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**TRADE POLICY OPTIONS FOR ASEAN
COUNTRIES AND THEIR REGIONAL
DIALOGUE PARTNERS
“PREFERENCE ORDERING” USING CGE ANALYSIS**

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**S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES
SINGAPORE**

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Abstract

The withdrawal of the United States from the Trans-Pacific Partnership (TPP) and Trump's "America First" agenda have ignited a second round of interest in mega-free trade agreements in the Asia Pacific region. Countries have been motivated to explore alternative trade policy options. Using national real gross domestic output gains estimated by the GTAP model to construct "preference ordering" for 10 Association of Southeast Asian Nations (ASEAN) members and their six regional dialogue partners, this paper comes up with several findings. First, when multilateral agreements are not possible, countries are better off with a narrower regional trading agreement than without one. Second, in the region, Regional Comprehensive Economic Partnership (RCEP) has higher beneficial impacts than the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Third, for dual-track countries, that is countries that are negotiating both the CPTPP and the RCEP, implementing both agreements is better than each separately. Fourth, as expected, economic impacts of the CPPTP are lower than those of the original TPP12, but all CPPTP members will benefit although to different degrees. Fifth, economic impacts of open regionalism are higher than those of a closed and reciprocal one. Going forward, the paper argues that ASEAN countries and their regional dialogue partners need to adopt a "multi-track, multi-stage" approach to trade policy.

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1. Introduction¹

There have been two rounds of interest in mega-free trade agreements (mega-FTAs). A decade ago, policymakers in Asia Pacific countries started to see mega-FTAs as a third trade liberalisation option in between a deadlocked multilateral agreement under the auspices of the World Trade Organization (WTO) and bilaterals whose benefits are dubious in the shadow of criss-crossing rules of origin (ROOs) that create a tangled “noodle bowl”.² Hence, negotiations for the Trans-Pacific Partnership (TPP12) that involved 12 Pacific Rim economies commenced in March 2010 and those for the Regional Comprehensive Economic Partnership (RCEP) were initiated in May 2013 (Table 1). The latter brings together 10 members of the Association of Southeast Asian Nations (ASEAN) and their six regional dialogue partners. A year later, in November 2014, 21 Asia-Pacific Economic Cooperation (APEC) members pledged to explore the prospect for realising a Free Trade Area of the Asia-Pacific (FTAAP) as an important policy instrument to advance its regional economic integration agenda. While the TPP agreement was concluded and signed with much fanfare in October 2015 and February 2016 respectively, the first wave of mega-FTA movement was essentially ground to a halt by a host of adverse factors including the rise of protectionism and anti-globalisation sentiment, regulatory and transparency concerns, a contentious US election that scapegoated foreign trade for political incompetence, and the institutional deficiency of APEC as a negotiating platform.

However, after President Donald Trump pulled the US out of the TPP grouping in January 2017 and reiterated an “America First” trade policy at the 2017 APEC meetings in favour of bilateralism and “fair trade”, a second round of interest in mega-FTAs took hold as regional countries began to proactively explore alternative economic cooperation possibilities. Early signs show that Asia Pacific countries are reluctant to engage in one-on-one trade negotiations with the US, as bilateral FTAs in theory are only “second best”, if not “third best” policy recourse, and could engender asymmetrical trade concessions disproportionately

¹ The research was supported by the Academic Research Fund (AcRF) Tier 1 Grant awarded by the Ministry of Education, Singapore (RG174/14). The authors thank Paul Gretton of The Australian National University for providing the modified longer-run GTAP closure used in this paper.

² Kawai, Masahiro, and Ganeshan Wignaraja. 2009. The Asian “Noodle Bowl”: Is It Serious for Business? . In ADBI Working Paper Series. Tokyo: Asian Development Bank Institute.

benefiting the US. Hence, they appear to have decided to carry through the unfinished business of negotiating mega-FTAs, to not only sustain economic growth but also signal an unwavering commitment to combating economic nationalism. In the margins of the APEC gatherings in November 2017, 11 remaining TPP countries revived the stalled TPP and renamed it “Comprehensive and Progressive Agreement for Trans-Pacific Partnership” (CPTPP), after suspending temporarily a narrow set of 20 provisions in relation to intellectual property rights, trade facilitation, investment, and others.³ Progress, albeit slow, is also being made on the RCEP front in parallel. Singapore Prime Minister Lee Hsien Loong promised that “maximum efforts” will be put in to push RCEP negotiations forward⁴ under the country’s 2018 ASEAN chairmanship. In a similar move, South Korea announced its willingness to voluntarily serve as an active coordinator to secure a rapid conclusion of RCEP talks.⁵ At the same time, several major regional economies such as China, Russia, and South Korea are lining up to back the so-called “Beijing Roadmap” which calls for a timely establishment of the FTAAP to fulfil the long-cherished dream of “a dynamic and harmonious Asia Pacific community.”

Despite the reignited interest in mega-FTAs, looking ahead, a couple of pertinent policy questions remain. With the US withdrawal, does it still make economic sense for the remaining members to move forward with the watered-down CPTPP? Should they simply pivot to RCEP instead? Or should they seek dual membership to participate in both the CPTPP and RCEP? Can RCEP and CPTPP tracks converge over time to forge a region-wide system akin to FTAAP? How about taking steps to implement the CPTPP, RCEP, and FTAAP in an open, non-discriminatory manner? How do gains from regional trade accords compare to those that accrue from multilateral trade liberalisation? This paper provides answers to those important questions by undertaking computable general equilibrium (CGE)-based analysis of various trade policy options facing the 16 selected Asia Pacific countries – seven CPTPP-TPP dual-track countries (Australia, Brunei, Japan, Malaysia, New Zealand,

³ Rana, Pradumna B., and Xianbai Ji. 2017. "TPP's resurrection: Will it be ratified at all?" The Business Times. <http://www.businesstimes.com.sg/opinion/tpps-resurrection-will-it-be-ratified-at-all>.

⁴ Yong, Charissa. 2017. "Leaders call for greater effort to conclude RCEP talks." The Straits Times. <http://www.straitstimes.com/asia/leaders-call-for-greater-effort-to-conclude-rcep-talks>.

⁵ Jung, Suk-ye. 2017. "Preferring RCEP To TPP? S. Korean Government Putting RCEP before TPP." Business Korea. <http://www.businesskorea.co.kr/english/news/national/19813-preferring-rcep-tpp-s-korean-government-putting-rcep-tpp>.

Singapore, and Vietnam) and nine single RCEP track countries (Cambodia, China, India, Indonesia, Laos, Myanmar, the Philippines, South Korea, and Thailand). Real gross domestic product (GDP) gains expected under alternative policy scenarios are ranked from the highest to lowest to construct what game theorists refer to as “preference ordering”.⁶

While there is a large volume of economic literature focusing on the likely economic consequences of individual mega-FTAs such as the TPP12,⁷ RCEP,⁸ and FTAAP,⁹ policy oriented studies which explicitly and comprehensively contrast the economic impacts of alternative regional trade policy options are relatively few in number. Petri et al.¹⁰ and Schott,¹¹ who employed quantitative and qualitative methods respectively to investigate the trade policy spectrum (ranging from the TPP11 to bilateral FTA with the US) available to Asia Pacific countries in the immediate future, are the notable exceptions. This paper also attempts to fill the gap. The paper differs from the work of others in the sense that, in addition to analysing the FTA portfolio that is available to countries in the immediate future, it adopts a longitudinal perspective to propose a “multi-track, multi-step” trade policy roadmap with milestones to be achieved across the time horizon (i.e., short-term, medium-term, and long-term). Concurring with Petri et al. and Schott who argue that “bigger is better,” this paper also demonstrates that “more is merrier” and “more open is better” -- meaning that for Asia Pacific

⁶ Brams, Steven. 1994. *Theory of moves*. Cambridge: Cambridge University Press.

⁷ Petri, Peter A., and Michael G. Plummer. 2016. The Economic Effects of the Trans-Pacific Partnership: New Estimates. In *PIIE Working Paper Series*. Washington, DC: Peterson Institute for International Economics; Petri, Peter A., Michael G. Plummer, and Fan Zhai. 2011. The Trans-Pacific Partnership and Asia-Pacific Integration: A Quantitative Assessment. In *East-West Center Working Papers*. Honolulu: East-West Center; USITC. 2016. Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors. Washington, DC: United States International Trade Commission; and World Bank. 2016. "Potential Macroeconomic Implications of the Trans-Pacific Partnership." In *Global Economic Prospects*. Washington, DC: The World Bank.

