Asian Trade Integration

Policy Brief: Tariff Reductions

March 2025

A joint project of the Australian National University (Australia), Centre for Strategic and International Studies (Indonesia) and NITI Aayog (India)

Australian National University

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CSIS INDONESIA

Contents

Executive Summary

The Asian Trade Integration policy brief, developed collaboratively by the Australian National University, NITI Aayog and the Centre for Strategic and International Studies, examines the economic impacts of expanded multilateral agreements in Asia.

The study utilises computable general equilibrium (CGE) modelling to evaluate the economic impact of tariff reductions generated by China, Indonesia and the United States joining the CPTPP agreement and of India acceding to RCEP. Amid growing scepticism of globalisation and increasing geoeconomic fragmentation, quantitative economic modelling plays a critical role in providing impartial analysis to inform evidence-based policymaking and bolster confidence in the international trading system.

Our economic modelling suggests that joining regional trading agreements typically benefits the countries that are acceding.

- India's accession to the RCEP is projected to boost its GDP by 0.41 per cent annually, with exports and imports rising by 6.15 per cent and 5.11 per cent, respectively, accompanied by increases in real wages and annual investment. However, joining RCEP may leave India with a negative Terms of Trade impact (0.3 per cent).
- Indonesia's entry into the CPTPP is expected to provide only a small positive GDP impact (0.1 per cent) but is expected to support middle-class job creation, with growth in textiles and light manufacturing, though a faster increase in imports compared to exports raises concerns about external balances.
- China's accession to the CPTPP would expand the agreement's share of global economic output from 18.5 per cent to 35.4 per cent, resulting in notable trade benefits for China alongside a modest growth in GDP (0.11 per cent).
- The United States's accession to the CPTPP would elevate the bloc's share of global output from 18.5 per cent to 44.8 per cent, significantly increasing trade flows and sectoral production while marginally reducing economic outcomes for non-members like China. US GDP would rise by just 0.1 per cent.
- In the optimistic scenario where China, the United States, and Taiwan all join the CPTPP, global trade could rise by 0.72 per cent, with Vietnam, Mexico and Indonesia emerging as the primary beneficiaries.

Our research is based on simplifying assumptions which may affect the overall results. For example, we assume that all tariffs are removed between all parties immediately as each nation accedes to trade agreements, while the timing in reality is often more complex. In this policy brief, we restrict attention to tariff measures, although we acknowledge that non-tariff measures also constitute an important component of modern plurilateral trade agreements. Nonetheless, this analysis lays the groundwork for further explorations of non-tariff measures, phased compliance and dynamic modelling pathways, offering critical tools for addressing the evolving challenges in trade and economic integration.

The findings from this modelling exercise provide evidence-based insights for policymakers to understand the potential benefits from improved trade integration, navigate the complexities of national, regional, and sectoral trade, and to ensure the equitable distribution of its benefits.

International Trade Context

The importance of trade modelling

The past decade has been marked by a complex interplay of geopolitical tensions and economic disruptions. After an uneven recovery from the global financial crisis, the global landscape has been dominated by waves of uncertainty — 'Brexit', COVID-19, US–China tensions and Russia's invasion of Ukraine have tested the resilience of global integration. As these more recent trends intersect with growing scepticism in major industrial countries on the benefits from globalisation, there has been an increased prevalence of a policy-driven withdrawal from, and a reconfiguration of international integration — leading to increased geoeconomic fragmentation (Aiyar et al., 2023).

Against this backdrop, policymakers face a greater challenge to make evidence-informed decisions. Quantitative economic modelling is critical for estimating the size and direction of potential impacts of trade and regulatory policies. In the assessment of regional trade agreements (Baier et al., 2019), modelling can provide crucial insights into the costs and benefits of participation, guiding evidence-based policymaking.

More broadly, the questioning by policymakers and the community about the benefits of trade and globalisation (Rodrik, 2011) requires a formal response. A key function of trade modelling is to provide impartial identification of where the gains from trade lie, restoring confidence in the international trading system. Economic modelling also informs important supplementary policy considerations, guiding efforts to ensure that these gains are distributed equitably, garnering broad support for participation in global trade.

Overview of major trade agreements

CPTPP

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) evolved out of the previously negotiated Trans-Pacific Partnership (TPP). After the United States formally withdrew from the TPP negotiations in 2017, the remaining 11 Pacific Rim economies re-grouped and renegotiated the CPTPP, keeping many of the original TPP provisions while modifying others.

The CPTPP spans various continents currently consisting of Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. The United Kingdom, which signed the accession protocol on 16 July 2023, has secured the sixth and final ratification required to formally join the agreement, likely in late 2024. In September 2024, Indonesia made a formal application to join CPTPP.

The CPTPP enables significant market access to a trade zone which boasts 11 per cent of world GDP and 6 per cent of the world's population. CPTPP seeks to eliminate almost 98 per cent of tariffs within the free trade area in key primary and secondary sectors such as agriculture and manufacturing, while establishing various commitments involving eased market access to trade in goods, services and investments. In addition, the CPTPP aims to increase flows of labour and investments between its member states, also create regional standards for matters such as intellectual property protections.

To improve the quality and efficacy of trade, the Agreement includes various commitments and accountability mechanisms to ensure the consistency, transparency and integrity in all trade matters conducted in CPTPP markets.

RCEP

The Regional Comprehensive Economic Partnership (RCEP) is a free trade agreement which seeks to unify trade rules developed from existing FTAs between East Asian economies. It is the world's largest free trade agreement, with 14 member states including Australia, Brunei, China, Cambodia,

Indonesia, Korea, Japan, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, and Vietnam. It covers 30 per cent of world GDP, 30 per cent of the world's population, 29 per cent of global trade, and 32 percent of global investment.

Many members of RCEP are also party to the CPTPP. The RCEP market encompasses a 2.3 billion population, with a combined GDP totalling USD$26.3 trillion. Notably, India withdrew from the RCEP negotiations in November 2019, but the November 2020 Ministerial Declaration on India's participation in RCEP has specified that India may recommence such negotiations at any time.

By developing universally beneficial trade and investment rules, and centralising regional trade infrastructure, the Agreement seeks to further economic integration and co-operation in the East Asian and bolster economic growth and equitable economic development. Beyond its provisions on trade, RCEP negotiations span a variety of multilateral issues including competition, dispute settlement, temporary movement of natural persons and investment, advanced through its unique built-in economic cooperation agenda. The agreement was a major initiative by the Association of Southeast Asian Nations (ASEAN) that seeks to reiterate ASEAN's leadership in the region.

Participation in agreements

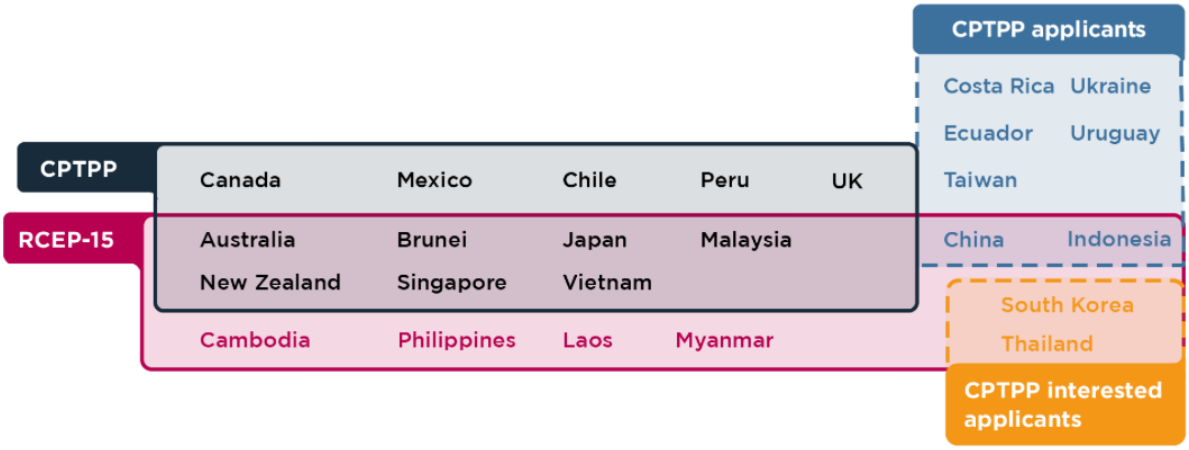

Figure 1- Breakdown of CPTPP and RCEP membership

Notable trends in international trade

International trade is undergoing a significant structural shift, ushering a new era with distinct challenges and opportunities for economies worldwide. The multilateral international trading system, anchored by the World Trade Organization (WTO), is increasingly strained by heightened global geoeconomic competition (WTO, 2023). Over the past decade, there has been a marked retreat from multilateralism (Hopewell, 2021; Raghavan, 2023), eroding the WTO's efficacy in mediating global trade disputes (Chow, 2020). Embodying this shift, large economies such as the United States and China have blatantly flouted WTO rules, particularly the principle of non-discrimination (Adekola, 2019). With the WTO gradually losing traction in the international trading system over a, bilateral and regional preferential trade agreements, such as CPTPP and RCEP, proliferated over the past three decades (Ruta, 2023). Though regional agreements integrate economies into the multilateral trading system, they represent a fundamental shift away from the non-discriminatory principle advocated by the WTO (Leal-Arcas, 2011).

Another significant development in international trade pertains to the increasing use of trade measures to advance strategic objectives, rather than purely as a means of stimulating economic activity. Amid heightened geoeconomic competition, national security considerations have increasingly been invoked to justify unilateral and confrontational actions in the international trading system (Zhou et al., 2023). Economies must carefully evaluate and navigate this trend to ensure that economic resilience and security objectives are both not compromised through trade policy.

The failure of domestic policy to address internal disparities in major economies associated with trade has increased scepticism about its ability to improve welfare. Though trade liberalisation commonly narrows the development gap between countries and increases economic efficiency (Urata & Narjoko, 2017), it may affect income inequality by altering patterns of demand for skilled and unskilled workers (Silva, 2003). Government policy is required to ensure that the benefits of globalisation are evenly distributed within communities and across countries.

Trade Scenarios

Modelling approach

This report models the economic impact of China, Indonesia and the United States joining the CPTPP agreement, as well as the effects of India acceding to RCEP. The analysis isolates the effects of these countries' participation, under the assumption that other CPTPP and RCEP member countries have already fully implemented their commitments based on prior agreements or understandings.

Using the Global Trade Analysis Project (GTAP) database, the report examines the effects on macroeconomic indicators, trade flows, investments, and employment. The GTAP model, being a multiregional, multisector CGE model, assumes perfect competition and constant returns to scale. The GTAP database includes detailed tariff, production, and trade flow data for 65 countries and 160 regions.

Modelling assumptions

To reflect the implementation of the CPTPP and RCEP trade agreements through a series of bilateral tariff reductions between members countries, we modify the general model as follows:

- All current CPTPP member countries (including the United Kingdom) are assumed to have eliminated tariffs on imports from other members countries
- All current RCEP member countries are assumed to have eliminated tariffs on imports from other member countries

The correspondingly updated database serves as the baseline for all simulations in this paper. Some additional assumptions characterising the GTAP modelling environment include:

- Aggregate employment, labour supply, and population are fixed in each region.
- Capital is mobile across sectors and regions, and its allocation is endogenously determined by differential rates of return.

This study employs a CGE model built on the GTAP v11 2017 database. The database is adjusted to simulate the effects of various economic shocks over an unspecified timeframe. Before analysing the implications of specific countries joining CPTPP or RCEP, it is assumed that other potential members have already acceded to the agreements based on geopolitical and economic considerations. For example, we posit that South Korea, Thailand, the Philippines and Indonesia all have become CPTPP members prior to the United States' accession.

For the CPTPP accession scenarios, the model considers 34 'regions', including the member countries of RCEP and CPTPP, countries of geopolitical and economic interest, and several broad regional groups, such as Africa, South America and Rest of Europe.

For the RCEP accession scenario, the model is adjusted slightly to also incorporate Pakistan, Bangladesh, and Nepal into the analysis, resulting in a total of 37 'regions' in the analysis.

The specific regional breakdown is presented in Figure 2 and further detailed in the Appendix.

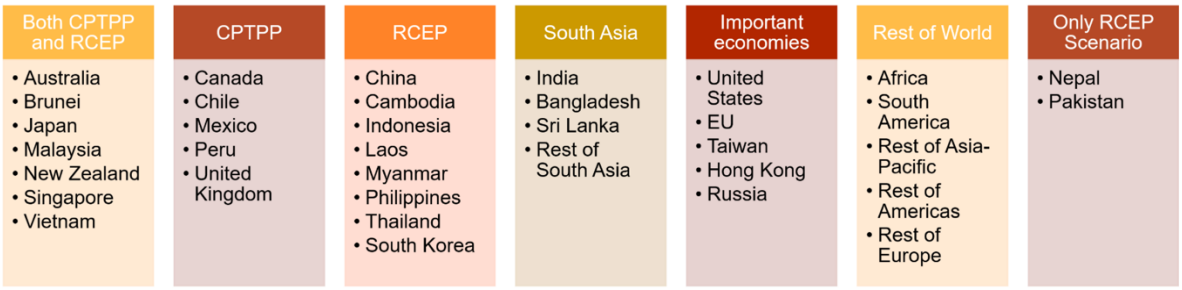

Figure 2 - Regional breakdown in our modelling

The GTAP 11 database provides a detailed sectoral classification of 65 industries. For this study, these sectors were aggregated into 20 distinct 'baseline sectors' based on policy relevance and sensitivity. It is important to note that some sectoral aggregations are not perfectly aligned. For example, coal products are included in the 'Petrol Products' baseline sector. We recognise the need to refine and improve our sectoral aggregation in future tranches of modelling.

The specific sectoral breakdown is presented in Table 1 and further detailed in the Appendix.

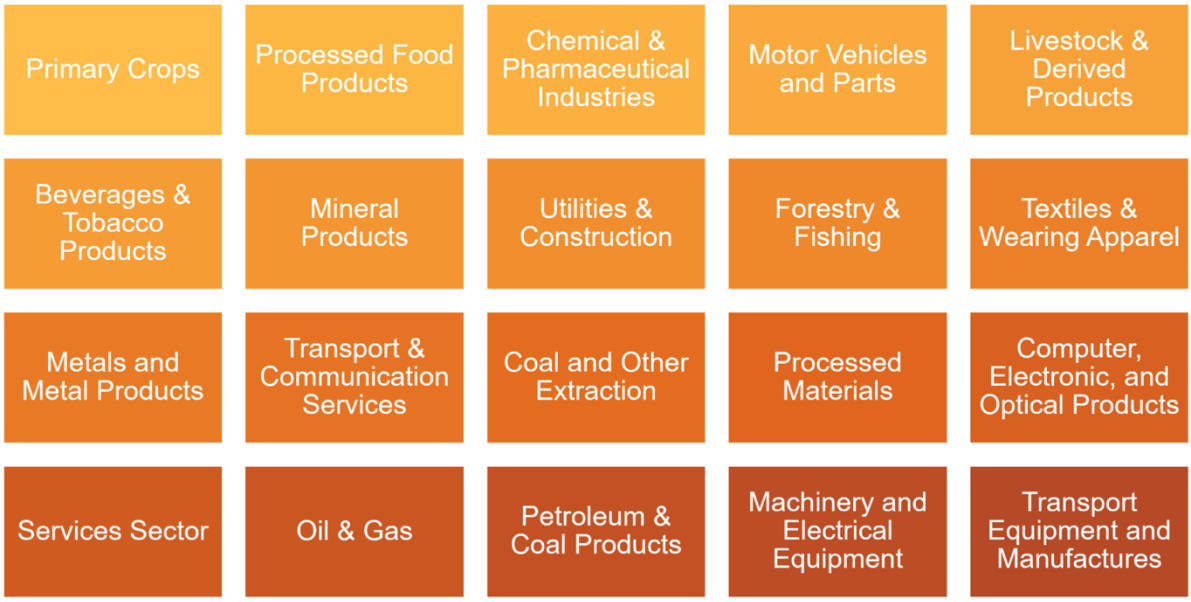

Figure 3 - Sectoral breakdown in our modelling

Known Modelling Limitations

Timing limits

Our approach in modelling countries' accession to the CPTPP and RCEP agreements involves a simplified timing assumption. While several countries will join these agreements before our 'target-countries', our model employs an abstract period rather than specific years to represent the order of accession. This simplification is important because the actual timing of accessions can impact trade flows, market access and the relative advantages of countries. This limitation will be addressed through the use of dynamic modelling in future extensions.

