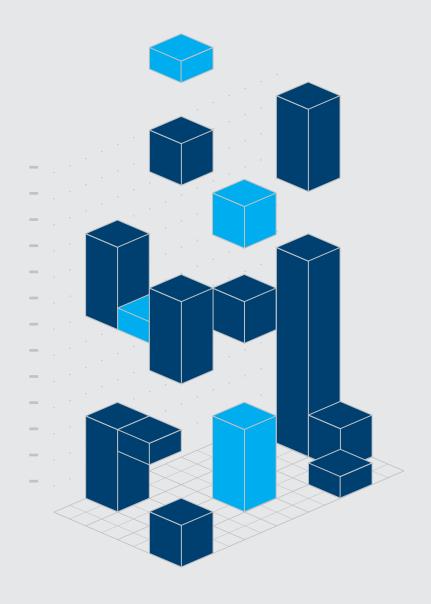
2025 • • •

TRILATERAL ECONOMIC REPORT







The Thirteenth Trilateral Economic and Trade Miamong the Republic of Korea, Japan and the People'



The Economic and Trade Ministers of CJK and TCS Secretary-General at the Thirteenth Trilateral Economic and Trade Ministers' Meeting

March 30, 2025, Seoul, ROK

The Trilateral Economic Report (TER) is a flagship publication of the Trilateral Cooperation Secretariat (TCS) on the state of the economy of China, Japan and the Republic of Korea (ROK). In light of the 13th Trilateral Economic and Trade Ministers' Meeting, the report is produced as an official joint project under the ministerial process.

This report is published by the TCS with support from the economic ministries of China, Japan, and the ROK, with the aims to promote mutual understanding and information sharing among the governments and all stakeholders. The report does not necessarily reflect the views of the TCS or the respective governments; the views expressed in the writings are the sole responsibility of the respective working group members.

2025 **Trilateral Economic Report**





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Foreword from TCS Secretary-General

The world today faces heightened uncertainty and sustained volatility. Geopolitical shifts, supply chain realignments, post-pandemic impacts, and the ongoing low-carbon transition are reshaping the policy environment in an increasingly uncertain manner. Rapid changes marked by global trade turbulence, demographic dynamics, and accelerated competition in new high-tech industries are not only global in scale but deeply felt in Asia, where structural challenges and new opportunities are both emerging in parallel.

Against this backdrop, it is my great pleasure to present the Trilateral Economic Report (TER) 2025, our flagship publication on the economic landscape and policy priorities of China, Japan, and the Republic of Korea (ROK). Since its inception in 2012, the TER has served as a key platform for advancing dialogue and understanding among the three economies.

This year's TER marks a significant milestone in its development as the 10th edition. More significantly, the 13th Trilateral Economic and Trade Ministers' Meeting, held for the first time since 2019, formally acknowledged the TER as a valuable asset for policy development and economic cooperation. This is the first time the TER is an official joint project endorsed under the ministerial process, reflecting the report's growing significance in regional economic cooperation. Building on the momentum revitalized by the 9th Trilateral Summit in May 2024, the ministers affirmed their commitment to leverage the report as a valuable resource to support economic exchange, cooperation, and information sharing.

This edition reflects our collective effort to maintain the momentum of future-oriented trilateral economic cooperation. TCS, as a key institutional partner in this initiative, remains committed to ensuring continued knowledge-sharing and policy dialogue among the three governments by engaging leading regional experts. I would like to express my sincere gratitude to the four working group members who have kindly contributed their insight to shape this important and meaningful endeavor.

Since overcoming the 1997 Asian Financial Crisis together, our region has consistently demonstrated our capacity to turn crises and challenges into opportunities. In East Asia, particularly within the ASEAN+3 framework, a shared recognition of the need for deeper cooperation and a strong spirit of solidarity have been key driving forces in navigating crises.

Looking ahead, TCS will continue to deepen its work with the three governments and a widening network of regional partners to further strengthen cooperation. Building on this report and an expanding roster of joint projects, we will foster candid dialogue, mobilize collective action, and shape policies that tangibly improve the lives of people in our three nations and beyond.

LEE Hee-sup

Foreword from AMRO Director

It is my great pleasure to introduce the 2025 edition of the Trilateral Economic Report —a flagship publication that provides timely and comprehensive assessments of economic developments and outlooks for China, Japan, and the Republic of Korea (ROK). The report also examines broader global and regional economic trends that shape the environment in which these three economics operate while highlighting the growing economic interlinkages and deepening cooperation.

As an international organization established under the ASEAN+3 Finance Process with a mandate to strengthen macroeconomic and financial resilience and stability in the ASEAN+3 region, AMRO is honored to contribute to the development of this report.

The current global environment is marked by rising geopolitical tensions and escalating trade protectionism, creating significant uncertainty to the global economic landscape. Against this backdrop, China, Japan, and the ROK—together with the broader ASEAN+3 region—are confronted with one of the most severe shocks to the global trading system in decades. Yet, these economies are navigating the challenges with resilience, supported by robust domestic demand, a more diversified export market, deepening intra-regional linkages, and available policy space to respond to shocks.

In this complex and evolving global environment, deeper regional integration and stronger policy coordination are more critical than ever. Strengthening cooperation across the region will be essential to navigating rising uncertainties and unlocking new pathways for sustainable and inclusive growth.

Against this backdrop, building strong and long-lasting partnerships among regional institutions is of particular importance. Since the signing of the Memorandum of Understanding between AMRO and the Trilateral Cooperation Secretariat (TCS) in 2019, our two institutions have worked closely to advance policy dialogue on economic and financial issues, while promoting knowledge exchange through various platforms and forums. The 2025 Trilateral Economic Report is a clear testament to this deepening collaboration and our shared commitment to fostering sustainable growth and stability in the region.

I would like to express my sincere appreciation to the TCS and all contributors who have devoted their time, expertise, and insights to the production of this important publication. The spirit of collaboration demonstrated throughout this process truly exemplifies our strong commitment to regional cooperation.

As we navigate an increasingly complex global environment, I am confident that our enduring partnership will continue to serve as a cornerstone for advancing meaningful dialogue, strengthening policy coordination, and fostering long-term economic resilience and stability across the region.

Morge S

Disclaimers

- This report, in principle, employs the alphabetical order in listing the names of the three countries; however, the order may vary depending on individual Chapters.
- This report is the joint outcome of three experts recommended by the economic ministries of China, Japan and the ROK and one regional expert recommended by TCS, applying the Trilateral+X cooperation framework. Chapters II VI are contributed by the respective working group members: Chapter III by Dr. PAN Yichen (CAITEC), Chapter IV by Dr. URATA Shujiro (RIETI), Chapter V by Dr. JEONG (KIEP), and Chapters II and VI by Mr. Allen NG (AMRO).
- Although the writings are published by the TCS and supported by the three
 economic ministries, the views expressed do not necessarily reflect those of
 the TCS or the respective governments. The writings and its views are the
 sole responsibility of the respective working group members.
- TCS does not guarantee the accuracy of the data included in this report. The boundaries, colors, denominations, and other information shown on any map in this report do not imply any judgment on the part of TCS concerning the legal status of any territory or the endorsement or acceptance of such boundaries.
- The content of this report is subject to copyright. Yet, TCS encourages dissemination of its knowledge; this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.
- The factual information covers data for the period up to May 2025, except when stated otherwise.

Abbreviations

ABAC	APEC Business Advisory Council	IMF	International Monetary Fund
ADB	Asian Development Bank	IT Index	Trade Intensity Index
AFTA	ASEAN Free Trade Area	ITI	Import Trade Intensity Index
Al	Artificial Intelligence	JP	Japan
AMRO	ASEAN+3 Macroeconomic Research Office	JPN	Japan
AP	Application Processor	KH	Cambodia
APEC	Asia-Pacific Economic Cooperation	KOR	Republic of Korea
APT	ASEAN Plus Three	KR	Republic of Korea
ASEAN	Association of Southeast Asian Nations	LA	Lao PDR
BCLMV	Brunei Darussalam, Cambodia, Lao PDR,	MCP	Multi-Chip Package
	Myanmar, Vietnam	MM	Myanmar
BN	Brunei Darussalam	MY	Malaysia
CEPEA	Comprehensive Economic Partnership for	MYS	Malaysia
	East Asia	OECD	Organization for Economic Cooperation and
CHN	People's Republic of China		Development
CJK	People's Republic of China, Japan, Republic	PH	The Philippines
	of Korea	PPP	Public-private partnerships
CJKFTA	China-Japan-Korea Free Trade Agreement	R&D	Research and Development
CMIM	Chiang Mai Initiative Multilateralization	RCA	Revealed Comparative Advantage
CN	People's Republic of China	RCEP	Regional Comprehensive Economic
CPTPP	Comprehensive and Progressive Trans-		Partnership
	Pacific Partnership	ROK	Republic of Korea
CPU	Central Processing Unit	RSCA	Revealed Symmetric Comparative
СТ	Chinese Taipei		Advantage
DEPA	Digital Economy Partnership Agreement	SG	Singapore
DRAM	Dynamic Random Access Memory	SGP	Singapore
EAFTA	East Asian Free Trade Agreement	SME	Small and medium-sized enterprises
EMDE	Emerging markets and developing	TCS	Trilateral Cooperation Secretariat
	economies	TFP	Total Factor Productivity
EPA	Economic Partnership Agreement	TH	Thailand
EU	European Union	TPP	Trans-Pacific Partnership
FTA	Free Trade Agreement	TPSEP	Trans-Pacific Strategic Economic
FTAAP	Free Trade Area of Asia-Pacific		Partnership Agreement
GATS	General Agreement on Trade in Services	TSI	Trade Specialization Index
GATT	General Agreement on Tariffs and Trade	UN	United Nations
GDP	Gross Domestic Product	USA	United States of America
GL	Grubel-Lloyd	USD	US Dollar
GPU	Graphic Processing Unit	USMCA	United States-Mexico-Canada
HPC	High-Performance Computing	VN	Vietnam
IC	Integrated Circuit	VNM	Vietnam
ID	Indonesia	WTO	World Trade Organization

Executive Summary

I. Trilateral Statistics 2024

- In 2024, the combined GDP of China, Japan, and the ROK (CJK) reached USD 24.21 trillion, up from USD 23.58 trillion in 2023 an annual growth rate of approximately 2.7% and in total accounts for over 24% of global GDP. This modest yet consistent growth reflects the region's resilience amid global economic uncertainties.
- The CJK region, home to 1.584 billion people nearly 20% of the global population faces rapid aging and low fertility. The elderly populations exceed global averages, fertility rates are critically low, and population growth is negative or stagnant. These demographic trends signal long-term decline and labor force contraction unless offset by migration or policy interventions. Despite these challenges, the CJK region displays strong labor force participation with low unemployment and high female representation, all exceeding global averages. Tight labor markets amid shrinking working-age populations are a positive sign of the region's ability to navigate difficulties.
- The volume of trade in goods also reached an estimated USD 8.93 trillion in 2024, representing 18.8% of total global volume. Despite uneven external demand recovery, the region remains central to global trade. Strong ties to ASEAN, the EU, and the U.S. underscores CJK's role as a key stabilizer in the global economy.
- CJK-ASEAN ties are a sign of strong interdependence, as designed by the APT framework. In 2024, the Regional Comprehensive Economic Partnership (RCEP) accounted for 27.7% of global GDP at current prices, totaling USD 30.65 trillion. With CJK comprising over 80% of RCEP's GDP, the bloc plays a central role in deepening regional integration and connecting networks.

II. Global and Regional Economic Development

- The recent U.S. announcement of broad-based tariff measures have heightened economic uncertainty and volatility worldwide, with global growth expected to remain subdued. As a result, growth in both the ASEAN+3 region and CJK economies could dip below 4 percent in 2025, down from 4.3 and 4.1 percent in the previous year. These projections are subject to significant uncertainty amid a rapidly evolving trade environment. Nevertheless, the ASEAN+3 region enters this global trade shock from a position of relative resilience underpinned by the increasing importance of domestic demand and intraregional trade as growth engine, more diversified export markets with less reliance on the US market, and available monetary and fiscal policy buffers.
- Long-term global and regional prospects are increasingly shaped by secular forces including demographic aging, geoeconomic fragmentation, technological shifts, and climate transition with potential growth in ASEAN+3 and the CJK economies projected to decline from 4.0 and 4.3 percent in 2023 to 2.8 and 3.0 percent by 2050, respectively. However, well-designed policies to advance productivity-enhancing reforms could unlock significant untapped growth potential.
- The CJK economies are well-positioned to lead regional structural transformation by leveraging their economic scale, technological edge, and trade linkages. These strengths can foster cooperation across the diverse ASEAN+3 economies, each with distinct comparative advantages, in areas such as trade integration, infrastructure connectivity, digital transformation, and green transitions, which will be critical for unlocking the region's potential growth.

III. High-Quality Implementation of RCEP and High-Standard Promotion of CJKFTA: Synergies and Breakthroughs in Regional Economic Integration

- The implementation of RCEP has had a material impact at regional, national, and business levels. At the regional level, RCEP has promoted trade growth, raised the expectations of investment, and further integrated industrial and supply chains. At the national level, RCEP has played a significant role in stabilizing the industrial and supply chains of the three countries. At the enterprise level, survey respondents mostly gave positive comments on the implementation of RCEP.
- However, the implementation of RCEP has also faced some problems and challenges. These include the inability of small and micro enterprises to benefit from RCEP, the inadequate utilization of origin cumulation rules, the low level of customs clearance facilitation in some members, and the uncertain regional economic landscape. This calls for China, Japan and the ROK to strengthen coordination and cooperation with RCEP partners, creating a stable and predictable development environment and providing a new impetus to the RCEP region.
- CJK are encouraged to share best practices in customs facilitation, leverage RCEP rules to foster digital and service-sector collaboration, support membership expansion, and improve key provisions to enhance regional supply chains. It is recommended that the three countries accelerate CJKFTA negotiations in parallel by expanding cooperation in areas like healthcare, green energy, intellectual property, and the digital economy. In light of growing global uncertainties, stronger regional integration is needed to jointly mitigate shared risks, build resilience, and promote economic stability and growth across the region.

IV. Evolution of Free Trade Agreements in East Asia: A Focus on China, Japan, and the ROK

- East Asia lagged in FTA development until the late 1990s, with AFTA as the main agreement. The Asian Financial Crisis and the surge of FTAs globally spurred Japan, the ROK, and China to act, with bilateral and minilateral FTAs expanding in the 2000s. ASEAN was positioned at the center of this development with the formation of five ASEAN+1 FTAs. Competing regional visions emerged, including EAFTA, CEPEA, and TPP (with the TPP evolving into CPTPP after U.S. withdrawal). The CJK FTA began formal talks in 2012 but stalled due to tensions. Broader initiatives like the TPP and FTAAP also evolved. Meanwhile, RCEP negotiations, initiated in 2013, concluded in 2020 and took effect in 2022, strengthening regional cooperation. These developments signified a growing preference for FTAs in the region.
- The CPTPP and RCEP share goals of promoting trade and integration but differ in emphasis, content, and quality. CPTPP focuses on high-standard rules, stronger liberalization, and broad issue coverage, while RCEP emphasizes inclusive development and economic cooperation. CPTPP uses stricter rules, a negative list for services, and stronger investor and digital trade protections. RCEP usage remains low due to its recent enactment and complex nature. Positive signs for RCEP are present with the rising uptake, especially among Japanese exporters.
- Amid global protectionism and a weakened WTO, China, Japan, and the ROK must uphold a rules-based trading system
 vital for East Asia's growth. They should lead WTO reform, enhance RCEP standards, and finalize the long-stalled CJK
 FTA. China and the ROK are encouraged to join the CPTPP, with China already having begun its application process.
 These efforts will strengthen regional cooperation, support open trade, and counterbalance rising unilateralism.

V. Enhancing Supply Chain Resilience through Trilateral Cooperation: A Comparative Analysis of the Semiconductor Industries

- The ROK continues to lead in memory chips such as DRAM and MCP, though China is rapidly closing the gap, leading to more balanced trade and mutual reliance between the two countries. In contrast, ROK-Japan memory chip trade is declining, reflecting weaker ties. For system chips including those used in vehicles, power systems, and communication devices the ROK is competitive but faces growing pressure from Chinese Taipei and the United States. China is advancing steadily in this area, while Japan plays a limited role in system chip production.
- Japan remains dominant in manufacturing equipment and high-performance materials, with the ROK and China heavily reliant on its advanced tools and precision inputs for semiconductor production. While both aim to develop domestic alternatives, progress is limited. ROK-China trade in semiconductor materials is becoming more reciprocal, reflecting complementary roles in the regional supply chain. On the other hand, ROK-Japan trade remains largely one-sided, underscoring the ROK's structural dependence on Japanese technology, particularly in critical materials essential for semiconductor production.
- To address these imbalances and strengthen regional semiconductor supply chains, the study proposes institutional cooperation among the three countries. A formal dialogue platform, joint R&D, and shared technical standards would foster innovation and cross-border collaboration. A trilateral consortium focused on semiconductor materials and components could combine Japan's engineering expertise, ROK's manufacturing capabilities, and China's production scale to develop new technologies and accelerate commercialization. Coproduction and investment would balance trade and reduce dependency. A shared governance framework on export controls, investment screening, and supply chain security would enhance transparency, manage risks, and build trust.

VI. Conclusion

- The CJK economies, at the heart of the ASEAN+3 region, face major global trade disruptions amid subsequent shifts and uncertainties in U.S. trade policy. Despite external shocks, the region demonstrates relative strength in the past decades due to strong domestic demand, diversified export markets, technological advancements, and strengthened institutional cooperation. CJK's strengths in intra-regional trade, macroeconomic policies, and innovative technologies have buffered impacts, and ongoing efforts like RCEP and CJKFTA reinforce economic stability. Leveraging these assets is key to navigating future turbulence and securing regional growth and integration.
- Although the region is built on strong foundations, CJK and ASEAN+3 face key challenges to regional resilience. Intra-CJK trade integration remains limited, and supply chains — as seen in the case of semiconductors — show strategic vulnerabilities. Regulatory fragmentation, uneven financial development, and underutilized safety nets hinder deeper integration. Rising global trade and tensions in the technology sector further amplify risks, underscoring the urgent need for stronger regional cooperation to close structural gaps and ensure sustainable growth.
- To fortify regional resilience and sustainable growth, CJK and ASEAN+3 should deepen integration through a high-standard CJKFTA, harmonize regulations, and enhance digital utilizations. Strengthening supply chains in key industries and advancing financial safety nets are vital. Driving digital and green transitions and expanding global partnerships will boost structural transformation and resilience, enabling CJK and ASEAN+3 to lead in a more fragmented global economy.

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Trilateral Statistics 2024



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Chapter I.

Trilateral Statistics 2024 of China, Japan, and the ROK¹

1. CJK Economies at a Glance



TOTAL GDP

24.21



MERCHANDISE EXPORT

4.97



PERCENT OF WORLD GDP

24.11%



PERCENT OF WORLD EXPORT

21.0%



TOTAL POPULATION

1584



MERCHANDISE IMPORT

3.96



PERCENT OF WORLD POPULATION

19.4%



PERCENT OF WORLD IMPORT

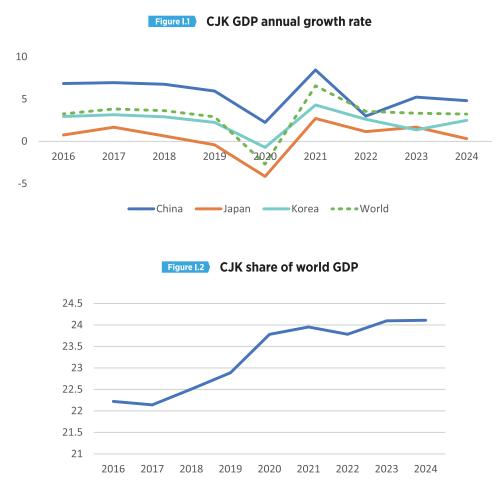
16.5%

¹ This chapter is prepared by XIE Tianyi, under the supervision of XU Hongda and the Consultative Board of the Trilateral Cooperation Secretariat (TCS). The data used in this Chapter is based on the Trilateral Statistics Hub (TSH), unless otherwise stated.

1.1 Gross Domestic Product (GDP)

In 2024, the combined GDP of China, Japan, and the ROK (CJK) reached USD 24.21 trillion, rising from USD 23.58 trillion in 2023. This accounts for more than 24% of global GDP.

The per capita GDP for CJK in 2024 reflected a modest 1.5% increase from 2023. This steady growth underscores the resilience of East Asia's major economies amid ongoing global uncertainty. The CJK economies continue to serve as key anchors in global supply chains and remain at the forefront of innovation across manufacturing, semiconductors, clean energy, and digital industries.