⁸ Cheong, Inkyo, and Jose Tongzon. 2013. "Comparing the Economic Impact of the Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership." *Asian Economic Papers* 12 (2):144-164. doi: 10.1162/ASEP_a_00218.

⁹ Scollay, Robert, and John Gilbert. 2000. "Measuring the Gains from APEC Trade Liberalisation: An Overview of CGE Assessments." *The World Economy* 23 (2):175–197.

¹⁰ Petri, Peter A., Michael G. Plummer, Shujiro Urata, and Fan Zhai. 2017. Going It Alone in the Asia-Pacific: Regional Trade Agreements Without the United States. In *PIIE Working Paper*. Washington, DC: Peterson Institute for International Economics.

¹¹ Schott, Jeffrey J. 2017. US Trade Policy Options in the Pacific Basin: Bigger Is Better. In *Policy Brief*. Washington, DC: Peterson Institute for International Economics.

Table 1: Comparing the Mega-Regional Initiatives

	TPP	CPTPP (TPP11)	RCEP	FTAAP	FTAAP+
Membership	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, US, and Vietnam	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam, Australia, China, India, Japan, South Korea, and New Zealand	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, US, and Vietnam	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, US, Vietnam, India, Cambodia, Myanmar, and Laos
GDP in 2016 (nominal, \$ trillion)	28.7 (38.0%)	10.2 (13.4%)	23.8 (31.4%)	45.1 (59.7%)	47.5 (62.9%)
Population (as of 1 July 2017, billion)	0.7 (9.3%)	0.4 (5.0%)	3.6 (47.7%)	2.8 (36.9%)	4.2 (55.6%)
Negotiation started/concluded	15–19 March 2010/5 October 2015	-	9–13 May 2013/Ongoing	-	-
Negotiation objectives/visions	A landmark 21 st century agreement, setting a new standard for global trade while taking up next-generation issues.	Promote regional economic integration and contribute to the economic growth prospects of its member countries, and create new opportunities for workers, families, farmers, businesses, and consumers.	To achieve a modern, comprehensive, high-quality, and mutually beneficial economic partnership agreement among the ASEAN Member States and ASEAN's FTA Partners.	<ul style="list-style-type: none"> • Be pursued on the basis of supporting the multilateral trading system. • Do more than achieve liberalisation. • Work towards the Bogor Goals. • Be realised outside of APEC, in parallel with the APEC process. • Aim to minimise any negative effects. 	-

Note: The numbers in the parenthesis are the per cent of world total.

Source: World Bank Database; United Nations Database; author's calculation and compilation from various sources.

countries -- concurrent participation in multiple mega-FTAs and operationalising the “open regionalism” principle¹² to extend preferential tariff reductions to non-member economies would better serve national interests than pursuing a single-track, narrower, and reciprocal trade pact.

The paper is organised as follows. The next section briefly describes the CGE model used in this paper, i.e., the Global Trade and Analysis Project (GTAP) comparative static model, and the modifications made to the default closure to permit a more accurate estimate of the macroeconomic effects after market forces work through the economies in the longer run. Section 3 presents the simulation scenarios examined, including the CPTPP, RCEP, the parallel existence of the CPTPP and RCEP, FTAAP+ (a hypothetical region-wide umbrella FTA resembling a merger between the CPTPP and RCEP), open regionalism scenarios, and multilateral tariff eliminations analogous to a successful conclusion of the Doha Development Agenda. See Table 1 for a comparison of the TPP, CPTPP, RCEP, FTAAP, and FTAAP+. In Section 4, we summarise the estimation results by constructing “preference orderings” and discuss the findings and policy implications. The last section concludes the paper.

2. GTAP and Key Modelling Assumptions

GTAP is an advanced multi-region, multi-sector general equilibrium model extensively used to conduct quantitative trade policy analysis.¹³ Core to the GTAP model is a database that comprehensively reports on the state of the world economy. This includes (virtually) all trade flows and inter-industrial links between and within national/regional economies for a given reference year, and a set of elasticity-based behavioural equations and parameters predicting how market agents (e.g., private households, firms, and governments) would react when a policy “shock” is introduced. Thus, the GTAP model can help answer “what if” policy questions by offering a counter-factual analysis based on a before- and after-shock

¹² Bergsten, Fred. 1997. "Open Regionalism." *The World Economy* 20 (5):545–565.

¹³ Hertel, Thomas W. 1997. *Global Trade Analysis: Modeling and Applications*. Cambridge: Cambridge University Press.

comparison of an economy. As a comparative static model that focuses on inter-equilibrium differentials, the GTAP model used in this study does not attempt to trace out intra-equilibrium dynamics, such as the adjustment process an economy would undergo before it arrives at new prices and quantities that clear all markets.

The model adopts a default short-term closure under which cross-border mobility of capital is prohibited. To account for the longer-run effects of the trade arrangements under study, our modified closure -- first developed by the Australia Productivity Commission¹⁴ -- creates a longer-term macro-environment in which capital is allowed to move between economies in search of highest return while the global stock of capital remains fixed.¹⁵

2.1 Regional and sectoral aggregations

In a GTAP model, to focus on key results and enhance computational efficiency, regions and sectors are bundled into aggregates. In our analysis, twenty-two regions which took part in at least one mega-agreement were identified and individually retained, with the rest coming under one single residual group “the rest of the world” (see Appendix A). The regions selected for an explicit analysis include: Australia, Brunei, Canada, Cambodia, Chile, China, India, Indonesia, Japan, South Korea, Lao DPR, Malaysia, Mexico, Myanmar,¹⁶ New Zealand, Peru, the Philippines, Singapore, Thailand, and Vietnam. The TPP withdrawer, the US, as well as the EU (which was negotiating a third mega-FTA the Transatlantic Trade and Investment Partnership), were also included in the simulations.

¹⁴ Productivity Commission. 2009. Modelling supporting the Productivity Commission Annual Report 2008-09: Technical Note. Melbourne: Productivity Commission.

¹⁵ This variant of model closure enables a broader range of capital market responses than would otherwise be possible, although it does not fundamentally change the short-term nature of the closure as long as the restriction of non-capital-accumulation is not relaxed.

¹⁶ In GTAP database, Myanmar is included in a group called ‘Rest of Southeast Asia’ (xse) with Timor-Leste. Since Myanmar’s GDP is close to 60 times as large as the economic size of Timor-Leste as of 2015, ‘xse’ is used to approximately represent Myanmar in this paper.

The 57 sectors originally classified by the GTAP database were aggregated into 15 main sectors for the purpose of this study.¹⁷ Appendix B provides an overview of the sectoral aggregation. The second column shows the chosen aggregates while the last column lists the GTAP sectors included in the aggregations. Notably more services sectors (e.g., communication, financial services, insurance, construction, transport, trade, and business) are represented in the aggregation scheme than manufacturing and food processing industries are. This is because of the increasing importance of services in national economies and the different level of liberalisation commitments facing different services industries under mega-FTAs.

2.2 Tariff and non-tariff measure patterns

According to the GTAP database version 9A (with reference year 2011), among the CPTPP countries, Australia, Brunei, Singapore, Chile, and Peru are the most liberal in terms of tariff barriers to merchandise trade. In contrast, the rest of CPTPP countries impose comparatively higher tariffs on flow of goods. Some of them have clustered protection in sectors of economic and political sensitivity while others show less variation across the gamut of industry sectors. For example, Canada's uniformly low tariff structure is accompanied by a few tariff peaks on New Zealand's dairy products and Chile's meat products. Vietnam, on the other hand, tends to have a tariff pattern that is more consistent across the CPTPP membership. This could be linked to the fact that Vietnam has relatively few intra-CPTPP trade agreements that liberalise bilateral trade. It is also worth pointing out that for the CPTPP grouping as whole, some industries have substantially higher tariffs than others. Most CPTPP countries have higher tariff levels in meat, livestock and fishery, and processed food industries.