Another key limitation stems from our static modelling approach using the 2017 GTAP database as the baseline, which may not accurately reflect the changes in economic conditions and trade dynamics that have occurred between the model's and our publication dates. The database represents the economy as it stood in 2017, so significant changes in tariff rates between the United States and China are not included. This limits the accuracy of our analysis but will be addressed in future work.

Furthermore, our assumption of a complete and immediate Chinese accession to the CPTPP may overestimate the potential gains from participation. CPTPP membership is only open to economies that can meet the ambitious market access commitments of the agreement. China will likely need to demonstrate its willingness to comply with these high standards, likely by actively reducing its tariffs in phases.

Our results may also overestimate the gains from trade liberalisation due to the assumption of full and immediate tariff reductions for all goods. In reality, tariffs are often reduced gradually in phases and may not apply to certain goods. For example, Australia does not consider tobacco in any of its trade agreements.

Focus on tariff reduction

Moreover, our model solely focuses on the effects of tariff reductions and does not address the potential effects of non-tariff measures or other factors. The analysis also does not capture the additional benefits arising from the accession to regional trading agreements. Though we have accounted for the benefits associated with tariff reductions, we ignore the possible gains to be made from the additional flows of services and investment associated with regional trading agreement membership.

Other limits

The GTAP model also has limitations regarding its estimation of capital stock and employment. The stock of capital owned by each region is fixed, meaning the model cannot account for changes in total capital stock within a region. The model also assumes full employment, meaning it cannot capture the effects of a policy change on unemployment rates, as labour is assumed to be reallocated to other industries in the region to maintain full employment.

Finally, the GTAP database aggregates Timor Leste and Myanmar, which will be corrected in future work. While this aggregation is unlikely to significantly affect our results, it is a limitation of the current analysis.

Scope of work

While the overall aim of the project is to comprehensively model and analyse the effects of various trade scenarios over time; this work will be conducted in multiple tranches across the course of the project. Each tranche has distinct aims, case studies, research methodologies and outputs, and seeks to extend on its predecessor.

This tranche of work is primarily focused on building familiarity with the trade modelling and policy environment that form the context of the project. Using comparative static modelling, our approach begins with the baseline assumptions and then seeks to implement basic shocks to the equilibrium based on likely membership changes in multilateral trade agreements – namely the RCEP and the CPTPP. This analysis is primarily engaged with changes to the tariff measures and does not extend to non-tariff measures.

Modelling scenarios

Each of the current scenarios models the accession of various countries of interest to regional trade agreements based on the bloc timelines. It involves the modelling and analysis of four key scenarios:

- China joining the CPTPP;
- the United States joining the CPTPP;
- Indonesia joining the CPTPP and
- India joining the RCEP.

Our modelling begins with the creation of two distinct timelines detailing our assumptions of the future CPTPP and RCEP accessions. The political and economic likelihood of each country joining the CPTPP or RCEP is used to delineate the likely timing of their accession. Each country was then assigned a bloc of accessions relative to other nations' accessions.

CPTPP Scenarios

For the CPTPP, four key blocs of countries are constructed to reflect the current geopolitical and trade relations in the region. The effects of some countries' accession, namely in Bloc I (South Korea) and Bloc II (Thailand and the Philippines) were assumed into the starting point for the model as they are not within the focus of this tranche of modelling. Bloc IV (United States) and Bloc V (China) were separated to reflect the presumption that if either the United States or China joins the CPTPP, the other country will not.

The first phase of the modelling reflects the effects of Indonesia's accession to the CPTPP alongside other Bloc II countries. Indonesia is predicted to accede earlier than the other nations as its accession timing aligns with its current geopolitical aims.

The second phase of the modelling started with the assumption that Indonesia had already joined the CPTPP and tested various combinations of accession between the United States, China and Taiwan. The impacts on trade were modelled with respect to four scenarios involving the Bloc IV and V countries:

1. China and Taiwan accede
2. The United States and Taiwan accede
3. Only China accedes
4. Only Taiwan accedes

The likelihood of each of these scenarios will be dependent on future trade negotiations and interactions between each of the Blocs and the CPTPP nations.

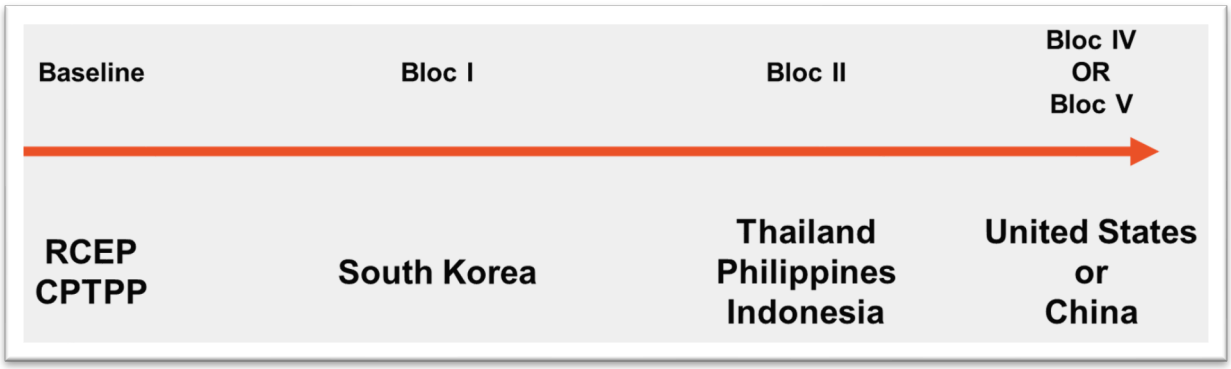

Figure 4 - CPTPP accession modelling timeline

RCEP Scenarios

The timeline for RCEP was developed based on the various countries' expressed willingness to join the agreement. Bloc I (Hong Kong, Bangladesh, and Sri Lanka) and Bloc II (Nepal, Pakistan, and the rest of South Asia) are assumed to accede earlier as those countries have previously demonstrated a strong desire to join the RCEP - with Bloc I countries having already applied for membership. Bloc III (India), as the primary focus of the model, is predicted to accede later than the rest, but the economic likeliness and impact of its accession will likely be dependent on the WTO standings between countries in the region.

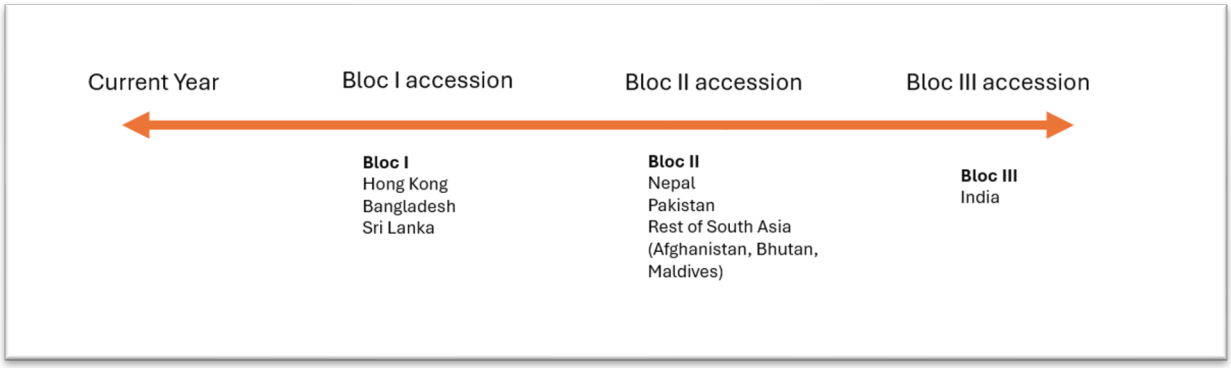

Figure 5 - RCEP accession modelling timeline

The impacts of India's accession to RCEP are modelled based on the assumption that Bloc I and II countries had acceded according to the timeline.

Next Steps

Future work will increase the complexity of the modelling scenarios and will adopt a dynamic modelling approach. Future work may focus on similar modelling cases, such as the South Asian region (excluding India) joining RCEP, or Indonesia joining OECD, with increasingly nuanced assumptions. This may include accounting for sectoral differences in trade liberalisation methods, or partial compliance with trade agreement requirements.

Future work may also expand the scope of the project to include non-tariff measures and may extend modelling scenarios to include other trade scenarios developed in response to emerging policy needs and through engagement with our partner organisations and governments. The scope of work may be

expanded to include trade in services and build in complex assumptions – for example, those that are country-specific or implemented over time. Future work will consider distributional modelling.

Future work will also consider extending our modelling capabilities to encompass distributional models, aiming to generate novel policy insights and more ambitious outputs. In the future, our work will be better at informing domestic policies (e.g. compensation and change management) necessary to ensure there is a broad sharing of the gains from trade and reinforce public support for greater trade integration where the evidence shows net benefits. Other scenarios of policy relevance may be added, based on feedback and engagement with policymakers.

Scenario - India joins RCEP

Key points

- This scenario models the effect of India joining the RCEP agreement that includes all current members as well as the members of the CPTPP and the South Asian countries such as Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka. United Kingdom was also included in the CPTPP members' group. All these members are assumed to have already removed tariffs on members, so the results show the isolated effect of India's entry.
- India increases both imports, due to lower costs for consumer goods and intermediate products, and exports, due to expanded access to the RCEP market. GDP increases slightly by 0.41 per cent. A negative Terms of Trade (-0.30 per cent) indicates the cost of importation will be high and might not be favourable to India's growth.
- In India's accession scenario, the real wages for both Indian skilled and unskilled labour are expected to be 0.69 per cent and 0.72 per cent annually, respectively. Indian export and import volumes are expected to grow at 6.16 per cent and 5.11per cent, respectively. India's investment is expected to rise by 0.91 per cent.
- Overall production increases by 11.08% from India's joining. Agricultural output, which is a sensitive sector, decreases slightly by 0.12 per cent.
- In most cases, there are only minor positive or negative impacts on GDP amongst RCEP members driven by India's joining. Nepal is the largest beneficiary with an increase in GDP of 3.60 per cent and higher exports of 17.64 per cent, while Pakistan and South Korea experience the largest decrease in GDP of -0.06 and -0.04 per cent, respectively, alongside lower exports and imports for South Korea while increase for Pakistan.

Indian trade context

Trade in India is administered by the Ministry of Commerce and Industry. Before the independence of India, the Government of India maintained semi-autonomous diplomatic relations. It had colonies, such as Aden Settlement, which sent and received full missions. After India gained independence from the United Kingdom in 1947, it soon joined Commonwealth of Nations and strongly supported independence movements in other colonies. During the cold war, India adopted a foreign policy of non-alignment with all major power blocs. However, the country developed close ties with the Soviet Union and received extensive military support from it.

Prior to the 1991 economic liberalisation, India was a relatively closed economy, with average tariffs exceeding 200 per cent and the extensive quantitative restrictions on imports. Foreign investment was strictly restricted to only allowing Indian ownership of businesses. Since liberalisation, India's economy has improved mainly due to increased foreign trade. Reforms in India in the 1990s and 2000s aimed to increase international competitiveness in various sectors, including auto components, telecommunications, software, pharmaceutical, biotechnology, research and development, and professional services. These reforms included reducing import tariffs, deregulating markets, and lowering taxes, which led to an increase in foreign investment and high economic growth. From 1992 to 2005, foreign investment increased by 316.9 per cent and India's GDP grew from USD266 billion in 1991 to USD 2.3 trillion in 2018.

Size of Indian Trade

India is the world's fastest emerging market and growing major economy with the world's largest population. If India were to join RCEP, the bloc will account for more than 32 per cent of the GDP of the world with 52 per cent of the world's population.

As per the financial year 2023-24, India has a total trade of USD1112.54 billion with USD437.11 billion exports and USD675.43 billion imports, comprising of a trade balance of USD238.32 billion. While in financial year 2022-23, India exported approximately USD450 billion merchandise and approximately USD323.00 billion of services exports. India's largest trade partners in financial year 2023-24 were as follows:

Table 1 - Table 1: India's largest trading partners (filtered list) in USD billions

Country	Exports	Imports	Total Trade	Trade Balance
European Union	75.93	59.38	135.31	16.55
ASEAN	41.21	79.67	120.88	-38.46
China	16.66	101.75	118.41	-85.09
US	77.52	40.77	118.29	36.74
UAE	35.63	48.02	83.65	-12.39
Russia	4.26	61.43	65.69	-57.17
Saudi Arabia	11.56	31.81	43.37	-20.25
Singapore	14.41	21.20	35.61	-6.79
Indonesia	5.99	23.41	29.40	-17.42
Hong Kong	8.24	20.45	28.69	-12.21
South Korea	6.42	21.14	27.56	-14.72
Netherlands	22.37	4.97	27.34	17.40
Australia	7.94	16.16	24.10	-8.20
Japan	5.16	17.70	22.86	-12.54
UK	12.92	8.42	21.34	4.50
Malaysia	7.26	12.75	20.01	-5.49
Thailand	5.04	9.91	14.95	-4.87
Vietnam	5.47	9.35	14.81	-3.86
Bangladesh	11.06	1.84	12.91	9.22
Bhutan	0.964	0.339	1.303	0.624
Afghanistan	0.355	0.642	0.997	-0.286
Nepal	7.041	0.831	7.8721	6.210
Pakistan	1.189	0.0029	1.192	1.186
Sri Lanka	4.117	1.424	5.541	2.693
Maldives	0.892	0.087	0.978	0.805
Remaining Countries	164.642	221.0241	385.67	-56.412

Country	Exports	Imports	Total Trade	Trade Balance
India's Total	437.11	675.43	1112.54	-238.32

Source: Export Import Data Bank, Ministry of Commerce and Industry, Government of India.

India's largest destinations for exports and imports in 2023-24 are presented in Figure 6. India's largest export destination is the United States (17.73 per cent) followed by United Arab Emirates (8.15 per cent), Netherlands (5.12 per cent), China (3.81per cent), and Singapore (3.3per cent). India's largest import destination is China (15.06per cent) whereas those from Russia, United Arab Emirates (UAE), the United States, and Saudi Arabia remain at 9.1 per cent, 7.11 per cent, 6.04 per cent, and 5per cent, respectively.

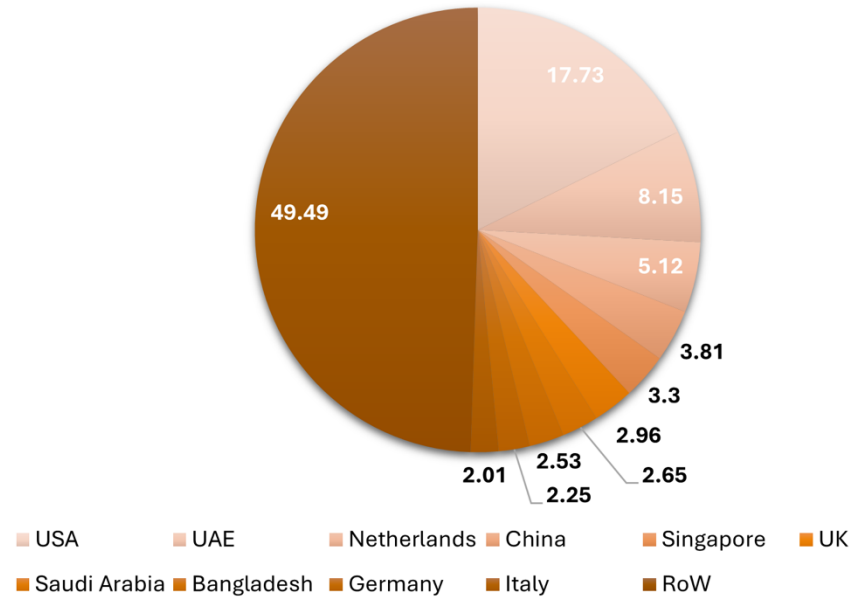

Figure 6 - India's 10 largest destinations for export in 2023-24.