Source: World Bank Data: https://data.worldbank.org/

1.2 Population

The CJK population collectively amounts to approximately 1.584 billion people, representing nearly 20% of the global population. However, all three economies are facing profound demographic shifts driven by rapid aging and declining fertility. The proportion of the population aged 65 and over stands at roughly 14% in China, 30% in Japan, and 18% in the ROK — significantly higher than the global average of 10%.

Coupled with historically low fertility rates - 1.0 in China, 1.2 in Japan, and an exceptionally low 0.7 in the ROK - these trends signal long-term population decline and labor force contraction, which will persist unless offset by migration or policy interventions. Moreover, population growth rates in China and Japan are already negative or near zero (-0.1% and -0.49%, respectively), while the ROK maintains a marginal positive rate of 0.08%. This contrasts sharply with the global average growth rate of 0.9%, underscoring that CJK countries are outliers in terms of demographic momentum.

Labor force participation in CJK remains relatively strong compared to the global average, with Japan leading at 81.9%, followed by China at 74.7% and the ROK at 70.9% — all above the global average of 67.4%. Unemployment rates are low across the board, at 5.12% in China, 2.57% in Japan, and 2.80% in the ROK, reflecting tight labor markets amidst shrinking working-age populations. Female representation in the labor force is also notable — 45.1% in both China and Japan, and 43.8% in the ROK — exceeding the global benchmark of 40.2% and indicating substantial gender inclusion.

Figure 1.3 Population Growth (annual %)

1.4 1.2 1 0.8 0.6 0.4 0.2 0 2016 2017 2020 -0.2 -0.4 -0.6 China Japan Korea - - World

1.3 Trade

Source: World Bank https://data.worldbank.org/

In 2024, the volume of trade in goods for CJK reached an estimated USD 8.93 trillion, representing 18.8% of total global volume. In 2023, the trade in goods of CJK accounted for USD 8.5 trillion, while the trade in service accounted for nearly USD 1.6 trillion.

Despite the uneven pace of external demand recovery — particularly in Europe and North America — the CJK region continues to play a central role in global trade. With the three countries accounting for nearly one-fifth of global trade, their economic interlinkages remain a critical stabilizer in the global system.

Key trading partners are ASEAN, the EU, and the United States, which together make up the majority of the region's external trade flows.



Source: World Bank Data: https://data.worldbank.org/

2. Regional Economic Integration

The trade volume between ASEAN and the CJK countries reached USD 1,238.9 billion in 2023, accounting for:

34.9% of ASEAN's total trade

15.5% of China's trade

4.7% of the ROK's trade

This underscores the high degree of economic interdependence between CJK and ASEAN, reflecting the deepening ties under the ASEAN Plus Three (APT) framework. The CJK-ASEAN corridor continues to play a stabilizing and strategic role in East Asian regionalism, especially as the region works to strengthen supply chain resilience and innovation capacity.

The trend of deeper integration is further supported by the major regional trade agreement. In 2024, the Regional Comprehensive Economic Partnership (RCEP) accounted for 27.7% of global GDP (current price), reaching USD 30.65 trillion. CJK together constitute more than 80% of the total GDP of RCEP members, as China alone accounted for 61.2%, while Japan and the ROK accounted for 13.1% and 6.1%, respectively.

The RCEP agreement is deepening regional connectivity, lowering trade barriers, and fostering broader cooperation in digital economy, investment, and services trade. As key members of the framework, China, Japan, and the ROK are playing pivotal roles in maintaining economic dynamism and openness across the region.

ROK China

Figure 1.5 2024 RCEP Members GDP (current price USD)

Source: IMF DATA World Economic Outlook (WEO), https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.RES:WEO(6.0.0)

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Global and Regional Economic Development



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Chapter II.

Global and Regional Economic Development ¹

1. Recent Global and Regional Economic Development and Near-term Outlook

The global economy in 2024 was marked by volatility and policy uncertainty

In 2024, the global economy managed to maintain modest growth amid ongoing challenges. Global GDP expanded by around 3.2 percent, reflecting continued resilience in services activity and steady labor markets, alongside easing inflationary pressures. Headline inflation declined from 6.8 percent in 2023 to 5.7 percent in 2024, reflecting lagged effects from monetary tightening over the past years. On the trade front, global goods trade was estimated to grow by 2.7 percent in 2024 (World Trade Organization 2024), marking a moderate recovery after a period of weakness. These data on growth, inflation and trade reflect a global environment of subdued but stable growth, improving price stability, and cautiously rebounding trade activity.

Beneath this broadly stable headline performance, however, 2024 was marked by significant volatility, reflecting shifting policy expectations and persistent uncertainties. Early in the year, persistent US inflation and robust growth led to expectations of prolonged high interest rates. By mid-year, this outlook had reversed with signs of weakness in the US labor market, as markets began pricing in Federal Reserve rate cuts ahead of the actual easing cycle in September. The November US presidential election added further complexity, introducing more uncertainties about trade policies and inflation risks to the outlook.

¹ This Chapter is prepared by WANG Haobin and WU Yuhong, under the supervision of Allen NG (all from the Regional Surveillance group in ASEAN+3 Macroeconomic Research Office (AMRO)). The authors would like to thank AMRO Director, LI Kouqing and AMRO Chief Economist, Hoe Ee Khor for the guidance and the useful comments. All views and errors are that of the authors.

In Europe, inflation continued to fall but growth remained fragile amid weak domestic demand and lingering structural challenges. While manufacturing output saw some recovery, energy-intensive sectors continued to be held back by elevated production costs. In response, the European Central Bank began easing interest rates to support the economy, although fiscal policy remained constrained by limited budget space and efforts to consolidate public debt.

Emerging markets and developing economies (EMDEs) also struggled to regain momentum. High debt levels, weak investment, and global policy uncertainty weighed on growth prospects. Constrained fiscal space limited public spending, while elevated borrowing costs hampered development project financing. These challenges were compounded by slowing productivity growth and ongoing geopolitical risks, which continued to generate market volatility and dampen overall sentiment.

The ASEAN+3 region held steady despite external uncertainty

Despite a challenging external environment, the region² delivered robust macroeconomic performance in 2024, underpinned by resilient domestic and external demand (Figure II.1). A healthy labor market played a key role, with Japan, the ROK and major ASEAN economies maintaining high labor force participation and low unemployment (Figure II.2).

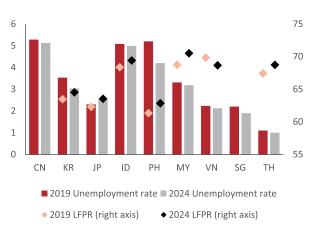
Figure II.1 Selected ASEAN+3: Real GDP Growth

(Percentage point, year-on-year)

Source: AMRO (2025), National authorities; AMRO staff calculations. Note: Data excludes Cambodia, Lao PDR, Myanmar, and Vietnam due to data unavailability.

Figure II.2 Selected ASEAN+3: Unemployment Rates and Labor Force Participation

(Percent of working-age population, seasonally adjusted; percent, seasonally adjusted)



Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

Note: CN= China; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. LFPR = Labor force participation rate. Unemployment rate data are up to Q4 2024. Labor force participation rate data are up to Q4 2024, except for Indonesia (August 2024).

² Throughout this chapter, the region refers to ASEAN+3, namely China, Japan and Korea (CJK economies) and all ten ASEAN economies (Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam). For brevity, "Brunei Darussalam" is referred to as "Brunei" in the text.

Consumer confidence and spending were supported by steady employment, rising wages, and easing inflation, particularly in the ASEAN-5 (Indonesia, Malaysia, the Philippines, Thailand, and Singapore). Strong exports and tourism recovery further lifted demand. Household consumption remained weaker in China and stayed relatively subdued in Japan and the ROK despite gradual improvements (Figure II.3). However, stronger external demand provided a boost, especially for China, Japan and the ROK (CJK economies). Services exports also grew robustly, averaging over 10 percent in the CJK economies (Figure II.4).

Figure II.3 Selected ASEAN+3: Contribution of Private Consumption to GDP Growth

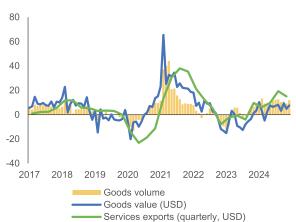
(Percentage point contribution)



Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Data for China refers to the contribution of total consumption to year-on-year GDP growth.

Figure II.4 Selected ASEAN+3: Real GDP Growth (Percent, year-on-year)



Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

Note: Data refers to the year-on-year growth of the sum of the respective indicators for the CJK economies (China, Japan, and Korea). The goods volume is the three-month moving average of the year-on-year growth.

Complementing consumer spending, investment activities across the region increased in 2024. The ASEAN-5 economies and Vietnam saw significant improvements in capital investment compared with the previous year. Indonesia, Thailand, Malaysia and Vietnam benefited from foreign investments in emerging sectors such as electric vehicles, batteries, data centers, and semiconductors. In Japan and the ROK, capital formation was slow early in the year but showed signs of recovery in the latter half of the year. China maintained steady investment levels in manufacturing and infrastructure.

Domestic activity remained robust, and external trade showed improvement in 2024. The semiconductor industry was a bright spot, with a substantial increase in global sales benefiting several regional economies (Figure II.5). The global pick-up in capital expenditure, especially in Artificial Intelligence (AI)-related technologies and infrastructure, further supported the region's goods export momentum. The services sector, especially tourism, saw substantial improvement, led by a strong recovery in Chinese outbound tourism, albeit still below pre-pandemic levels (Figure II.6). Transport and manufacturing services also gained momentum alongside strengthening goods exports.

Figure II.5 World: Semiconductor Sales Forecast

(Percent, year-on-year, three-month moving average)

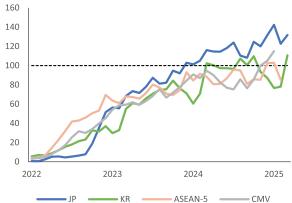


Source: AMRO (2025), WSTS; AMRO staff estimates.

Note: Forecast is made by WSTS as updated in November 2024.

Figure II.6 Selected ASEAN+3: Tourist Arrivals

(Index, 2019=100)



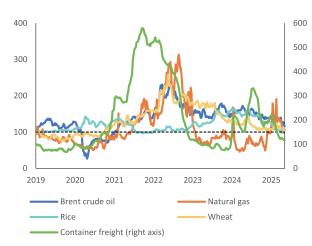
Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

Note: JP = Japan; KR = Korea; ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; CMV = Cambodia, Myanmar,

The region experienced a further decline in inflation to pre-pandemic levels during 2024, although the path was not always smooth. External factors, such as the conflicts in the Middle East and shipping disruptions in the Red Sea, caused temporary spikes in energy prices and transportation costs (Figure II.7). However, the overall trend showed improving price stability across the region, with core inflation easing across both CJK and ASEAN economies (Figure II.8).

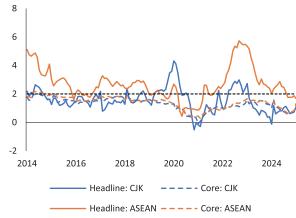
Figure II.7) World: Selected Commodity and Shipping Figure II.8) ASEAN+3: Headline and Core Inflation

Prices (Index, January 4, 2019 = 100)



Source: AMRO (2025), Energy Information Administration, Drewry Shipping Consultants Ltd via Haver Analytics; AMRO staff calculations. Note: Freight costs refer to the Drewry Composite Freight Rate for 40foot containers.

(Percent, year-on-year)



Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

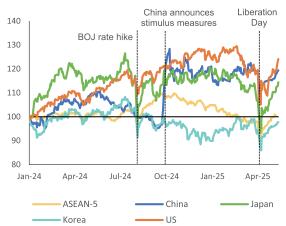
Note: CJK = China, Japan, and Korea, Regional aggregates are GDPweighted. Data up to December 2024, except Myanmar (September 2024). Core inflation data excludes Brunei and Myanmar due to data unavailability.

In response to these improving inflation dynamics, most central banks in the region moved toward more supportive monetary policies as inflation fell near to or within inflation target band. Several economies, including China and the ROK, as well as Philippines, Indonesia and Thailand in ASEAN, cut interest rates in the second half of the year. However, Japan stood out as an exception by ending its long-standing unconventional monetary stimulus program and raising its policy rate. This move is in response to growing evidence that inflation is becoming anchored at around 2 percent, prompting Japan to reduce the accommodativeness of its policy stance.

Despite significant market volatility during the year, financial markets continued to function normally (Figure II.9), albeit with liquidity support from central banks. External positions remained resilient, despite volatile capital flows and sharp movements in exchange rates during the year. The region, especially ASEAN-5, also attracted substantial international investment flows during the first half of the year, reflecting the reconfiguration of global supply chains (Figure II.10).

Figure II.9 Selected ASEAN+3: Equity Market Indices

(Index, January 2, 2024 = 100)

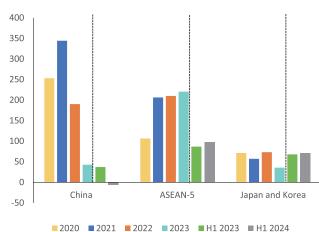


Source: AMRO (2025), National authorities via Haver Analytics; AMRO staff calculations.

Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

Figure II.10 Selected ASEAN+3: Foreign Direct Investment, by Regional Grouping

(Billions of US dollars)



Source: AMRO (2025), International Financial Statistics database, IMF; AMRO staff calculations.

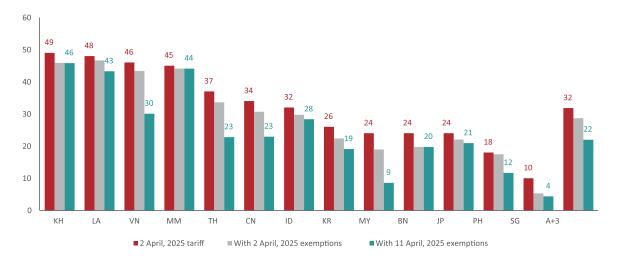
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Data refers to the direct investment liabilities item in the balance of payments.

Entering 2025, however, the global economy's steady performance has given way to an unprecedented wave of trade disruptions and geopolitical fragmentation³

On April 2, 2025 — now referred to as "Liberation Day" — the US announced sweeping tariffs on imports of over 60 economies, including all ASEAN+3 economies. As the US administration continually adjusts its tariff measures in response to market reactions and counter measures by trading partners, implementation details have remained remarkably fluid — creating a multilayered and unpredictable trade landscape that is continuously evolving.

If implemented and sustained, these initial tariffs would mark the most severe escalation in trade protectionism in recent history. The US announcement of reciprocal tariffs has already heightened recession fears in the US, amplifying the risk of negative spillovers to the global economy. For the ASEAN+3 region, with a baseline 10 percent tariff on all imports and additional punitive rates for economies with large bilateral trade surpluses, regional economies were initially subject to an average effective tariff rate of 28 percent. (Figure II.11, Figure II.12). While the direct impact on ASEAN+3's total exports varies by economy and continues to vary with policy adjustments, the broader implications would be substantial. Supply chain uncertainties, heightened investor caution, and the possibility of cascading trade measures contribute to the complexity of the situation.

Figure II.11 United States: Adjusted April 2, 2025 Tariff Rate for Imports from ASEAN+3 (Percent)



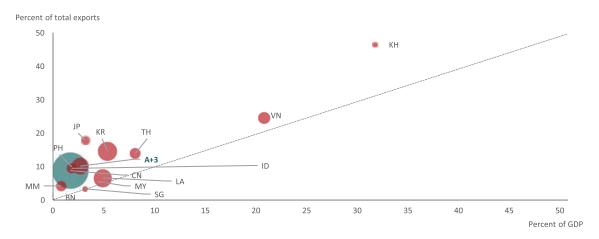
Source: S&P Global Trade Analytics; AMRO staff calculations.

Note: A+3 = ASEAN+3; BN = Brunei; CN = China; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Adjusted April 2, 2025 tariff is calculated by adjusting the reciprocal tariff rate announced on April 2 to account for product exemptions in the April 2 Executive Order and April 11 announcement, and applying a 25-percent tariff specifically to automotive, steel, and aluminum products under Proclamation 10908, Proclamation 10895, and Proclamation 10896.

³ The discussion of trade disruptions in this section and the next section draws from the AMRO blog "ASEAN+3: Navigating Unprecedented Trade Shocks from a Position of Resilience" (Ng. Wang and Chong 2025).

Figure II.12 ASEAN+3: Share of Total Exports and GDP of Affected Exports

(Percent share of each economy's total exports; percent share of each economy's GDP)



Source: S&P Global Trade Analytics, International Monetary Fund; National authorities via Haver Analytics; AMRO staff calculations.

Note: A+3 = ASEAN+3; BN = Brunei; CN = China; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Size of the bubble represents the size of each economy's exports to the US in the 12 months up to November 2024. Share of exports affected by effective tariffs shows the total exports to the US excluding the exempted products as a share of the economy's total exports. Total exports from Cambodia, Lao PDR, Myanmar and Vietnam are proxied by the exports over the 12 months up to November 2024. Share of GDP affected by effective tariffs shows the total exports to the US excluding the exempted products as a share of the economy's total GDP in 2024.

Under the initial "Liberation Day" scenario, global growth could decline to 2.7 percent in 2025 and 2.2 percent in 2026, down from 3.2 percent in 2024. Regional growth would slip below 4 percent in 2025 and ease further to 3.4 percent in 2026 (Table II.1), compared to 4.3 percent in 2024. Growth in the CJK economies would fall to 3.7 percent in 2025 and 3.3 percent in 2026, also down from above 4 percent in 2024.

Under the "Pause" scenario — where the U.S. maintains its April 9 announcement to delay its "Liberation Day" tariff hikes, while keeping an additional 30 percent tariff on China and a 10 percent baseline tariff for the rest of the world — global growth is expected to remain sluggish at 3.0 percent in both 2025 and 2026. Growth in the ASEAN+3 region would ease to 3.9 percent and 3.8 percent, while CJK economies could see slower expansion at 3.8 percent and 3.6 percent, respectively. These projections are subject to significant uncertainty. The evolving scope and intensity of trade measures — driven by successive rounds of actions and counteractions — and their cascading effects on growth, inflation, financial markets, and investor sentiment have created an unusually wide range of possible outcomes.

Overall, downside risks to the outlook remain elevated. The escalation of trade tensions has heightened the risk of a global slowdown, with possible recessionary effects, inflationary shocks, and financial market volatility. For globally integrated economies in the region, these developments could trigger sharp external demand shocks, capital flow instability, and broader macro-financial disruptions.

Table II.1 ASEAN+3: AMRO Staff Preliminary Growth Estimates and Forecasts, 2025–26

(Percent, year-on-year)

Faanamy	Pre-April 2, 2025		'Liberation Day' Scenario		'Pause' Scenario	
Economy	2025f	2026f	2025f	2026f	2025f	2026f
ASEAN+3	4.2	4.1	3.8	3.4	3.9	3.8
CJK	4.1	4.0	3.7	3.3	3.8	3.6
ASEAN	4.7	4.7	4.4	3.8	4.6	4.7
World	3.0	3.0	2.7	2.2	3.0	3.0

Source: National authorities via Haver Analytics; AMRO staff estimates and forecasts.

Note: f = forecast. 'Liberation Day' and 'Pause' scenarios do not include the impact of policy response to counteract the negative impact of the tariffs. The Pause scenario refers to the temporary suspension of reciprocal tariffs, applying the universal 10 percent tariffs to all economies and 30 percent tariffs on China (including 20 percent tariffs announced in Executive Order 14195) effective from 12 May.

The ASEAN+3 Region is positioned for resilience against the global trade shock

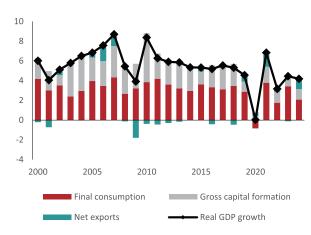
While these trade shocks are undoubtedly daunting and will weigh on regional economies, the ASEAN+3 region enters this period of global trade turbulence from a position of relative strength and resilience.

First, the region's economies are now more domestically driven than before, with domestic demand — both consumption and investment — and intra-regional trade being the primary drivers of growth. (Figure II.13, Figure II.14). While the shock to external demand will spill over into the broader economy, robust domestic demand will likely remain, supported by more expansionary monetary and fiscal policies and structural measures to bolster domestic-driven growth.

Second, the region is now supported by a more diversified external demand structure. The share of exports going to the US has fallen steadily from about 24 percent in 2000 to below 15 percent currently (Figure II.15). Meanwhile, intraregional trade now accounts for 45 percent of the total exports, with China becoming the region's largest final demand market, helping to stabilize regional supply chains and demand flows (Figure II.16).

Third, many regional economies have fiscal and monetary space, which can be used to support growth and manage downside risks as needed. Foreign exchange reserves are adequate, offering an important buffer against external shocks. Regional economies also have extensive experience from past crises in effectively combining fiscal, monetary, and other policy measures to navigate challenging economic conditions. This proven ability to calibrate policy mix will be particularly valuable as policymakers work to mitigate trade disruptions while maintaining economic stability in the months ahead.