Applied bilateral tariff rates between RCEP members are generally higher than those between CPTPP partners. A common pattern is that many RCEP countries protect their processed food industry. This is in stark contradiction to extractive industries and heavy manufacturing

¹⁷ The purpose of sectoral aggregation is to speed up the computation process. This paper does not focus on sectoral results for the sake of brevity.

industries where average tariffs are close to zero. In addition to inter-sectoral tariff heterogeneity, some country pairs have distinctly higher bilateral tariff protections than others, considering Korea's tariffs on grains imports from India (317 per cent) and Indonesia (282 per cent), and India's tariffs on processed food imported from Cambodia (85 per cent) and Malaysia (79 per cent). Conversely, two smallest RCEP members stand out, with Brunei facing very low tariffs when exporting to other RCEP markets, and Singapore presiding over a zero-tariff regime.

While commercial trading of goods is to a great extent hindered by tariffs, para-tariff measures, and tariff-rate quotas, services trade is more affected by behind-the-border regulatory and technical measures collectively known as non-tariff measures (NTMs). It is, however, a practically and analytically difficult task to collect sector-specific and globally comparable data on NTMs due partly to their opaque nature.¹⁸ Translating NTMs to ad valorem equivalents (AVEs) -- the tariffs rates that would induce the same level of imports as the NTMs -- is by far the most common approach to quantifying NTMs. This paper uses earlier work on this topic by Fontagné, Guillin, and Mitaritonna¹⁹ and the United States International Trade Commission (USITC).²⁰

It is estimated that, among the CPTPP countries, the sector with the lowest level of NTMs is transport service with an average protection/regulation of 25 per cent, followed by other services (34 per cent) and insurance (35 per cent). The highest NTMs are found in construction (75 per cent), financial services (60 per cent), and business-related trade services (50 per cent). In particular, NTMs in construction sectors in Peru (159 per cent), Mexico (136 per cent), Chile (133 per cent), and Australia (127 per cent), as well as business service in Mexico (134 per cent), are all greater than 100 per cent. The trend by and large

¹⁸ Dee, Philippa, and Michael Ferrantino. 2005. "Introduction." In *Quantitative methods for assessing the effects of non-tariff measures and trade facilitation*, edited by Philippa Dee and Michael Ferrantino. Singapore: APEC Secretariat and World Scientific Publishing.

¹⁹ Fontagné, Lionel, Guillin, Amélie, and Mitaritonna, Cristina. 2014. *Estimations of Tariff Equivalents for the Services Sectors*. Paris: Centre d'Etudes Prospectives et d'Informations Internationales.

²⁰ AVEs for the EU is the GDP-weighted average based on national data for 27 EU member states excluding Malta, due to a lack of Maltase data. Data for Cambodia, Laos and Myanmar are imputed from Vietnamese data since they form the so-called "CLVM" grouping within ASEAN.

holds with respect to RCEP countries: the most protected service industries are financial services (67 per cent), construction (56 per cent), and communication (52 per cent), while transport services (28 per cent) is the least protected/regulated sector. The average level of NTMs in Singapore is the lowest in the grouping. India's service market, in contrast, is the most protected/regulated with AVEs in communication, construction, and financial service sectors amounting to 160 per cent, 154 per cent, and 137 per cent respectively.

2.3 Modelling assumptions on market access

On the basis of the tariff schedules of the negotiated TPP agreement,²¹ it is assumed that Australia, Chile, New Zealand, Peru, Singapore, Brunei, and Malaysia will lift all tariff barriers vis-à-vis the remaining CPTPP members and each other. In Mexico, one per cent tariff on the aggregated processed food industry against imports originating in Australia, Brunei, Canada, Japan, Malaysia, New Zealand, Singapore, and Vietnam is retained. To reflect Canada's attempt to exempt dairy, poultry, and egg markets from full liberalisation and Vietnam's similar attempt to protect its automotive industry, it is assumed that three per cent tariffs still apply in Canada's processed food industry and Vietnam's aggregated heavy manufacturing industry. Japan comes last in the CPTPP grouping in terms of the scope and depth of tariff removal. Relatively high tariffs on some meat of bovine animals and selected dairy and textile products are not negotiated away even after a protracted transition period of 30 years. In this study, the assumption is that only 90 per cent of tariff protections in Japanese livestock and processed food industries would be scrapped, and so would 95 per cent of tariffs in its textiles and clothing sector. The extent of services liberalisation attributed to the CPTPP accord was wholly obtained from USITC²² which concluded that communication and business services sectors will be comparatively more exposed to regional competition.

²¹ For a brief analysis of the text of the original TPP12, see Freund, Caroline, Tyler Moran, and Sarah Oliver. 2016. "Tariff Liberalization." In *Assessing the Trans-Pacific Partnership*. Washington, DC: Peterson Institute for International Economics. Some agreed and pending minor revisions to the original TPP text notwithstanding, the reworked CPTPP will essentially be a replica of the original TPP with tariffs schedules and service liberalisation kept virtually unchanged. See for example ATC. 2017. TPP11: Unpacking the Suspended Provisions. In *Policy Brief*. Singapore: Asian Trade Centre.

²² USITC. 2016. *Trans-Pacific Partnership Agreement: Likely Impact on the U.S. Economy and on Specific Industry Sectors*. Washington, DC: United States International Trade Commission.

The legal text of RCEP is not available at the time of writing (November 2017). As the benchmark GTAP shock rate, we assume that RCEP grouping would achieve a tariff removal rate of 90–95 per cent, a target that leaders have publicly declared. Singapore, Australia, Brunei, and New Zealand are considered in this study as full liberalisers (i.e., countries that eliminate all tariffs barriers against RCEP partners) because of their liberal trade policy history and their concurrent participation in the CPTPP agreement which does not tolerate significant sectoral carve-outs or residual tariffs post-implementation. A research into tariff elimination coverage under existing ASEAN+ FTAs by Fukunaga and Isono²³ suggests that China, Indonesia, Japan, Korea, Malaysia, and the Philippines have shown moderate levels of ambition in opening up their domestic markets to regional partners. These countries are assumed to adopt a tariff shock of 95, and the rest of developing RCEP countries 90 per cent.

To refine the assumptions further, tariff peaks presumably corresponding to sectors that would better withstand the external pressure of liberalisation are identified based on a reading of RCEP countries' sector-specific tariffs, both in terms of bilaterally applied and most favoured nation (MFN) rates. It was found that China's and India's processed food; Japan's crops and grains; Cambodia's crops and grains, meat and livestock, textiles, and manufacturing; Korea's meat and livestock, and processed food; Laos' meat and livestock, processed food, and light manufacturing; Malaysia's grains and crops, and heavy manufacturing; Thailand's processed food and manufacturing; and Vietnam's processed food, textiles, and manufacturing tend to be more sensitive sectors, carrying absolutely high or above-regional-average tariffs for a variety of politico-economic reasons. Accordingly, tariff shocks applied to these sectors were revised downward by an additional five per cent. Of particular note is that foreign exporters face extraordinarily high tariff barriers in Korea's agricultural market, with MFN rates on milling industry products and cereals amounting to 330 per cent and 285 per cent respectively, even though the country's overall MFN tariff rate is 14 per cent on average. We therefore assume that Korea's grains and crops industry will be subject to a tariff shock of only 85 per cent (see Appendix C).

²³ Fukunaga, Yoshifumi, and Ikumo Isono. 2013. Taking ASEAN+1 FTAs towards the RCEP: A Mapping Study. In *ERIA Discussion Paper Series* Jakarta: Economic Research Institute for ASEAN and East Asia.

With respect to services liberalisation, we hypothesise that RCEP countries would be willing to make concessions in sectors that have a prior history of liberalisation and de-regulation. This assumption is in keeping with the fact that services agreement under RCEP will follow the “positive approach,” where only specifically listed sectors will be liberalised. Thus, guesstimate of RCEP’s services “actionability” -- how much NTMs can be realistically removed -- was estimated by Ishido²⁴ who mapped out the degree of liberalisation for several services industries under concluded ASEAN+ agreements. Appendix C presents the assumed NTMs cuts in RCEP countries; these figures are expressed as percentage reductions to AVEs. For the RCEP grouping as a whole, our guess is that RCEP-induced services reform will be limited given the relatively closed nature of the services markets in most RCEP partners. Disproportionately heavy presence of state-owned enterprises and government-linked companies²⁵ whose income constitutes an important stream of state revenue also restrict the reform.