Source: Ministry of Commerce and Industry, Government of India

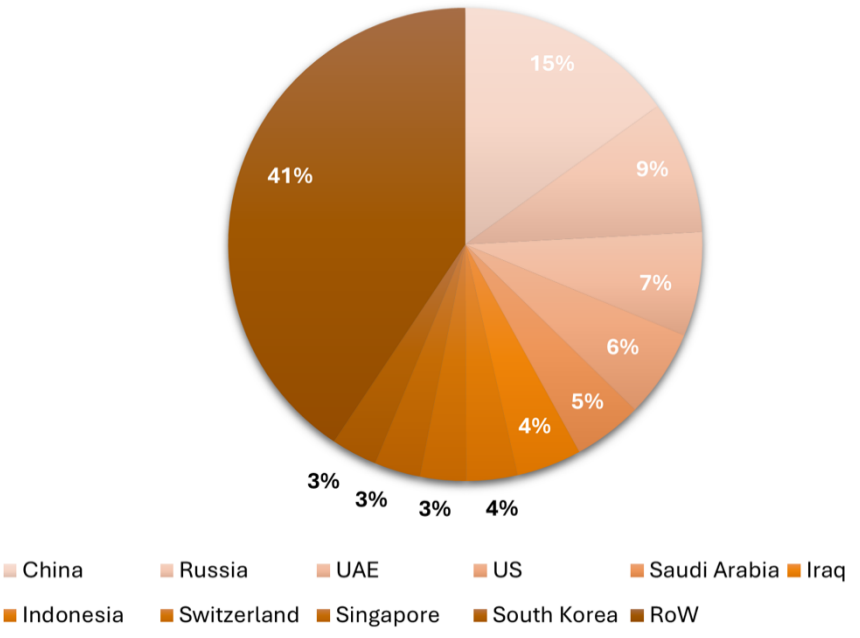

Figure 7 - India's 10 largest destinations for import in 2023-24

Source: Ministry of Commerce and Industry, Government of India

Indian Tariff Levels

Tariff levels imposed by India on the RCEP countries and those imposed by the RCEP countries on India vary across the board. Bilateral agreements certainly allow trading economies to lower the tariff levels. In India's case, the tariff levels remain high across all member countries, with Cambodia (19.19 per cent) facing notably high barriers while exporting to India, as shown in Figure 3.

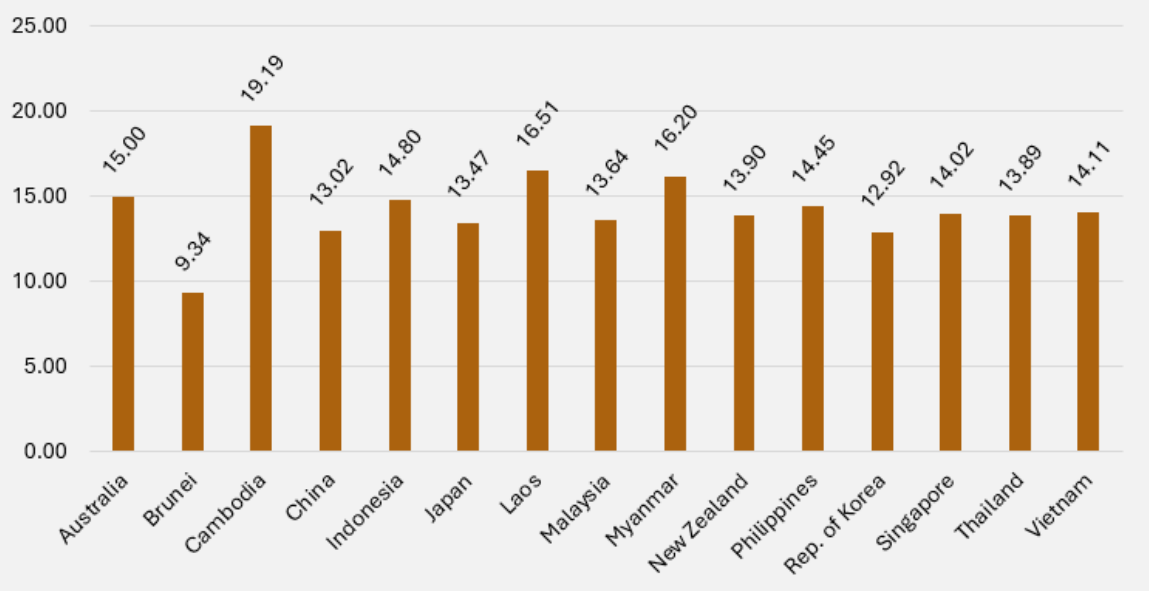

Figure 8 - Tariff imposed by India on RCEP countries.

Source: Author's compilation (WITS Database)

Table 2 - Indian Tariff levels

Economy	Tariffs imposed by India	Tariffs imposed on India
Australia (RCEP)	15.00	0.04
Cambodia (RCEP)	19.19	11.08
China (RCEP)	13.02	6.78
Hong Kong	12.23	0.00
Republic of Korea (RCEP)	12.92	10.66
Malaysia (RCEP)	13.64	5.18
Singapore (RCEP)	14.02	0.00
Vietnam (RCEP)	14.11	2.72
United States	13.98	3.54
European Union	--	3.14
Japan (RCEP)	13.47	0.51

Economy	Tariffs imposed by India	Tariffs imposed on India
Taiwan	11.98	5.08
Afghanistan	23.87	--
Bangladesh	15.24	--
Bhutan	17.48	--
Brunei (RCEP)	9.34	--
Myanmar (RCEP)	16.20	--
Sri Lanka	16.01	--
Indonesia (RCEP)	14.80	--
Laos (RCEP)	16.51	--
Maldives	16.93	--
Nepal	17.10	--
New Zealand (RCEP)	13.90	--
Pakistan	17.89	--
Philippines (RCEP)	14.45	--
Thailand (RCEP)	13.89	--
United Kingdom	13.96	--

Source: *World Bank WITS Database*

Scenario overview

This scenario models the RCEP comprising of all current members, and assumes that South Asian countries such as Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka have already joined the agreement. The simulation includes the existing CPTPP members with United Kingdom being part of the CPTPP group.

An assumption of the model is that tariffs between all RCEP members, including the projected new entrants, have been reduced to zero. This model therefore isolates the effect of India's entrance into the RCEP agreement.

The model also assumes that tariffs are removed between all CPTPP members, so India has zero tariffs with countries who are members of both the RCEP and the CPTPP (but not with countries who are members of the CPTPP only, such as Canada, Chile, Mexico, Peru, and United Kingdom as a baseline of the simulation). The simulation, therefore, shows the effects of bilateral removal of tariffs between India and members of only the RCEP.

The model of India's accession to the RCEP is independent of our model on the CPTPP, so in this simulation, the CPTPP does not include the projected entrants in the 'US joins the CPTPP', 'China joins the CPTPP', and 'Indonesia joins the CPTPP' scenarios.

Local Significance

India is a labour-intensive economy. India's joining of the RCEP holds the potential to benefit both skilled and unskilled workers through an increase in real income. This rise in real income could contribute to the enhancement of human capital formation, leading to acceleration of the share of

manufacturing sector in the GDP. As merchandise exports would strengthen, India could likely experience an influx of the foreign exchange which could improve the current account deficit.

This improvement would help India reduce the fiscal deficit and strengthen the financial account outflows (lending to foreign countries). However, imports would also increase and, therefore, the country should maintain a balance between exports and imports to ensure favourable terms of trade (ToT) which can be achieved by effective trade and fiscal policies.

Global Significance

India's joining of the RCEP would pave the way for the RCEP member countries to improve access to Indian markets for goods and services. At the global level, enhancement of global value chains among the member nations could lead to a rise in exports. Foreign investments in India would likely increase employment opportunities, infrastructural development, technical know-how spillovers, and research and development that would accelerate the growth rate of the economy. This regional cooperation would act as a buffer through the strong integration between the member countries such that any economic upheaval by non-member countries would not distort the terms of trade (ToT) of the member nations.

Simulation results

This simulation evaluates the impact on trade between India and RCEP members by uniformly removing all import tariffs. This simulation also considers the scenario where the South Asian countries join RCEP before India.

Impacts on India

Consumers and producers now enjoy lower import prices for final and intermediate goods produced in RCEP member economies, leading to an increase in imports by 5.11 per cent. Cheaper imports benefit consumers through lower prices for final goods and benefit producers through lower prices for inputs that will then be used in production.

Producers in the India benefit from greater access to the RCEP market after the removal of tariffs, leading to an increase in India's exports by 6.16 per cent.

The increase in exports will mean that India needs more labour and capital. In our model, aggregate employment is assumed to be fixed which means that the increased demand for labour pushes up real wages. Skilled and unskilled wages increase by 0.69 per cent and 0.72 per cent, respectively.

With cheaper wages and lower prices for goods, India increases its domestic consumption, leading to greater confidence in the economy which incentivises an increase in private investment. As a result of these effects, total real GDP of India increases by 0.41 per cent.

Considering the rate of return of capital to be zero, implying productivity and profitability of capital investments in India are non-existent viz., indication of a lack of productivity and profitability of capital employed. Further implying that businesses are unable to generate profits or operate efficiently, thereby reflecting a decline in ToT. As a result, India might be forced to import more at a high cost than what it can export. Also, a negative GDP deflator (-0.37 per cent) leads to the lowering of nominal GDP indicating the slowed pace of the economic growth.

The ToT for India is negative (-0.30 per cent) under our simulation. The import cost might be higher than usual with respect to what India might strategically plan with their exportation policy.

Equivalent Variation (EV, USD$7247.35 million) shows the increase in consumer welfare as the negative GDP deflator indicates the decrease in the nominal income (driven by a decline in domestic price level), suggesting an increase in real income of the consumer and the purchasing power of the consumer. Despite the increase in consumer real income, the cost of importation is more highlighted by the negative ToT. However, the economy is in a stable price equilibrium as it is exporting more and

importing comparatively less. The trade surplus indicates the sufficiency of supply in India driven by private investment which is expected to increase by 0.91 per cent.

Table 3 - Aggregate impacts of India and selected RCEP members removing bilateral import tariffs

Domain	Measure	India	Australia	China	Indonesia
Macroeconomy	Real GDP	0.41	0.07	0.06	0.01
	Domestic Consumption	0.28	0.15	0.07	0.04
	Private Investment	0.91	0.15	0.08	0.02
	Government Expenditure	0.15	0.12	0.07	0.06
Trade and Capital Flows	Export volumes	6.16	0.12	0.28	0.27
	Import volumes	5.11	0.46	0.41	0.42
	Terms of Trade	-0.30	0.35	0.12	0.23
	Capital Used	0.92	0.16	0.09	0.03
	Rate of Return of Capital	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (unskilled)	0.72	0.10	0.07	0.03
	Real Wages (Skilled)	0.69	0.10	0.07	-0.10
	Equivalent Variation (USD $ Mn)	7247.35	1787.63	8510.68	542.00
	GDP Price Deflator	-0.37	0.29	0.15	0.29

Source: Author's simulation results.

Impacts on other regions

Our model shows that India joining RCEP would increase imports into Australia, China and Indonesia, leading to higher consumer welfare. This reflects the greater dependency of these economies on Indian imports leading to higher demand of the merchandised goods and services. There is a marginal increase in these countries' private investment (0.15per cent, 0.08per cent and 0.02 per cent respectively) leading to the marginal increase in the real wages of the skilled and unskilled labour. India's domestic production processes are operating at a higher cost relative to other economies, leading to more importation of merchandised goods and services, signified by the lower increase in the export volumes than the import volumes.

The impact on South Asian economies (aggregated) reflects the increase in real GDP by 1.14 per cent while the GDP price deflator remains negative at -1.8 per cent suggesting a slowdown in economic growth throughout the subcontinent region as calculated in current prices. The ToT, being negative (-121.24 per cent), signifies higher merchandise exports than imports as South Asian goods and services become cheaper in the world market.

Looking specifically at Nepal, a low-income country in South Asian region. Its economy is based on subsistence agriculture. Remittances from abroad constitute a significant source of income for households. According to the World Bank (2017), the country shows high levels of poverty, with about 25 per cent live below the poverty line. 55 per cent of the population live on less than $1.25 per day. The trade policy overview by the World Trade Organization (2018) provides that Nepal's trade policy aims to promote trade and business, increase exports, and reduce the trade deficit. The policy significantly aims to strengthen the relationship between domestic and foreign trade, and to increase income and employment opportunities. Nepal's trade liberalization policies are based on the idea that liberalization will improve industrial efficiency and reduce costs. This will improve the competitiveness of Nepal's industrial goods and stimulate domestic demand. The policy aims to reward major exporters and importers for their promotion of export trade. Despite their sustainable development approach, Nepal does not allow the import of used items, except for refurbished aircrafts. In our simulation, it is assumed that Nepal is already within RCEP prior to India's joining. India's accession produces notable results for Nepal, with annual growth rising to 3.6 per cent with an astounding increase in export and import volumes, and a reduced trade deficit. It also leads to an increased current account surplus, leading to accretion of foreign exchange reserves.

In our analysis of India's joining RCEP, there are some RCEP member countries that are likely to face economic challenges (such as slow economic growth, depreciation, slow consumption demand, etc.) through trade diversion as reflected by equivalent variations (EV). Japan, Pakistan, South Korea, Taiwan, Singapore, Myanmar, Rest of South Asia, and Cambodia are the economies that might face small negative impacts from India's accession to the RCEP. This could arise from the fall in both export and import volumes along with reduced private investment.

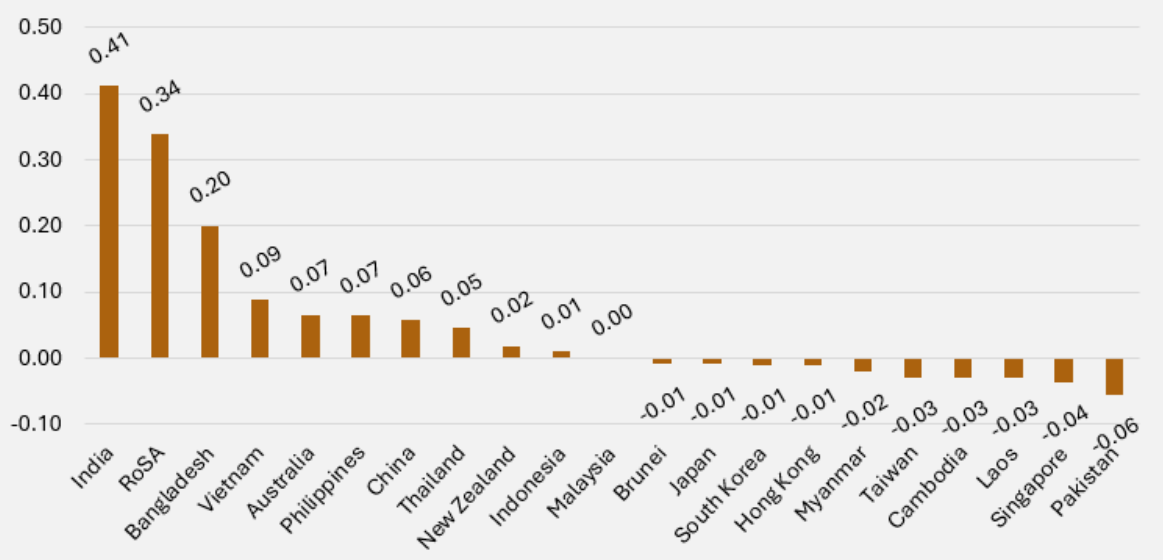

Figure 9 - Change in Real GDP resulting from India joining RCEP (author's simulation).