Figure II.13 Selected ASEAN+3: Contribution to Real GDP Growth (Percent, year-on-year)

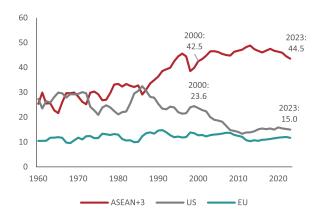


Source: National authorities via Haver Analytics; AMRO staff calculations.

Note: Statistical discrepancies are not shown. Excludes Cambodia, Lao PDR, Myanmar, and Vietnam.

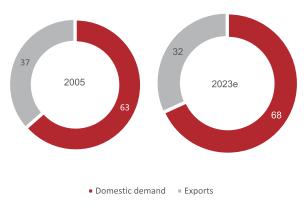
Figure II.15 ASEAN+3: Gross Exports to Key Trading

Partners (Percent of gross exports)



Source: IMF via Haver Analytics; AMRO staff calculations. Note: EU = European Union and refers to EU27.

Figure II.14) ASEAN-4 and Vietnam: GDP Decomposition, Import-Adjusted GDP Framework (Percent share of GDP)



Source: National authorities; Organisation for Economic Co-operation and Development; AMRO staff estimates.

Note: Domestic demand refers to both private and public consumption and investment (net of imports)

Figure II.16) ASEAN+3 excluding China: Domestic Value-added Exports, by Final Market

(Percent of gross exports)



Source: Organisation for Economic Co-operation and Development (OECD) Trade in Value-Added; AMRO staff calculations.

Note: For series where Korea or Japan is the final market, the respective economy is excluded from the regional exports share calculation.

2. Long-term Growth Prospects for the Region and Key Implications

Long-term growth prospects are profoundly influenced by key secular trends⁴

Beyond the near-term challenges, the long-term growth outlook for both the global and regional economy will be increasingly shaped by deep-seated secular forces. These structural shifts — already underway — are set to redefine the global economic landscape over the coming decades, complicating efforts to sustain strong growth. Four trends stand out:

• **Demographic aging and population dynamics:** Demographic aging is accelerating globally, with both advanced and emerging economies facing falling birth rates and longer life expectancies (Figure II.17). As a result, growth in the working-age population is slowing sharply and is expected to contract in many regions (Figure II.18). This shift has far-reaching implications for growth, consumption, and fiscal sustainability. Aging populations lead to lower labor force participation, slower productivity gains, and rising dependency ratios — contributing to the projected global growth slowdown.

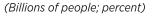
Figure II.17 ASEAN+3: Fertility Rates

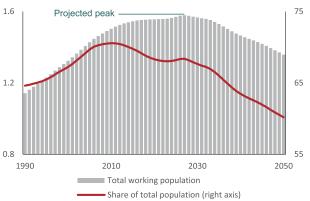
(Live births per woman)



Source: AMRO (2024), United Nations Department of Economic and Social Affairs, Population Division; AMRO staff calculations. Note: BN = Brunei; CN = China; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Figures for 2035 are UN estimates (medium variant).

Figure II.18 ASEAN+3: Projected Working Population





Source: AMRO (2024), United Nations Department of Economic and Social Affairs, Population Division; AMRO staff calculations.

Note: Data after 2021 uses UN estimates (medium variant).

⁴ The discussion of long-term prospect of this section and the next two sections draws heavily from "On the Road to Net Zero", Chapter 2 from the 2023 ASEAN+3 Regional Economic Outlook (AREO) (AMRO 2023), "Navigating Tomorrow", Chapter 2 from the 2024 AREO (AMRO 2024), and "Long-term Growth of ASEAN+3: Prospects and Policies", Chapter 3 from the 2025 AREO (AMRO 2025).

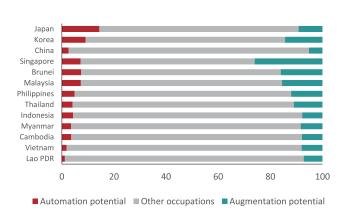
- Global trade reconfiguration and geoeconomic fragmentation: The global trade landscape is being reshaped by shifting geopolitical dynamics. Traditional globalization is giving way to more regionalized networks, as economies reassess strategic dependencies and prioritize resilience over efficiency in supply chains (Figure II.19). This geoeconomic fragmentation marks a structural break from the highly integrated trade system of past decades introducing new frictions but also creating opportunities for economies that can strategically reposition within emerging economic blocs.
- **Technological transformation and disruption:** Rapid advances in artificial intelligence, automation, and digital connectivity are reshaping economic structures worldwide. While these technologies offer productivity gains and new growth opportunities, they also disrupt labor markets and traditional industries (Figure II.20). The rise of generative AI and advanced automation raises fundamental questions about the future of work and skills. As adoption accelerates, gaps between technology leaders and followers are widening shaping relative growth trajectories, reinforcing inequalities, and opening new paths for advancement.

Figure II.19 ASEAN+3: Top Export Markets (Percent of total exports)

100 80 60 40 20 0 2000 2024 2000 2024 **ASEAN** CJK ■ China Japan ■ Korea Other ASEAN+3 Other Asia ■ Europe United States ■ Others

Source: AMRO (2024), IHS Markit; AMRO staff calculations. Note: Data consists of the shares of the top export partners/markets for each subregion for that particular year. As such, the composition of regional groupings (e.g., Europe) changes over time. The subregional aggregates were calculated using simple averaging of partner shares.

Figure II.20 ASEAN+3: Share of Employment with Automation and Augmentation Potential (Percent)



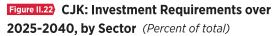
Source: AMRO (2024); Gmyrek, Berg, and Bescond (2023); AMRO staff calculations.

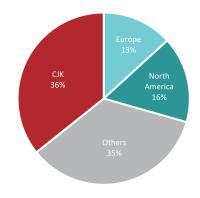
Note: Data refers to the proportion of jobs with automation and augmentation potential as a share of total employment within each economy. Data are as of 2022 (Korea, Singapore, Thailand, Vietnam), 2021 (Brunei, Cambodia, the Philippines), 2020 (Japan, Myanmar, Malaysia), 2017 (Lao PDR), 2010 (Indonesia), and 2005 (China).

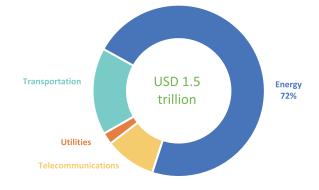
• Climate change and transition toward net-zero emission: Climate change is emerging as a defining structural force that will reshape long-term growth prospects globally. The intensification of climate-related risks — from extreme weather events to resource pressures — is already disrupting supply chains and production systems. The CJK economies, contributing more than a third of global annual carbon dioxide emissions, face significant challenges in balancing emission reduction commitments with other development priorities (Figure II.21). In response, economies are accelerating

their transition toward net-zero emissions, spurring wide-ranging shifts in investment flows, energy systems, and industrial structures. This green transformation presents both adjustment costs and new growth opportunities (Figure II.22). Economies that can mobilize green finance, upgrade infrastructure, and foster innovation in clean technologies will be better positioned to sustain longterm productivity and resilience in the face of environmental shocks.

Figure II.21) World: Annual Carbon Dioxide Emissions, Figure II.22 CJK: Investment Requirements over **2023** (Share of total emission)







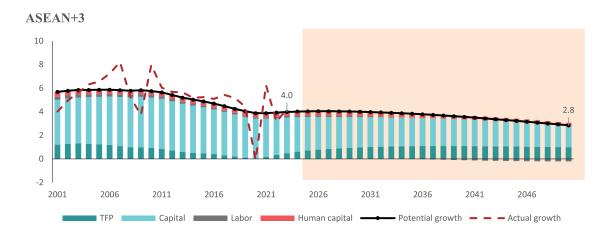
Source: Global Carbon Budget (2024) via Our World in Data, AMRO staff calculations

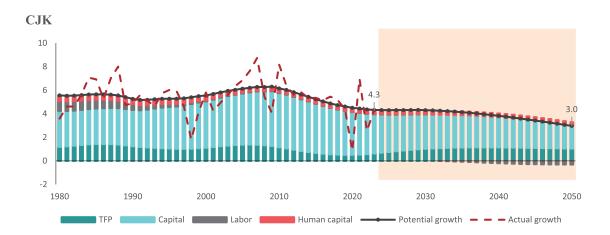
Source: AMRO (2025), G20 Global Infrastructure Outlook; AMRO staff calculations.

Note: CJK = China, Japan, and Korea. Utilities mainly cover water. Transportation infrastructure covers ports, rail, roads, and airports.

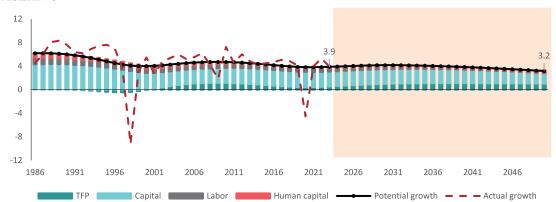
Notwithstanding these secular trends, historical trends and trajectories indicate that the ASEAN+3 region is projected to remain a key driver of global growth, with potential growth expected to moderate from around 4.0 percent in 2023 to 2.8 percent by 2050 (Figure II.23). This trajectory is underpinned by continued, albeit slowing, capital accumulation, human capital improvements, and total factor productivity (TFP) growth. At the same time, aging population, especially in the CJK economies — is expected to weigh on labor supply and dampen overall growth. Ultimately, the region's actual growth trajectory will depend on its ability to mitigate these structural drags and turn them into opportunities for transformation and resilience.

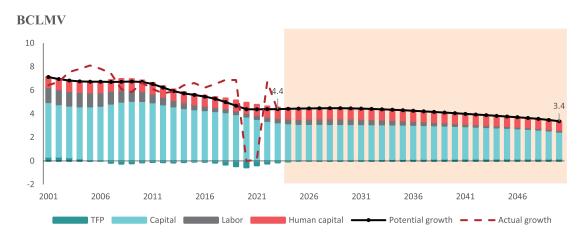
Figure II.23 ASEAN+3: Potential Growth Projections, by Factor Input (Percent, year-on-year)





ASEAN-5





Source: AMRO (2025); International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.

Note: ASEAN+3 = China, Japan, Korea, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. CJK = China, Japan, and Korea. ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, Vietnam. TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP.

Intensified geoeconomic fragmentation and accelerated demographic aging could exacerbate the growth slowdown

The key secular trends could have significant impacts on the long-term growth of the region. To illustrate this, we can consider two downside scenarios that could substantially reduce the ASEAN+3 region's baseline potential growth through 2050 (Figure II.24). In the first scenario, intensified geoeconomic fragmentation would severely hamper technological diffusion and productivity growth. A decline with these impacts would potentially reduce the region's annual growth by 0.5 percentage point on average relative to the baseline, resulting in regional potential growth dropping from 2.8 percent to 2.3 percent by 2050. This represents a substantial cumulative impact equivalent to approximately 15 percent of the region's projected 2050 output — larger than Japan's estimated economy that year — with ASEAN economies disproportionately affected.

In the second scenario, accelerated demographic aging, leading to faster workforce decline, would reduce the region's potential growth to 2.6 percent by 2050, compared to 2.8 percent in the baseline. Based on "low fertility" projections from the United Nations, this scenario would cut average growth potential by 0.2 percentage point by 2050, resulting in a GDP loss of about 5.3 percent of the region's projected 2050 output. Both scenarios highlight critical challenges for the region, particularly the need to boost productivity and human capital development to counterbalance these long-term structural headwinds.

Well-designed policies to advance productivity-enhancing reforms could unlock substantial growth potential

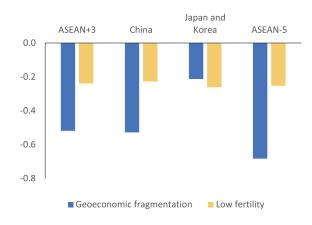
Well-designed policies to advance structural transformation and sectoral upgrading could unlock substantial growth potential in the ASEAN+3 region. A key advantage lies in the region's ample room for economic reconfiguration — from labor-intensive activities to higher-value-added sectors such as semiconductors, digital services, and Al-driven production. This ongoing shift presents opportunities to raise productivity, spur innovation, and create high-skilled employment. Capturing these gains, however, will require sustained investment in education, infrastructure, and enabling business environments to support industrial upgrading.

The services sector is also emerging as a key engine of growth, particularly in digital finance, logistics, and IT services. Yet, productivity in services remains well below potential. Targeted reforms are needed to enhance efficiency, strengthen competition, and accelerate the integration of digital technologies across sectors. Likewise, the region's green transformation — driven by growing investment in clean energy, electric mobility, and climate resilience — offers a new frontier for sustainable growth.

Scenario analysis suggests that such targeted, growth-enhancing reforms could significantly lift the region's growth potential. Technology-driven improvements in TFP offer the greatest upside. Infrastructure development would yield the highest returns in ASEAN, while human capital investments are especially critical for the CJK economies. If implemented comprehensively, these policies could raise long-term regional growth for CJK economies by as much as 2 percentage points over the next decade, representing a nearly 50 percent increase relative to baseline projections (Figure II.25) (AMRO 2025).

Figure 11.24) ASEAN+3: Decline in Potential Growth in 2050, Under Two Scenarios

(Percentage point difference from the baseline)



Source: AMRO (2025); International Labour Organization; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.

Note: ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand. The aggregate decline is the weighted average of the declines in the projected growth of regional economies in 2050.

Table II.2 CJK: Potential Growth Scenarios

(Percent, year-on-year)

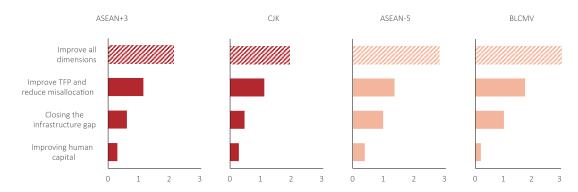
Scenarios	2001- 23	2024- 30	2031- 40	2041- 50		
	Actual	Projections				
Baseline	5.5	4.3	4.1	3.4		
Scenario: Geoeconomic fragmentation						
TFP convergence effects fully eliminated due to barriers to technology diffusion	5.5	3.9	3.5	2.9		
Scenario: Low fertility						
Accelerated population decline (Fertility rate at 0.5 births below United Nations median assumption)	5.5	4.0	3.6	2.9		

Source: AMRO (2025); International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.

Note: CJK = China, Japan, and Korea. TFP = total factor productivity. The potential growth is the aggregate regional growth weighted by purchasing power parity-adjusted GDP, averaged over time.

Figure II.25 ASEAN+3: Impact of Specific Policy Interventions on Annual Growth to 2050

(Percentage point increase relative to the baseline)



Source: AMRO (2025); AMRO staff calculations.

Note: CJK = China, Japan, and Korea. ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam. TFP = total factor productivity. Upside scenarios assume all regional economies converge to the Organisation for Economic Co-operation and Development members frontier or the theoretical frontiers at the historical convergence rate achieved by the leading ASEAN+3 economies (Japan, Korea, and Singapore).

Implications for CJK economies: leading productivity enhancement and driving structural transformation across the region

Amid an increasingly uncertain and fragmented global economy, the CJK economies are well-positioned to play a leading role in fostering long-term growth across the region. With their economic scale, technological edge, and deep trade linkages, the CJK economies have both the capacity and the strategic interest to drive structural transformation, deepen regional cooperation, and support the region's transition toward more resilient and sustainable growth.

Studies have found that structural transformation across the ASEAN+3 region has stalled and remains incomplete in many economies⁵. This poses a long-term challenge to productivity growth and economic upgrading. The CJK economies have a vital role to play in reviving and advancing structural transformation — not only within their own economies but across the region. Deepening regional cooperation is essential to this effort, guided by a fundamental principle: leveraging trade, investment, and integration to generate efficiency gains and shared growth.

The region's diversity is a major strength. Each economy holds distinct comparative advantages — from advanced technologies and digital innovation to strategic location and abundant labor and natural resources. China's vast and increasingly sophisticated domestic market, combined with Japan and the

⁵ See, for instance, AMRO (2025), Rodrik (2016), and Atolia and others (2020) for relevant findings.

ROK's leadership in frontier technologies, offers enormous potential for mutually beneficial growth. At the same time, many ASEAN economies, such as Indonesia, Thailand, and Malaysia, boast strong manufacturing bases and pivotal positions within regional and global supply chains. Others, like Vietnam and Cambodia, are benefiting from abundant labor supply and rapid industrialization, attracting growing investment in export-oriented industries. Together, this diversity creates fertile ground for deeper regional integration and collaboration.

Strengthening regional cooperation across ASEAN+3 will be critical to advancing the region's long-term development agenda. Priority areas include deepening trade and investment integration, expanding infrastructure connectivity, accelerating digital and green transitions, and enhancing financial cooperation. Cross-border initiatives — such as regional supply chain networks, subregional development programs, and efforts toward a shared low-carbon future — can foster more inclusive and resilient growth. The diversity of ASEAN+3 economies provides fertile ground for such collaboration (Hinojales, Kho and Tan 2023).

With ample room for greater integration, the CJK economies are well-positioned to lead efforts to strengthen cross-border industrial linkages, support technology diffusion, and expand regional demand. Doing so will be critical for unlocking the region's untapped productivity and ensuring that ASEAN+3 can rise to meet the challenges and opportunities of the next development phase.

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High-Quality Implementation of RCEP and High-Standard Promotion of CJKFTA: Synergies and Breakthroughs in Regional Economic Integration



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Chapter III.

High-Quality Implementation of RCEP and High-Standard Promotion of CJKFTA: Synergies and Breakthroughs in Regional Economic Integration

PAN Yichen

China, Japan and the ROK, situated in the center of Northeast Asia, are important global economies, and their combined trade volume and GDP account for approximately 20% of the world's total. The three countries account for nearly 70% of Asia's economic growth and over 30% of the global economic growth. Trilateral trade and economic cooperation plays an important role in the trend of economic development in the Asia-Pacific region as well as in the world economic landscape. However, due to a host of internal and external factors, trilateral trade and economic cooperation is still facing great uncertainties, and there has even been a downward trend in trade and investment.

The Joint Declaration of the Ninth China-Japan-ROK Leaders' Meeting in 2024 emphasized that "the joint efforts of the three countries in the economic and trade field play an important role in the prosperity and stability of the regional and global economies." Currently, the global economy still faces downward risks such as the intensification of trade tensions and protectionism, geopolitical conflicts, and challenges in public finance. In the face of a significant increase in the uncertainty of global economic policies and a fierce impact on the trade order, China, Japan and the ROK need all the more to foster economic and trade cooperation through institutional arrangements.

¹ OECD (2024)

² OECD (2025)

Regional Comprehensive Economic Partnership (RCEP) and China-Japan-ROK Free Trade Agreement (CJKFTA) are both institutional arrangements to boost economic coopeations, enhance regional integration, and contribute to free trade and global economic growth. This study argues that the three countries should collaborate to promote the high-quality implementation of the RCEP and make breakthroughs in high-level CJKFTA negotiations. In the first part, this study reviews the development of China's FTAs. In the second part, the study evaluates the results of RCEP implementation. In the third part, this study puts forward policy recommendations.

1. Review of China's FTA Developments and the Status Quo of RCEP and CJKFTA

1.1 China's FTA developments

Over the past two decades, China has signed 23 FTAs with 30 countries and regions around the world and with Belt and Road partners, including RCEP, which is the world's largest free trade area in terms of population, trade volume and growth potential. Such efforts have fueled regional economic integration.³

From the perspective of market access, China's commitment to high-standard opening-up has been fulfilled. In the field of trade in goods, zero-tariff treatment is ultimately accorded to over 90% of the goods covered by China's FTAs. Among them, the proportion of zero-tariff goods to which China is committed under FTAs with New Zealand, Chile, Costa Rica and Cambodia is approximately 97%, approaching the liberalization level under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). In the field of services and investment, China has deepened its commitments to the existing WTO General Agreement on Trade in Services (GATS). The transition from a positive list to a negative list for market access in FTAs has further promoted the liberalization in services and investment. In September 2021, China officially submitted an application to join the CPTPP. This demonstrates China's willingness and determination to continuously deepen reform and expand opening-up.

From the perspective of economic and trade rules, China has included a number of key issues in the negotiations of international economic and trade rules, including Intellectual Property Rights, competition policy, e-commerce, and environmental protection. The scope of rule-related issues covered by FTAs are constantly expanding. In November 2021, China officially submitted an application to join the Digital Economy Partnership Agreement (DEPA). Currently, China is conducting accession negotiations and has carried out in-depth exchanges on digital economy-related issues. At the same time, China has steadily expanded institutional opening-up, actively aligned with international high-standard economic and trade rules such as the CPTPP, and promoted further compatibility of rules, regulations, management, and standards.