2.4 Trade facilitation

Apart from swapping preferential market accesses, FTA partners also tend to agree on provisions that facilitate trade through, among others, simplifying customs procedures, ditching duplicated safety tests, and reducing bureaucratic delays. Hillberry and Zhang²⁶ estimate that implementation of the WTO’s Trade Facilitation Agreement (which entered into force in February 2017) would result in an average trade cost reduction of 0.9 per cent for imports and 1.2 per cent for exports. As such, following USITC,²⁷ we assume that the TPP and RCEP would have a small efficiency-enhancing effect (estimated at one per cent

²⁴ Ishido, Hikari. 2011. Liberalization of Trade in Services under ASEAN+n: A Mapping Exercise. In *ERIA Discussion Paper Series*. Jakarta: Economic Research Institute for ASEAN and East Asia.

²⁵ Park, Donghyun. 2013. "Summary of Key Findings and Main Policy Recommendations." In *Developing the Service Sector As an Engine of Growth for Asia*, edited by Donghyun Park and Marcus Noland. Manila: Asian Development Bank.

²⁶ Hillberry, Russell Henry, and Xiaohui Zhang. 2015. Policy and performance in customs : evaluating the trade facilitation agreement. In *Policy Research working paper*. Washington, DC: World Bank.

²⁷ USITC (n22).

increase in efficiency for the former and 0.5 per cent for the latter), removing the “sand in the wheels” of international trade.²⁸

2.5 Rules of origin and preference utilisation

To push back against trade deflection and transshipment, reciprocal trade agreements typically include a chapter setting out detailed rules of origin (ROOs) procedures to determine whether products are eligible to receive negotiated benefits.²⁹ When complicated ROOs imply administrative costs and front-loaded investment in compliance expertise, critics claim that the provision becomes a new class of hidden trade barriers.³⁰ While origin rules are not malicious by design (and certainly should not be singled out as *the* reason to reject trade agreement altogether), they do in practice result in incomplete utilisation of trade preferences written into FTAs.³¹ Available empirical investigation suggests that the economic costs of ROOs are not insignificant, which in the context of goods traded within ASEAN could amount to 25 per cent.³² Similarly, a 2010 Productivity Commission assessment³³ of the preference take-up of the Australia-US FTA concluded that incomplete utilisation could reduce projected GDP gains to Australia by approximately 25 per cent, in relation to the case of full take-up. As a rule of thumb, this study follows Gretton³⁴ in assuming that mega-FTAs' preferential origin rules reduce the magnitude of GDP gains by 25 per cent below the case of full take-up. This discount impacts non-members because arguably incomplete utilisations also reduce detrimental effects on them that result from trade diversion and preference erosion.

²⁸ Andriamananjara, Soamiely, Michael Ferrantino, and Marinos Tsigas. 2003. *Alternative Approaches in Estimating the Economic Effects of Non-Tariff Measures: Results from Newly Quantified Measures*. Washington, DC: United States International Trade Commission.

²⁹ Brenton, Paul. 2011. "Preferential Rules of Origin." In *Preferential Trade Agreement Policies for Development: A Handbook*, edited by Jean-Christophe Maur and Jean-Pierre Chauffour. Washington, DC: World Bank.

³⁰ Gretton, Paul, and Jyothi Gali. 2005. "The Restrictiveness of Rules of Origin in Preferential Trade Agreements." 34th Conference of Economists, Melbourne.

³¹ Reuters, and KPMG. 2015. "2015 Global Trade Management Survey." accessed 15 July 2016. <https://www.kpmg.com/SG/en/IssuesAndInsights/ArticlesPublications/Documents/Tax-IndTax-2015-Global-Trade-Management-Survey.pdf>.

³² Pelkmans-Balaoing, Annette O., and Miriam Manchin. 2007. Rules of origin and the web of East Asian free trade agreements. In *World Bank Policy Research Working Paper*. Washington, DC: World Bank.

³³ Productivity Commission. 2010. *A CGE Analysis of Some Economic Effects of Trade Agreements Supplement to Bilateral and Regional Trade Agreements*. Canberra: Productivity Commission.

³⁴ Gretton, Paul. 2017. *Bilateral And Regional Trade Agreements: Detangling The Noodle/Spaghetti Bowl*. In *EABER Working Paper*. Canberra: East Asian Bureau of Economic Research.

3. Policy Simulation Scenarios

The following policy scenarios were considered in this study.

Scenario 1	CPTPP
Scenario 2	RCEP
Scenario 3	Open CPTPP
Scenario 4	Open RCEP
Scenario 5	CPTPP + RCEP
Scenario 6	Open CPTPP + Open RCEP
Scenario 7	FTAAP+
Scenario 8	Open FTAAP+
Memo (a)	TPP12
Memo (b)	Multilateral tariff elimination

Scenarios 1–4 focused on individual mega-agreements, evaluating separately their likely economic implications for 16 countries in the sample. The first two scenarios simulated the economic impacts of the CPTPP and RCEP as conventional, “closed” (read: discriminatory) trade groupings. The latter two were designed to throw light on the possibility of implementing the two accords on a non-discriminatory basis in keeping with APEC’s principle of “open regionalism” which generally connotes a commitment of voluntarily lowering trade barriers vis-a-vis non-member countries while pursuing reciprocal liberalisation within a regional trade bloc.

Scenarios 5 and 6 corresponded to situations where both mega-FTAs are in force. Insofar as the modelling results are the net economic outcome of two mega-FTAs’ respective impacts, single-track economies would be better able to ascertain their real economic growth potential knowing that while they are included in one mega-bloc, they are also excluded from the other. Dual-track economies, on the other hand, can use the results to decide if their concurrent pursuits of two mega-FTAs are worth the effort. In the simulations, we assumed that countries

taking part in two mega-agreements will adopt shocks associated with the more liberalising agreement (see sub-section 2.3).³⁵ It is certainly not the case that the relatively deeper agreement will nullify the shallower one *de jure*. But, voting with their feet, businesses facing two agreements with differentiated liberalising scopes and tariff savings may presumably choose the more beneficial one based on economic logic, possibly driving the gradual, *de facto* oblivion of the less liberalising agreement.

Scenarios 7 and 8 looked at a hypothetical umbrella FTA that encompasses 21 APEC members in addition to four non-member countries negotiating RCEP. Since this FTA is broader in membership which includes countries like India and Cambodia that are not official APEC members, we labelled it "Free Trade Area of the Asia Pacific-Plus (FTAAP+)"³⁶ in this study. Incorporation of RCEP countries that do not form part of APEC in the potential region-wide trade architecture is possible since RCEP is officially recognised as a pathway to achieving FTAAP.³⁷ In these two aspirational scenarios, we assumed the participation of the US, full removal of tariffs, and one per cent efficiency enhancement. Additionally, Memo item (a) was included to present simulation results of the original TPP12.³⁸ Memo item (b) dealt with global tariff liberalisation as a reference.³⁹ Table 2 summarises the assumptions under the different policy scenarios discussed in this and the previous section.

³⁵ In practice, it means countries that take part in both the TPP and RCEP will adopt shock assumptions associated with the TPP.

³⁶ This is equivalent to what is called "FTAAP-25" in Petri, Peter A., and Ali Abdul-Raheem. 2014. "Can RCEP and the TPP be Pathways to FTAAP?" In *State of the Region*. Singapore: Pacific Economic Cooperation Council.

³⁷ Petri, Peter A., and Ali Abdul-Raheem. 2014. "Can RCEP and the TPP be Pathways to FTAAP?" In *State of the Region*. Singapore: Pacific Economic Cooperation Council.

³⁸ In the TPP12, the US is assumed to eliminate all tariffs and liberalise services according to estimate by USITC (n34).

³⁹ Since multilateral trade liberalisation and open regionalism do not require rules of origin to enforce preferentialism, 25 per cent ROO-related discount does not apply in Scenarios 4, 6, 8 and 9.