Impacts on sectors

Our analysis indicated several sensitive sectors within the Indian economy. In our modelling of India's joining RCEP, production in most sectors increases, with notable exceptions in Utilities and Construction (–0.95 per cent), Meat and Livestock (–0.56 per cent), and Grains and Crops (-0.12 per cent). By contrast, sizeable increases in production were witnessed by some sectors, such as Coal and Other Extraction (1.32 per cent), Transportation and Communication (1.48 per cent), and Other Services (2.10 per cent).

India joining RCEP would increase the net export of the country as the net change in output is positive. All the sectors other than Utilities and Construction, Meat and Livestock, along with Grains and Crops, increases its output. The key sensitive sectors would therefore be these three sectors with declining

outputs. These sectors account for agricultural activities, and utilities and construction activities where two-thirds of the population is engaged. The agricultural sector is the most important sector of the Indian economy accounting for about 38 per cent that includes the Grains and Crops, and Meat and Livestock sectors (Union Budget, 2018). Though, India offers a strong policy structure to absorb any shock vis-à-vis to these three sensitive sectors, such as through the Production Linked Incentive Scheme (PLI), the Export-Import Scheme (EXIM), the Interest Equalisation Scheme (IES), and other related to increasing and stabilizing the trade policy of the country.

It is evident from Figure 10 that the majority of the sectoral outputs are positive with production surplus, and, therefore, export in these sectors will tend to increase. On the contrary, other sector showing a decline need to increase their production through various export-oriented schemes and hence, the overall net export will continue to increase if India joins RCEP.

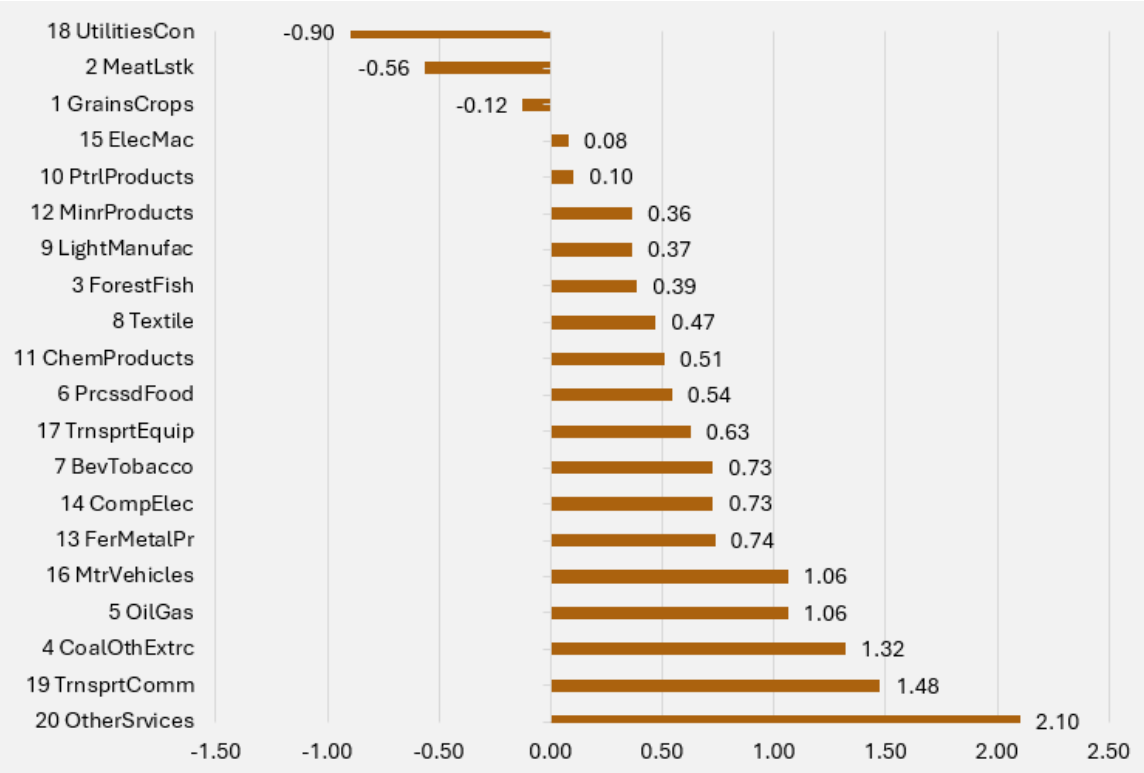

Figure 10 - Change in Output by sectors (author's simulation result)

Insights for further exploration

This tranche of modelling assumed a reduction in all tariffs between India and RCEP members, but future tranches of work will take a more nuanced approach, acknowledging the reality that some sectors will likely retain some tariffs due to their political sensitivities. Future work will also seek to model the effects of reductions in trade barriers besides the tariffs.

Subsequent models will seek to study the implications of a shift in the Indian trade policy. Incorporating changes in trade policies ranging from liberal to protectionist measures, would facilitate the development of a more global-local-global (GLG) approach.

Further, as South Asian economies continue their impressive growth path, their significance in these models will be reevaluated.

Appendix – India

Table 4 - Aggregate impacts of India and selected RCEP members removing bilateral import tariffs

Domain	Measure	AUS	BRU	JPN	MYS	NZL	SIN	VNM

Macroeconomy	Real GDP	0.05	-0.01	-0.01	0.03	0.01	-0.04	0.09
	Domestic Consumption	0.36	-0.02	-0.02	0.01	0.08	-0.07	-0.08
	Private Investment	0.16	-0.02	-0.03	-0.03	0.02	-0.08	0.15
	Government Expenditure	0.36	-0.02	-0.02	0.02	0.08	-0.08	-0.06
Trade and Capital Flows	Export volumes	0.08	0.01	0.01	0.06	0.03	-0.07	0.20
	Import volumes	0.47	-0.01	-0.04	0.04	0.06	-0.09	0.17
	Terms of Trade	0.36	-0.01	-0.02	-0.001	0.03	-0.016	-0.03
	Capital Used	0.11	-0.01	-0.01	0.03	0.03	-0.07	0.17
	Rate of Return of Capital	0.05	-0.003	-0.01	-0.04	0.01	-0.001	-0.01
Price and Economic Welfare	Real Wages (Skilled)	0.09	-0.01	-0.01	0.03	0.02	-0.04	0.13
	Equivalent Variation ($US Mn)	1617.1	-0.90	-326.5	112.90	47.52	-148.0	87.31
	GDP Price Deflator	0.31	-0.01	-0.01	-0.02	0.06	-0.04	-0.16

Source: Author's simulation results.

Table 5- Aggregate impacts of India and selected RCEP members removing bilateral import tariffs

Domain	Measure	CHN	KOR	TWN	IDN	PHI	IND	THA	HKG
Macroeconomy	Real GDP	0.05	-0.004	-0.01	-0.11	0.04	0.36	0.04	0.01
	Domestic Consumption	0.20	-0.04	-0.07	0.26	-0.02	-0.06	-0.02	0.04
	Private Investment	0.08	-0.03	-0.06	-0.09	0.05	0.85	0.06	-0.02
	Government Expenditure	0.21	-0.04	-0.07	0.21	-0.02	0.03	-0.01	0.04
Trade and Capital Flows	Export volumes	0.27	-0.01	-0.03	0.09	0.14	6.07	0.11	0.03
	Import volumes	0.41	-0.04	-0.07	0.34	0.07	5.06	0.10	0.03
	Terms of Trade	0.12	-0.03	-0.03	0.26	-0.06	-0.28	-0.04	0.01
	Capital Used	0.08	-0.01	-0.03	-0.18	0.04	0.79	0.06	0.01

	Rate of Return of Capital	0.01	-0.01	-0.02	0.12	0.02	0.10	0.01	-0.02
Price and Economic Welfare	Real Wages (unskilled)	0.06	-0.02	-0.03	-0.06	0.03	0.67	0.04	0.01
	Real Wages (Skilled)	0.06	-0.02	-0.03	-0.17	0.03	0.65	0.04	0.01
	Equivalent Variation ($US Mn)	8329.7	-195.6	-150.7	-418.0	30.94	6108.9	76.47	48.30
	GDP Price Deflator	0.15	-0.03	-0.06	0.33	-0.06	-0.35	-0.05	0.03

Source: Author's simulation results.

Table 6 - Aggregate impacts of India and selected RCEP members removing bilateral import tariffs

Domain	Measure	CAM	LAO	MYN	BAN	NPL	PAK	SLA	RoSA
Macroeconomy	Real GDP	-0.01	-0.05	0.04	0.18	3.60	-0.01	1.09	0.29
	Domestic Consumption	-0.11	-0.02	-0.21	-0.15	-1.86	-0.13	-0.04	-0.73
	Private Investment	-0.07	-0.09	0.03	0.28	6.78	-0.06	1.26	0.61
	Government Expenditure	-0.12	-0.04	-0.20	-0.12	-1.59	-0.14	0.23	-0.70
Trade and Capital Flows	Export volumes	-0.01	-0.06	-0.01	1.38	17.64	0.38	2.72	0.80
	Import volumes	-0.06	-0.07	-0.12	0.98	5.38	0.02	1.83	-0.10
	Terms of Trade	-0.05	0.01	-0.17	-0.32	-4.05	-0.14	-0.60	-0.45
	Capital Used	-0.05	-0.11	0.08	0.28	6.90	-0.03	1.38	0.45
	Rate of Return of Capital	-0.02	0.03	-0.12	0.03	-0.23	-0.03	-0.20	0.12
Price and Economic Welfare	Real Wages (unskilled)	-0.02	-0.04	0.02	0.25	4.67	0.01	1.63	0.11
	Real Wages (Skilled)	-0.01	-0.08	0.10	0.24	5.81	-0.02	1.25	0.38
	Equivalent Variation ($US Mn)	-13.32	-5.95	-21.11	265.63	431.11	-120.38	712.89	-35.1
	GDP Price Deflator	-0.10	0.01	-0.23	-0.31	-4.91	-0.12	-1.01	-0.95

Source: Author's simulation results

Indonesia joins CPTPP

Key points

- Indonesia has officially begun the process of joining CPTPP in 2024.
- Indonesia's CPTPP membership is projected to boost real GDP by 0.097 per cent, driven by higher domestic consumption and private investment.
- Both exports and imports are expected to rise, improving consumer surplus and access to higher-quality goods.
- Membership could help tackle middle-income stagnation by boosting medium-tech manufacturing and motor vehicle jobs, diversifying Indonesia's industrial base and aiding the recovery of its shrinking middle class, down from 23 per cent in 2018 to 17 per cent in 2023.
- Joining the CPTPP would increase Indonesia's role in regional supply chains — especially in electric vehicles — by leveraging its nickel reserves to attract investment in high-growth sectors.
- CPTPP integration would attract foreign investment in medium- and high-tech sectors, driving technology transfer, productivity, and skill development—needed for advancing value chains and achieving 8 per cent growth targets.
- This membership, with its high standards, would drive needed reforms in Indonesia — revitalising manufacturing, reducing inequality, and strengthening domestic consumption — key for sustained economic growth.

Indonesian trade context

Size of Indonesian Trade

Indonesia, Southeast Asia's largest economy, had a total trade volume of approximately US$480 billion in 2023. Key exports include coal, palm oil and metals, while imports mainly consist of machinery, chemicals and raw materials for manufacturing.

Indonesia's participation in the CPTPP would expand its trade footprint, increasing the agreement's share of global trade. About 30 per cent of Indonesia's exports and imports involve CPTPP members.

CPTPP members' share in goods trade with Indonesia shows Japan as the largest partner, with exports at 8.51 per cent and imports at 7.23 per cent. Malaysia and Singapore also maintain significant trade volumes. The diversity of trade with other CPTPP members — from Australia's 4.15 per cent share in imports to smaller partners like Brunei and Peru — highlights Indonesia's varied trade engagements within the CPTPP.

Table 7 - CPTPP members' share in goods trade with Indonesia

Economy	Exports from Indonesia	Imports to Indonesia
Australia	1.19	4.15
Brunei	0.08	0.02
Canada	0.44	1.26
Chile	0.12	0.10
Japan	8.51	7.23
Malaysia	5.29	5.25

Mexico	0.58	0.14
New Zealand	0.25	0.59
Peru	0.15	0.05
Singapore	4.93	8.17
Vietnam	2.84	2.03
South Korea	4.39	4.94
Philippines	4.42	0.63
Thailand	2.80	4.63
United Kingdom	0.57	0.44
Rest of the World	63.44	60.37
Total	100	100

Source: World Bank WITS Database

Indonesian Tariff Levels

Tariffs imposed between Indonesia and CPTPP members in 2017 — the base year of the GTAP model — may differ from the actual tariffs in the database sourced from the World Bank WITS Database and show varying levels of protection.

Indonesia generally maintains relatively low tariffs with several CPTPP members, consistent with its trade engagements, while higher tariffs are observed with economies like Canada, Mexico and the United Kingdom, which are not part of RCEP. Bilateral tariffs with RCEP members — like Malaysia and Vietnam — are minimal, indicating strong trade ties within the region.

Tariffs imposed by Indonesia on Australia and New Zealand are 1.13 per cent and 1.53 per cent respectively, while the tariffs imposed on Indonesia by these countries are even lower, at 0.15 per cent and 0.81 per cent. Mexico and the United Kingdom impose tariffs of 9.60 per cent and 3.41 per cent on Indonesia, with Indonesia reciprocating with tariffs of 5.48 per cent and 5.92 per cent respectively.

Table 8 - Average tariff rates imposed between China and CPTPP members (2017)

Economy	Tariffs imposed by Indonesia	Tariffs imposed on Indonesia
Australia	1.13	0.15
Brunei	0	0
Canada	1.88	5.72
Chile	2.90	6.00
Japan	1.83	0.36
Malaysia	0.42	–
Mexico	5.48	9.60
New Zealand	1.53	0.81
Peru	3.72	3.31

Singapore	0.62	0
Vietnam	0.02	0.46
South Korea	0.95	0.54
Philippines	0.19	0
Thailand	1.21	–
United Kingdom	5.92	3.41

Source: World Bank WITS Database

Scenario overview

This scenario models a CPTPP comprising all current members and assumes South Korea joins first, followed by the Philippines, Thailand, and Indonesia joining simultaneously. Tariffs among CPTPP members, including projected new entrants, have been reduced to zero prior to the simulation. No assumptions are made about future participation of China or the United States in CPTPP. This modelling, therefore, isolates the effect of Indonesia's entrance into the agreement.

Under the current RCEP agreements, the model also assumes zero tariffs between all RCEP members; so Indonesia has zero tariffs with Australia, Brunei, Cambodia, China, Japan, South Korea, Laos, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand and Vietnam before the simulation. The simulation, therefore, shows the effects of bilateral tariff removal between Indonesia and Canada, Chile, Mexico, Peru and the United Kingdom.

CPTPP modelling is independent of work on RCEP, so RCEP excludes the projected entrants in the 'India joins RCEP' scenario.

Simulation results

This simulation evaluates the impact on Indonesia–CPTPP trade by examining the unilateral removal of all import tariffs. Future tranches of the study will explore a more targeted application of tariffs and the liberalisation of non-tariff measures.