³ Pan Yichen, Yuan Bo & Wang Qingchen. (2022)

From the perspective of economic and trade cooperation, FTAs have acted as a key catalyst for China's economic development. Through FTAs, the relations between China and its partners have been cemented, and the cooperation in the fields of goods, services and investment have been fuelled. FTAs have also facilitated the free flow of economic factors in the region by lifting market access restrictions and harmonizing standards. Especially in the context of the COVID-19 global pandemic and the intensification of supply chain disruptions, these agreements have provided a source of institutional stability for China and partners' trade, investment, and supply chain cooperation.

1.2 Review of the Chinese policies to promote high-quality implementation of the RCEP

The Chinese government prioritized and promoted the high-quality implementation of RCEP. In January 2022, the Ministry of Commerce and related ministries issued the Guiding Opinions on the High - Quality Implementation of the Regional Comprehensive Economic Partnership Agreement. In April 2023, the General Office of the State Council issued opinions on stabilizing the scale and optimizing the structure of trade, which required in-depth training on RCEP and other topics, and increased the comprehensive utilization of FTAs. It also encouraged and guided local organizations to promote trade with RCEP partners and others.

In May 2024, the General Office of the Ministry of Commerce of China issued the Circular on Referring to Good Experiences and Practices for High-Quality Implementation of RCEP, pointing out the way for local governments to further implement RCEP.⁴ Local governments across China have carried out several practical explorations, such as developed AI-based query platform that facilitated companies to inquire tax rates, and held exhibitions to help enterprises deepen cooperation with partners in RCEP region.

1.3 Progress and Prospects of CJKFTA

(1) CJKFTA negotiation progress

The development of CJKFTA was proposed back in 2002. After ten years, the CJKFTA negotiations officially launched in November 2012. As of November 2019, 16 rounds of negotiations had been held. The three parties have established a number of working groups on trade in goods, services, investment, competition, e-commerce, etc. At the chief negotiators meeting of the 15th Round of CJKFTA Negotiations held on April 12, 2019, the three parties agreed to create an "RECP+" agreement, so as to further enhance trade and investment liberalization and incorporate high-standard rules on the basis of the RCEP consensus.

⁴ Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

The Joint Declaration of the Ninth Trilateral Summit Meeting of China, Japan and the ROK in May 2024 declared "discussing and accelerating the negotiations on a trilateral free trade agreement, with a view to reaching a free, fair, comprehensive, high-quality, mutually beneficial free trade agreement with its own value". At the China, Japan and the ROK Foreign Ministers' Meeting on March 22, 2025, China called for an early resumption of the CJKFTA negotiations and expressed hope that an agreement would be reached as soon as possible. As stated in the Joint Media Statement of the Trilateral Economic and Trade Ministers' Meeting on March 30, 2025, the three countries are to "keep discussions for speeding up negotiations" for CJKFTA.

(2) The prospects of the CJKFTA

For decades, the mutually beneficial cooperation among China, Japan, and the ROK has brought significant economic benefits to all three parties, laying a solid foundation for their advancement of CJKFTA. China has been Japan's largest trading partner for 18 consecutive years and the ROK's largest trading partner for 22 consecutive years. China boasts a vast market and is continuously upgrading consumer demand, providing Japanese and Korean companies with extensive markets and substantial profits. Japanese and Korean enterprises operating in China have also shared their experiences in technological innovation and business management, promoting the rapid growth and transformation of Chinese enterprises. Cooperation platforms such as the China-ROK Industrial Park and the China-Japan Local Development Cooperation Demonstration Zone have further strengthened the industrial synergy among the three countries. Accelerating the construction of CJKFTA in line with the interests of the three countries will further enhance their influence in the global economy, and unleash huge potential for cooperation.

CJKFTA will help to form a huge unified regional market. According to World Bank data in 2023, the combined GDP of China, Japan, and the ROK reached \$24.1 trillion, surpassing the EU's total of \$18.6 trillion and second only to the North American Free Trade Area's \$30.9 trillion. However, the degree of economic integration in the three countries lags behind that of the EU and North America. If the CJKFTA is achieved, the three countries will form a regional market with a population of 1.5 billion and a GDP of \$24 trillion. Integrating the markets of the three countries will further promote the free and efficient flow of goods, capital, people, technology, and other factors within the region, thereby releasing more momentum for trilateral cooperation.

CJKFTA will further promote trade and investment liberalization. China, Japan and the ROK are important trading partners of each other. In recent years, around 60% and 80% of Japan and the ROK's FDI in China was in the manufacturing sector. Lowering tariffs on consumer goods will improve consumer welfare in the three countries and provide more business opportunities for exporters. As the service trade sector of the three countries continues to expand, CJKFTA will enhance the level of service trade liberalization, expanding the scope of service trade cooperation among the three countries.

CJKFTA can inject new momentum into digital and green economic cooperation among the three countries, achieving new growth in trilateral collaboration. Green economic cooperation aligns with the carbon neutrality goals of the three countries. The three countries lead globally in emerging green technologies such as lithium-ion battery technology, green hydrogen, and carbon capture, utilization, and storage⁵. CJKFTA can also inject new momentum into exploring cooperation among enterprises in areas like energy conservation, environmental protection, hydrogen energy, and new energy vehicles. The digital economy has become a significant driver of economic growth. Under the rules of CJKFTA e-commerce, companies from the three regions can actively explore cooperation in areas such as cross-border e-commerce, big data, artificial intelligence, smart cities, intelligent medical services, and education.

CJKFTA will provide a stable development environment for the three countries. Against the backdrop of rising global uncertainties, the CJKFTA will help improve the regional economic and trade development environment, stabilize business operations expectations, and boost trade and investment vitality as an institutionalized trade arrangement. It will also contribute to building a more stable and efficient regional, industrial, and supply chains, creating new development opportunities to the economies of the three countries and the region as a whole.

In short, the achievements of economic and trade cooperation among China, Japan and the ROK have laid a good foundation for the three countries to accelerate the CJKFTA. CJKFTA can function as a power engine to promote the quality and upgrading of cooperation among the three sides. The three countries should push for breakthroughs in CJKFTA negotiations as soon as possible and work together to advance the regional integration process.

2. Evaluation of the Effect of RCEP Implementation

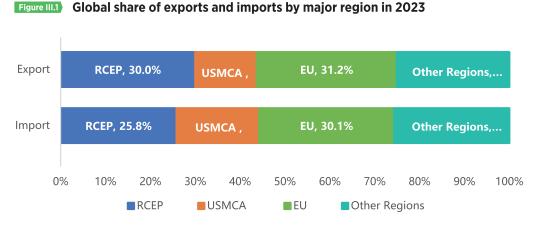
RCEP has been in force for more than three years. Through RCEP, a free trade partnership has been established between China and Japan, and between Japan and the ROK for the first time. From a Chinese perspective, this analysis evaluates RCEP's implications for the regional economy and its effects on China's trade dynamics with Japan and the ROK.

⁵ Boao Forum for Asia. (2025b)

2.1 Regional assessment

RCEP has become a new engine for global economic growth, to some extent offseting the adverse impact of fluctuations in global external demand and the emergence of trade-restrictive measures. The implementation of RCEP has reshaped the global industrial chain and supply chain landscape, creating an institutional environment for the development of new industries.

Promoting trade growth and maintaining the region's importance in global trade. The implementation of RCEP has enhanced the level of regional trade liberalization. In 2023⁶, the RCEP region's contribution to global trade reached 13 trillion USD, an increase from 12.8 trillion USD in 2021, before RCEP went into effect. In terms of exports, the RCEP region achieved a global export of 6.9 trillion USD in 2023, accounting for 30% of global exports, close to that of the EU (31.2%) and far higher than that of the USMCA region (13.7%). In terms of imports, the RCEP region recorded imports of 6.1 trillion USD with the world, accounting for 25.8% of the global imports. This is lower than that of the EU (30.1%) and higher than that of the USMCA region (18.4%).



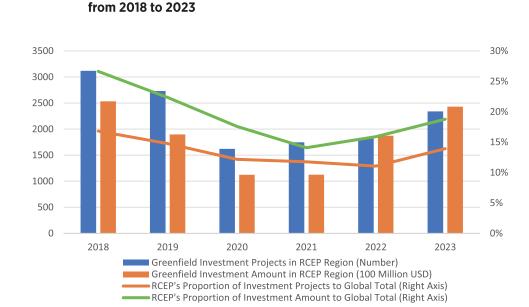
Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

Raising expectations for regional investment cooperation. Since the RCEP entered into effect, members have expanded opening-up, built up confidence in cooperation, and improved the regional business environment. This progress has created a more predictable and stable landscape for companies. In 2023, the RCEP region attracted 2,340 greenfield investment projects with an investment value of 243.09 billion USD, an increase of 33.9% and 1.2 times, respectively, over 2021.⁷ This showed an upward trend in attracting greenfield investment, indicating that all parties have rising expectations for RCEP investment.

⁶ Since the trade and investment data on RCEP members for 2024 have not been fully released, the trade and investment data for 2023 are used here to analyze the effect at the regional level.

⁷ Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

The proportion of greenfield investment attracted by the RCEP region



Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

Advancing the integration of regional industrial and supply chains. The implementation of RCEP has enhanced the connectivity of regionwide industry and supply chains, which is of great significance for making the region more competitive. The Cumulative Rules of Origin encourages companies to source parts and components within the region and deploy industry chains flexibly regionwide. This provides solid support for cross-border industrial cooperation among members. In 2023, the intra-regional trade for RCEP was approximately 5.6 trillion USD against a backdrop of a decline in global trade in goods, an increase of 0.4% over 2021 and accounting for approximately 43% of the RCEP region's share in world trade.⁸

2.2 Country-level assessment

Figure III.2

China, Japan and the ROK serve as foundational trading economies within the RCEP framework. In 2023, China, Japan, and the ROK ranked among the top three in terms of the trade scale within the RCEP region. The proportions of the trade volumes between the three countries and other RCEP members were 32.1%, 12.4%, and 10.5%, respectively, totaling 55%. In 2023, the trade volume among the three countries accounted for 12.8% of the intra-regional trade of the RCEP. China, Japan, and the ROK are important pillars within RCEP.

⁸ Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

Philippines Indonesia
China
Laos Vietnam
Republic of Korea Vapan
New Zealand Thailand

Cambodia Myanmar

Malaysia

Figure III.3 Chart of intra-regional trade flows in the RCEP region in 2023

Note: The area of the country point is drawn based on the size of each country's total trade with the region; | the thickness of the line is reflective of the trade volume.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

RCEP has fostered China-Japan-ROK cooperation in the industrial and supply chains. The three countries have close trade ties in terms of integrated circuits, motor vehicle accessories, telephones, etc. For instance, in 2024, the ROK's integrated circuit exports to China were 83.94 billion USD. This accounts for over 40% of its exports to China all year round, an increase of 27.9% year-on-year in 2024. From a production standpoint, the implementation of RCEP has facilitated the free flow and efficient allocation of production factors — including raw materials, technology, talent, capital, information, and data — across all 15 member states. For enterprises in China, Japan, and the ROK, the RCEP Cumulation Rules of Origin has enabled strategic optimization of production layouts within the region and reduction of operational costs. A report by the Asian Development Bank (ADB) highlights that RCEP has lowered intermediate goods procurement costs for Japanese companies in ASEAN by 7%. From a market standpoint, RCEP has expanded opportunities for enterprises in the three countries by promoting tariff reductions on goods, mutual recognition of product standards, and streamlined trade procedures, creating a broader and more integrated market landscape.

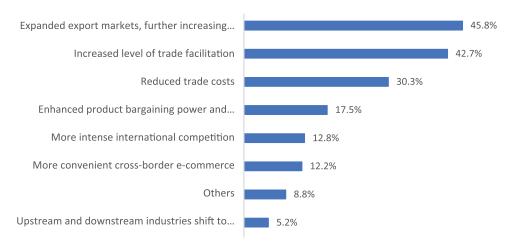
⁹ Asian Development Bank (ADB). (2022)

It is noteworthy that there are some changes and challenges that China, Japan and the ROK should face while deepening economic and trade cooperation. First, in the context of the restructuring of the global industrial chain, manufacturing orders have gradually shifted from China, Japan and the ROK to Southeast Asia, South Asia and other regions. The three countries should develop adaptive cooperation frameworks aligned with these structural changes. Second, homogeneous competition for the three countries in sectors such as home appliance manufacturing, leading to a gradual shift from import to domestic production of some key components, thereby reducing the closeness of industrial cooperation. The three countries need to forge new frontiers of cooperation in emerging technology fields. Third, in the face of geopolitical tensions and global fracturing, the supply chains are becoming fragile. The three countries need collaboration to enhance supply chain resilience.

2.3 Enterprise-level assessment

At the beginning of 2024, a research team of the Chinese Academy of International Trade and Economic Cooperation conducted an online questionnaire survey on Chinese enterprises related to RCEP, and 2,297 valid questionnaires were collected¹⁰. The survey results revealed that most of the respondents made positive comments on the implementation of RCEP. For example, 45.8% expressed that RCEP expanded export markets and increased trade opportunities; 42.7% expressed that RCEP enhanced the level of trade facilitation.

Figure III.4) Impact of RCEP on the import and export business of businesses (multiple choices)

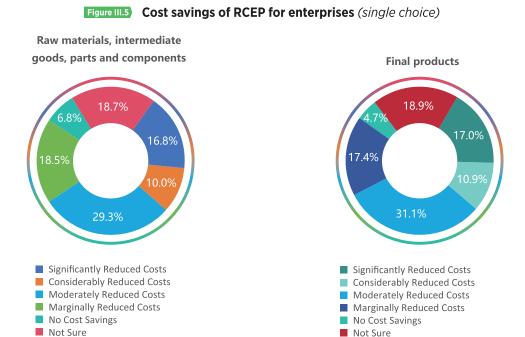


Note: 1,985 enterprises offered valid answers.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

¹⁰ For more questionnaire materials, please refer to: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

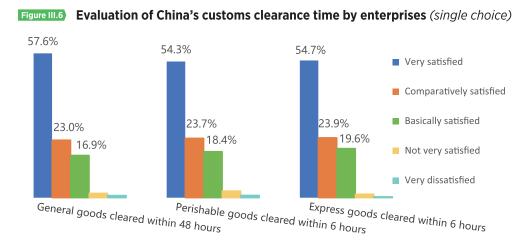
In terms of the use and benefits of certificates of origin, more than 70% of businesses recognized the positive effect of RCEP tariff concession on reducing the costs of trade in raw materials, intermediate goods and components, as well as finished products.



Note: 840 enterprises offered valid answers in terms of raw materials, intermediate goods and accessories, and 829 enterprises offered valid answers in terms of finished products.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming). Research on Assessment of RCEP Implementation from Regional Perspective. China Commerce and Trade Press

In terms of RCEP customs clearance and trade facilitation, over 97% of the respondents expressed themselves as satisfied with China's customs clearance time, and more than 50% of these companies replied "very satisfied", particularly for AEO enterprises and large-scale enterprises.

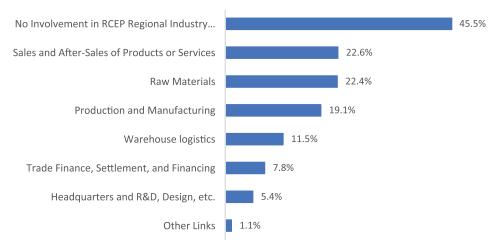


Note: After excluding enterprises that are not involved in relevant business, 688 enterprises offered valid answers for the 48-hour customs clearance of general goods; 523 enterprises offered valid answers for the 6-hour customs clearance of perishable goods; 561 enterprises offered valid answers for the 6-hour customs clearance of express goods.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

In terms of cooperation in the industrial and supply chains in the RCEP region, 54.5% of the surveyed respondents reported involvement in such collaboration, primarily in raw materials, manufacturing, sales and after-sales services. Enterprises generally were of the opinion that RCEP had promoted their cooperation with member countries in industrial and supply chains.

Figure III.7 Participation of enterprises in RCEP regional industrial and supply chain cooperation (multiple choices)

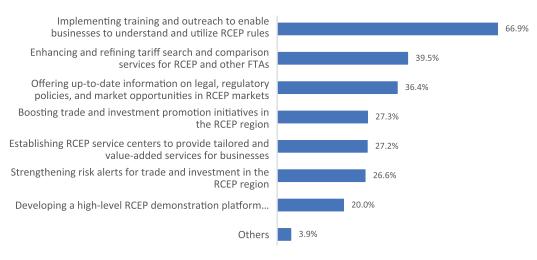


Note: 2,297 enterprises offered valid answers.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

In terms of RCEP public services, enterprises had high expectations for training and publicity, upgrading of tariff inquiry and comparison services, and timely provision of laws, regulations, policies and market opportunities.

Figure III.8) Enterprises' demands and suggestions for RCEP public services (multiple choices)



Note: 2,297 enterprises offered valid answers.

Source: Institute of Asian Studies, Chinese Academy of International Trade and Economic Cooperation. (2025, forthcoming)

2.4 Summary

To sum up, the implementation of RCEP has had a material impact at regional, country, and business levels. At the regional level, RCEP has promoted trade growth, raised the expectations of investment, and further integrated industrial and supply chains. At the country level, RCEP has played a significant role in stabilizing the industrial and supply chains of the three countries. At the enterprise level, most of the respondents gave positive comments on the implementation of RCEP. However, the implementation of RCEP has also faced some problems and challenges, such as the inability of small and micro enterprises to benefit from RCEP, the inadequate utilization of origin cumulation rules, the low level of customs clearance facilitation in some members, and the uncertainty facing regional cooperation. This calls for China, Japan and the ROK to strengthen coordination and cooperation with RCEP partners to create a stable and predictable development environment and give a new impetus to the RCEP region.

3. Policy Recommendations

At present, the unilateral tariff policy implemented by the United States has caused the uncertainty of global economic development to rise sharply. The negative impact of trade protection and unilateralist policies has become increasingly evident. China, Japan and the ROK are backbones of the East Asian economy and an important driving force for global development. In the face of the complex and volatile international situation, the stable development of trilateral cooperation has become more important to the region and the world. To this end, the three countries should ensure that the RCEP is implemented in a transparent, smooth and effective manner. At the same time, the three countries should actively promote new breakthroughs in the CJKFTA negotiation process. This is not only conducive to deepening trilateral economic and trade cooperation, but also particularly important for accelerating the process of regional economic integration, upholding the system of free trade rules, and boosting global trade confidence.

3.1 Synergies in High-Quality RCEP Implementation

Collaborate to set an example in the RCEP's high-quality implementation. After the RCEP entered into effect, China, Japan and the ROK have accumulated many unique experiences and practices in RCEP implementation. All these deserve to be promoted across the RCEP region. The three countries can also work together to enhance the level of customs clearance facilitation for less developed members, create a best practice model for fast customs clearance under RCEP, and promote it in the RCEP region.

China, Japan and the ROK should fully capitalize on the RCEP rules in the fields of e-commerce and trade in services. This would tap into potential cooperation for enterprises in new industries and new business

Utilize RCEP rules to create new growth poles for trilateral economic and trade cooperation.

forms such as cross-border e-commerce, artificial intelligence, Internet finance, and online medical care. This will create new growth poles for digital economy cooperation among the three countries and also act as new attempts for upgrading RCEP.

Promote the RCEP membership expansion talks. At the Ninth Trilateral Summit, the three sides encouraged the RCEP Joint Committee to expedite discussions on the procedures for admitting new RCEP members. Thus, the three countries should work together to promote RCEP membership expansion talks and enhance the scale and regional influence of RCEP.

Promote the review and further improvement of the RCEP provisions at an appropriate time. While implementing the RCEP with high quality, the three countries should further promote the review and improvement of the RCEP. This includes simplifying customs clearance procedures, optimizing rules of origin, relaxing market access for trade in services and investment, and enhancing rule standards in areas such as e-commerce, intellectual property rights, and small and medium-sized enterprises.

Leverage the RCEP to stabilize, strengthen, and enhance supply chains. Enterprises should be encouraged to take advantage of RCEP rules of origin cumulation to make flexible planning and improve the stability and efficiency of regional supply chains. The three countries should cooperate on stabilizing the industrial supply chain in the RCEP region. This would include exploring the possibility of expanding the ASEAN and China-Japan-ROK (10+3) Conference on the Docking of Industrial Chains and Supply Chains to the RCEP regional level, establishing a practical cooperation platform for industrial and supply chains within the region, enhancing policy communication among government departments, and promoting information sharing among upstream and downstream enterprises in the supply chains.

3.2 Breakthroughs in High-Standard CJKFTA Advancement

Achieve breakthroughs in CJKFTA development. Accelerating the CJKFTA is the consensus reached at the ninth China-Japan-ROK Leaders' Meeting. The three countries should actively implement this consensus, launch consultations and negotiations at all levels as soon as possible, and actively promote a new breakthrough in the CJKFTA negotiation process. Also, the three countries should implement the commitments to further enhance trade and investment liberalization, incorporate high-standard rules, and create a "RCEP +" agreement.