Table 2: Summary of Simulation Assumptions

	Tariff Reduction	Service Liberalisation	Trade Facilitation	Effect of Rules of Origin	Non-preferential Tariff Reduction and Trade Facilitation
CPTPP	Full removal with “carve-outs” in Canada, Mexico, Vietnam, Japan	USITC (n22) inclusive of more liberalisation in communication, trade and other business service industries	1% decrease in import cost	25% reduction in projected gains	No
RCEP	100% in Australia, Brunei, Singapore, New Zealand; 95% in China, Japan, Korea, Malaysia, Philippines; 90% in the rest (with carve-outs)	Minimal liberalisation in communication, transport, and other industries based on existing ASEAN+ agreement	0.5% decrease in import cost		
Open CPTPP	Same as CPTPP			No	Yes
Open RCEP	Same as RCEP				
CPTPP+RCEP	Same as CPTPP and RCEP; Dual-track economies adopt CPTPP assumptions	Same as CPTPP and RCEP; Dual-track economies adopt more liberal assumptions	1% for CPTPP and dual-track members; 0.5% for RCEP members	25% reduction in projected gains	No
Open CPTPP + Open RCEP	Same as CPTPP+RCEP			No	Yes
FTAAP+	Full removal	No	1% decrease in import cost	No	No
Open FTAAP+	Same as FTAAP+				Yes
TPP12	Same as CPTPP				
Multilateral liberalisation	Full removal	No	1% decrease in import cost	No	-

Source: Authors' assumptions

4. Policy Simulation Results and Implications

All simulations were done using the multi-step, non-linear Gragg's method, with extrapolation.⁴⁰ Automatic accuracy function of the GTAP model was activated, ensuring at least 99 per cent accuracy of the results to at least four decimal points (although results reported in this paper were kept to two decimal places for simplicity). Tables 2 and 3 present the simulated real GDP impacts (percentage change)⁴¹ and rank orderings from highest (10) to lowest (1) for dual-track and single-track countries respectively under each of the ten scenarios. Cross-checking the findings with those of some widely cited recent works,⁴² it was found that the figures presented in this paper are generally in the middle range of the available studies. The rank orderings led to a number of findings.

The first is that while multilateral tariff elimination is the most desirable option, countries are also better off with some regional trading arrangements than without it. This holds true particularly with respect to developing ASEAN countries such as Cambodia and Vietnam -- whose real GDP would increase by 8.22 per cent and 3.34 per cent under RCEP respectively. While it is true that countries would realise the highest gains if a multilateral tariff elimination agreement can be concluded, all the modelled regional trade deals also pass the test (from the perspective of participating economies) if the perpetuation of sub-optimal, zero liberalisation status quo -- and not dogmatic views on free trade and multilateralism -- is the benchmark.

⁴⁰ Harrison, Jill, Mark Horridge, Michael Jerie, and Ken Pearson. 2014. "GEMPACK Manual." accessed 25 July 2017. <http://ledsgp.org/wp-content/uploads/2015/09/gempack-manual.pdf>.

⁴¹ Alternatively, welfare figures in dollar terms could be reported. But it should be noted that the (absolute value of) welfare gains is a function of the size of the economy, meaning larger (smaller) economies will see larger (smaller) welfare gains. Presenting welfare figures alone could be misleading. If we covert absolute welfare value into percentage share, the welfare figures are not too different from real GDP figures.

⁴² For example, TPP/CPTPP results are juxtaposed with USITC (n22), Petri, Peter A., and Michael G. Plummer. 2016. *The Economic Effects of the Trans-Pacific Partnership: New Estimates*. In *PIIE Working Paper Series*. Washington, DC: Peterson Institute for International Economics; and Ciuriak, Dan, Ali Dadkhah, and Jingliang Xiao. 2017. *The Art of the Trade Deal: Quantifying the TPP Without the United States*. Calgary: Canada West Foundation. Simulated RCEP impacts are compared with Cheong and Tongzon (n8), Itakura, Ken. 2015. "Assessing the Economic Effects of the Regional Comprehensive Economic Partnership on ASEAN Member States." In *East Asian Integration* edited by Lili Yan Ing, 1-24. Jakarta: Economic Research Institute for ASEAN and East Asia; and Jungbluth, Cora, Rahel Aichele, and Gabriel Felbermayr. 2016. *Asia's Rise in the New World Trade Order: The Effects of Mega-Regional Trade Agreements on Asian Countries*. Gütersloh: Bertelsmann Stiftung.

Table 2: “Preference Orderings” For Dual-Track Countries

(Percent real GDP change in parenthesis with two best scenarios in bold)

Scenario	Australia	Brunei	Japan	Malaysia	New Zealand	Singapore	Vietnam
1 CPTPP	1 (0.36)	1 (1.48)	1 (0.21)	1 (1.97)	3 (1.00)	1 (0.99)	1 (1.51)
2 RCEP	3 (0.61)	3 (1.87)	3 (0.55)	3 (2.59)	1 (0.69)	3 (1.63)	2 (3.34)
3 Open CPTPP	7 (1.08)	9 (3.70)	6 (0.94)	8 (6.43)	9 (2.00)	6 (2.61)	6 (6.66)
4 Open RCEP	6 (1.00)	6 (3.26)	5 (0.86)	5 (5.25)	2 (0.81)	5 (2.24)	5 (6.48)
5 CPTPP+RCEP	4 (0.66)	4 (2.08)	4 (0.66)	4 (3.15)	5 (1.22)	4 (2.07)	4 (4.17)
6 Open CPTPP+RCEP	10 (1.23)	10 (3.94)	10 (1.29)	9 (6.52)	8 (1.93)	9 (3.50)	7 (8.30)
7 FTAAP+	5 (0.98)	5 (3.19)	8 (1.07)	6 (5.35)	7 (1.57)	7 (3.33)	8 (9.43)
8 Open FTAAP+	8 (1.13)	8 (3.51)	7 (1.05)	7 (6.35)	7 (1.57)	8 (3.37)	9 (9.97)
Memo (a) TPP12	2 (0.40)	2 (1.78)	2 (0.40)	2 (2.54)	4 (1.14)	2 (1.30)	3 (4.00)
Memo (b) Multilateral Tariff Reduction	9 (1.15)	7 (3.31)	9 (1.19)	10 (6.60)	10 (3.25)	10 (4.04)	10 (10.75)

Source: Authors' simulations

Table 3: “Preference Orderings” For Single-Track (RCEP) Countries

(Percent real GDP change in parenthesis with two best scenarios in bold)

Scenario	Cambodia	China	India	Indonesia	Laos	Myanmar	Philippines	South Korea	Thailand
1 CPTPP	2 (-0.07)	2 (-0.03)	2 (-0.02)	2 (-0.06)	1 (-0.01)	3 (0.00)	2 (-0.08)	2 (-0.06)	2 (-0.36)
2 RCEP	5 (8.22)	5 (0.40)	5 (0.68)	5 (0.62)	4 (2.38)	5 (0.38)	5 (1.00)	5 (2.33)	5 (4.53)
3 Open CPTPP	3 (4.45)	3 (0.30)	3 (0.09)	3 (0.16)	1 (-0.49)	1 (-0.09)	3 (0.17)	3 (0.54)	3 (0.14)
4 Open RCEP	7 (16.05)	6 (1.29)	7 (2.45)	6 (1.17)	7 (4.15)	6 (0.66)	6 (2.12)	6 (6.04)	6 (8.20)
5 CPTPP+RCEP	4 (8.11)	5 (0.40)	4 (0.67)	4 (0.61)	5 (2.41)	5 (0.38)	4 (0.97)	4 (2.32)	4 (4.46)
6 Open CPTPP+RCEP	6 (15.79)	7 (1.33)	8 (2.49)	7 (1.23)	6 (4.09)	7 (0.67)	7 (2.22)	8 (6.21)	7 (8.56)
7 FTAAP+	9 (21.28)	8 (1.35)	6 (1.42)	8 (1.49)	8 (4.22)	10 (0.93)	8 (2.77)	7 (6.15)	8 (8.85)
8 Open FTAAP+	10 (21.90)	9 (1.83)	9 (2.89)	9 (1.62)	10 (4.63)	8 (0.87)	10 (3.04)	9 (6.91)	9 (9.96)
Memo (a) TPP12	1 (-0.58)	1 (-0.06)	1 (-0.05)	1 (-0.08)	2 (0.02)	3 (0.00)	1 (-0.15)	1 (-0.12)	1 (-0.47)
Memo (b) Multilateral Tariff Reduction	8 (19.86)	10 (2.41)	10 (3.47)	10 (1.80)	9 (4.24)	10 (0.93)	9 (2.88)	10 (7.84)	10 (11.38)