Impacts on Indonesia

Indonesia's trade policy has long swung between openness and protectionism, with recent trends leaning towards the latter. Nationalism is a significant driver, particularly in resource management. The nickel export ban, which led to a WTO dispute with the European Union, exemplifies this approach. From Indonesia's perspective, such measures are often framed in anti-colonial or anti-imperialist terms, highlighting its resource nationalism.

Indonesia's industrial policy is tightly linked to its trade policy, reflecting its ambition to reindustrialise. Recent measures such as *downstreaming* strategies and local content requirements illustrate this alignment. The renaming of the Ministry of Investment to the *Ministry of Investment and Downstreaming* signals the likely direction of policy over the next five years.

Against this backdrop, Indonesia's request to join the CPTPP was unexpected. Yet it signals a positive step towards domestic reform and expanded market access, particularly in underexplored regions like Latin America. Markets in Mexico and Peru, for instance, offer new opportunities. The CPTPP's high standards on labour and environmental policies could push Indonesia towards broader economic reforms. At the same time, Indonesia's ongoing OECD accession efforts highlight its commitment to structural reform and market openness.

The modelling shows mixed but broadly positive results for Indonesia in joining CPTPP. Real GDP is projected to increase by 0.1 per cent, largely due to a 0.17 per cent rise in private investment. Imports are expected to grow faster (0.40per cent) than exports (0.27 per cent), suggesting potential trade

imbalances. On wages, the data is encouraging both skilled and unskilled workers are projected to see a 0.12 per cent rise in real wages, with no significant differences in growth between the two groups.

Indonesia's CPTPP membership presents opportunities to attract private investment, expand market access and support wage growth. But meeting the agreement's high standards while managing trade imbalances will require sustained policy effort.

Table 9 12 - Aggregate impacts of Indonesia and selected countries removing bilateral import tariffs

Domain	Measure	IDN	CHN	AUS	JPN	CAN	MEX	US
Macroeconomy	Real GDP	0.10	-0.00	0.00	-0.00	0.02	0.13	-0.00
	Domestic Consumption	0.10	-0.00	0.00	-0.01	0.03	0.11	-0.00
	Private Investment	0.17	-0.00	0.01	-0.01	0.04	0.17	-0.00
	Government Spending	0.08	-0.00	0.00	-0.01	0.01	0.08	-0.00
Trade and Capital Flows	Export Volumes	0.27	-0.01	-0.01	-0.02	0.04	0.32	-0.03
	Import Volumes	0.40	-0.02	-0.00	-0.04	0.08	0.29	-0.03
	Terms of Trade	0.09	-0.01	0.00	-0.02	0.04	-0.04	-0.01
Price and Economic Welfare	Real Wages (Skilled)	0.12	-0.01	0.00	-0.01	0.04	0.12	-0.00
	Real Wages (Unskilled)	0.12	-0.01	0.00	-0.01	0.07	0.14	-0.00
	Equivalent Variation (US$ millions)	721.40	-351.08	23.37	-277.54	333.08	1039.86	-391.09
	GDP Price Deflator	0.14	-0.01	0.01	-0.01	0.04	-0.04	-0.01

Impacts on other regions

Indonesia's entry into the CPTPP would create varied economic impacts for both existing members and non-members. This analysis excludes the United States and China as CPTPP members, reflecting a scenario where these major economies join the agreement in subsequent phases.

For existing CPTPP members, outcomes would depend on their existing trade relationships with Indonesia. Canada and Mexico are expected to benefit the most, aligning with Indonesia's strategy to expand market access in North and Latin America. Canada could see stronger growth in trade volumes, investment and wages, while Mexico's workforce would also experience notable gains, supported by a 0.32 per cent increase in trade volumes and a 0.29 per cent rise in private investment. Australia, as a fellow member, would see modest gains due to its balanced trade relationship with Indonesia.

Japan may face economic losses despite CPTPP membership. Existing FTAs covering trade with Indonesia could drive declines in GDP, consumption and trade by up to 0.02 per cent due to increased competition within the bloc.

Non-CPTPP members, particularly China and the United States, would experience negative spillovers. China would face declines in GDP, trade and wages due to trade diversion effects. The United States, excluded from this phase of the agreement, would see lower trade volumes as benefits shift towards CPTPP members.

These outcomes highlight the potential for Indonesia's membership to enhance trade and investment flows among select members while creating competitive pressures for others. The model shows non-members like China and the United States must consider strategies to mitigate losses as the CPTPP evolves.

Impacts on sectors

CPTPP membership offers Indonesia a way to revitalise its manufacturing sectors, particularly labour-intensive industries like footwear, textiles and chemicals. These industries have faced mounting challenges, including rising competition and labour costs which have led to significant layoffs. Simultaneously, the government's emphasis on *downstreaming* strategies — capital-intensive with limited job creation — has highlighted trade-offs in its industrial policy.

Indonesia's labour force, largely composed of workers with primary or junior high school education, is well-suited to labour-intensive sectors like footwear and apparel. These industries are resilient, export-oriented and benefit from stable global demand.

But an underdeveloped industrial ecosystem and volatile trade policies continue to impede growth. CPTPP could address these barriers by fostering policy stability and encouraging investment to build a stronger industrial base.

Membership in CPTPP could also help the government create formal, secure and high-quality jobs for the middle class. Growth in medium-tech manufacturing, light manufacturing and motor vehicles could help diversify Indonesia's economy beyond natural resource reliance. For instance, light manufacturing is projected to grow by 0.93 per cent, showcasing its potential to absorb labour and drive inclusive economic growth.

The motor vehicle sector — especially electric vehicles (EVs) — represents another significant opportunity. Indonesia's rich nickel reserves position it as a key player in the global EV supply chain. CPTPP standards could streamline customs processes, regulatory alignment and infrastructure upgrades, enabling Indonesia to scale up production and establish itself as a leading motor vehicle exporter.

Foreign investment in medium and high-tech sectors will be essential to reversing Indonesia's shrinking middle class, which fell from 23 per cent of the population in 2018 to 17 per cent in 2023 due to COVID-19 and geopolitical disruptions. This contraction has led to stagnating wages, rising inequality and constrained domestic consumption, heightening risks of social instability. CPTPP could attract the investment needed to expand Indonesia's manufacturing base and reverse middle-class decline.

The textiles and apparel sector highlights this potential, with CPTPP membership projected to boost production by 2.55 per cent. By enabling growth in labour-intensive industries and fostering integration into regional value chains, CPTPP could play a key role in realising Indonesia's 2045 vision of becoming an advanced economy.

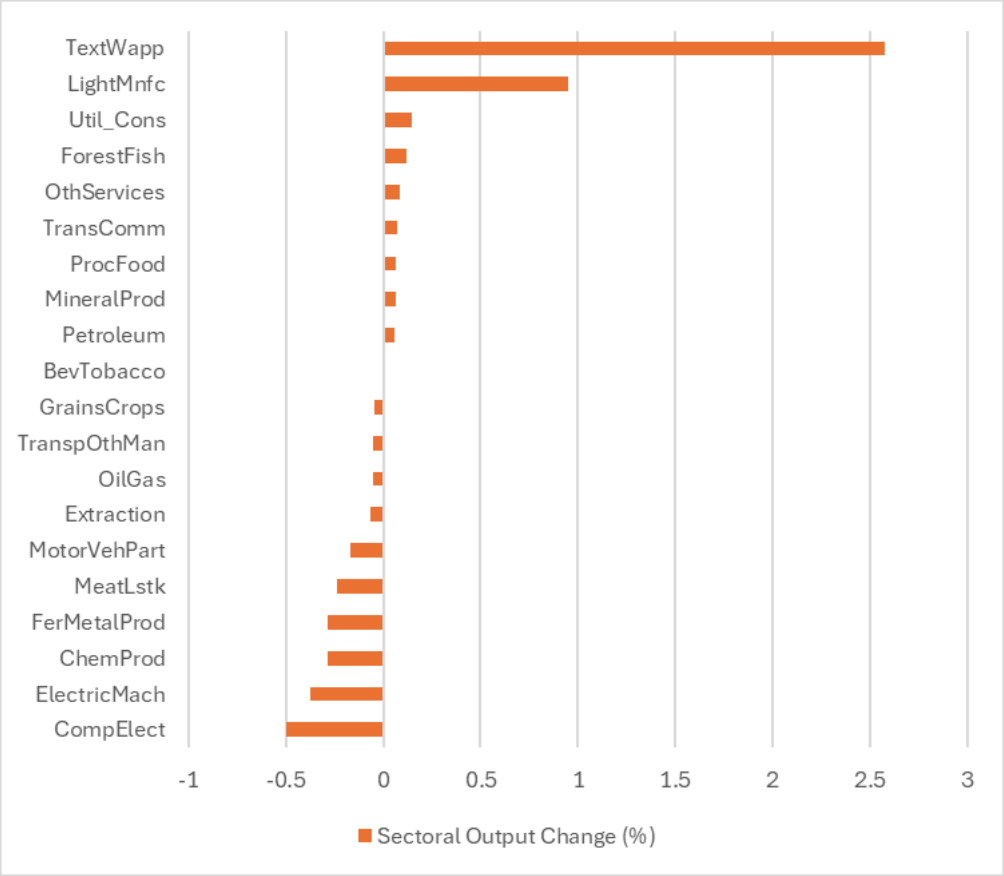

Figure 11- Change in output by sector

Insights for further exploration

In 2016–17, the Indonesian government conducted a cost-benefit analysis of joining the (former) Trans-Pacific Partnership (TPP). The analysis suggested potential benefits, largely from enhanced market access if the United States joined. But this required revising approximately seven laws and 278 ministerial decrees. Today, the number of laws requiring amendment is estimated to exceed 20. Achieving such reforms is uncertain, but the government's interest in domestic economic reform is a positive signal.

Flexibility within trade agreements like the CPTPP can ease concerns about legal and regulatory changes. While the CPTPP emphasises maintaining competition, member countries like Vietnam have secured specific exemptions.

Sensitivity analysis — including zero-tariff scenarios and the impact on state-owned enterprises (SOEs) — can guide policymakers in assessing industry-specific outcomes. Identifying sectors where tariffs should be retained could help balance economic impacts and provide a pragmatic path for reform.

CPTPP discussions align closely with Indonesia's recent OECD accession efforts. Comparing the OECD accession paper with CPTPP chapters reveals significant overlap, suggesting potential synergies. Indonesia's CPTPP membership might even hinge on its OECD accession, offering an opportunity to bundle reforms efficiently. Exploring a scenario where OECD accession precedes CPTPP membership could provide valuable insights.

The CPTPP's non-tariff provisions — such as SOE regulation, labour and environmental standards — require deeper analysis. These features distinguish the CPTPP from other agreements like RCEP and add complexity to the economic modelling.

Incorporating trade balance data — often absent in models like GTAP — could address concerns about current account deficits and their impact on financial accounts. While governments are often advised to tolerate moderate current account deficits, providing this data would enhance understanding of the broader economic impacts.

CPTPP's greatest value lies in the domestic reforms it necessitates. The real benefits emerge from what Indonesia 'gives up' in negotiations and the behind-the-border measures implemented. Reforms can improve competitiveness, attract FDI and drive productivity.

Policymakers often frame trade agreements as job creators through export growth. Yet, gains come from reallocating resources to productive sectors, even as uncompetitive sectors decline. Managing these trade-offs requires evidence-based policymaking, adjustment packages for those adversely affected and a strong narrative to sustain reform momentum.

Indonesia has lagged in attracting FDI, particularly in sectors like semiconductors and global value chains, falling behind Malaysia, Vietnam and even the Philippines. CPTPP-driven reforms could bolster Indonesia's FDI attractiveness, improving its position in global markets. Including financial account data in the analysis could clarify FDI's role in balancing external accounts and strengthen the case for reform.

Finally, services trade — an essential component of Indonesia's economic strategy — remains underexplored. Future phases of this project should integrate services trade into the broader reform agenda, ensuring a comprehensive approach to maximising CPTPP benefits.

China joins CPTPP

Key points

- This scenario models the effect of China joining a CPTPP agreement that includes all current members as well as the United Kingdom, South Korea, Indonesia, the Philippines and Thailand. All these members are assumed to have already removed tariffs, so the results show the isolated effect of China's entry. In this scenario, the United States is not a member.
- The entrance of China into CPTPP would significantly expand the agreement, increasing its share of global output from 18.5 per cent to 35.4 per cent.
- China increases both imports, due to lower costs for consumer goods and intermediate products, and exports, due to expanded access to the CPTPP market. GDP increases slightly by 0.11 per cent.
- In most cases, there are only minor positive or negative impacts on GDP amongst CPTPP members driven by China's joining. Mexico is the largest beneficiary, with GDP rising 0.40 per cent and higher exports of 1.15 per cent, while Vietnam shows the largest decrease in GDP of 0.1 per cent alongside lower exports and imports.
- Outside CPTPP, the United States shows a marginal GDP decline of 0.01 per cent, with export volumes 0.12 per cent lower.
- In most sectors, production increases from China's joining. But agricultural output — a sensitive sector — decreases slightly.

China trade context

Size of China Trade Today

China is the world's second–largest economy, accounting for about 17 per cent of global output and 11.5 per cent of global exports. Its entrance into the projection of CPTPP would be a significant expansion of the agreement — increasing its share of global GDP from 18.5 per cent to 35.4 per cent. China is a member of RCEP, which means it is already in a free-trade agreement with 11 members of the projected CPTPP.

Just under one-third (30.78 per cent) of Chinese exports are to economies in the projected CPTPP and about two-fifths (41.52 per cent) of Chinese imports come from these economies. Of China's top 10 largest individual trading partners, five are in the projected CPTPP (Japan, South Korea, Vietnam, Australia and Malaysia).

Table 10 - CPTPP members' share in goods trade with China

Economy	Exports from China	Imports to China
Australia	1.83	5.15
Brunei	0.03	0.02
Canada	1.39	1.11
Chile	0.64	1.15
Japan	6.06	8.99
Malaysia	1.84	2.95
Mexico	1.59	0.64
New Zealand	0.23	0.51

Peru	0.31	0.72
Singapore	1.99	1.86
Vietnam	3.16	2.73
South Korea	4.54	9.63
Indonesia	1.54	1.55
Philippines	1.42	1.04
Thailand	1.70	2.26
United Kingdom	2.51	1.21
Rest of the World	69.22	58.48
Total	100	100

Source: World Bank WITS Database

China Tariff Levels

Tariff levels between China and CPTPP economies vary across members.

The tariffs below, sourced from the World Bank WITS Database indicate protection levels between China and CPTPP members in 2017 — the GTAP model's base year — and may differ from the actual tariffs in the database. Generally, bilateral tariffs are quite low for most CPTPP members , reflecting their shared RCEP membership. Some economies which not in RCEP, such as Canada, Mexico and the United Kingdom, levy higher tariffs on China.

Tariffs between China and RCEP members have been reduced to zero prior to the simulation of China acceding to the CPTPP.

Table 11 - Average tariff rates imposed between China and CPTPP members (2017)

Economy	Tariffs imposed by China	Tariffs imposed on China
Australia	1.31	0.05
Brunei	0	0.07
Canada	5.57	3.35
Chile	0.03	0.22
Japan	6.12	2.52
Malaysia	0.70	–
Mexico	4.09	3.01
New Zealand	1.06	8.87
Peru	0.06	1.47
Singapore	0.22	0
Vietnam	0.48	2.03
South Korea	3.47	4.41

Indonesia	1.68	0.87
Philippines	0.09	0.87
Thailand	2.13	–
United Kingdom	9.29	3.53

Source: World Bank WITS Database

Scenario overview

This scenario models a CPTPP comprised of all current members and assumes that South Korea, Indonesia, the Philippines and Thailand have joined the agreement. In the scenario of China joining the CPTPP, the United States does not enter the agreement.