Expand new areas of trilateral economic and trade cooperation to lay the groundwork for accelerating CJKFTA. Under the trilateral cooperation mechanism, directions and suggestions have been provided for expanding cooperation, which should be actively promoted and implemented. By expanding new areas of cooperation and realizing new increments of cooperation, the three countries can also lay a solid foundation for accelerating the CJKFTA negotiation process. In the service sector, the three countries can deepen cooperation in areas such as public health and aging, intellectual property. In the green economy, there is still vast potential for cooperation in renewable energy, nuclear energy, hydrogen, and carbon capture, utilization, and storage. In the digital economy, the three countries can engage in extensive cooperation on artificial intelligence, digital infrastructure, digital technology innovation and application, as well as enhancing the resilience of the digital economy.

3.3 Deepen regional integration to jointly address risks and challenges

At the ninth China-Japan-ROK Leaders' Meeting, China proposed that the three countries should adhere to their original commitment to cooperation, uphold openness and inclusiveness, mutual respect and trust, mutual benefit, and exchange and learning. This not only provides a clear direction for trilateral cooperation but also lays a solid foundation for further development of trilateral relations. Currently, the international situation is characterized by changes and disruptions, making the external environment for trilateral cooperation more complex. It is necessary to deepen regional integration to jointly address risks and challenges.

By working together to promote high-quality RCEP implementation, the three countries can further expand market openness, reduce trade barriers, stabilize business confidence, enhance trade and investment, and optimize the business environment. This would bring tangible benefits to all three countries and the RCEP region. Moreover, the high-quality implementation of RCEP is also a crucial foundation for advancing CJKFTA. Promoting breakthroughs in CJKFTA construction and driving a high-level openness and cooperation can enable China, Japan, and the ROK to demonstrate willingness and effort in enhancing regional economic integration. Together, the three countries will make new and greater contributions to the prosperity and stability of the region and the world.

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IV

Evolution of Free Trade Agreements in East Asia:A Focus on China, Japan, and the ROK



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Chapter IV.

Evolution of Free Trade Agreements in East Asia: A Focus on China, Japan, and the ROK

URATA Shujiro

1. Introduction: The Growing Importance of FTAs in the Global Trading System

The world trading system under the World Trade Organization (WTO) is facing significant challenges and is at risk of breaking down. A series of unjustifiable tariff policies implemented by U.S. President Donald Trump since taking office in January of this year have had serious and negative impacts on both the global trading system and the world economy.

The world trading system, originally built and managed under the General Agreement on Tariffs and Trade (GATT) and later overseen by the WTO, contributed to significant economic growth in the post-World War II period. It did so by promoting international trade through the establishment of trade rules and the liberalization of trade policies. However, the WTO has become increasingly unable to fulfill its expected functions, including setting trade rules, liberalizing trade regimes, monitoring and enforcing trade rules, and resolving disputes. One major reason for the WTO's inability to effectively operate is its consensus-based decision-making system. Reaching consensus among 166 members is extremely difficult, particularly given the divergent perspectives and interests of developed and developing members.

Given the difficulty of advancing trade liberalization under the WTO, countries that remain committed to fostering economic growth through open trade have increasingly turned to free trade agreements (FTAs) with like-minded partners. FTAs allow member countries to eliminate trade barriers, such as import tariffs, between and among participating countries and to establish trade rules on issues not covered by the WTO.

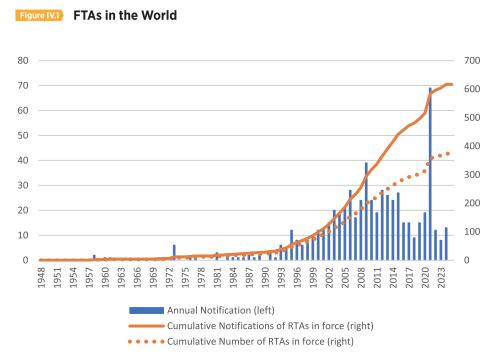
Unlike other regions such as Europe and North America, East Asia was initially reluctant to pursue FTAs, with many countries in the region opting to liberalize trade and investment on a global scale under the GATT/WTO framework. However, as trade and investment liberalization within the multilateral system became increasingly difficult, East Asian countries began considering FTAs as an alternative. Recent developments in U.S. trade policy under Trump have only reinforced East Asia's perception that the multilateral trading system is unreliable, further strengthening the region's commitment to FTAs in order to maintain an open and rules-based trading environment to achieve economic growth.

Against this backdrop, this chapter reviews and examines the evolution of FTAs in East Asia, with a particular focus on Northeast Asia, specifically China, Japan, and the ROK. In addition to deepening the understanding of how FTAs have developed in the region, this chapter seeks to analyze the motivations behind their establishment. The remainder of this chapter is structured as follows: Sections 2, 3, and 4 examine FTA developments during the 1980s–90s, the 2000s, and the 2010s, respectively¹. Section 5 compares two major regional FTAs, the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP). The concluding section, Section 6, presents comments and policy recommendations for China, Japan, and the ROK as a group regarding their FTA strategies.

2. The First Phase: Prelude to Regional Trade Integration in the 1980s and 1990s

Compared to other regions, East Asia was relatively slow in forming FTAs until the late 1990s. Before the turn of the century, the ASEAN Free Trade Area (AFTA) was the only major FTA established in East Asia. AFTA was signed in 1992 by ASEAN's founding members — Indonesia, Malaysia, the Philippines, Singapore, and Thailand — along with Brunei Darussalam, and came into effect in 1993. Vietnam, Myanmar, Lao PDR, and Cambodia later joined ASEAN and acceded to AFTA. Several factors contributed to the formation of AFTA. Two significant external drivers were the global expansion of FTA formation (Figure IV.1) and the competition from China.

¹ Discussions in these three sections build upon, update, and expand those in Urata (2019)



Source: WTO website, https://rtais.wto.org/UI/charts.aspx# accessed on March 23, 2025

Towards the end of the 1990s, several East Asian countries began considering bilateral FTAs. Among ASEAN members, Singapore was particularly proactive in pursuing FTAs and approached Japan and the ROK for possible agreements in 1998. Among the Northeast Asian countries, the ROK initiated its first bilateral FTA negotiations with Chile in 1999. In contrast, Japan was initially reluctant to pursue FTAs. In 1998, Mexico approached Japan for discussions on a bilateral FTA, followed by approaches from the ROK and Singapore in 1998 and 1999, respectively. At the time, Japan and the ROK were major WTO members without any FTAs. Both countries maintained the view that engaging in preferential and discriminatory trade agreements would violate the WTO's fundamental principle of non-discrimination, complicating the trade environment and potentially discouraging global trade.

However, Japan and the ROK gradually shifted their stance on FTAs and began exploring their feasibility². Several factors contributed to this change. First, there was a significant surge in FTAs worldwide during the 1990s, partly due to the slow progress of multilateral trade liberalization under the GATT until 1994 and under the WTO from 1995 onward. In response, countries interested in trade liberalization sought FTAs with like-minded partners. FTAs often trigger a domino effect, as excluded countries face discriminatory trade treatments. To mitigate these disadvantages, excluded countries may pursue FTAs themselves or seek membership in existing FTAs, thereby accelerating the proliferation of such agreements. Faced with

² For example, see Urata (2025) on Japan's FTA policy and Kim (2004) and Rosenbaum and Krieckhaus (2016) on Korea's FTA policy

the growing number of FTAs and the potential for exclusion, Japan and the ROK adopted a more favorable stance towards FTAs to safeguard their market access. In addition to freer access to export market, Japan thought FTAs useful as they cover investment, people's exchange and others that are not covered by the WTO. Indeed, Japan named Japan's FTAs EPAs (Economic Partnership Agreement).

Another critical factor was the Asian financial crisis. The ROK was severely affected by the crisis, which began in Thailand in June 1997 and quickly spread to other Asian economies, including Indonesia, the ROK, the Philippines, and Malaysia. In response to the crisis, the ROK sought cooperation from Japan and other countries, including emergency financial assistance. During this period, ROK leaders also pursued the formation of FTAs as a means of fostering economic stability and recovery. It should also be noted that the ROK and Japan became interested in FTAs as a policy option to promote structural reform, which was needed to achieve sustained economic growth. China was not active in establishing FTAs until the turn of the century, as it was busy negotiating for the accession to the WTO. China's accession negotiation to the GATT began in 1986 and China successfully entered the WTO in 2001.

3. The Second Phase: Active Pursuit of Bilateral and Minilateral FTAs in the 2000s

The early 2000s saw the establishment of a series of bilateral FTAs involving East Asian countries, beginning with the Japan-Singapore FTA in 2002. While Japan and the ROK became active in establishing FTAs, China initially seems to show little interest in forming agreements. However, after joining the WTO in 2001 and securing access to the global market, China began pursuing regional strategies through FTAs. China's approach to FTAs differed from those of other countries in several respects, surprising many East Asian nations, particularly Japan and the ROK³.

First, unlike Japan and the ROK, which pursued bilateral FTAs, China approached ASEAN as a unified group of ten members to form an FTA. Second, the China-ASEAN FTA incorporated unique components not typically seen in other FTAs. China introduced various schemes to appeal to ASEAN, particularly its newer members, such as economic cooperation initiatives and advanced trade liberalization through an "early harvest" program covering tropical fruits and other products.

Several factors contributed to China's proactive FTA policy. One was the desire to maintain and expand export markets. Another was the reduced adjustment costs for trade liberalization, following its significant commitments under the WTO. Beyond economic motives, China also used FTAs to enhance its regional economic and political influence.

³ On China's FTA policy, see, for example, Zhang and Shen (2013).

The China-ASEAN FTA triggered competitive pressure on Japan, the ROK, Australia-New Zealand, and India, creating a domino effect as these countries sought FTAs with ASEAN. These agreements were often initiated by these countries rather than by ASEAN. However, ASEAN's ability to engage all these major economies highlights its strong diplomatic standing. By 2010, ASEAN had established five ASEAN+1 FTAs with China, Japan, the ROK, India, and Australia-New Zealand, solidifying its role as the regional trade hub. Among these, the ASEAN-Australia-New Zealand FTA achieved the highest level of tariff elimination, while the ASEAN-India FTA had the lowest (Table IV.1).

Table IVI Tariff Elimination Commitments for ASEAN+1 FTAs

	ACFTA	AJCEP	AKFTA	AIFTA	AANZFTA	Average
Brunei	98.3	97.7	99.2	85.3	99.2	95.9
Cambodia	89.9	85.7	97.1	88.4	89.1	90
Indonesia	92.3	91.2	91.2	48.7	93.7	83.4
Lao PDR	97.6	86.9	90	80.1	91.9	89.3
Malaysia	93.4	94.1	95.5	79.8	97.4	92
Myanmar	94.5	85.2	92.2	76.6	88.1	87.3
Philippines	93	97.4	99	80.9	95.1	93.1
Singapore	100	100	100	100	100	100
Thailand	93.5	96.8	95.6	78.1	98.9	92.6
Vietnam	92.2	94.4	89.4	79.5	94.8	89.5
China	94.1					
Japan		91.9				
Korea			90.5			
India				78.8		
Australia					100	
New Zealand					100	

Notes: Computed at HS 6 digit

ACFTA: ASEAN-China FTA

AJCEP: ASEAN-Japan Comprehensive Economic Partnership

AKFTA: ASEAN-Korea FTA

AIFTA: ASEAN-India FTA

AANZFTA: ASEAN-Australia/New Zealand FTA

The concept of a comprehensive East Asian FTA emerged in the late 1990s, even before discussions on bilateral and ASEAN+1 FTAs. At the ASEAN+3 (China, Japan, and the ROK) summit in 1998, ROK President Kim Dae Jung proposed the establishment of the East Asia Vision Group to study goals for long-term economic cooperation. By 2002, this group recommended forming the East Asian FTA (EAFTA) comprising ASEAN+3. In 2005, a private-sector research group assessed the feasibility of EAFTA, leading to further governmental discussions.

In response EAFTA led strongly by China, Japan introduced the Comprehensive Economic Partnership for East Asia (CEPEA) in 2006, proposing an agreement encompassing ASEAN+3+3 (ASEAN, China, Japan, the ROK, India, and Australia-New Zealand). CEPEA reflected Japan's ambition to counterbalance China's growing influence by leading regional economic integration efforts. ASEAN member countries, wary of exacerbating Sino-Japanese rivalry, maintained a balanced approach by participating in both EAFTA and CEPEA discussions. Ultimately, these parallel initiatives fostered regional dialogue and diminished competition between Japan and China.

The absence of a unified East Asian market persisted. The diverse rules and standards across the five ASEAN+1 FTAs created a "spaghetti/noodle bowl" effect, complicating regional trade. Furthermore, unresolved negotiations among China, Japan, and the ROK hindered broader integration. Talks on a Japan-ROK FTA, initiated in 2003, stalled in 2004 due to disagreements on market access. Japan sought to protect its agricultural sector, while the ROK expressed concerns over its small and medium-sized enterprises facing competitive pressures from Japanese manufacturing. Similar obstacles emerged in discussions on a Japan-China FTA, further complicated by historical and political tensions.

The idea of a China-Japan-Korea (CJK) FTA was first proposed informally by Chinese Premier Zhu Rongji at the 2002 Leaders' Meeting. This led to a private-sector study in 2003, which concluded in 2009 with a recommendation for a trilateral feasibility study. In 2010, the three countries established a joint research group involving government, business, and academic representatives. By 2011, the group's report highlighted the potential benefits of a CJK FTA and recommended official negotiations. Formal negotiations began in November 2012, covering trade in goods and services, investment, intellectual property rights, e-commerce, rules of origin, and others. However, geopolitical tensions and differing economic priorities have impeded progress. The establishment or signing of the RCEP in 2020, which includes all three countries, has reduced the urgency of a CJK FTA, though it remains relevant for deeper regional integration.

While East Asian countries advanced discussions on regional FTAs, economies within broader regional FTA initiatives emerged within the Asia-Pacific Economic Cooperation (APEC) framework⁴. Informal talks among Australia, Chile, New Zealand, Singapore, and the US (P5) led to the creation of the Trans-Pacific Strategic Economic Partnership Agreement (TPSEP, commonly known as P4 Agreement) in 2006, comprising Chile, Singapore, New Zealand, and Brunei Darussalam. The P4 was a comprehensive FTA covering goods,

⁴ APEC was established in 1989 with an initial membership of 11 economies, including Australia, Japan, the Republic of Korea, and the United States. It later expanded to include China, Chinese Taipei, and other economies, bringing the total to 21 member economies. APEC's primary objective is to support sustainable economic growth and prosperity in the Asia-Pacific region. To achieve this goal, APEC focuses on three key pillars: trade and investment liberalization, business facilitation, and economic and technical cooperation. It also promotes regional economic integration through a range of activities, including the annual APEC Economic Leaders' Meeting, as well as various ministerial and senior officials' meetings."

services, investment, competition policy, intellectual property, government procurement, and others. It was designed as a "living agreement," allowing further expansion and the inclusion of additional members.

By 2008, the P4 members sought to expand the agreement's scope to financial services and investment. The US expressed interest in joining the expanded negotiations, leading to the formation of the Trans-Pacific Partnership (TPP). Australia, Peru, and Vietnam soon joined the TPP talks, recognizing the strategic importance of deeper trade integration. The emergence of the ASEAN+3 and ASEAN+6 FTAs further heightened US interest in the TPP, as Washington sought to maintain its economic influence in East Asia.

In parallel, the US proposed the Free Trade Area of Asia-Pacific (FTAAP) at APEC in 2006 as a comprehensive trade agreement encompassing all APEC economies. The concept, initially suggested by the APEC Business Advisory Council (ABAC) in 2005, aimed to secure US access to the dynamic East Asian market. During the 2010 APEC Economic Leaders' Meeting in Yokohama, the FTAAP was endorsed as a primary mechanism for regional economic integration, with the EAFTA, CEPEA, and TPP recognized as pathways toward its realization.

In 2014, China initiated a feasibility study on the FTAAP, culminating in the 2016 Collective Strategic Study presented at the APEC Economic Leaders' Meeting in Peru. While the study outlined key issues for consideration, it did not propose a definitive roadmap for achieving the FTAAP. APEC has since pursued incremental progress through capacity-building initiatives and discussions on next-generation trade and investment issues. As of May 2025, the FTAAP remains a long-term vision for APEC economies. While progress has been made in capacity building and policy dialogue, challenges persist due to the region's economic diversity and geopolitical tensions. Nevertheless, APEC continues to play a pivotal role in fostering regional cooperation and laying the groundwork for the eventual realization of the FTAAP.

4. The Third Phase: Emergence of Regional FTAs in the 2010s

Enlarged TPP negotiations with eight countries — Brunei Darussalam, Chile, New Zealand, Singapore, Australia, Peru, the US, and Vietnam — began in March 2010. After the negotiations started, four countries joined: Malaysia in October 2010, Canada and Mexico in 2012, and Japan in 2013. The increase in the number of negotiating countries during the negotiation process was quite unusual and reflected the importance of the TPP for many countries. The TPP negotiations lasted for five years and seven months before the countries reached an agreement in October 2015. The TPP agreement was signed by the TPP negotiating members in February 2016, and the ratification process began after the signing. However, it stopped with the newly elected US President, Donald Trump, withdrawing the US from the TPP Treaty on his third day in office in January 2017. Because US ratification was a necessary condition for the treaty to come into force, the process came to a halt after Japan and New Zealand's ratification.

With the TPP no longer set to enter into force, the remaining TPP members decided to pursue TPP11 without the US. TPP11 trade ministers held a sideline meeting at the APEC trade ministers' meeting in May 2017 and agreed to revive the stalled agreement. They tasked senior trade officials with assessing the options to bring TPP11 into force expeditiously before the APEC Economic Leaders' Meeting in November 2017.

Several reasons were identified for pursuing TPP11. First, the TPP, with its high-level trade and FDI liberalization and comprehensive issue coverage, could serve as a model FTA for future agreements. Second, the enactment of TPP11 could pressure other mega-regional FTAs, such as the RCEP, maintaining momentum for FTA formation and resisting protectionism. Third, although unlikely under the Trump Administration, the US might return to the TPP. In such a case, the TPP11 would need to be in force to accommodate the US. TPP11 negotiations concluded relatively quickly in January 2018, and the TPP11 treaty, formally known as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), was signed in March 2018 and entered into force in December 2018. Since then, the United Kingdom joined the CPTPP in December 2024. Currently, Costa Rica is under negotiation, and the following countries and economies have applied for membership: China, Chinese Taipei, Uruguay, Ukraine, Indonesia, and Ecuador.

Turning to the EAFTA and the CEPEA, government-level discussions began in 2010 following recommendations from feasibility studies. Discussions proceeded in parallel until 2011, when Japan and China jointly proposed the establishment of a working group to accelerate the formation of an EAFTA and CEPEA. This joint move by China and Japan, both competing for a leadership role in the establishment of a region-wide FTA, stemmed from China's desire to advance the EAFTA or CEPEA in light of progress in the TPP negotiations. In other words, the TPP negotiations pressured China to act towards a region-wide FTA in East Asia.

While China and Japan took the lead in forming a region-wide FTA, ASEAN countries, participated equally in both activities (EAFTA and CEPEA) to avoid deepening opposition by deciding an order of precedence. However, the joint proposal by China and Japan to accelerate the EAFTA and CEPEA spurred ASEAN countries, fearing a diminished central role in the regional framework, to propose the RCEP in 2011. The RCEP framework did not specify membership, allowing any East Asian country with an FTA with ASEAN to join. A statement was released to launch RCEP negotiations at the ASEAN+6 summit meeting in November 2012, effectively unifying the movements towards founding the EAFTA and CEPEA under RCEP.

RCEP negotiations began in May 2013, arguably influenced by Japan's decision to join TPP negotiations in March 2013. Japan's participation likely encouraged non-TPP members, especially China, to initiate RCEP negotiations. Notably, the CJK FTA and the Trans-Atlantic Trade and Investment Partnership (involving the US and the EU) also began negotiations in March and July 2013, respectively, reflecting the chain reaction or domino effect in FTA formation, a phenomenon described as "competitive regionalism"⁵

⁵ See Solis et al. (2009)

RCEP negotiations missed several target deadlines for conclusion. However, momentum accelerated following the signing of the CPTPP agreement, a rival mega-FTA. Additionally, heightened policy uncertainty and rising US-China trade friction under the Trump administration in 2017 pressured RCEP negotiating members to conclude the negotiations. India withdrew from the negotiation process because of concerns over its growing trade deficit with China. In November 2019, the 15 RCEP-participating countries reached an agreement to finalize regional trade deals and concluded text-based negotiations. RCEP was signed in November 2020 and entered into force in January 2022.