Source: Authors' simulations

These empirical findings are broadly supportive of Larry Summers' famous, and much criticised, assertion that "economists should maintain a strong, but rebuttable, presumption in favour of all lateral reductions in trade barriers, whether they be multi, uni, bi, tri, plurilateral. Global liberalisation may be best, but regional liberalisation is very likely to be good."⁴³ Economic success in increasingly competitive commercial environment requires countries to proactively reduce border barriers; abolish undue and superfluous regulations that may or may not have explicit protectionist intent; win over highly mobile international capital that flows to freer and more secure markets; and defensively neutralise third-party beggar-thy-neighbour trade policies and practices. But the interlocking nature of modern economic relations⁴⁴ and domestic political economy hostile to unilateral trade disarmament often influence the way national interests are served. Most times, the most effective way is through coordinated and reciprocal regional efforts where countries swap preferential market access and trade away each other's political opposition. As such, the formation of FTAs at the bilateral and regional levels has increased exponentially in the past fifty years.

Second, in all countries except New Zealand, RCEP has higher economic benefits than the CPTPP. This is because (i) RCEP has more members than the CPTPP (16 in the former including such countries as China, India, and Korea as compared to the latter's 11-country configuration), and (ii) trade liberalisation can be more significant in RCEP than the CPTPP because RCEP countries typically have higher tariff barriers prior to liberalisation. A caveat is that our model has little to say about the potential economic footprint of an enlarged CPTPP, to which accession is, in theory, open to all APEC members and other countries willing to adhere to its high-quality rules. Inducting a new member could provide additional benefits not only to the accession economy but also to other economies of the trading bloc. If countries lining up for TPP membership (i.e., Colombia, Thailand, South Korea, and even post-Brexit

⁴³Summers, Lawrence. 1991. "Regionalism and the world trading system." Economic Policy Symposium, Jackson Hole.

⁴⁴ Baldwin, Richard. 2016. *The Great Convergence: Information Technology and the New Globalization*. Cambridge, MA: Harvard University Press.

United Kingdom) could become part of the reworked CPTPP,⁴⁵ there is chance that the trans-Pacific bloc could be more economically enticing than RCEP.

Third, for dual-track economies, CPTPP and RCEP are better together than individually. An open RCEP together with CPTPP is even better. In other words, there is no “spaghetti/noodle bowl” effect. Furthermore, countries adopting both initiatives tend to capture larger benefits, an observation that is broadly consistent with the findings of an earlier survey conducted by the authors⁴⁶ showing that 77 per cent of Asian respondents felt that countries should pursue multiple mega-FTAs if possible.

As an illustration, Singapore’s concurrent participation in the TPP11 and RCEP would lead to a real GDP increase of 2.07 per cent, whereas the CPTPP could increase GDP by slightly less than 1 per cent and RCEP by 1.63 per cent. This is also true for Australia, Brunei, Japan, Malaysia, New Zealand, and Vietnam, each registering a greater preference score for the CPTPP+RCEP parallel scenario. One could argue that there is a certain degree of overlapping since the additive gains are smaller than the sum of separate gains from CPTPP and RCEP tracks. However, dual-track economies enjoy the distinct advantage of securing privileged free trade relations with key American markets such as Canada and Mexico through the TPP, and with Asian heavyweights like China and India under RCEP simultaneously.

That said, negotiating mega-scale FTAs embedding forward-looking and WTO-plus provisions is a demanding undertaking that necessitates massive political, diplomatic, and administrative capital commitment. Potential entrants should pragmatically put the RCEP framework before the TPP and pursue multiple-mega-FTAs only when capacity permits (the former is likely to

⁴⁵ Petri et al (n10) show that adding Indonesia, Korea, the Philippines, Taiwan and Thailand to the TPP agreement would boost economic benefits three times.

⁴⁶ Ji, Xianbai, Pradumna Rana, Wai-Mun Chia, and Changtai Li. 2016. Economic and Strategic Dimensions of Mega-FTAs: A Perception Survey of Asian Opinion Leaders. In *RSIS Working Paper*. Singapore: S. Rajaratnam School of International Studies.

be more economically rewarding, all else being equal, but also because the TPP's high standard in services and regulations could be intimidating). Tables 2 and 3 also stand to reason that the prize of FTAAP+ is the largest among alternative regional accords examined in this paper. Notably, an FTAAP+ represents the best state of trade affairs and the second best one for Myanmar and Cambodia respectively, generating GDP gains that are even larger than would be expected from multilateral trade liberalisation. These projected gains associated with FTAAP+ suggest that both the TPP and RCEP should be understood as "entrées" in anticipation of main courses to follow.

A relevant corollary to this referencing order concerning regional accords is a comparison of the economic impacts of the TPP12 and CPTPP (i.e., TPP11). The fourth finding of our paper therefore is that, as expected, remaining signatories are made worse off by replacing the original pact with the CPTPP given smaller GDP gains and thus lower preference scores, but the proclamation of the US withdrawal posing a substantial and existential threat to the deal (at least from an economic perspective) is greatly overstated.

This view supports Petri et al.⁴⁷ and Ciuriak, Dadkhah, and Xiao.⁴⁸ Except Japan, Malaysia, and Vietnam, all the other Asia Pacific countries in the sample managed to preserve over 80 per cent of their TPP12 gains through forging on with the TPP minus US. Even Japan, Malaysia, and Vietnam, which saw establishing freer trade with the US as a key rationale underpinning interest in the TPP in the first place, would do reasonably well under the CPTPP.

In this regard, an important contextual factor to consider in rationalising this seemingly counter-intuitive finding is that the US is already an open economy with markedly low applied MFN tariff of an average 2.8 per cent in 2015. Further opening up of the US merchandise trade regime under the TPP would not boost trade materially (the forgone opportunity and

⁴⁷ Petri et al. (n10).

⁴⁸ Ciuriak, Dan, Ali Dadkhah, and Jingliang Xiao. 2017. *The Art of the Trade Deal: Quantifying the TPP Without the United States*. Calgary: Canada West Foundation.

benefits of securing privileged access to the US's vast services market explain much of the benefit shortfalls). More profoundly, at stake politically is for the 11 countries to form a united front to challenge the Trump administration's protectionist trade agenda and "America First" rhetoric in the interest of buttressing the wobbly global liberal economic order.

The fifth finding of our preference ordering is that open regionalism is more attractive than "closed" regionalism in terms of economic benefits. For FTA participating economies, converting a preferential agreement to a more open and liberal configuration would reinforce market forces; reduce trade flow distortions; import least cost supplies from all trading nations; facilitate value adding and production sharing chains extending beyond the jurisdiction of the trading bloc; and eliminate costs associated with the maze of rules of origin and other regulations to enforce preferences.⁴⁹ The theoretical proposition is supported by policy modelling in this paper. Open CPTPP scenario is consistently ranked higher than the CPTPP scenario for Asian countries. For instance, implementing the agreement on a non-discriminatory basis will boost Japanese real GDP gains four-fold. Similar outcomes are projected for the RCEP grouping, the FTAAP+ bloc, and parallel scenarios. While Australia, Brunei, Canada, Japan, Mexico, and Peru rank parallel, open implementation of the CPTPP and RCEP (i.e., Scenario 6) as the best outcome, open FTAAP+ is most preferred by three ASEAN countries, namely, Cambodia, Laos, and the Philippines. Moreover, excluded party whose exports are conventionally discriminated against in integrating markets will find open regionals less trade diverting and more attractive to them. China, for example, would experience net gains from a 0.03 per cent loss (under a closed CPTPP) to a 0.3 per cent gain (under an open CPTPP) when Chinese exports are treated no less favourably in CPTPP countries than those originating within the geographical boundary of the CPTPP bloc. Compared to open regionalism, however, global liberalisation can deliver more substantial gains for most Asian countries -- even though only tariff elimination is considered in this paper. The most prominent beneficiaries amongst all the modelling projects, in percentage terms, are trade exposed countries with higher levels of prevailing MFN tariff rates such as Cambodia (with a simple average applied MFN tariff rate of 11.4 per cent in 2014), Thailand

⁴⁹ Gretton (n34).