Tariffs between all CPTPP members, including the projected new entrants, have been reduced to zero prior to the simulation. This modelling therefore isolates the effect of China's entrance into the agreement.

The model also includes tariff removals between all RCEP members — China has zero tariffs with Australia, Brunei, Cambodia, Indonesia, Japan, South Korea, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand and Vietnam prior to the simulation. The simulation therefore shows the effects of bilateral removal of tariffs between China and Canada, Chile, Mexico, Peru and the United Kingdom.

CPTPP modelling is independent of work on RCEP — RCEP does not include the projected entrants in the 'India joins RCEP' scenario.

Simulation results

This simulation models the impact on trade between China and CPTPP members resulting from the reciprocal removal of all import tariffs. Future tranches of the work will consider a more targeted application of tariffs and the liberalisation of non-tariff measures.

Impacts on China

China benefits from the reciprocal removal of tariffs.

The removal of tariffs reduces the cost of imported goods from CPTPP member economies, leading to a 0.75 per cent rise in Chinese imports. Lower import prices enable Chinese consumers and businesses to access foreign goods at more competitive prices, stimulating demand for intermediate and final products. This increased availability and affordability of imports not only benefits consumers but also strengthens the supply chains of domestic producers reliant on these inputs.

China's export volumes rise by 0.51 per cent. Cheaper imported inputs lower production costs for Chinese exporters, enhancing the global competitiveness of Chinese goods. Improved access to CPTPP markets makes Chinese products more attractive compared to domestic alternatives in member countries.

Export growth creates a ripple effect throughout the economy. Increased demand for Chinese goods requires greater utilisation of labour and capital. As industries expand to meet rising export demands, the economy experiences a 0.17 per cent increase in real wages for both skilled and unskilled workers and 0.18 per cent rise in capital employed, signalling increased investment and resource utilisation to support growing production capacities.

The combined effects of tariff removal contribute to a 0.10 per cent increase in China's real GDP. Alongside external trade, growth is also supported by domestic trends. With cheaper imports and higher wages, Chinese households enjoy improved purchasing power which drives greater consumption. Enhanced competitiveness and confidence in China's economic prospects attracts

higher levels of private investment, and the expanded economic base increases tax revenues which allows for greater government spending.

Table 12 - Aggregate impacts of China and selected CPTPP members removing bilateral import tariffs

Domain	Measure	CHN	AUS	JPN	CAN	MEX	US	IDN
Macroeconomy	Real GDP	0.10	-0.01	-0.02	0.11	0.40	-0.01	-0.03
	Domestic Consumption	0.12	-0.01	-0.03	0.17	0.33	-0.02	-0.04
	Private Investment	0.18	-0.01	-0.04	0.23	0.55	-0.03	-0.06
	Government Spending	0.09	0.00	-0.02	0.01	0.25	-0.02	-0.03
Trade and Capital Flows	Export Volumes	0.51	-0.03	-0.07	0.49	1.20	-0.12	-0.09
	Import Volumes	0.75	-0.04	-0.12	0.59	1.15	-0.16	-0.15
	Terms of Trade	0.16	-0.01	-0.05	0.11	-0.11	-0.06	-0.06
	Capital Employed	0.18	-0.01	-0.04	0.23	0.55	-0.03	-0.06
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	0.17	-0.01	-0.03	0.24	0.41	-0.02	-0.03
	Real Wages (Unskilled)	0.17	-0.01	-0.03	0.37	0.47	-0.03	-0.04
	Equivalent Variation (US$ millions)	11276	-48	-1020	1688	3180	-3422	-270
	GDP Price Deflator	0.17	-0.03	-0.04	0.08	-0.13	-0.08	-0.07

Impacts on other CPTPP members

Tariff removals render Chinese imports much cheaper, shifting consumption in CPTPP economies away from domestic production and towards Chinese products. It also means that producers in CPTPP economies have better access to the Chinese market.

China's entry into the CPTPP has a minor overall effect but varies greatly across members. Countries that previously had relatively higher tariffs on Chinese goods — Canada, Mexico and the United Kingdom — are the biggest beneficiaries of tariff removal. Mexico and Canada do particularly well, with both significantly increasing import and export volumes. They also benefit from reduced costs of Chinese intermediate goods used to create final products exported to other markets including the United States.

But the gains for Mexico and Canada come at the expense of economies such as Vietnam, Thailand, the Philippines and Indonesia who previously had relatively lower tariffs with China which made

trading between them cheaper and more competitive. Removing reciprocal tariffs between China and other CPTPP members diverts trade to non-RCEP members of CPTPP who have now removed their own tariffs. Consequently, some CPTPP members are predicted to see reduced import and export volumes, reducing their GDP following China's accession.

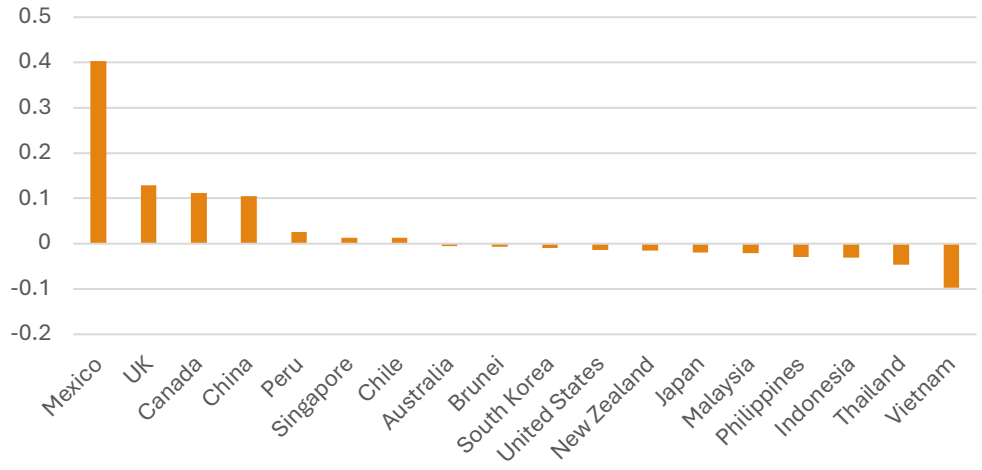

Figure 12- Change in real GDP

Results presented here should be interpreted with caution because they don't account for the interaction between RCEP–CPTPP tariffs. For example, Australia and Japan realise relatively little gains in the modelling results because tariff reductions with China had already occurred under the RCEP simulation, leading to GDP growth of 0.46 and 0.78 per cent respectively. Therefore, seeing China's entry as creating 'losses' could be misleading since prior gains are not reflected. Furthermore, the modelling assumes that entry into the trade agreement only changes tariffs, yet China's accession would also reduce bilateral NTMs and prompt economic reforms in China which would bring about further gains.

Impacts on sensitive sectors

Production in most sectors increases, with notable exceptions being computer electronics (–0.65 per cent) and motor vehicles and parts (–0.38 per cent). Some sectors, such as textiles and wrapping (1.60 per cent) and light manufacturing (0.66) see sizable increases in production.

The agricultural sectors see slight decreases in production, with grains and crops decreasing by 0.09 per cent and meat and livestock decreasing by 0.02 per cent.

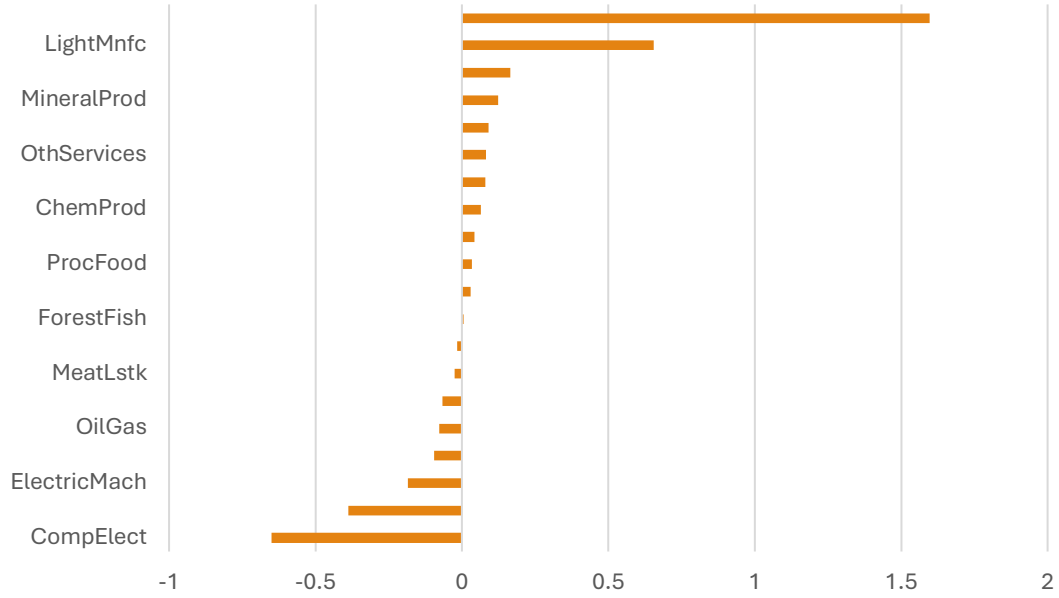

Figure 13 - Change in output by sector

Insights for further exploration

These preliminary results suggest that tariff reductions alone may not provide the gains expected from China's entry to the CPTPP. To best position for CPTPP accession, China likely needs to undertake significant structural reforms and build trust with existing members.

Future work will model more nuanced assumptions than a complete removal of all tariffs, acknowledging that not all tariffs are removed immediately for all countries and that certain sectors will remain politically sensitive. It will also account for the fact that CPTPP tariff reductions go further than RCEP reductions, so China's entry into CPTPP is beneficial even for RCEP members. Work will also be undertaken to model reductions in NTBs and the effects of increased standards in areas such as labour reforms and SOEs.

China's accession would require a sustained commitment to tariff liberalisation and a commitment to higher standards over time, not a one-shot reduction in tariffs. Future work will include a dynamic component that models the effect of a gradual accession process.

Table 13 - Impacts of China and CPTPP members removing bilateral import tariffs (per cent)

Domain	Measure	AUS	BRN	CAN	CHL	JPN	MYS	MEX	NZL	PER
Macro-economy	Real GDP	-0.01	-0.01	0.11	0.01	-0.02	-0.02	0.40	-0.01	0.03
	Domestic Consumption	-0.01	0.00	0.17	0.15	-0.03	-0.03	0.33	-0.03	0.07
	Private Investment	-0.01	-0.01	0.23	0.03	-0.04	-0.04	0.55	-0.03	0.05
	Government Spending	0.00	0.00	0.01	0.14	-0.02	-0.03	0.25	-0.02	0.03
Trade and Capital Flows	Export Volumes	-0.03	-0.01	0.49	0.03	-0.07	-0.03	1.20	-0.03	0.88
	Import Volumes	-0.04	0.00	0.59	0.41	-0.12	-0.05	1.15	-0.09	1.20
	Terms of Trade	-0.01	0.00	0.11	0.43	-0.05	-0.02	-0.11	-0.06	0.15
	Capital Employed	-0.01	-0.01	0.23	0.03	-0.04	-0.04	0.55	-0.03	0.05
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	-0.01	0.00	0.24	-0.03	-0.03	-0.02	0.41	-0.02	0.02
	Real Wages (Unskilled)	-0.01	0.00	0.37	0.21	-0.03	-0.03	0.47	-0.03	0.11
	Equivalent Variation (US$ millions)	-48	0	1688	369	-1020	-90	3180	-51	118
	GDP Price Deflator	-0.03	0.00	0.08	0.35	-0.04	-0.02	-0.13	-0.07	0.11

Domain	Measure	SGP	VNM	US	CHN	ROK	IDN	PHL	THL	UK
Macroeconomy	Real GDP	0.01	-0.10	-0.01	0.10	-0.01	-0.03	-0.03	-0.05	0.13
	Domestic Consumption	0.02	-0.20	-0.02	0.12	-0.02	-0.04	-0.04	-0.06	0.13
	Private Investment	0.02	-0.25	-0.03	0.18	-0.02	-0.06	-0.05	-0.08	0.27
	Government Spending	0.01	-0.18	-0.02	0.09	-0.01	-0.03	-0.04	-0.06	0.02
Trade and Capital Flows	Export Volumes	0.02	-0.17	-0.12	0.51	-0.03	-0.09	-0.06	-0.07	0.90
	Import Volumes	0.03	-0.27	-0.16	0.75	-0.06	-0.15	-0.09	-0.11	0.80
	Terms of Trade	0.00	-0.10	-0.06	0.16	-0.03	-0.06	-0.03	-0.03	0.04
	Capital Employed	0.02	-0.25	-0.03	0.18	-0.02	-0.06	-0.05	-0.08	0.27
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	0.01	-0.25	-0.02	0.17	-0.02	-0.03	-0.03	-0.04	0.27
	Real Wages (Unskilled)	0.01	-0.26	-0.03	0.17	-0.02	-0.04	-0.04	-0.05	0.27
	Equivalent Variation (US$ millions)	48	-417	-3422	1127 6	-215	-270	-107	-226	2334
	GDP Price Deflator	-0.01	-0.22	-0.08	0.17	-0.03	-0.07	-0.03	-0.04	-0.03

US joins CPTPP

Key points

- This scenario models the effect of the United States joining a CPTPP agreement that includes all current members and the United Kingdom, South Korea, Indonesia, the Philippines and Thailand. All other members are assumed to have already removed tariffs, so the results show the isolated effect of the United States' entry. In this scenario, China is not a member.
- The entry of the United States into CPTPP would significantly expand the agreement, increasing its share of global output from 18.5 per cent to 44.8 per cent.
- The United States increases both imports, due to lower costs for consumer goods and intermediate products, and exports, due to expanded access to the CPTPP market. GDP increases by 0.1 per cent.
- Most CPTPP members experience only minor positive or negative impacts on GDP from the United States joining. For example, Canada is worse off due to lower imports and domestic consumption, while Vietnam benefits through higher exports and imports.
- Outside of CPTPP, China is marginally worse off, with GDP 0.02 per cent lower and import volumes 0.18 per cent lower.
- Production increases across most sectors, and trade with China generally decreases in sensitive sectors such as computer electronics and motor vehicles.

US trade context

Size of US Trade Today

As the world's largest economy, the entrance of the United States would be a significant expansion to the CPTPP. The CPTPP would increase its share of global GDP from 18.5 per cent to 44.8 per cent — a significant jump that would see it become the world's largest free-trade agreement.

The United States already has free-trade agreements with some CPTPP members, including Australia, Canada, Chile, Mexico, Peru and Singapore, as well as an agreement in critical minerals with Japan. Of the projected CPTPP members, the United States has a free-trade agreement with South Korea.

More than half (53.43 per cent) of US exports go to economies in the projected CPTPP, and just under half (45.47 per cent) of US imports come from these economies. Of the United States' top 10 largest individual trading partners, six are in the projected CPTPP — Canada, Mexico, Japan, South Korea, the United Kingdom and Vietnam.

Table 14 - CPTPP members' share in goods trade with the United States

Economy	Exports from the United States	Imports to the United States
Australia	1.59	0.42
Brunei	0.01	0.00
Canada	18.27	12.71
Chile	0.88	0.47
Japan	4.37	5.81
Malaysia	0.83	1.58
Mexico	15.75	13.13
New Zealand	0.25	0.18

Peru	0.56	0.32
Singapore	1.92	0.82
Vietnam	0.53	2.01
South Korea	3.13	3.05
Indonesia	0.44	0.88
Philippines	0.55	0.50
Thailand	0.71	1.34
United Kingdom	3.64	2.25
Rest of the World	46.57	54.53
Total	100	100

Source: World Bank WITS Database

US Tariff Levels

Tariff rates between the United States and CPTPP member countries vary widely. Some, such as Australia, Canada, Chile, Mexico, Peru and Singapore have quite low tariffs, while others, such as Brunei, New Zealand, Vietnam, Indonesia and Thailand, have much higher tariff rates.