5. RCEP and CPTPP: A Comparison

Let us compare the CPTPP and the RCEP in terms of their objectives, content, and quality. The objectives of the CPTPP and the RCEP appear quite similar. Both agreements aim to be high-quality and comprehensive trade agreements that promote trade, economic integration, growth, and development. Indeed, both frameworks cover a broader range of issues than the WTO (Table IV.2).

Table IV.2 Contents of CPTPP, RCEP, and WTO

	СРТРР	RCEP	WTO
Market Access for Goods	~	~	~
Rules of Origin and Origin Procedures	~	~	~
Textiles and Apparel	~	~	~
Customs Administration and Trade Facilitation	~	~	~
Trade Remedies	~	V	~
Sanitary and Phytosanitary Measures	~	V	~
Technical Barriers to Trade	~	V	~
Investment	✓	V	~
Cross Border Trade in Services	~	V	~
Financial Services	~	~	~
Temporary Entry for Business Persons	~	V	~
Telecommunications	~	V	~
Electronic Commerce	~	V	
Government Procurement	~	V	~
Competition Policy	~	V	
State-Owned Enterprises and Designated Monopolies	~		
Intellectual Property	✓	V	~
Labor	~		
Environment	~		
Cooperation and Capacity Building	~	~	
Competitiveness and Business Facilitation	~		
Development	~	~	
Small and Medium-Sized Enterprises	~	V	
Regulatory Coherence	~		
Tranparency and Anti-corruption	~		
Administrative and Institutional Provisions	~	✓	
Dispute Settlelement	~	~	~

Note: Vindicates the issue is covered,

Sources: Texts of CPTPP and RCEP Agreements

Despite their common objectives, there are notable differences in the emphasis placed on economic growth and development. One of the most important elements of the RCEP is achieving equitable economic development through economic cooperation. In contrast, the CPTPP does not emphasize economic cooperation to the same extent. This focus on cooperation in the RCEP is understandable, as its membership includes least-developed countries such as Cambodia, Lao PDR, and Myanmar, whose successful economic development is crucial for sustainable growth and regional stability. As a result, the RCEP incorporates special and differential treatment for these countries, consistent with the arrangements in the ASEAN+1 FTAs. Examples include the postponement of trade liberalization for new ASEAN members under the ASEAN-China FTA. On the other hand, the CPTPP does not offer special or differential treatment to its least-developed members. The CPTPP emphasizes the establishment of a rules-based, free, and open trade system by setting high-standard rules not only for trade but also for other economic activities, such as investment and intellectual property rights.

The scope of issues covered by the CPTPP and the RCEP also differs. As shown in Table IV.2, both agreements cover the following issues: market access for goods, rules of origin, customs administration and trade facilitation, trade remedies, sanitary and phytosanitary measures, technical barriers to trade, investment, trade in services, e-commerce, government procurement, competition policy, cooperation and capacity building, development, small- and medium-sized enterprises, and dispute settlement. However, the CPTPP covers additional issues not addressed by the RCEP, including state-owned enterprises and designated monopolies, labor, environment, competitiveness and business facilitation, regulatory coherence, and transparency and anti-corruption. These topics are particularly important for developed countries like Japan and Australia to ensure fair competition and sustainable economic growth while protecting labor rights and the environment. For developing countries, however, such commitments may present significant challenges, especially in economies with substantial government control.

Among the issues common to both agreements, the concept of 'cumulation' in the rules of origin warrants particular attention. This rule allows products produced in member countries to be treated as CPTPP products under the CPTPP, and as RCEP products under the RCEP. Consequently, they can be traded tarifffree, facilitating the establishment and management of regional production networks and supply chains.

A closer examination of the CPTPP and the RCEP reveals significant differences in the quality and level of commitment, even in areas where the agreements seem similar. One clear distinction is the level of trade liberalization in goods (Table IV.3). The CPTPP aims for the complete elimination of tariffs, targeting 100% trade liberalization. In practice, the actual rate of liberalization may be lower due to political sensitivities surrounding certain products, such as rice in Japan. In contrast, the RCEP's level of tariff elimination is lower, although it still offers significant trade liberalization compared to the lower commitments under the WTO for most countries.

Table IV.3 Comparison of Tariff Elimination Rates: WTO, RCEP, and CPTPP

		WTO		RCEP	СРТРР
	Import sources	Bound	Applied		
CI.	Japan			86.0	
China	Korea			86.0	
	Others	6.6	9.7	91.2*	
	China			85.5	
Japan	Korea			80.7	
	Others	53.0	53.9	87.8	95.1
	China			86.0	
Korea	Japan			83.0	
	Others	16.2	17.6	90.7*	
Australia		23.6	52.1	98.3	99.9
New Zealand		50.0	66.1	91.4	100
Brunei Darussalam		0.0	92.8	97.8	99.9
Cambodia		0.8	17.1	87.1	
Indonesia		2.4	13.3	89.4	
Lao PDR		1.1	1.7	86.0	
Malaysia		5.5	66.8	90.0	99.9
Mynmar		1.2	5.8	86.0	
Philippines		5.0	13.2	91.1	
Singpore		17.3	100.0	100.0	100
Thailand		4.9	37.1	88.5	
Vietnam		13.9	36.4	87.5	99.9
Canada		40.3	77.8		99.9
Chile		0.0	0.4		99.9
Mexico		0.3	49.4		99.9
Peru		1.8	69.1		99.9

Note: Figures indicate the proportion of products with zero tariffs in total number of products.

Sources: Figures for WTO and RCEP are taken from WTO (2024) and Kuno (2021), respectively. Figures for CPTPP are taken from Kuno (2021) and Urata (2019). Figures with asterisk are taken from Nicita (2021)

Further differences arise in other areas. For trade in services, the CPTPP adopts a negative list approach, meaning all sectors are open unless explicitly excluded. The RCEP, however, uses a positive list approach, where only the explicitly mentioned sectors are liberalized. Regarding investment, the CPTPP provides stronger investor protections, including Investor-State Dispute Settlement (ISDS) mechanisms, which are not present in the RCEP. Additionally, in the realm of e-commerce, the CPTPP establishes robust digital trade rules that ensure the free flow of data across borders, prohibit data localization, and prevent forced disclosure of source codes. In contrast, the RCEP includes only general provisions on e-commerce.

Having discussed several differences between the CPTPP and the RCEP, one may wonder whether the relationship between these two mega-regional FTAs is competitive or complementary as a region-wide agreement. The two agreements were often viewed as competing when the US was a member of the TPP, due to the rivalry between the US in the TPP and China in the RCEP. However, the perspective that the agreements are complementary has been gaining traction.

For example, Urata (2014) proposes a stages approach to East Asian regionalism, suggesting that countries unable to meet the high-standard, comprehensive rules required to join the CPTPP could first join the RCEP (first stage) to facilitate their economic development. Once these countries have achieved sufficient growth and are capable of adhering to the CPTPP's rules, they could then join the CPTPP (second stage). In this manner, the CPTPP and the RCEP can be viewed as having a complementary relationship.

One way to understand the impact of FTAs such as the RCEP and the CPTPP is to examine how firms use these agreements when they conduct trade, exporting and importing. Table IV.4 shows the proportion of imports registered under different FTAs and the Generalized System of Preferences (GSP) within Japan's total dutiable imports. GSP is a trade policy that provides preferential tariff treatment to imports from developing countries.

Table IV.4 Use of FTAs: Japan's Imports in 2023 (%)

Use of First, Japan's imports in 2023 (70)						
	RCEP	Bilateral	AJCEP	СРТРР	GSP	Others
China	58.3					41.7
Korea	22.6					77.4
Australia	0.0	42.7		53.3		4.0
New Zealand	2.4			91.0		6.6
Brunei Darussalam	0.0	72.6	0.0	19.9		7.4
Cambodia	0.9		13.5		80.9	4.7
Indonesia	7.5	64.1	13.2		0.0	15.2
Lao PDR	4.3		25.1		64.5	6.2
Malaysia	2.2	53.3	22.9	0.0	0.0	21.7
Myanmar	0.0		7.6		90.4	1.9
Philippines	0.5	86.0	4.4		0.1	9.0
Singapore	0.2	15.5	20.0	25.8		38.6
Thailand	3.8	81.1	4.7			10.4
Vietnam	14.2	14.3	57.5	7.9	0.1	5.9
Canada		0.0		89.1		10.9
Chile		77.0		19.5		3.5
Mexico		30.1		62.8		7.1
Peru		55.2		27.5		17.3

Notes: 1) AJCEP: ASEAN-Japan Comprehensive Economic Partnership, GSP: Generalized System of Preferences 2) Figures indicate the proportion of imports registered under different FTAs in Japan's total dutiable imports.

3) Blank cell indicates not applicable (no FTAs).

Source: Obtained from Hayakawa (2024)

Regarding the RCEP, the proportion is notably high for imports from China and the ROK. This is understandable because, for Japan, the RCEP is the only FTA in place with China and the ROK. For other countries, however, the RCEP is just one of several available FTAs. One reason for the relatively low use of the RCEP for imports from its member countries, except China and the ROK, is that it is a very recent agreement, having come into effect in January 2022. Many RCEP members had already used other FTAs, and in many cases, adopting a new FTA can be challenging because exporters and importers need to familiarize themselves with its procedures. Additionally, the choice of which FTA to use depends on the level of preferential tariff rates and the restrictiveness of the rules of origin. Higher levels of preference and less restrictive rules of origin typically lead to increased FTA utilization.

A comparison of the countries in both RCEP and the CPTPP reveals a higher utilization rate for the CPTPP, except in the case of Vietnam. Part of the reason is the difference in enactment dates; the CPTPP came into effect earlier than the RCEP. Additionally, lower tariff rates applied under the CPTPP compared to the RCEP may have contributed to its greater use. For imports from many ASEAN member countries, bilateral FTAs show a relatively high utilization rate compared to the AJCEP. This is likely because the bilateral FTAs were enacted earlier. GSP also holds a significant share of Japan's imports from Cambodia, Lao PDR, and Myanmar, reflecting its long-standing use since the system's introduction in 1971.

A low level of RCEP utilization is also observed for the ROK's imports from RCEP member countries (Table IV.5), except for imports from Japan and Thailand. Instead of the RCEP, firms tend to use the ASEAN-Korea FTA for imports from ASEAN member countries, and bilateral FTAs for imports from China, Australia, and New Zealand.

Table IV.5 Use of FTAs: ROK Imports in 2023 (%)

	RCEP	AKFTA	APTA	Bilateral	GSP	Others
China	2	'	2	72	'	23
Japan	18					82
Australia	0			70		30
New Zealand	0.3			84		16
Brunei Darussalam	0	33				67
Cambodia	0.4	59		8	6	26
Indonesia	1	64		8		27
Lao PDR	0.3	74	0		21	4
Malaysia	0	46				53
Myanmar	0.2	86			10	3
Philippines	0	63				37
Singapore	4	26		8		63
Thailand	12	69	0	0		20
Vietnam	0.3	39	0	46		15

Notes: 1) AKFTA: ASEAN-Korea FTA, APTA: Asia Pacific Trade Agreement, GSP: Generalized System of Preferences

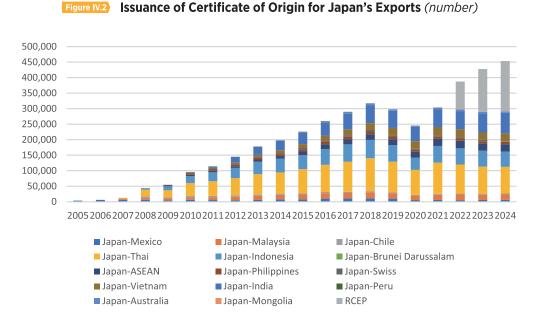
Source: Obtained from Hayakawa and Laksanapanyakul (2024)

²⁾ Figures indicate the proportion of imports registered under different FTAs in Korea's total dutiable imports.

³⁾ Blank cell indicates not applicable (no FTAs).

The use of the RCEP for the exports of RCEP member countries to Japan and the ROK can be observed indirectly through the import data presented in Tables 4 and 5, as imports by definition represent exports from the corresponding countries. For example, 54% and 23% of China's and the ROK's exports to Japan used the RCEP, respectively, while only 3% and 18% of China's and Japan's exports to the ROK used the RCEP.

An examination of import data for Japan and the ROK indicates that the level of RCEP use remains relatively low, except for Japan's imports from China and the ROK, as well as the ROK's imports from Japan. However, the use of FTAs other than the RCEP is notably high for both countries, particularly the ROK's imports from ASEAN countries through the AKFTA. Having discussed a low level of RCEP use in the case of Japan and the ROK's trade, it should be noted that RCEP utilization by Japanese exporters is growing as issuance of certificates of origin (COO) for the RCEP, which are required to obtain preferential treatment under FTAs (Figure IV.2), is increasing. Although not shown in the figure, it is reported that a large portion of the certificate of origin has been issued for Japan's exports to China and the ROK.



 $Source: Ministry of Economy, Trade and Industry. \\ https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.meti.go.jp%2Fpolicy%2Fexternal_economy%2Ftrade_control%2Fboekikanri%2Fdownload%2Fgensanchi%2Fcoissuance.xlsx&wdOrigin=BROWSELINK accessed on March 30, 2025 \\ \\$

Policymakers should identify possible reasons for the limited utilization of the RCEP by gathering insights from the business community to develop strategies for increasing its use. One potential reason could be the lack of awareness within the business community about the benefits of cumulative rules of origin, which are highly advantageous for firms engaged in regional production networks or global supply chains.

6. Conclusions: The Role of CJK in Maintaining a Free and Open Trading System

Amid rising protectionism fueled by anti-globalization sentiment, intensified geopolitical tensions, a dysfunctional WTO, and particularly the introduction of unjustifiable tariff policies by U.S. President Donald Trump under the "America First" policy, maintaining and strengthening a rules-based open global trading system is imperative for achieving economic growth through trade and FDI. This is especially relevant for East Asia, where trade and FDI have been essential drivers of economic growth.

China, Japan, and the ROK must play a crucial role in preserving an open, rules-based global trading system. Specifically, they should pursue the following policies. First, they should lead discussions on WTO reform. Key areas requiring reform include dispute settlement, rule-making, transparency, special and differential treatment for developing members, and decision-making methods. Although China, Japan, and the ROK may have differing views on these issues, it is essential that they actively and effectively work to find solutions acceptable to WTO members. In response to the Trump tariffs, it is vital for the rest of the world, including China, Japan, and the ROK, to maintain an open trade environment among themselves.

Second, China, Japan, and the ROK should work toward upgrading the provisions of the RCEP. As discussed in Section 5, some aspects of the RCEP do not match the higher standards of the CPTPP, including tariff elimination on goods, treatment of service trade and investment, and e-commerce regulations.

Third, building on the previous point, China and the ROK should consider joining the CPTPP. China has already applied for membership, but the ROK has not. China must demonstrate to CPTPP members that it is willing to accept the agreement's rules, while the ROK should conduct a cost-benefit analysis to determine whether joining the CPTPP is advantageous and make a decision accordingly.

Finally, China, Japan, and the ROK should conclude negotiations on a CJK FTA, which began in 2013 and are still ongoing. Momentum is building to finalize the negotiations, as a recent meeting of trade ministers from the three countries resulted in an agreement to accelerate discussions. Since China, Japan, and the ROK are all members of the RCEP, the CJK FTA should be of higher quality than the RCEP. If established, the CJK FTA could also serve as a stepping stone for China and the ROK towards CPTPP membership.

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V

Enhancing Supply Chain Resilience through Trilateral Cooperation: A Comparative Analysis of the Semiconductor Industries



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Chapter V.

Enhancing Supply Chain Resilience through Trilateral Cooperation: A Comparative Analysis of the Semiconductor Industries

JEONG Hyung-gon

1. Introduction

The semiconductor industry occupies a critical position in contemporary economic systems, underpinning technological innovation and permeating through virtually all aspects of modern life. Its widespread impact fosters productivity and advancement across multiple sectors, positioning it as a central driver of economic growth. Semiconductors constitute approximately 20–25% of the total value of electrical and electronic products, reflecting their fundamental role in modern electronic devices, such as computers, smartphones, and digital appliances. This share may vary depending on the specific industrial structures of individual countries.

China, Japan and the ROK are widely recognized as global leaders in semiconductor production. While the ROK and China have comparative advantages in semiconductor manufacturing, Japan maintains a leading global position in supplying essential materials, components, and manufacturing equipment. Over the past two decades, these countries have strategically developed their semiconductor industries by leveraging their distinct capabilities and pursuing collaborative initiatives. Particularly notable is China's rapid semiconductor industry expansion, significantly elevating its role in the global semiconductor supply chain. Concurrently, the ROK and Japan have also strengthened their respective positions within the global semiconductor ecosystem.

This study investigates structural challenges facing the semiconductor industries of China, Japan, and the ROK by evaluating competitiveness, trade structures, and evolving patterns of cooperation across four principal subsectors: memory semiconductors, system semiconductors, semiconductor manufacturing equipment, and semiconductor materials and parts. Furthermore, the study proposes strategic directions for enhanced trilateral cooperation.

Data from the Korea Customs Service and UN Comtrade underpin the analysis of export, import, and supply chain configurations within the semiconductor industry. Employing trade indicators such as the Trade Specialization Index (TSI), Revealed Symmetric Comparative Advantage (RSCA), Grubel–Lloyd (GL) Index, and Trade Intensity (IT) Index, this research evaluates global competitiveness and discerns shifts in trade dynamics and cooperative linkages among the three countries. The findings provide critical insights into how the trilateral semiconductor supply chain is evolving through integration patterns yet still susceptible to weakening linkages, serving as a valuable reference for policy formulation and future collaborative strategies among the ROK, China, and Japan.

2. Trade Dynamics in Memory Semiconductors

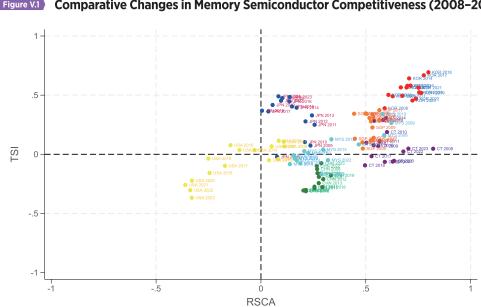
2.1 Comparing Competitiveness Across Regions

The ROK has traditionally held a leading position in the global memory semiconductor industry, particularly in key segments such as DRAM, MCP (Multi-Chip Package), and Flash memory. As depicted in Figure V.1, the ROK is consistently positioned in the first quadrant (RSCA¹ > 0, TSI² > 0), reflecting both a revealed comparative advantage and a trade surplus. This suggests that the country has maintained a high level of competitiveness over time. However, recent trends point to a gradual erosion of this competitive edge. While the ROK's RSCA and TSI values have plateaued or shown only slightly declined, China has exhibited continuous upward momentum in both indices. This divergence signals a potential narrowing of the competitiveness gap. In particular, the ROK's TSI and RSCA indices have trended downward in recent years across its major export categories, indicating that the country's dominant position may be weakening. China, in contrast, has steadily improved its position in the memory semiconductor sector.

¹ The Revealed Comparative Advantage (RCA) index is widely used to assess trade competitiveness, where values above 1 indicate comparative advantage and values below 1 suggest disadvantage. However, RCA is asymmetric — advantage values are unbounded while disadvantage values are limited between 0 and 1 — making interpretation uneven. To address this, the Revealed Symmetric Comparative Advantage (RSCA) index is used, transforming RCA into a scale from –1 to 1 for more balanced analysis.

² The Trade Specialization Index (TSI) measures whether a country is a net exporter or importer of a product, offering insights into its trade specialization and dependency patterns. A higher export level relative to imports suggests greater competitiveness. TSI values are classified into five categories: Very Strong Competitiveness ($0.5 \le TSI \le 1.0$), Strong Competitiveness ($0.0 \le TSI < 0.5$), Neutral (TSI = 0.0), Weak Competitiveness ($-0.5 \le TSI < 0.0$), and Very Weak Competitiveness ($-1.0 \le TSI < -0.5$).

As illustrated in Figure V.1, China's data points have moved clearly toward the upper-right quadrant over time. This trajectory reflects both a growing trade surplus and increasing comparative advantage in China's semiconductor industry. Expanded domestic production capabilities and a more mature export profile drive these developments.



Comparative Changes in Memory Semiconductor Competitiveness (2008–2023)

Note: To evaluate cross-country competitiveness in memory semiconductors, this study plots the RSCA (x-axis) and TSI (y-axis) on a four-quadrant graph. The first quadrant (RSCA > 0, TSI > 0) indicates high competitiveness with both comparative advantage and trade surplus. The second quadrant (RSCA < 0, TSI > 0) reflects strong export performance despite a lack of comparative advantage. The third quadrant (RSCA < 0, TSI < 0) indicates low competitiveness with both trade deficits and disadvantages. The fourth quadrant (RSCA > 0, TSI < 0) suggests potential industrial strength facing trade balance challenges.