(with an MFN rate of 11 per cent), Vietnam (9.5 per cent), and South Korea (13.9 per cent). By way of comparison, countries with relatively low trade-to-GDP ratios and low MFN border protections (e.g., the US, Peru, and Canada) are projected to benefit modestly from global merchandise trade liberalisation.

Also, should the hypothetical multilateral liberalisation accord go beyond mere tariff removal in progressively liberalising services trade and public procurement markets, there would be substantially larger benefits. Unlike merchandise trade liberalisation that had been pursued lastingly since the inauguration of the General Agreement on Tariffs and Trade (GATT) in 1948, comparable movement of multilateral liberalisation of services trade did not gain traction until the negotiation of the General Agreement on Trade in Services (GATS) which entered into force almost fifty years later in 1995. Due to conflicting national interests in key areas such as banking, insurance, professional services, telecoms, and transport that proved hard to reconcile at the multilateral level, GATS commitments by and large are more aspirational than operational.⁵⁰ Leveraging the benefits of mega-FTAs over existing GATS commitments, schedules and scopes in liberalising selected segment of trade in services of common interest could be the first step towards engineering a genuinely full-fledged free services trade regime that ensure unhindered access to a competitive and efficient global services markets for all.

Going forward, the Asia Pacific policy makers should adopt a “multi-track, multi-stage” approach in designing their regional trade policies. The first stage should centre on concluding and subsequently implementing the mega-FTAs under negotiations, that is the CPTPP and RCEP. As the TPP morphs into the CPTPP, further negotiations will be held by the remaining 11 countries to iron out outstanding issues in relation to labour and cultural protections, and agree on new rules and procedures governing orderly withdrawal, enlargement, and review. It is imperative for CPTPP partners to stick with the deadline and

⁵⁰ Adlung, Rudolf, and Martin Roy. 2005. Turning Hills into Mountains? Current Commitments under the GATS and Prospects for Change. In *WTO Staff Working Paper No. ERSD-2005-01*. Geneva: World Trade Organization

sign the final texts and schedules in the first quarter of 2018. With the 85 per cent GDP requirement gone, the CPTPP will take effect provisionally once six countries complete domestic ratification processes. Meanwhile, ASEAN+6 partners should strive to bring ongoing RCEP negotiations to a substantial conclusion possibly as soon as next year, under the ASEAN chairmanship of Singapore, a pro-trade *entrepôt* economy. At this juncture, disagreements between ASEAN+1 countries with no bilateral FTA with each other and perceived low tariff concessions offered by India seem to have exerted a drag on the RCEP project;⁵¹ but it should be reminded that new and direct economic links instituted by RCEP between China, Japan, India, and others are in fact the real drawcard for the establishment of RCEP in the first place.

In stage two, if and when RCEP talks are completed, RCEP partners not represented in the CPTPP grouping should switch political attention and diplomatic capital to acquire CPTPP membership⁵² as our modelling shows that dual membership is preferred. CPTPP incumbents absent from RCEP negotiations ought to do the same to seek accession to the RCEP bloc, which in 2016 accounted for almost half of the world population, 32 per cent of global output, 29 per cent of global trade, and a fifth of the global foreign direct investment inflows. In so doing, TPP members will get unhampered access to a significantly larger integrated market including China. Furthermore, RCEP members -- many of which are developing economies --

⁵¹ India on the other hand is pushing for what New Delhi calls “a balanced agreement” that involves a commensurate level of services liberalisation which other RCEP partners are comparatively more reluctant to embrace. And some Indian officials find it difficult to reconcile external opening under RCEP and Prime Minister Modi’s central industrial policy, the “Made In India” campaign. Nevertheless, most recently, ASEAN leaders took advantage of the ASEAN-India Commemorative Summit in January 2018 (which marked the 25 years of bilateral ties) to push India to conclude RCEP talks in 2018. See Kaushik, Narendra. *Indian resistance could spell trouble for RCEP*. Bangkok Post 2018 [cited 5 February 2018]. Available from <https://www.bangkokpost.com/business/news/1392206/indian-resistance-could-spell-trouble-for-rcep>.

⁵² There were some legitimate concerns that incumbent TPP members might impose harsh accession conditionality to extract more concessions from aspiring countries seeking TPP membership. See Hamanaka, Shintaro. 2014. “TPP versus RCEP: Control of Membership and Agenda Setting.” *Journal of East Asian Economic Integration* no. 18 (2):163-86. However, with the withdrawal of the US which can unilaterally dictate the terms of accession, the CPTPP has become a more equitable grouping wherein partners show more sensitivity to each other’s concerns and interests. This characteristic change is best evidenced in the willingness of the 11 remaining parties to suspend some 20 provisions of the original text of the TPP, at the request of such countries as Vietnam, Malaysia, Brunei and Canada. It is therefore unlikely that non-TPP RCEP countries would be deterred by the CPTPP’s entry requirements to the extent that the benefits of joining the CPTPP become expendable. See Rana, Pradumna B. and Ji, Xianbai. 2017. “TPP’s Resurrection: Will It Be Finally Ratified?” *RSIS Commentary*. Available from <https://www.rsis.edu.sg/wp-content/uploads/2017/11/CO17219.pdf>

will gain valuable exposure to high-quality trade rules that may inspire further economic liberalisation in non-traditional trade areas. For trade strategists, pursuing a multi-track trade policy straddling two mega-FTAs would spare regional countries the need to choose between the Japan-led CPTPP and China-backed RCEP, thereby defusing daunting geopolitical tensions. Efforts should not stop at securing dual mega-FTA participation; countries should move towards merging the CPTPP and RCEP into the overarching FTAAP+ for greater inclusion and streamlined rules that can disentangle the region from multiple ruling and “noodle bowl” problems.⁵³

Then, in stage three, Asian countries could try to relax the inward-looking principle of reciprocity embedded in the mega-deals in operationalising the principle of open regionalism over time. To be sure, open regional approach to liberalising trade -- akin to concerted unilateral liberalisation actions -- in the Asia Pacific will be politically difficult to achieve.⁵⁴ If anything, it will rely on far-sightedness and collaborative leadership potentially provided by the region’s economic hegemons (necessarily including the US and India despite their current protectionist trade policy rhetoric) together with the most liberal countries such as Singapore, Australia, and Chile, in recognition that the more open an agreement becomes, the more economically stimulating it will be. Successes of regional arrangements could re-energise global momentum at the WTO level and pave the way for worldwide free trade⁵⁵ in the final phase, which will go a long way in promoting sustainable and equitable economic growth and combating economic nationalism.

⁵³ Hamanaka, Shintaro. 2012. "Evolutionary paths toward a region-wide economic agreement in Asia." *Journal of Asian Economics* 23 (4):383-394.

⁵⁴ At a rhetorical level, the principle of “open regionalism” is explicitly or implicitly enshrined across various Asian cooperative mechanisms including ASEAN and ASEAN-Plus (e.g. ASEAN Vision 2020 Declaration and ASEAN Economic Community Blueprint 2025) and inter-continental forums like Asia-Europe Meeting (ASEM). The principle is invoked predominantly for the purpose of projecting an image of the concerned grouping being non-exclusive and not targeting any third party. In the specific realm of trade liberalisation, putting “open regionalism” into practice means voluntarily lowering trade barriers to non-members (and ideally to the rest of the world) without reciprocal liberalisation. It has not been a very popular policy option except for a few ultra-liberal economies like Australia.

⁵⁵ Urata, Shujiro. 2016. "Mega-FTAs and the WTO: Competing or Complementary?" *International Economic Journal* 30 (2):231-242; and Baldwin, Richard, and Patrick Low, eds. 2008. *Multilateralizing Regionalism: Challenges for the Global Trading System*. Cambridge: Cambridge University Press.

V. CONCLUSION

This paper uses CGE analysis to illustrate the relative economic merits of several existing and potential trade agreements and implementation modalities. The results show that regional trade agreements could generate economic gains to members, and should be preferred by Asian countries to the sub-optimal status quo where multilateral trade liberalisation is on the brink of falling to a state of permanent stasis and domestic political economy prevents governments from pursuing unilateral measures.

