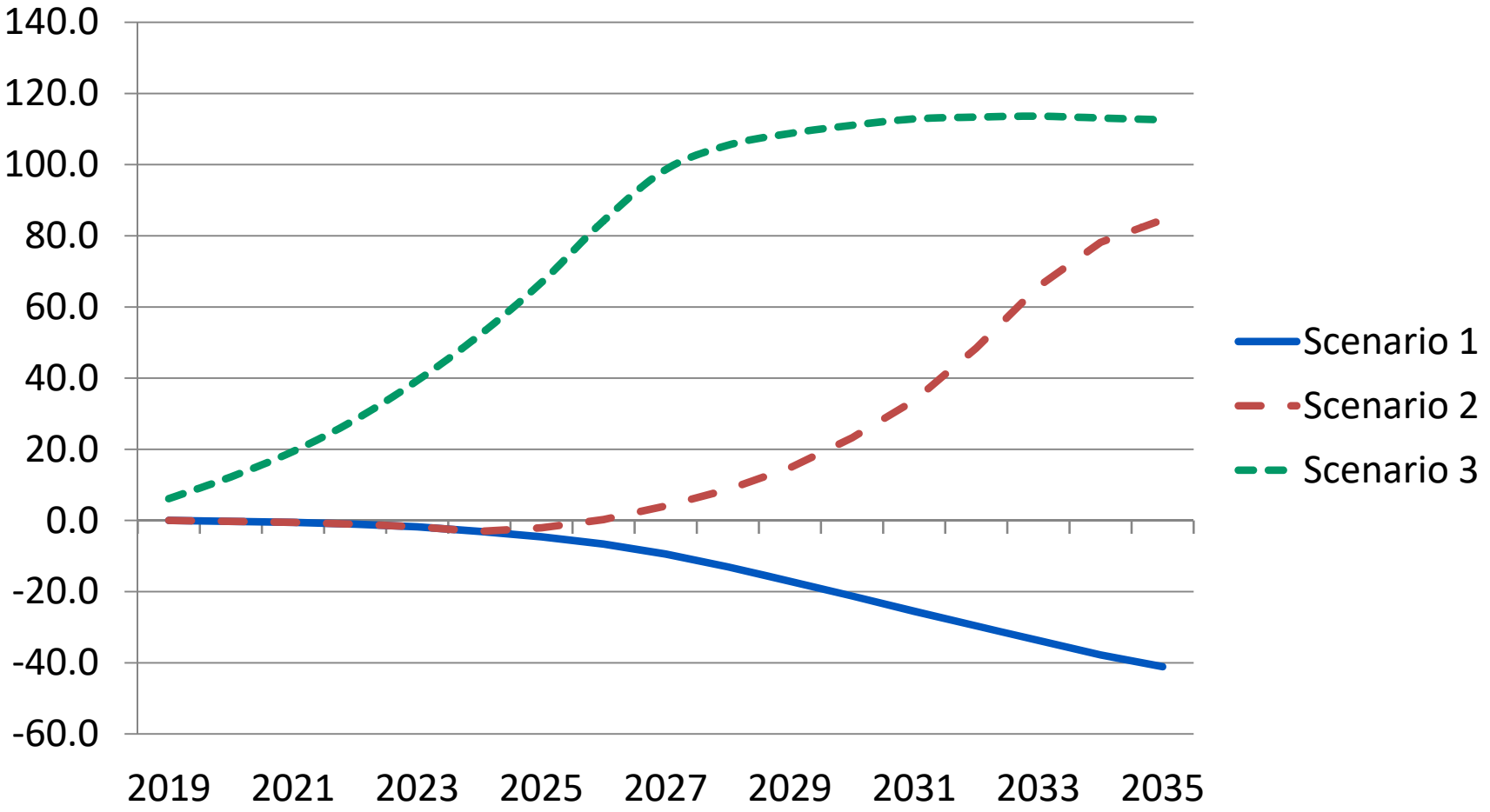
The welfare effects of policy scenarios, 2030 and 2035 (cont.)

(% changes in utility relative to real income)

	Scenario 1		Scenario 2		Scenario 3	
	2030	2035	2030	2035	2030	2035
Rest of ASEAN	-0.1	0.1	-0.2	0.0	-0.2	0.0
Australia	0.3	0.4	0.3	0.2	0.2	0.2
New Zealand	1.1	1.3	1.1	1.2	1.1	1.2
India	0.1	0.0	0.1	0.2	0.2	0.1
Canada, Mex	0.6	0.7	0.8	0.9	0.9	0.9
Chile, Peru	0.5	0.8	0.6	0.7	0.5	0.7
UK	0.4	0.7	0.5	0.6	0.4	0.6
EU	0.0	0.0	0.0	-0.1	-0.1	-0.1
Rest of world	-0.1	-0.1	-0.2	-0.2	-0.3	-0.2

Real GDP changes in the United States

(Absolute changes from the baseline, US$ billion in 2014 prices)



U.S. sectoral output adjustments for the year 2035

(Percent changes relative to the baseline)

	Scenario 1	Scenario 2	Scenario 3
Agriculture	0.0	0.5	0.6
Mining	0.0	0.5	0.5
Food products	-0.1	0.7	1.0
Textiles and apparel	-0.2	-2.6	-3.7
Petro and chemical prod.	-0.3	1.1	1.5
Metals	-0.4	-0.5	0.7
Electronic products	-0.1	-0.5	0.6
Electrical equipment	-0.3	-0.9	0.1
Machinery	-0.3	-0.1	0.5
Motor vehicles	-1.0	-0.2	0.1
Other transport equip.	0.1	-0.9	0.0
Other manufactures	-0.2	0.0	0.4
Construction and utilities	-0.6	0.7	0.4

Conclusion

1. The US would lose an opportunity to gain 0.4% in its economic welfare by 2030 if it never rejoins the CPTPP. If the US rejoins the CPTPP in 2025, its welfare is projected to increase by 0.2% and 0.4% in 2030 and 2035, respectively.
2. If the US returns to the CPTPP in 2025, output of several manufacturing sectors is projected to decline by small percentages in 2035, which is more than offset by output expansion in the primary and tertiary sectors.
   - Since sectoral output adjustments in the US are small, its adjustment costs from participation in CPTPP would be limited.

Conclusion

3. Although not being examined in this paper, US reengagement with the Trans-Pacific trade deal might be desirable for two additional reasons.
   - Its return to CPTPP is likely to facilitate a reduction in US dependence on Chinese intermediate products and a greater diversification in its supply chains (Laget et al., 2020).
   - After the UK becomes a member of CPTPP, four member countries have defense pacts with the US, which might provide a political incentive for the US to rejoin the trade pact amid escalating conflicts with China.