Source: Compiled using data from UN Comtrade.

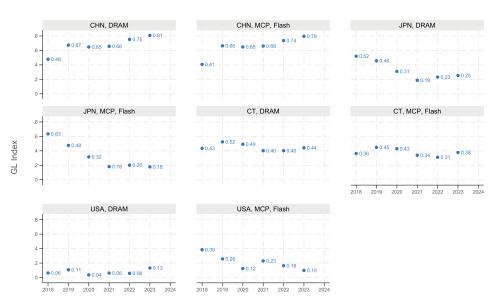
2.2 Comparing Intra-Industry Trade Trends

A deeper look at the structure of trade, through the Grubel-Lloyd (GL) index³, offers additional insights into the dynamics of the ROK's memory semiconductor trade. Between 2018 and 2023, the ROK exhibited a relatively high level of intra-industry trade in DRAM exclusively with China, as evidenced by rising GL index values (see Figure V.2). In contrast, the ROK's trade with the United States, Japan, and Chinese Taipei has remained predominantly one-sided, with GL index values close to zero, suggesting that exports of DRAM from the ROK are not matched by meaningful imports from these regions. China's GL index for DRAM increased from 0.48 in 2018 to 0.81 in 2023, signaling a transition towards more balanced two-

³ The Grubel-Lloyd (GL) index measures the extent of intra-industry trade for a specific product, ranging from 0 (purely one-way trade) to 1 (perfectly balanced two-way trade). Higher values indicate greater symmetry between exports and imports, suggesting stronger intra-industry trade; lower values reflect a more unidirectional trade pattern, indicating reliance on either imports or exports.

way trade. This shift can be attributed to factors such as the re-importation of Korean-manufactured DRAM from facilities in China (e.g., SK hynix's Wuxi plant), as well as the growing capability of domestic Chinese firms to produce DRAM for local consumption and export. Meanwhile, Japan's role in the ROK's memory semiconductor trade has diminished. The steady decline in the GL index and the falling share of ROK memory exports to Japan reflect weakening industrial interdependence. The expansion of Micron's production capacity in Japan has likely contributed to this shift, facilitating the emergence of a more independent supply chain increasingly decoupled from ROK inputs.

Figure V.2 Comparative Changes in Grubel-Lloyd (GL) Indices for DRAM and MCP/Flash Memory Trade (2018–2023)



Source: Compiled using data from UN Comtrade.

A similar pattern is observed in the MCP and Flash memory segments. The GL indices for trade between the ROK and both the United States and Japan remain persistently low, indicating that these trade flows are largely unidirectional, dominated by exports from the ROK with minimal reciprocal imports (Figure V.3). In contrast, the ROK's GL index for MCP and Flash memory trade with China rose from 0.41 in 2018 to 0.79 in 2023, reflecting increased two-way trade. This trend is largely driven by final-stage processing and packaging activities conducted in China, especially for mobile MCP products, which are subsequently re-imported to the ROK or shipped directly to global markets.

Although Japan is home to Kioxia, a leading global producer of NAND Flash, trade between Japan and the ROK in this segment remains limited. The steady decline in the bilateral GL index since 2018 suggests a weakening of intra-industry linkages. Likewise, while Micron (a U.S.-based firm) also produces NAND Flash, much of its production is concentrated in overseas locations such as Singapore, resulting in minimal direct trade with the ROK and a near-zero GL index for ROK-U.S. trade in this category.

2.3 Strength and Patterns in Trade Relationships

The ROK exhibits a notably high level of trade intensity with China in the memory semiconductor sector, underscoring the deepening interdependence between the two countries. As illustrated in Figure V.3, both the export and import trade intensity indices (ITIs)⁴ between the ROK and China exceed the global average threshold of 1, suggesting a bilateral trade relationship that is substantially more integrated than typical global patterns.

In the DRAM segment, the ROK's export trade intensity with China has remained relatively stable, maintaining a level around 1.56 throughout the observed period. However, the import trade intensity index increased noticeably from 1.62 in 2018 to 1.82 in 2023. This upward trend indicates a gradual restructuring of the bilateral trade relationship. China and the ROK developed from a previously export-dominant pattern to a more balanced two-way flow, driven in part by China's growing domestic semiconductor production capabilities and increasing sophistication in memory-related supply chains.

A similar trend is observed in the Multi-Chip Package (MCP) segment. The ROK's export trade intensity index with China rose from 1.20 to 1.41 between 2018 and 2023, reflecting rising demand in China's smartphone and server markets. While the import trade intensity index for MCPs declined modestly from 3.22 to 2.92 over the same period, it remains high compared to global patterns, underscoring the ROK's continued dependence on MCP imports from China. This sustained import reliance points to China's competitiveness in MCP packaging and module assembly, especially in final-stage production for mobile and consumer electronics.

By contrast, the ROK's trade intensity with Japan remains comparatively weak. Both export and import trade intensity indices between the two countries have consistently remained below 1, signaling relatively low bilateral trade interdependence in the memory semiconductor sector. Japan's role as a destination for Korean memory exports has been limited, as Japan relies primarily on domestic production capabilities, such as those of Micron Japan, and increasingly diversified supply routes away from the ROK. Similarly, the ROK imports only a small volume of memory semiconductors from Japan, further contributing to the low mutual trade intensity.

⁴ The Trade Intensity Index (IT Index) measures the strength of bilateral trade linkages by comparing the share of a partner country in a nation's exports (or imports) to that partner's share in global trade. A value above 1 indicates stronger-than-average trade intensity, while a value below 1 suggests weaker trade linkages and lower trade complementarity.

Figure V.3 Comparative Changes in Trade Intensity (IT) Indices for DRAM, MCP, Flash, and SRAM (2018–2023)

Source: Compiled using data from UN Comtrade.

3. CJK Trade Dynamics in System Semiconductors

3.1 Comparing Competitiveness Across Regions

As illustrated in Figure V.4, the ROK's system semiconductor⁵ industry is positioned within the zone of competitive advantage (TSI > 0, RSCA > 0), indicating a stable level of global competitiveness. However, the gap with leading economies, particularly Chinese Taipei, has continued to widen. Although the ROK maintains a relative comparative advantage based on the RSCA index, the pace of improvement has either stagnated or slowed compared to Chinese Taipei and the United States. This trend suggests a growing disparity in competitiveness. Similarly, the TSI has shown signs of plateauing and decelerating in recent years, indicating that the ROK faces increasing challenges in maintaining its position in the global system semiconductor export market.

⁵ System semiconductors encompass various segments, including processors and controllers. The Processor & Controller category can be broadly divided into three subgroups. First, HPC (High-Performance Computing) chips — such as CPUs, GPUs, and AI accelerators — are dominated by the United States (e.g., Intel, AMD, NVIDIA), with contributions from the ROK (Samsung, SK Hynix) and Chinese Taipei (MediaTek, TSMC). Second, mobile application processors (APs) used in smartphones and tablets are led by Chinese Taipei (MediaTek) and the ROK (Samsung Exynos). Third, controllers and microcontroller units (MCUs) used in industrial and automotive applications are primarily produced by Japan (Renesas), Europe (Infineon, STMicroelectronics), and the United States (Texas Instruments, NXP).

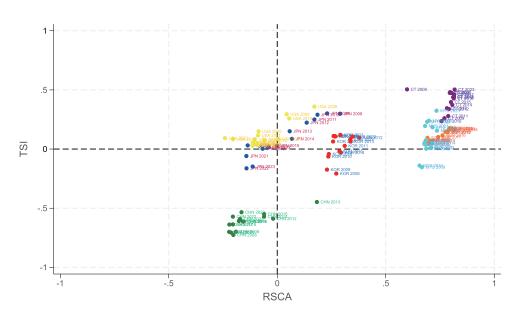


Figure V.4 Comparative Changes in System Semiconductor Competitiveness (2008–2023)

Note: To assess cross-country competitiveness in the semiconductor sector, this study plots RSCA (x-axis) and TSI (y-axis) on a four-quadrant graph. The first quadrant (RSCA > 0, TSI > 0) indicates high competitiveness with both trade surplus and comparative advantage. The second (RSCA < 0, TSI > 0) reflects strong exports despite structural disadvantage. The third (RSCA < 0, TSI < 0) signals low competitiveness, with trade deficits and disadvantages. The fourth (RSCA > 0, TSI < 0) suggests latent competitiveness — comparative advantage exists, but trade deficits persist.

Source: Compiled using data from UN Comtrade.

In contrast, China remains in the third quadrant (TSI < 0, RSCA < 0), reflecting its still-limited competitiveness in system semiconductors. Nonetheless, both its TSI and RSCA indices have shown consistent upward trends in recent years, pointing to a gradual strengthening of its position. The rise in China's RSCA index reflects an expansion of domestic capabilities in semiconductor design and manufacturing and signals the possibility of the ROK's declining market share, particularly in the legacy chip segment. China has actively promoted the growth of domestic foundry companies such as SMIC and Hua Hong Semiconductor, and despite ongoing U.S. export controls, continues to increase its share of domestically produced semiconductors.

3.2 Comparing Intra-Industry Trade Trends

The Grubel–Lloyd (GL) Index provides useful insights into the degree of intra-industry trade in the ROK's system semiconductor sector. From 2018 to 2023, bilateral trade integration has increased in some segments but remains uneven across products and partners. In processors and controllers, the ROK maintains a strong export position, particularly with China, where the GL index remains low (0.34–0.38), reflecting a one-sided structure. In 2024, the ROK exported USD 11.16 billion to China while importing only USD 1.63 billion. Trade with Japan is import-dominant; despite a slight recovery in the GL index to 0.27 in 2023, the ROK's imports (USD 4.59 billion) far exceed exports (USD 170 million), indicating continued reliance on Japanese industrial ICs. The amplifier segment shows consistently low GL indices, indicating

limited two-way trade. Japan is an exception, with the GL index rising sharply to 0.99 in 2022, though the 2024 data still reveal a heavy import bias. Trade with China and Chinese Taipei remains marginal, with minimal export volumes and GL indices near zero. In contrast, application-specific systems on a chip (SOC) exhibit stronger bilateral trade. The ROK's GL index with China peaked at 0.97 in 2022 before moderating to 0.75 in 2023, alongside robust trade flows in both directions. Similar trends are observed with the U.S. and Japan, though the ROK's export base remains narrower. Trade in IC manufacturing components continues to be asymmetric. The ROK holds a strong export position with China, while GL indices with Japan have improved slightly (0.52 in 2023). However, reliance on high-precision imports from Japan and the U.S. remains substantial.

CHN, Amplifier CHN, Application Specific SoC CHN, Processor & Controller CHN, IC manufacturing components .5 0 JPN, Amplifier .5 0 -9 CT, IC manufacturing components CT, Amplifier CT, Processor & Controller 5 ●0.08 ●0.06 ●0.04 ●0.01 ● USA, Amplifier USA, Processor & Controller USA, Application Specific SoC USA, IC manufacturing components .5 2018 2019 2020 2021 2022 2023 2024 2018 2019 2020 2021 2022 2023 2024 2018 2019 2020 2021 2022 2023 2024 2018 2019 2020 2021 2022 2023 2024

Figure V.5 Comparative Changes in Grubel-Lloyd Indices for System Semiconductors (2018–2023)

Source: Compiled using data from UN Comtrade.

3.3 Strength and Patterns in Trade Relationships

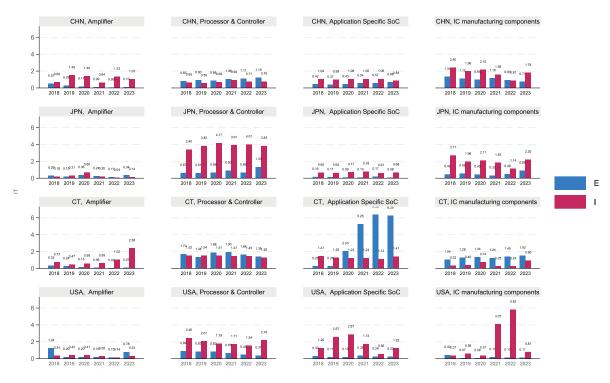
Figure V.6 presents trends in the ROK's trade intensity in system semiconductors with major partner countries between 2018 and 2023. The data highlight distinct patterns of product-level specialization, reflecting the differentiated roles that trading partners play in regional semiconductor supply chains. The ROK maintains relatively reciprocal trade relationships with both China and Chinese Taipei, with Chinese Taipei exhibiting particularly strong interdependence across most system semiconductor categories.

In contrast, the ROK's trade with Japan remains narrowly focused, with high trade intensity concentrated in processors, controllers, and IC components, indicating persistent structural asymmetry. In the amplifier segment, the ROK's export intensity with China declined from 0.5 in 2018 to 0.1 in 2023. However, the import intensity remained consistently high, underscoring the ROK's continued dependence on Chinese amplifier components despite falling export competitiveness.

The processor and controller segment shows growing mutual interdependence with China, as the ROK's export intensity index rose from 0.8 to 1.2 and the import intensity from 0.6 to 0.8 over the period. Similarly, the ROK's export intensity for application-specific SoCs with China increased steadily, as imports also remained high, reflecting both rising demand for Korean products and continued inflow of complementary Chinese SoCs.

In IC components, the ROK's export intensity with China declined, indicating China's strengthening self-sufficiency. The ROK's import intensity rebounded in 2023 despite the initial drop, suggesting the reconfiguration of a functionally differentiated supply chain. With Japan, the ROK's import intensity remained consistently high in processors and components, reflecting Japan's dominance in high-precision and industrial-grade inputs. The ROK's export intensity with Japan improved modestly in processors but remained low in other segments, reinforcing the asymmetric nature of the bilateral trade structure.

Figure V.6 Comparative Trends in Trade Intensity Indices for System Semiconductors (2018–2023)



4. Trade Dynamics in Semiconductor Manufacturing Equipment

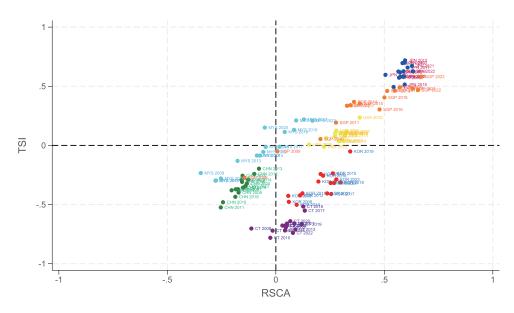
4.1 Comparing Competitiveness Across Regions

This part compares the international competitiveness of the semiconductor manufacturing equipment industry in the ROK, Japan, and China using the TSI and the RSCA.

As shown in Figure V.7, Japan consistently falls in the first quadrant (TSI > 0, RSCA > 0) from 2008 to 2023, indicating a strong and stable competitive edge. Its RSCA remains above 0.5 and TSI between 0.5 and 0.6, reflecting an export-driven structure. Japan's sustained trade surplus and overall strength stems from its specialization in precision machinery, advanced production base, and deep technological capabilities.

The ROK presents a mixed picture. Its RSCA is slightly positive, showing emerging competitiveness. However, its TSI remains negative (-0.4 to -0.1), indicating continued import dependence. Despite global leadership in chip fabrication and memory, the ROK lags in equipment manufacturing due to limited scale and reliance on high-end imports. Recent gains in localization and technology have improved the RSCA slightly, but negative TSI reflects structural challenges.

Figure V.7 Comparative Trends in the Competitiveness of the Semiconductor Manufacturing Equipment Industry (2008–2023)



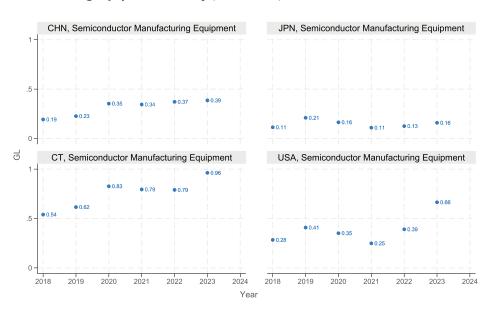
China remains in the third quadrant (TSI < 0, RSCA < 0) throughout the period, indicating weak competitiveness. Its RSCA and TSI stay negative, highlighting reliance on imports. Although demand has surged with its expanding foundry and memory sectors, China's domestic industry remains technologically behind. Government-led investments have spurred gradual progress, but the core trade structure still reflects limited global reach and high foreign dependence.

4.2 Comparing Intra-Industry Trade Trends

This part examines intra-industry trade in semiconductor manufacturing equipment between the ROK and its major partners, China and Japan, using the GL index and IT metrics.

The ROK's intra-industry trade with China remains limited. In 2023, the GL index for ROK-China trade stood at 0.39, indicating a largely one-way trade dominated by ROK exports. This is supported by a high export IT index (1.8), reflecting strong Chinese demand, while the import IT index (0.5) shows minimal Korean reliance on Chinese equipment. These figures highlight China's role as a key export market, but not a significant supplier.

Figure V.8 Comparative Trends in Grubel-Lloyd (GL) Indices for the Semiconductor Manufacturing Equipment Industry (2018–2023)



Source: Compiled using data from UN Comtrade.

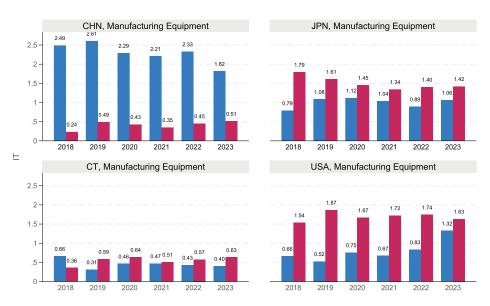
Trade with Japan is even more unbalanced. The GL index for ROK-Japan trade is just 0.16, revealing minimal reciprocal exchange. While the ROK's export IT index with Japan is 1.1, its import IT index is higher at 1.4, underscoring the ROK's dependence on Japanese equipment. Japan remains a core supplier, particularly in advanced segments like photolithography, etching, and deposition, where Korean capabilities remain limited. Despite the ROK's push for localization, these indicators reveal continued structural reliance on Japanese high-end machinery.

4.3 Strengths and Patterns in Trade Relationships

Figure V.9 illustrates the ROK's bilateral IT in semiconductor manufacturing equipment with China and Japan between 2018 and 2023, highlighting the structural asymmetries in the ROK's trade relationships. The ROK's export IT index with China remained high throughout the period, ranging from 1.8 to 2.6, reaffirming the ROK's role as a key supplier to China's expanding semiconductor industry. Although the index declined to 1.8 in 2023, it still indicates export levels well above global averages. In contrast, the ROK's import IT index from China remained low (0.2–0.5), suggesting limited sourcing from Chinese firms. This asymmetry underscores China's reliance on foreign — particularly Korean — equipment, although recent shifts point to two emerging trends: the gradual localization of Chinese equipment production and the impact of U.S.-led export controls limiting Korea's shipments of advanced tools to China.

By contrast, the ROK's trade with Japan reveals a structurally import-dependent relationship. The ROK's export IT index to Japan remained modest (0.8–1.1), indicating limited market access for Korean equipment, while the import IT index consistently exceeded 1.5 — peaking at 1.8 — demonstrating sustained dependence on Japanese suppliers. This reflects Japan's enduring technological leadership in critical equipment categories such as photolithography, etching, and deposition. Despite the ROK's ongoing localization efforts, the persistently high import intensity with Japan suggests that strategic reliance on Japanese manufacturing tools remains deeply embedded and difficult to offset in the short term.

Figure V.9 Comparative Trends in Trade Intensity (IT) Indices for the Semiconductor Manufacturing Equipment Industry (2018–2023)



5. Trade Dynamics in Semiconductor Materials and Parts

5.1 Comparing Competitiveness Across Regions

Figure V.10 presents a comparative analysis of the international competitiveness of Japan, China, and the ROK in the semiconductor materials and parts industry using the TSI and the RSCA. The results underscore the distinct strategic positions of the three countries within the global value chain.

Japan consistently ranks in the first quadrant (TSI > 0, RSCA > 0), maintaining a leading position marked by strong export orientation and pronounced comparative advantage. This is particularly evident in high-precision, high-value segments such as photoresists, CMP slurries, and advanced packaging materials. Japan's competitiveness is rooted in long-term investment in R&D, stringent quality control, and vertically integrated production systems.

China, while historically import-reliant, has recently moved toward export specialization. Both the TSI and RSCA indices have turned positive, signaling the emergence of a nascent comparative advantage. This shift reflects robust state-led investments, particularly in base and intermediate materials, as well as the benefits of a large domestic market. Although China remains dependent on foreign suppliers for advanced inputs, it is gaining competitiveness in cost-sensitive segments.