Between the two mega-FTAs that currently define the landscape of trade governance in the Asia Pacific, relevant parties should prioritise RCEP over the CPTPP not least for the reason that the former, as the only multi-party trade grouping that brings together Asia's three largest economies (i.e. China, Japan, and India), would unleash more substantial gains. Our GTAP simulations also suggest that Asian countries should explore the possibility of pursuing both the CPTPP and RCEP to maximise trade creating potentials and to strike a geopolitical balance between their ties with China and those with Japan. Recognising that such multi-track FTA strategy could be too resource intensive to be followed by the region's low-income economies, prudent policy sequencing that presumably puts RCEP ahead of the CPTPP in the short run would be wise. Once both the CPTPP and RCEP are implemented, a follow-up strategy would be merging the two into the FTAAP+ that encompasses all key Asia Pacific economies. While the gap between the CPTPP and RCEP in terms of the differing levels of ambition might prove challenging to close, dual-track economies and single-track economies that are ready to ratchet up their existing commitments could drive the convergence between the CPTPP and RCEP and push it in positive directions. In this paper, we also illustrate the case for greater trade openness. Transitioning from a "noodle bowl" of preferential regional trade agreements to open regionals, and eventually to a more open global trading system is estimated to offer far greater benefits.

To sum up, when it comes to trade liberalisation, the preference ordering exercise based on CGE modelling suggests that the first best option remains a multilateral solution and

regionalism is demonstrably the second best. Open regionalism that extends preferential market access to all parts of the world would generate greater economic gains than closed agreements. The same goes for larger regional agreements (e.g., RCEP) vis-à-vis smaller ones (the CPTPP) and multiple mega-FTA memberships vis-à-vis single mega-FTA membership. The worst outcome is for countries to stay idle, not only forgoing the opportunity to liberalise trade with external partners but also possibly crumbling in the face of protectionist pressures, as per the “bicycle theory.”⁵⁶

⁵⁶ Bergsten, Fred. 1996. "Globalizing Free Trade." *Foreign Affairs* 75 (3):105-120.

Appendix A

Regional Aggregation

No.	Region	Original GTAP Regions ^a
1	Australia	aus
2	Brunei	brn
3	Cambodia	khm
4	Canada	can
5	Chile	chl
6	China	chn
7	European Union	aut, bel, cyp, cze, dnk, est, fin, fra, deu, grc, hun, irl, ita, lva, ltu, lux, mlt, nld, pol, prt, svk, svn, esp, swe, gbr, bgr, hrv, rou
8	Indonesia	idn
9	India	ind
10	Japan	jpn
11	South Korea	kor
12	Laos	lao
13	Malaysia	mys
14	Mexico	mex
15	Myanmar ^b	xse
16	New Zealand	nzl
17	Peru	per
18	Philippines	phl
19	Singapore	sgp
20	Thailand	tha
21	United States	usa
22	Viet Nam	vnm
23	Rest of the world	xoc, hkg, mng, twm, xea, bgd, npl, pak, ika, xas, xna, arg, bol, bra, col, ecu, pry, ury, ven, xsm, cri, gtm, hnd, nic, pan, slv, xca, dom, jam, pri, tto, xcb, che, nor, xef, alb, blr, rus, ukr, xee, xer, kaz, kgz, xsu, arm, aze, geo, bhr, irn, isr, jor, kwt, omn, qat, sau, tur, are, xws, egy, mar, tun, xnf ,ben

^a See <https://www.gtap.agecon.purdue.edu/databases/regions.asp?Version=9.211> for the GTAP countries and regions. ^b In the current GTAP Data Base, Myanmar and Timor-Leste are bundled in 'Rest of Southeast Asia (xse)'. This study used 'xse' to represent Myanmar.

Appendix B

Sectoral Aggregation

No.	Code	Aggregated sector	GTAP sectors	Description
1	GrainsCrops	Grains, Crops, Forestry	pdr, wht, gro, v_f, osd, c_b, pfb, ocr, frs	Paddy rice; wheat; cereal grains and others; vegetables, fruit, nuts; oil seeds; sugar cane, sugar beet; plant-based fibres; crops and others; forestry
2	MeakLstk	Livestock, fishing	ctl, oap, rmk, wol, fsh,	Cattle, sheep, goats, horses; animal products and others; raw milk; wool, silk-worm cocoons; fishing
3	Mining	Mining	coa, oil, gas, omn	Coal; oil; gas; minerals and others
4	ProcFood	Processed food	cmt, omt, vol, mil, pcr, sgr, ofd, b_t	Meat; meat products and others; vegetable oils and fats; dairy products; processed rice; sugar; food products and others; beverages and tobacco products
5	TextWapp	Textiles and clothing	tex, wap	Textiles; wearing apparel
6	LightMnfc	Light manufacturing	lea, lum, ppp, omf	Leather products; wood products; paper products, publishing; manufactures and others
7	HeavyMnfc	Heavy manufacturing	p_c, crp, nmm, i_s, nfm, fmp, mvh, otn, ele, ome	Petroleum, coal products; chemical, rubber, plastic products; mineral products and others; ferrous metals; metals and others; motor vehicles and parts; transport equipment; electronic equipment; machinery and equipment and others
8	Const	Construction	cns	Construction
9	Transport	Transport	otp, wtp, atp	Transport and others; sea transport; air transport
10	Comm	Communication	cmn	Communication
11	FinSvc	Financial services	ofi	Financial services and others
12	Trade	Trade	trd	Trade
13	Insurance	Insurance	isr	Insurance
14	Business	Business	obs	Business services and others
15	Others	Other services	ely, gdt, wtr, ros, osg, dwe	Electricity; gas manufacture, distribution; water; recreation and others; public administration, defence, health and education; dwellings

Appendix C

Modelling Assumptions on RCEP's Actionability

Tariff-cuts on Merchandise Trade (%)

	GrainsCrops	MeatLstk	Extraction	ProcFood	TextWapp	LightMnfc	HeavyMnfc
AUS	-100	-100	-100	-100	-100	-100	-100
BRN	-100	-100	-100	-100	-100	-100	-100
CHN	-95	-95	-95	-90	-95	-95	-95
IDN	-95	-95	-95	-95	-95	-95	-95
IND	-90	-90	-90	-85	-90	-90	-90
JPN	-90	-95	-95	-95	-95	-95	-95
KHM	-85	-85	-90	-90	-85	-85	-85
KOR	-85	-90	-95	-90	-95	-95	-95
LAO	-90	-85	-90	-85	-90	-85	-90
MMY	-90	-90	-90	-90	-90	-90	-90
MYS	-90	-95	-95	-95	-95	-95	-90
NZL	-100	-100	-100	-100	-100	-100	-100
PHL	-95	-95	-95	-95	-95	-95	-95
SGP	-100	-100	-100	-100	-100	-100	-100
THA	-90	-90	-90	-85	-90	-85	-85
VNM	-90	-90	-90	-85	-85	-85	-85

NTM Reduction on Services Trade (%)

	Construction	Communication	Business	Finance	Insurance	Trade	Transport	Others
AUS	-5	-5	-8	-8	-5	-8	-5	-5
BRN	-5	-8	-5	-5	-5	-5	-8	-5
CHN	-	-	-3	-	-	-	-3	-
IDN	-	-3	-	-	-	-5	-	-1
IND	-	-5	-	-	-	-	-	-
JPN	-	-3	-5	-3	-3	-	-	-3
KHM	-	-8	-	-3	-	-	-8	-8
KOR	-	-3	-	-	-	-3	-3	-
LAO	-5	-	-	-	-3	-	-3	-1
MMY	-3	-3	-	-	-	-	-3	-3
MYS	-	-5	-	-3	-	-	-3	-
NZL	-	-5	-	-	-	-	-	-
PHL	-	-	-	-	-	-	-5	-
SGP	-3	-8	-8	-5	-5	-5	-5	-5
THA	-	-3	-	-	-	-3	-3	-1
VNM	-	-3	-	-	-3	-3	-3	-

- Denotes no liberalisation in this sector

Source: Authors' assumptions

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