These tariffs, sourced from the World Bank WITS Database, indicate the levels of protection between the United States and CPTPP members in 2017 — the GTAP model's base year — and may differ from the actual tariffs within the database.

Table 15 - Average tariff rates imposed between the US and CPTPP members

Economy	Tariffs imposed by the United States	Tariffs imposed on the United States
Australia	0.95	1.31
Brunei	10.42	0.03
Canada	0.13	0.99
Chile	0.24	0.01
Japan	1.57	5.32
Malaysia	0.67	1.93
Mexico	0.21	0.03
New Zealand	4.81	2.2
Peru	0.13	0.11
Singapore	0.01	0
Vietnam	6.15	3.25
South Korea	1.40	6.47
Indonesia	5.91	3.63

Philippines	1.85	3.8
Thailand	2.04	8.23
United Kingdom	1.24	1.53

Source: World Bank WITS Database

Scenario overview

The United States has developed a bipartisan scepticism of trade, driven by the fall in domestic manufacturing and job losses, strategic competition with China and the government's inability to equitably distribute the gains from trade. Following President Trump's re-election and the US withdrawal from the Trans-Pacific Partnership in 2017 under his administration's leadership, the United States is unlikely to seek membership of the CPTPP.

The aim of this scenario is to estimate the opportunity cost for the United States in pursuing their protectionist path. By analysing a scenario where the US joins the CPTPP, we seek to assess the benefits left on the table by the current stance of non-participation.

This scenario models a CPTPP comprised of all current members plus the United States, assuming South Korea, Indonesia, the Philippines and Thailand have also joined the agreement. In the scenario of the United States joining the CPTPP, China does not enter the agreement.

Tariffs between all CPTPP members, including the projected new entrants, have been reduced to zero prior to the simulation. This modelling isolates the effect of the United States' entrance into the agreement.

The model also includes tariff removals between all RCEP members — Australia, Brunei, Cambodia, China, Indonesia, Japan, South Korea, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand and Vietnam — which have removed tariffs on each other prior to the simulation of the United States acceding to the CPTPP.

CPTPP modelling is independent of work on RCEP — RCEP does not include the projected entrants in the 'India joins RCEP' scenario.

Simulation results

This simulation models the impact on trade between the United States and CPTPP members through the reciprocal removal of all import tariffs. Future tranches of the work will consider a more targeted application of tariffs and the liberalisation of non-tariff measures.

Impacts on US

The US benefits from the reciprocal removal of tariffs with CPTPP members.

Table 16 - Aggregate impacts of the United States and selected CPTPP members removing bilateral import tariffs

Domain	Measure	US	AUS	CHN	JPN	CAN	MEX	IDN
Macroeconomy	Real GDP	0.10	-0.02	-0.02	0.10	-0.05	-0.10	0.39
	Domestic Consumption	0.11	-0.05	-0.03	0.14	-0.12	-0.13	0.39
	Private Investment	0.21	-0.06	-0.06	0.09	-0.19	-0.17	0.65
	Government Spending	0.06	-0.04	-0.04	0.05	-0.12	-0.12	0.32

Domain	Measure	US	AUS	CHN	JPN	CAN	MEX	IDN
Trade and Capital Flows	Export Volumes	1.22	-0.09	-0.06	0.78	0.04	0.08	1.17
	Import Volumes	1.16	-0.25	-0.18	0.81	-0.25	-0.01	1.69
	Terms of Trade	0.17	-0.15	-0.09	0.01	-0.26	-0.09	0.40
	Capital Employed	0.23	-0.04	-0.05	0.10	-0.16	-0.15	0.67
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	0.15	-0.06	-0.02	0.25	-0.05	-0.09	0.51
	Real Wages (Unskilled)	0.15	-0.07	-0.03	0.21	-0.13	-0.13	0.50
	Equivalent Variation (US$ millions)	17553	-573	-4035	4303	-1607	-1330	2917
	GDP Price Deflator	0.12	-0.24	-0.11	-0.05	-0.39	-0.08	0.53

Consumers and producers now enjoy lower import prices for final and intermediate goods produced in CPTPP member economies, leading to a 1.16 per cent increase in imports. Cheaper imports benefit consumers through lower prices for final goods and benefit producers through lower prices for inputs used in production.

Producers in the United States benefit from greater access to the CPTPP market after tariff removal, leading to a 1.22 per cent increase in US exports.

With an export increase the United States will need more labour and capital. In the model, aggregate employment is assumed to be fixed so increased demand for labour pushes up real wages — skilled and unskilled wages increase by 0.15 per cent. Increased demand for capital results in a 0.23 per cent rise in capital employed.

With cheaper wages and lower prices for goods, the United States increases its domestic consumption, leading to greater confidence in the economy and incentivising private investment. Government spending also increases with an expanded tax base. As a result of these effects, total real GDP in the United States increases by 0.1 per cent.

Impacts on CPTPP members

The reduction of tariffs lowers the cost of US imports , leading to a switch in consumption in CPTPP economies towards US products. Exporters in CPTPP economies also gain from tariff-free access to the US market.

The total effect of the United States' entrance into the CPTPP varies across members. Countries that already had relatively low reciprocal tariffs with the United States, such as Canada and Mexico are negatively affected by the United States' entrance. Canada and Mexico — the United States' two largest trading partners — see a reduction in imports, consumption and consequently GDP due to greater trade optionality for US exporters. Australia is also negatively affected, but to a lesser extent, with a reduction in export and import volumes that results in a small GDP decrease.

On the other hand, countries that previously had high tariffs benefit significantly from the United States' entrance. Vietnam, Thailand, Indonesia and the Philippines are the biggest winners, with the removal of all tariffs allowing them to exploit their complementarities with the United States. The four economies significantly increase export and import volumes, domestic consumption and real GDP. These results suggest untapped complementarities between the US and ASEAN economies.

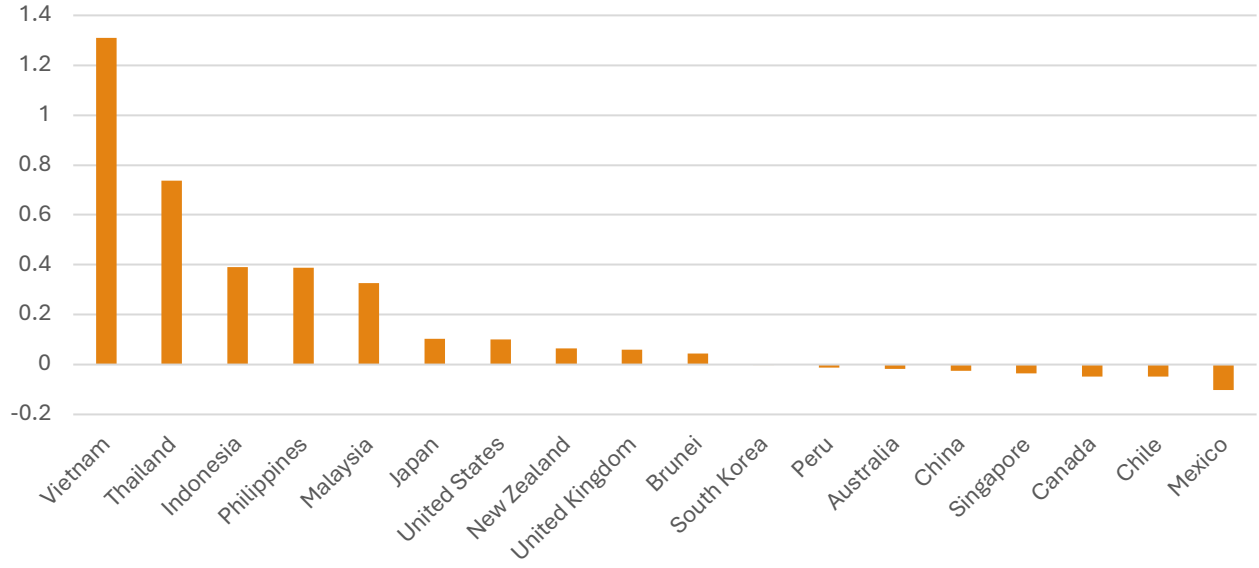

Figure 14 - Change in real GDP

Impacts on sensitive sectors

Our tariff analysis and qualitative research identified several sensitive sectors within the US economy. These sectors had high maximum tariffs, high weighted average tariffs, delivered high tariff revenues or were the subject of campaign commitments made by candidates for the 2024 Presidential election.

Production in most sectors increases and the agricultural sector performs particularly well with an increase of 2.06 per cent in grains and crops and 3.07 per cent in meat and livestock. But production reshuffles as some sectors decrease their output, particularly textiles and wrapping (–2.43 per cent), light manufacturing (–0.79 per cent) and computer electronics (–0.31 per cent).

Some sectors are sensitive amid geopolitical tensions with China — for example, the United States currently imposes high tariffs on Chinese computer electronics and motor vehicles. Within the computer electronics sector, exports to China decrease by 1.15 per cent as the United States diverts trade to other economies, particularly Indonesia (increase of 30.46 per cent), the Philippines (up 8.70 percent) and New Zealand (increase of 8.60 per cent). In the motor vehicles and parts sector, imports from China decrease by 2.03 per cent with a big jump in imports from Japan (8.93 per cent) and the United Kingdom (8.68 per cent). In computer electronics, imports from China increase by 0.78 per cent.

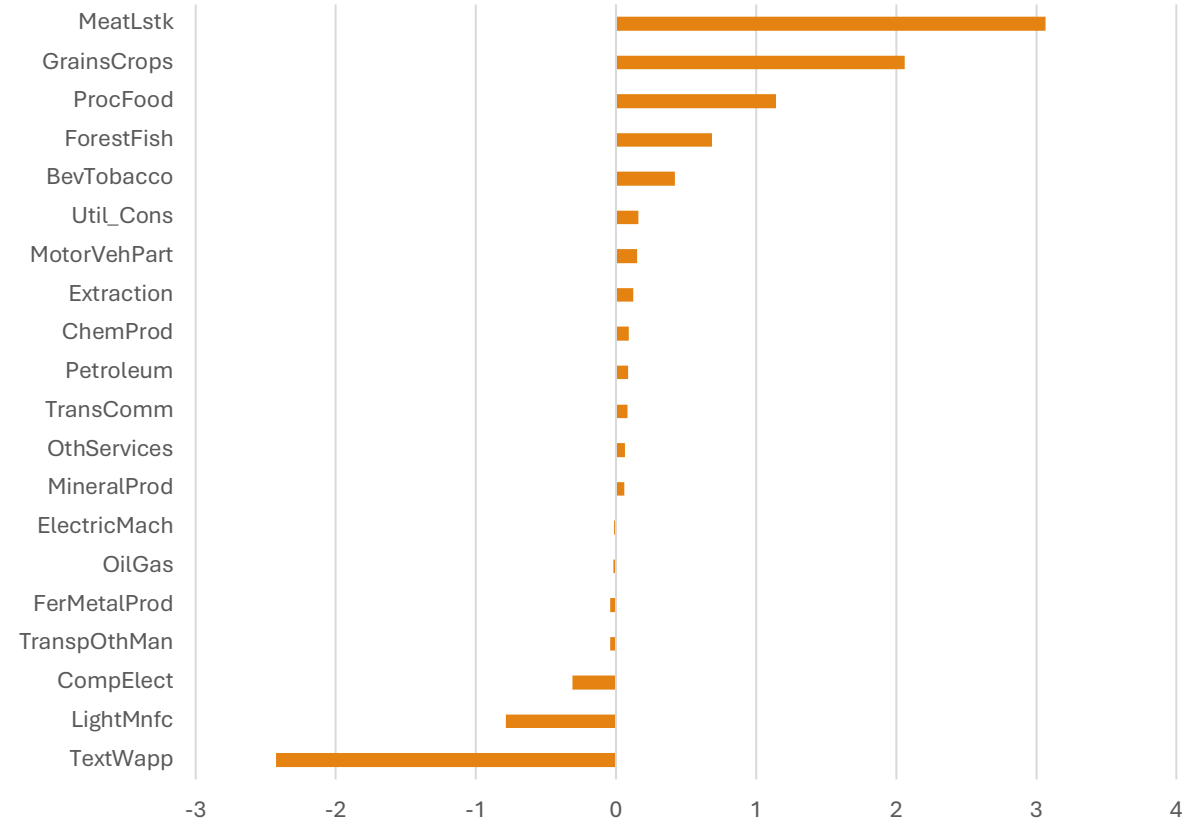

Figure 15 - Change in output by sector

Insights for further exploration

Early results did find some evidence for the political narrative that joining trade agreements may negatively affect domestic manufacturing. But aggregate level results showed that the economy as a whole would benefit from joining the CPTPP, highlighting the need for targeted government intervention to ensure that the aggregate gains are distributed within the economy.

This tranche of modelling assumed a reduction in all tariffs between the United States and CPTPP members, but future tranches of work will take a more nuanced approach that acknowledges the reality that some sectors will likely retain tariffs due to political sensitivities. The study will also model the effects of reductions in non-tariff barriers. Finally, a wider range of scenarios will be modelled that analyse degrees of protectionism and liberalisation in US trade policy.

Table 17 - Impacts of United States and CPTPP members removing bilateral import tariffs (per cent)

Domain	Measure	AUS	BRN	CAN	CHL	JPN	MYS	MEX	NZL	PER
Macroeconomy	Real GDP	-0.02	0.04	-0.05	-0.05	0.10	0.33	-0.10	0.06	-0.01
	Domestic Consumption	-0.05	0.08	-0.12	-0.08	0.14	0.31	-0.13	0.02	-0.02
	Private Investment	-0.06	0.05	-0.19	-0.11	0.09	0.53	-0.17	0.11	-0.05
	Government Spending	-0.04	0.06	-0.12	-0.07	0.05	0.22	-0.12	0.01	-0.01
Trade and Capital Flows	Export Volumes	-0.09	0.09	0.04	-0.10	0.78	0.48	0.08	0.21	-0.05
	Import Volumes	-0.25	0.14	-0.25	-0.22	0.81	0.55	-0.01	0.12	-0.13
	Terms of Trade	-0.15	0.06	-0.26	-0.11	0.01	0.01	-0.09	-0.13	-0.05
	Capital Employed	-0.04	0.07	-0.16	-0.09	0.10	0.54	-0.15	0.12	-0.03
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	-0.06	0.11	-0.05	-0.06	0.25	0.43	-0.09	0.04	-0.03
	Real Wages (Unskilled)	-0.07	0.11	-0.13	-0.08	0.21	0.43	-0.13	0.04	-0.03
	Equivalent Variation (US$ millions)	-573	6	-1607	-191	4303	844	-1330	32	-39
	GDP Price Deflator	-0.24	0.06	-0.39	-0.16	-0.05	-0.06	-0.08	-0.21	-0.07

Domain	Measure	SGP	VNM	US	CHN	ROK	IDN	PHL	THL	UK
Macroeconomy	Real GDP	-0.04	1.31	0.10	-0.02	0.00	0.39	0.39	0.74	0.06
	Domestic Consumption	-0.05	2.76	0.11	-0.03	-0.01	0.39	0.35	0.48	0.06
	Private Investment	-0.08	3.30	0.21	-0.06	-0.03	0.65	0.64	1.02	0.12
	Government Spending	-0.04	2.29	0.06	-0.04	-0.02	0.32	0.28	0.38	0.04
Trade and Capital Flows	Export Volumes	-0.05	1.75	1.22	-0.06	0.04	1.17	1.20	1.54	0.32
	Import Volumes	-0.07	3.10	1.16	-0.18	0.00	1.69	1.07	1.47	0.30
	Terms of Trade	-0.02	1.26	0.17	-0.09	-0.06	0.40	0.01	-0.29	0.04
	Capital Employed	-0.06	3.31	0.23	-0.05	-0.01	0.67	0.65	1.04	0.14
	Rate of Return to Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price and Economic Welfare	Real Wages (Skilled)	-0.04	3.82	0.15	-0.02	0.05	0.51	0.49	1.02	0.10
	Real Wages (Unskilled)	-0.03	3.90	0.15	-0.03	0.04	0.50	0.40	0.84	0.10
	Equivalent Variation (US$ millions)	-137	5580	17553	-4035	-345	2917	968	1752	1257
	GDP Price Deflator	-0.02	2.88	0.12	-0.11	-0.10	0.53	-0.02	-0.40	0.02

CPTPP Aggregate Findings

Key points

- This optimistic scenario models the accession of the United States, China and Taiwan to the CPTPP, a politically unlikely scenario at this stage that allows exploration of the potential large-scale economic effects of wider membership in the trade pact.
- The entry of these economies into CPTPP would increase global trade by 0.72 per cent.
- Apart from the United States, China and Taiwan, the biggest beneficiaries of their CPTPP accession are Vietnam, Mexico and Indonesia — all benefiting from increased supply chain linkages.
- Countries not members of CPTPP or RCEP — India, Bangladesh and Sri Lanka — are worse off due to lower imports and exports.