-5 - -1 -.5 0 .5 1

Figure V10 Comparative Trends in the Competitiveness of Semiconductor Materials and parts (2008–2023)

The ROK, by contrast, occupies a transitional position. Its TSI hovers near zero, suggesting a relatively balanced trade structure with a slight import surplus, while its RSCA shows modest but positive values. The ROK has advanced in select areas such as specialty chemicals and encapsulants but continues to rely on Japan for critical high-end materials. In response, the ROK has elevated materials localization to a national strategic priority, emphasizing R&D investment, supply chain resilience, and efforts to improve global competitiveness.

Overall, the three countries exhibit differentiated trajectories: Japan as a mature leader with entrenched advantages, China as a rapidly advancing challenger, and the ROK as a strategically positioned actor seeking to upgrade its capabilities in targeted segments of the semiconductor materials and parts industry.

5.2 Comparing Intra-Industry Trade Trends

Figure V.11 examines the ROK's intra-industry trade patterns in semiconductor materials and parts with China and Japan using the GL Index and IT metrics. The GL Index serves as a measure of the extent to which trade is reciprocal within the same product category, providing insight into the structural nature of bilateral exchanges.

The ROK's trade with China exhibits a high degree of integration. The GL index reached 0.98 in 2023, indicating near-balanced intra-industry trade. This reflects a well-balanced structure, supported by high IT indices in both directions. Korean firms export materials such as encapsulants and etching gases to Chinese fabrication and packaging facilities, while Chinese-made inputs are imported into the ROK for further processing or final assembly. Despite China's growing localization efforts, the two economies remain deeply interconnected through complementary functions across the materials supply chain.

Figure V.11 Comparative Trends in Grubel-Lloyd (GL) Indices for Semiconductor Materials and parts (2018–2023)



In contrast, the ROK's trade with Japan remains structurally asymmetric. The GL index stood at 0.46 in 2023, suggesting limited reciprocity in trade flows. While both export and import IT indices are high, the ROK's imports from Japan dominate the relationship, particularly in high-purity, high-precision materials such as photoresists, silicon wafers, and hydrogen fluoride — key inputs for advanced semiconductor production. Since Japan's imposition of export controls in 2019, the ROK has intensified efforts to localize the production of critical materials. Although progress has been made, particularly in select substitute products, the ROK remains reliant on Japanese suppliers in technologically advanced segments. The persistent trade imbalance underscores the limitations of current localization strategies in closing the competitive gap with Japan.

5.3 Strength and Patterns in Trade Relationships

Figure V.12 presents trends in the ROK's export and import IT indices with China and Japan in the semiconductor materials and parts sector from 2007 to 2023, offering insights into the structure and evolution of the ROK's bilateral trade relationships. With China, the ROK's export IT index has remained consistently high, peaking at 3.7 in 2021 and remaining well above the global average in 2023. This highlights China's role as the ROK's primary export market in this sector. In contrast, the import IT index from China has gradually increased to 1.5 in 2023, indicating growing — though still moderate — reliance on Chinese materials. The persistent disparity between the two indices reflects a structurally export-oriented trade relationship, wherein the ROK supplies key intermediate inputs such as wafer chemicals, encapsulants, and packaging substrates, while selectively importing complementary materials. Despite China's localization efforts, the data suggest that bilateral supply chain integration remains robust, with both countries occupying complementary positions in upstream and midstream segments of semiconductor production.

The trade pattern with Japan exhibits a markedly different structure. The ROK's export IT index to Japan has declined over time, reaching a low of 1.69 in 2017 before modestly recovering. In contrast, the import IT index from Japan has remained consistently high, ranging from 2.8 to 3.2. Taken together, this underscores the ROK's sustained dependence on Japanese suppliers. This asymmetry reflects Japan's dominance in high-purity, high-performance materials — such as photoresists, hydrogen fluoride, and specialty process gases — essential for advanced semiconductor manufacturing. Although the ROK has intensified its localization efforts since Japan's 2019 export controls, the persistent IT index gap illustrates the challenges of substituting Japan's technological leadership in critical materials. As such, the ROK's structural reliance on Japanese inputs remains a key constraint in its pursuit of supply chain resilience.

CHN, Materials & Parts JPN, Materials & Parts 3.72 2019 2020 2021 2022 2023 2018 2019 2020 \vdash CT, Materials & Parts USA, Materials & Parts 2.73 2.74

Figure V.12 Comparative Trends in Trade Intensity (IT) Indices for Semiconductor Materials and parts (2018–2023)

Source: Compiled using data from UN Comtrade.

6. Conclusion and Policy Implications

This study has examined the semiconductor industries of the ROK, China, and Japan by analyzing trade structures and patterns across memory and system semiconductors, manufacturing equipment, and materials and parts. Utilizing key trade indicators — namely, the GL Index, IT Index, and TSI — the analysis highlights both interdependence and asymmetries within the trilateral semiconductor value chain.

The findings reveal that while the three countries occupy distinct positions — Japan as a technology supplier, the ROK as a manufacturing hub, and China as a demand center — trade structures remain uneven, particularly in high-value segments such as manufacturing equipment and critical materials. Intra-industry trade has increased in select sectors, yet many relationships continue to be dominated by one-way trade flows, exposing supply chain vulnerabilities.

In memory semiconductors, the ROK leads as a global producer with a vertically integrated, export-driven trade structure. China has emerged as a key partner, with growing mutual trade, while ties with Japan have declined. In system semiconductors, intra-industry trade remains underdeveloped, particularly in power, automotive, and analog ICs — segments crucial to future supply chain resilience and regional cooperation.

Manufacturing equipment and materials trade underscores Japan's continued dominance, with the ROK and China reliant on high-precision Japanese inputs. Despite localization efforts, both countries remain structurally dependent on Japanese technologies. However, increasing trade integration between the ROK and China in the materials segment indicates emerging complementarities and opportunities for deeper cooperation.

Based on these insights, the following policy recommendations are proposed:

Establish a Trilateral Semiconductor Supply Chain Platform: Institutionalize cooperation via an East Asia Semiconductor Supply Chain Council to enhance transparency, risk-sharing, and coordination in critical supply chain segments.

Promote Joint R&D and Certification Harmonization: Develop common certification systems and collaborative R&D initiatives in system semiconductors, advanced materials, and precision equipment to improve interoperability and reduce redundancy.

Launch a ROK-China-Japan Materials & Parts Consortium: Leverage Japan's engineering expertise, the ROK's application capabilities, and China's production scale to build an integrated R&D and commercialization ecosystem.

Expand Intra-Industry Trade through Functional Specialization: Support sectors with rising GL indices through structured co-production networks, co-branding, and cross-border investments that promote long-term mutual benefit.

Develop a Multilateral Semiconductor Governance Framework: Advance beyond technical cooperation to establish shared rules and joint responses to export controls, investment screening, and geopolitical risks shaping the global semiconductor order.

In sum, the ROK, China, and Japan are strategically positioned to build a resilient and complementary regional semiconductor ecosystem. Trade indicators analyzed in this study not only underscore existing dependencies but also point toward viable pathways for cooperative upgrading. A coordinated policy approach — grounded in shared strengths and strategic interdependence — will be essential to ensuring the long-term sustainability and competitiveness of the East Asian semiconductor supply chain in an increasingly complex global environment.

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Chapter VI.

Strengthening Regional Resilience Amid Global Trade Turbulence: Foundations, Challenges, and the Way Forward¹

This chapter summarizes and synthesizes the key findings and messages from the preceding chapters. It provides an overview of the CJK economies and the broader ASEAN+3 region's current resilience amid the ongoing global trade turbulence, highlighting the previously outlined main building blocks of regional cooperation that have supported economic stability and resilience, . It then examines the existing challenges and gaps that could constrain the region's ability to deepen regional integration and cooperation in navigating future shocks in a more fragmented global environment, drawing from the discussions in Chapters III to V. Finally, it outlines key policy priorities to further strengthen regional resilience and secure sustainable growth amid rising external uncertainties.

¹ This Chapter is prepared by WANG Haobin and WU Yuhong, under the supervision of Allen NG (all from the Regional Surveillance group in ASEAN+3 Macroeconomic Research Office (AMRO)). The authors would like to thank AMRO Director, LI Kouqing and AMRO Chief Economist, Hoe Ee Khor for the guidance and the useful comments. All views and errors are that of the authors.

1. CJK and the Broader ASEAN+3 Region: Navigating Global Trade Turbulence from a Position of Relative Strength

The CJK economies, at the core of the broader ASEAN+3 region, are confronting the most profound global trade shock in decades. As discussed in Chapter II, the sweeping tariffs announced by the United States in April 2025 have triggered systemic disruptions in global trade. Along with these announcements are subsequent shifts and uncertainties in U.S. trade policy, which are amplifying supply chain fragmentation, fuelling financial volatility, and eroding investor and consumer confidence worldwide. For CJK, which are deeply integrated into global trade and investment flows, these external shocks pose an existential challenge to growth stability and long-term economic prosperity, with significant implications for the broader regional outlook.

Despite the turbulence, CJK and the broader ASEAN+3 region are entering this episode from a position of relative resilience and strength, as highlighted in Chapters II and III. Over the past two decades, CJK economies have steadily diversified their export markets, built up reserves buffer, strengthened intraregional ties, and led efforts to build institutional frameworks for cooperation across ASEAN+3 — all of which now serve as critical buffers against external shocks. This resilience was built up over the year through pursuance of sound macro policies, strict financial regulation, and structural transformation.

First, as outlined in Chapter II, growth across CJK and the wider region has become increasingly driven by robust domestic demand rather than reliance solely on external markets. Household consumption and private investment have contributed an expanding share of GDP growth across ASEAN+3 economies since the Global Financial Crisis, with China rebalancing toward consumption-led growth and Japan and the ROK enhancing domestic demand through structural reforms. This internal dynamism, led by the CJK economies, provides a vital anchor of stability as external markets become more volatile.

Second, export markets for CJK and ASEAN+3 economies have become more diversified, and intraregional trade has expanded significantly, creating stronger internal demand linkages. As discussed in Chapter II and Chapter III, trade flows within ASEAN+3 now account for a substantial share of total trade, reducing dependence on traditional markets like the United States and Europe. Deepening CJK-ASEAN trade relations, in particular, have helped mitigate risks from any single market downturn, offering alternative growth engines even amid global protectionist headwinds.

Third, CJK economies underpin some of the most resilient and sophisticated supply chains globally, particularly in critical sectors such as semiconductors, as highlighted in Chapter V. The ROK leads in memory chip manufacturing, Japan excels in semiconductor materials and equipment, and China has rapidly scaled up its production capacity in electric vehicles and renewal energy products. Despite some vulnerabilities, the depth of technological leadership, specialization, and interdependence among the three economies offers a strong platform for supply chain durability against external disruptions.

Fourth, the CJK economies, together with their ASEAN partners, have spearheaded the development of strong institutional foundations for regional cooperation and integration discussed in Chapter IV, which are more critical now than ever. Initiatives such as the Regional Comprehensive Economic Partnership (RCEP), the ASEAN Economic Community (AEC), the Chiang Mai Initiative Multilateralization (CMIM), and the ongoing efforts toward a China-Japan-ROK Free Trade Agreement (CJKFTA) represent deliberate commitments in rules-based regionalism. These frameworks not only promote trade and investment liberalization but also provide mechanisms for financial stability coordination and broader economic resilience.

In short, while the global environment has turned dramatically against open trade and predictable markets, the CJK economies — at the heart of the ASEAN+3 region — have spent the past decades laying the groundwork for collective strength. The immediate challenge is to leverage these assets — domestic dynamism, diversified trade, resilient supply chains, and robust regional cooperation — to navigate the new turbulence and build an even stronger regional future.

2. Existing Challenges and Gaps to Regional Resilience

Despite their formidable strengths, the CJK economies — along with the broader ASEAN+3 region — face persistent challenges that could constrain their ability to fully capitalize on existing resilience. While the foundations are solid, the edifice of regional integration remains incomplete, with important gaps that must be addressed to ensure sustainable growth and stability amid a more fragmented global economy, as discussed in Chapters III to V.

One major constraint is the relatively limited degree of intra-CJK trade integration. Intra-CJK trade accounts for only about a quarter of total trade among China, Japan, and the ROK, a level that highlights the potential for deeper economic interdependence. Despite strong industrial complementarities and geographic proximity, the region's economies remain vulnerable to external demand shocks, underscoring the need to strengthen intra-regional linkages, as highlighted in Chapter III.

At the same time, the region's sophisticated supply chains exhibit strategic vulnerabilities, particularly in critical sectors such as semiconductors. As discussed in Chapter V, while China, Japan and the ROK each lead in different parts of the value chain — from memory production to semiconductor materials and manufacturing equipment — stronger trilateral collaboration could further enhance supply chain resilience. Overreliance on specific production nodes and the impact of export controls on key inputs have heightened risks of disruption amid rising geopolitical tensions.

Regulatory fragmentation and the persistence of non-tariff barriers also remain major challenges to seamless regional integration. Although RCEP has significantly reduced tariff barriers, divergences in technical standards, customs procedures, and investment regulations continue to impede efficient trade and investment flows across the region, as outlined in Chapter IV. Without greater regulatory convergence, CJK and ASEAN+3 economies may struggle to fully optimize regional value chains and sustain competitiveness.

Financial vulnerabilities remain an important consideration as the region navigates a more volatile global environment. Financial market development across ASEAN+3, including parts of CJK, remains uneven, with varying levels of depth, liquidity, and resilience. These differences could leave some economies more susceptible to capital flow volatility and currency pressures. The CMIM remains an important regional liquidity backstop and a key pillar of ASEAN+3's financial safety net. However, the facility has not been activated to date, highlighting the continued need to further enhance its accessibility, operational readiness, and effectiveness to ensure that it can serve as a robust support mechanism during periods of financial stress.

Compounding these structural challenges are intensifying external headwinds. The escalation of trade and technology tensions — including new tariffs, shifting trade and investment policies, and restrictions on critical technologies — threatens to fragment global value chains and restrict market access for CJK and ASEAN+3 economies. These developments add to the complexity of the external environment and reinforce the urgency of further strengthening regional resilience.

In sum, while the CJK economies and the broader ASEAN+3 region have built substantial buffers over the past decades, significant structural gaps in intra-regional trade, supply chain cooperation, regulatory harmonization, and financial safety nets remain. Addressing these challenges through strengthened regional collaboration will be critical to safeguarding the region's growth prospects and enhancing resilience in an increasingly uncertain global economy.

3. Policy Agenda to Fortify Regional Resilience

Building on the gaps and challenges identified in earlier chapters, several policy priorities emerge to further strengthen regional resilience and integration.

Deepen regional economic integration through institutional upgrades

CJK economies should continue to take the lead in advancing the negotiation and conclusion of a high-standard China-Japan-ROK Free Trade Agreement (CJKFTA), as discussed in Chapter III. While RCEP has established an important baseline for regional liberalization, a successful CJKFTA could further deepen

economic integration by expanding market access, enhancing services trade, and supporting broader cooperation in emerging sectors. Consolidating the trilateral economic space through such an agreement would significantly strengthen intra-regional demand, investment flows, and supply chain connectivity, helping to address the relatively low level of intra-CJK trade dependency highlighted earlier.

In parallel, CJK and ASEAN+3 economies should continue efforts to harmonize standards, customs procedures, and investment-related rules across the region. As noted in Chapter 4, despite substantial progress in tariff liberalization under RCEP, non-tariff barriers and regulatory divergences remain key obstacles to seamless regional production networks. Greater alignment in technical standards, mutual recognition efforts, and streamlined customs practices could help facilitate more efficient trade and investment across borders and bolster the competitiveness of regional value chains.

Looking ahead, there are also opportunities to further advance trade facilitation by leveraging digital technologies. While not explicitly covered in previous chapters, strengthening cooperation on electronic customs procedures, promoting the use of digital documentation, and supporting initiatives to enhance transparency and efficiency in cross-border trade would complement broader efforts to build resilient and future-ready supply chains, a theme emphasized in Chapter V.

Strengthen strategic supply chain cooperation in critical industries

Strengthening the resilience and future readiness of regional supply chains should become a central strategic objective for CJK and the broader ASEAN+3 region. As highlighted in Chapter V, the semiconductor sector — where CJK economies collectively maintain global leadership — presents both strengths and vulnerabilities and offers a key opportunity for deeper trilateral cooperation. Pursuing coordinated strategies, including co-investment in fabrication facilities, joint research and development of next-generation chips, and efforts to secure upstream materials, would help enhance the collective resilience of the region's critical industries.

Beyond semiconductors, there is significant scope for broader regional industrial cooperation in emerging sectors such as electric vehicles, renewable energy equipment, and green hydrogen. While not the primary focus of earlier chapters, strengthening collaboration in these areas would build on the region's existing industrial complementarities and contribute to diversifying future growth engines.

Investments in "resilient supply chain corridors," integrating logistics infrastructure, digital monitoring systems, and green transport networks would also further bolster supply chain robustness. Public-private partnerships (PPPs) could play a central role in mobilizing the necessary financing and expertise to support such initiatives, complementing broader efforts to bolster the resilience of regional production networks discussed earlier.

Enhance regional financial cooperation and safety nets

Financial resilience remains a fundamental pillar for ensuring broader economic and financial stability in the ASEAN+3 region. As discussed in Chapter IV, continued efforts to further enhance regional financial safety nets, including the CMIM, will be important to strengthen the region's capacity to manage future shocks. Measures that promote the operational readiness, effectiveness, and responsiveness of regional mechanisms can help reinforce confidence in the region's collective financial arrangements.

At the same time, strengthening regional surveillance and risk monitoring frameworks remains essential. Institutions such as the ASEAN+3 Macroeconomic Research Office (AMRO) can continue to play a key role in providing timely analysis, early warning signals, and policy-relevant research to support member economies in navigating an increasingly complex global environment.

Looking ahead, initiatives that enhance cross-border payment linkages and settlement systems can contribute to strengthening regional monetary resilience and reducing exposure to external financial shocks. Expanding cooperation into emerging areas such as green finance, fintech regulation, and digital asset governance could help position the ASEAN+3 region at the forefront of global financial innovation and sustainability efforts.

Driving structural transformation through digital and green transitions

Advancing structural transformation is critical for unlocking the region's long-term growth potential, as emphasized in Chapter II. The CJK economies, with their technological leadership, economic scale, and deep integration into regional supply chains, are well positioned to spearhead efforts to drive structural changes that foster more dynamic, resilient, and sustainable growth across ASEAN+3.

Strengthening cooperation in the digital economy — including initiatives to promote cross-border data flows, facilitate digital trade, support technology diffusion, and enhance cybersecurity collaboration — would accelerate productivity gains and innovation across the region. Deeper digital integration would not only improve regional connectivity but also create new opportunities for small and medium-sized enterprises (SMEs) and startups, contributing to broader and more inclusive economic upgrading.

At the same time, advancing the green transition will be crucial for positioning the region for future competitiveness. Promoting sustainable finance, harmonizing environmental standards, and investing in renewable energy and climate-resilient infrastructure would support the shift toward a low-carbon economy, in line with the shared goal of fostering more sustainable and inclusive growth highlighted in earlier chapters.

Cross-border investments in sustainable infrastructure — such as regional energy grids, electric vehicle networks, and smart cities — would reinforce regional supply chains, deepen intra-regional connectivity, and contribute meaningfully to global efforts to address climate change. Taken together, these initiatives would help the ASEAN+3 region revitalize its structural transformation process and realize its untapped productivity potential over the long term.

Embrace strategic regional leadership in a fragmenting global economy

Looking ahead, CJK economies, in collaboration with their ASEAN partners, are well placed to play a global leadership role in strengthening open, inclusive, and rules-based economic cooperation. Building on the region's efforts to deepen trade, investment, and financial linkages as discussed in previous chapters, CJK economies can help sustain regional stability and promote constructive engagement with the broader global economy. In an increasingly fragmented world marked by rising protectionism and geopolitical tensions, ASEAN+3's continued commitment to openness and cooperation will be critical.

Active participation in multilateral forums — including trade, digital economy, and sustainability platforms — would allow the region to contribute substantially to global rule-making efforts. Engaging with emerging frameworks, sharing best practices, and collaborating with like-minded economies will help shape a fair and open international economic system.

Strengthening external partnerships and diversifying economic ties — including with partners in the European Union, South Asia, Africa, and Latin America — would also enhance the region's resilience and expand opportunities for growth in an increasingly multipolar world.

By pursuing pragmatic and forward-looking steps toward deeper regional integration, more resilient supply chains, financial cooperation, digital innovation, and diversified external engagement, CJK and ASEAN+3 economies can not only safeguard their own prosperity but also contribute positively to global economic resilience and sustainable development.





Supporting the annual Trilateral Economic Report (TER) by the Trilateral Cooperation Secretariat as a valuable resource for policy development and economic cooperation, we agreed to facilitate economic exchanges, cooperation and information sharing based on report, while also to encourage the development of future editions.



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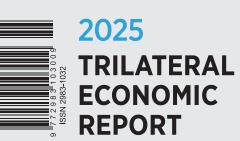
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