Regional trade context

This scenario highlights the possible benefits of broad CPTPP membership, allowing us to imagine what wide-ranging economic cooperation across the Asia-Pacific might look like in the future.

Since China's accession to the WTO in 2001, United States–China bilateral trade has grown enormously. Though US consumers have benefited from cheaper imported Chinese goods, concerns over national security and economic dependency on China have risen. In this context, leveraging multilateral trading agreements like the CPTPP could enable China and the United States to balance mutual economic interests with greater stability, strengthening collaboration while managing risks.

Taiwan's accession to the CPTPP further adds to the vision of deepened collaboration in the Asia–Pacific. Despite being a small economy, Taiwan's advanced technology sector, embodied by its dominance of the international semiconductor industry, makes it an integral player in the Asia–Pacific economic arena. Including Taiwan in the multilateral agreement would strengthen regional supply chain resilience and strengthen technological capacity.

Though current political challenges are set aside in this analysis, the scenario gives important insights into the potential impacts of enhanced economic collaboration across these major economies.

Simulation results

This simulation models the impact on trade between the United States, China, Taiwan and existing CPTPP members through the reciprocal removal of all import tariffs. Importantly, the scenario assumes that earlier Bloc One countries (South Korea) and Bloc Two countries (Thailand, Indonesia and the Philippines) have already acceded to the agreement.

Key beneficiaries

Changes in global exports and imports served as a key metric to assess the effects of this accession scenario on other countries (Table x, y). The modelling reveals two primary categories of beneficiaries.

1. Economies directly joining the CPTPP
2. Economies benefiting from enhanced integration into global supply chains.

Table 18 - Key beneficiaries of the aggregated optimistic scenario

Economy	per cent change in global exports	per cent change in global imports
Taiwan	6.125	7.880

China	2.186	2.736
United States	2.894	2.623
Vietnam	1.368	2.024
Indonesia	0.901	1.027
Mexico	1.190	0.922

Of the economies joining CPTPP, Taiwan is estimated to the biggest beneficiary, experiencing a 6.1 per cent increase in global exports and a substantial 7.9 per cent increase in global imports. Taiwan's growth can be attributed to the expansion of the computer and electronics sector, with a 3.58 per cent increase in output activity and 4.55 per cent growth in exports due to liberalisation of trade by lifting export controls on advanced semiconductors. While the United States and China see more moderate growth in exports and imports compared to Taiwan, both still experience significant gains after joining the multilateral agreement.

The second group of beneficiaries includes economies like Vietnam, Mexico and Indonesia, who profit from deeper integration into global supply chains. Vietnam is particularly well-positioned, seeing a 1.4 per cent rise in exports and a 2.0 per cent increase in imports, reflecting its position in many US–China supply chains. Indonesia and Mexico also experience moderate but important gains.

Indonesia experiences a 1.02 per cent increase in import volume and a 0.9 per cent increase in export volume. This growth could potentially be credited to the sheer increase in trade volume from tariff reduction, coupled with Indonesia's complementarity with the United States.

Economies that are worse off

Not all economies are expected to benefit from the accession of the United States, Taiwan and China to CPTPP (Table 19).

Most of the economies experiencing negative impacts on their exports and imports are largely isolated from the global trading system, as reflected in their lack of membership in multilateral trade agreements like the CPTPP and RCEP.

Table 19 - Countries that are worse off in the aggregated optimistic scenario

Economy	RCEP/CPTPP membership	per cent change in global exports	per cent change in global imports
Australia	Both	-0.107	-0.303
Cambodia	Only RCEP	-2.878	-4.006
India	Neither	-0.180	-0.539
Bangladesh	Neither	-1.641	-2.469
Sri Lanka	Neither	-2.555	-3.169
Rest of South Asia	Neither	-1.331	-1.561

Countries that are neither members in RCEP nor CPTPP — including India, Bangladesh, Sri Lanka and other South Asian economies (Afghanistan, Nepal, Pakistan, Bhutan and the Maldives), demonstrate clear losses in the aggregated scenario. These economies experience negative changes in both global exports and imports, with Sri Lanka seeing a particularly sharp decline of 2.6 per cent in exports and

3.2 per cent in imports. Cambodia, which is only a member of RCEP and not the CPTPP, is also among the losers, with the largest decline of 2.9 per cent in exports and 4 per cent in imports.

The subsequent reduction in import–export flows indicates that exclusion from multilateral trade agreements results in forgone deep trade linkages with member countries and reduced access to markets. Additionally, this modelling scenario ignores the potential gains to be made through services trade and the reduction of non-tariff barriers resulting from CPTPP membership, possibly underestimating losses for these non-member countries.

Despite CPTPP and RCEP membership, Australia is predicted to be worse off after China, the United States and Taiwan join the multilateral agreement. Australia's current economic dependence on China means that the dynamics of trade between the two economies could be negatively impacted by China's accession to the CPTPP. As China reduces trade barriers with other members, Australia may face increased competition within China’s market, limiting the benefits it might otherwise gain.

Another explanatory factor for Australia’s result emanates from the modelling procedure used in this scenario. Before modelling the CPTPP accession of the United States, China and Taiwan, the RCEP shock is initially accounted for, where Australia and China are both already members. Since the RCEP shock reduces Australia–China tariffs to zero, Australia does not realise any additional benefits from China’s CPTPP accession. In essence, the trade gains from RCEP have already been realised.

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Appendix

Structure of sectors

	New	Sector		Old	Sector
No.	Code	Description	No.	Code	Description
1	GrainsCrops	Grains and Crops	1	pdr	Paddy rice
			2	wht	Wheat
			3	gro	Cereal grains nec
			4	v_f	Vegetables, fruit, nuts
			5	osd	Oil seeds
			6	c_b	Sugar cane, sugar beet
			7	pfb	Plant-based fibers
			8	ocr	Crops nec
2	MeatLstk	Livestock and Meat Products	9	ctl	Bovine cattle, sheep and goats
			10	oap	Animal products nec
			11	rmk	Raw milk
			12	wol	Wool, silk-worm cocoons
			19	cmt	Bovine meat products
			20	omt	Meat products nec
			21	vol	Vegetable oils and fats
			22	mil	Dairy products
3	Extraction	Coal and Other Extraction	15	coa	Coal
			18	oxt	Minerals nec
4	ProcFood	Processed Food	23	pcr	Processed rice
			24	sgr	Sugar
			25	ofd	Food products nec
5	TextWapp	Textiles and Clothing	27	tex	Textiles
			28	wap	Wearing apparel
6	LightMnfc	Light Manufacturing	29	lea	Leather products

			30	lum	Wood products
			31	ppp	Paper products, publishing
7	Util_Cons	Utilities and Construction	46	ely	Electricity
			47	gdt	Gas manufacture, distribution
			48	wtr	Water
			49	cns	Construction
8	TransComm	Transport and Communication	52	otp	Transport nec
			53	wtp	Water transport
			54	atp	Air transport
			55	whs	Warehousing and support activi
			56	cmn	Communication
9	ForestFish	Forest and Fishing	13	frs	Forestry
			14	fsh	Fishing
10	OilGas	Oil and Gas	16	oil	Oil
			17	gas	Gas
11	BevTobacco	Beverages and Tobacco Products	26	b_t	Beverages and tobacco products
12	OthServices	Other Services	50	trd	Trade
			51	afs	Accommodation, Food and servic
			57	ofi	Financial services nec
			58	ins	Insurance
			59	rsa	Real estate activities
			60	obs	Business services nec
			61	ros	Recreational and other service

			62	osg	Public Administration and defe
			63	edu	Education
			64	hht	Human health and social work a
			65	dwe	Dwellings
13	Petroleum	Petroleum Products	32	p_c	Petroleum, coal products
14	ChemProd	Chemical Products	33	chm	Chemical products
			34	bph	Basic pharmaceutical products
			35	rpp	Rubber and plastic products
15	MineralProd	Mineral Products	36	nmm	Mineral products nec
16	FerMetalProd	Ferrous Metal and Products	37	i_s	Ferrous metals
			38	nfm	Metals nec
			39	fmp	Metal products
17	CompElect	Computer and Electronics	40	ele	Computer, electronic and optic
18	ElectrcMach	Electric Machinery	41	eeq	Electrical equipment
			42	ome	Machinery and equipment nec
19	MotorVehPart	Motor Vehicle and Parts	43	mvh	Motor vehicles and parts
20	TranspOthMan	Transportation and Others	44	otn	Transport equipment nec
			45	omf	Manufactures nec

Structure of regions

	New	region		Old	regions

No.	Code	Description	No.	Code	Description
1	Australia	Australia	1	aus	Australia
2	Brunei	Brunei	11	brn	Brunei Darussalam
3	Canada	Canada	28	can	Canada
4	Chile	Chile	35	chl	Chile
5	Japan	Japan	6	jpn	Japan
6	Malaysia	Malaysia	15	mys	Malaysia
7	Mexico	Mexico	30	mex	Mexico
8	NewZealand	New Zealand	2	nzl	New Zealand
9	Peru	Peru	39	per	Peru
10	Singapore	Singapore	17	sgp	Singapore
11	Vietnam	Vietnam	19	vnm	Viet Nam
12	US	United States of America	29	usa	United States of America
13	China	China	4	chn	China
14	SouthKorea	South Korea	7	kor	Republic of Korea
15	Taiwan	Taiwan	9	twn	Taiwan Province of China

16	Indonesia	Indonesia	13	idn	Indonesia
17	Philippines	Philippines	16	phl	Philippines
18	Thailand	Thailand	18	tha	Thailand
19	India	India	23	ind	India
20	RoAsiaPac	Rest of Asia Pacific	3	xoc	Rest of Oceania
			8	mng	Mongolia
			10	xea	Rest of East Asia
			94	kaz	Kazakhstan
			95	kgz	Kyrgyzstan
			96	tjk	Tajikistan
			97	uzb	Uzbekistan
			98	xsu	Rest of Former Soviet Union
			99	arm	Armenia
			100	aze	Azerbaijan
			101	geo	Georgia
			102	bhr	Bahrain
			103	irn	Iran (Islamic Republic of)
			104	irq	Iraq
			105	isr	Israel
			106	jor	Jordan
			107	kwt	Kuwait
			108	lbn	Lebanon
			109	omn	Oman
			110	pse	Palestine
			111	qat	Qatar
			112	sau	Saudi Arabia

			113	syr	Syrian Arab Republic
			114	tur	Turkiye
			115	are	United Arab Emirates
			116	xws	Rest of Western Asia
			160	xtw	Rest of the World
21	HongKong	Hong Kong	5	hkg	China, Hong Kong SAR
22	Cambodia	Cambodia	12	khm	Cambodia
23	Laos	Lao DPR	14	lao	Lao People's Democratic Republic
24	Myanmar	Myanmar (XSE)	20	xse	Rest of Southeast Asia
25	Bangladesh	Bangladesh	22	bgd	Bangladesh
26	Nepal	Nepal	24	npl	Nepal
27	Pakistan	Pakistan	25	pak	Pakistan
28	SriLanka	Sri Lanka	26	lka	Sri Lanka
29	RoSouthAsia	Rest of South Asia	21	afg	Afghanistan
			27	xsa	Rest of South Asia
30	RoAmericas	Rest of America	31	xna	Rest of North America
			43	cri	Costa Rica

			44	gtm	Guatemala
			45	hnd	Honduras
			46	nic	Nicaragua
			47	pan	Panama
			48	slv	El Salvador
			49	xca	Rest of Central America
			50	dom	Dominican Republic
			51	hti	Haiti
			52	jam	Jamaica
			53	pri	Puerto Rico
			54	tto	Trinidad and Tobago
			55	xcb	Caribbean
31	SouthAmerica	South America	32	arg	Argentina
			33	bol	Bolivia (Plurinational State o
			34	bra	Brazil
			36	col	Colombia
			37	ecu	Ecuador
			38	pry	Paraguay
			40	ury	Uruguay
			41	ven	Venezuela (Bolivarian Republic
			42	xsm	Rest of South America
32	UK	United Kingdom	83	gbr	United Kingdom of Great Britain
33	EU	European Union	56	aut	Austria

			57	bel	Belgium
			58	bgr	Bulgaria
			59	hrv	Croatia
			60	cyp	Cyprus
			61	cze	Czechia
			62	dnk	Denmark
			63	est	Estonia
			64	fin	Finland
			65	fra	France
			66	deu	Germany
			67	grc	Greece
			68	hun	Hungary
			69	irl	Ireland
			70	ita	Italy
			71	lva	Latvia
			72	ltu	Lithuania
			73	lux	Luxembourg
			74	mlt	Malta
			75	nld	Netherlands
			76	pol	Poland
			77	prt	Portugal
			78	rou	Romania
			79	svk	Slovakia
			80	svn	Slovenia
			81	esp	Spain
			82	swe	Sweden
34	Russia	Russia	90	rus	Russian Federation
35	RoEurope	Rest of Europe	84	che	Switzerland
			85	nor	Norway
			86	xef	Rest of EFTA
			87	alb	Albania

			88	srb	Serbia
			89	blr	Belarus
			91	ukr	Ukraine
			92	xee	Rest of Eastern Europe
			93	xer	Rest of Europe
36	Africa	Africa	117	dza	Algeria
			118	egy	Egypt
			119	mar	Morocco
			120	tun	Tunisia
			121	xnf	Rest of North Africa
			122	ben	Benin
			123	bfa	Burkina Faso
			124	cmr	Cameroon
			125	civ	Cote d'Ivoire
			126	gha	Ghana
			127	gin	Guinea
			128	mli	Mali
			129	ner	Niger
			130	nga	Nigeria
			131	sen	Senegal
			132	tgo	Togo
			133	xwf	Rest of Western Africa
			134	caf	Central African Republic
			135	tcd	Chad
			136	cog	Congo
			137	cod	Democratic Republic of the Con
			138	gnq	Equatorial Guinea

			139	gab	Gabon
			140	xac	South-Central Africa
			141	com	Comoros
			142	eth	Ethiopia
			143	ken	Kenya
			144	mdg	Madagascar
			145	mwi	Malawi
			146	mus	Mauritius
			147	moz	Mozambique
			148	rwa	Rwanda
			149	sdn	Sudan
			150	tza	United Republic of Tanzania
			151	uga	Uganda
			152	zmb	Zambia
			153	zwe	Zimbabwe
			154	xec	Rest of Eastern Africa
			155	bwa	Botswana
			156	swz	Eswatini
			157	nam	Namibia
			158	zaf	South Africa
			159	xsc	Rest of Southern African Custom