Geo-economic trends and maritime supply chain resilience: What’s next for the Indo-Pacific?

The Indo-Pacific region is made up of major and emerging economies and is critical to the world’s economy and trade. It depends on supply chains, largely maritime transport. Approximately 80 percent of total global trade passes through the region via the Strait of Malacca, linking major Asian economies such as India, Thailand, Indonesia, Malaysia, Philippines, Singapore, Vietnam, China, Japan, Taiwan, and South Korea.

Southeast Asia and East Asia are at the centre of the Indo-Pacific’s economic vibrancy. Singapore and Malaysia are the most connected economies as measured by the Liner Shipping Connectivity Index by United Nations Conference on Trade and Development, along with China, South Korea and the United States. Countries with low connectivity such Cambodia, Myanmar and the Philippines remain on the margins of the major trading routes, unable to fully participate in the global economy. Southeast Asia has, over many years, provided buoyancy to international trade and has been the largest recipient of investment, but many Southeast Asian nations are highly dependent on the availability of reliable and efficient shipping services. Southeast Asia is also home of major ports such as Port of Singapore, Port Klang and Port of Tanjung Pelepas, in Malaysia.

Asia’s sea lanes and shipping supply chains remain vulnerable to a variety of threats. The security and diversification of supply chains became a prominent concern due to disruptions caused by the COVID-19 pandemic and has intensified after the Russian invasion of Ukraine.

Geo-economic threats to shipping supply chains

The main geo-political threats are related to the United States and China potentially on a collision course over the status of Taiwan. In addition, the South China Sea is rich in oil and gas deposits and the site of intractable sovereignty disputes, overlapping maritime jurisdictional claims, and contestation over historical rights.

Geopolitics and geoeconomics cannot be separated and if armed conflict broke out there could be major disruption to shipping supply chains. The entire region and beyond would be affected, including the nations of the Association of Southeast Asian Nations (ASEAN), as the significance of a conflict would reach far beyond territorial disputes among a limited number of claimants.

In 2023, the Member States of the global regulatory body for shipping, the International Maritime Organisation (IMO), set a sector target of net-zero emissions by or around 2050. This will require massive investment, raising concerns on the possible impact of reduced shipping available to vulnerable shipping-reliant Small Island Developing States and Least Developed Countries. Estimates show that decarbonising the world's fleet by 2050 could require USD 8 billion to USD 28 billion annually, with an additional USD 28-90 billion needed each year for the carbon-neutral fuel infrastructure. Public-private partnerships are now crucial to substantially boost funds that can help small and vulnerable economies to achieve a green and low-carbon transition.

Increasing regional integration

Key geo-economic megatrends in the Indo-Pacific in recent decades have been defined and underpinned by regional integration, both state-led and market-led. Supply chains across the Indo-Pacific, including shipping supply chains, have become more integrated, especially since China joined the World Trade Organisation in 2001.

In 2018, Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in 2018. This came after the US withdrew from The Trans-Pacific Partnership Agreement in 2017, intended as a vehicle for greater regional economic integration. The CPTPP prioritises several areas including improving connectivity, and promoting sustainable and inclusive growth. One of the CPTPP's aims, among others, is to support global value chains and strengthen supply chain resilience to help Member States to withstand external shocks and disruption. The Agreement has helped boost overall trade and supply chain trade between CPTPP members and further expansion would deepen regional economic integration of the Asia-Pacific region.

The Association of Southeast Asian Nations (ASEAN) has become increasingly integrated with the two largest economies in the world, particularly with China, (although its integration with the US and Japan, has declined since its peak in the late 2000). China has become the main individual player in Global Value Chains, moving from being a world factory for a diverse range of consumer goods towards becoming a technological leader in sectors linked to advanced cloud computing, artificial intelligence and electric vehicles while lessening its dependence on the United States by focusing on domestic markets and emerging regional markets. Since the 2000s, China has taken over the positions of Japan, Taiwan, and the United States as a supply hub of value-added exports for ASEAN economies, and ASEAN economies are more dependent on China for intermediate inputs for their exporting product. In 2002, a framework agreement on the ASEAN-China Free Trade Area was signed.

The Regional Comprehensive Economic Partnership (RCEP) signed in 2020 estimates that the 15 member countries: ASEAN 10, China, Japan, South Korea, Australia and New Zealand will contribute to USD 26.3 trillion to global gross domestic product (GDP). Among the key features of RCEP are that it aims to reduce tariffs and red tape on merchandise trade between Member States over the next 20 years. It will supersede a number of bilateral trade agreements in the region and offer one set of rules for trade and customs procedures. It includes unified rules of origin throughout the block, which may facilitate international supply chains and trade within the region. India decided to opt out of RCEP in 2019, but has been invited to join any time.

In 2013, China's Belt and Road Initiative was proposed as infrastructure development and investment to boost trade routes between Asia, Europe and Africa, including roads, railways, airports and ports to enhance supply-chain resilience. Chinese authorities have actively promoted cooperation with ASEAN economies by linking the BRI and the Master Plan on ASEAN Connectivity.

Policymakers in the European Union, the US, and many Asian countries in the Indo-Pacific are pushing for greater connectivity in areas such as digital, transport infrastructure, and energy. Projects such as Japan's Partnership for Quality Infrastructure, South Korea's New Southern Policy Plus and the EU's connecting Europe & Asia strategy show the commitment of different governments and groups to support infrastructure development in the Indo-Pacific that will enhance the resilience of maritime supply chains.

Diversifying supply chains in the Indo-Pacific

The centrality of China in relation to supply chains is the main driver behind calls for supply chain diversification.

In November 2023, the US-backed Indo-Pacific Economic Framework (IPEF) was signed, aiming to enhance supply chains. Founding countries include the US, India, Indonesia, Japan, Australia, New Zealand, Singapore, South Korea, Thailand, the Philippines, Vietnam and others, but not China. It seeks to provide an alternative to the Regional Comprehensive Economic Partnership and Belt and Road Initiative. IPEF distinguishes itself from China's BRI by stressing transparency commitments, and purportedly aligns with the administration of US President Joe Biden's broader trade policy of inclusiveness and fair trade. Several countries were not included in the IPEF launch, such as Myanmar, Laos and Cambodia, given political and human rights concerns. Pacific-Rim countries that participated in the TPP negotiations (Canada, Mexico, Peru and Chile) were not invited.

A key question is whether the Framework can be developed in Asia with growing trade investment relations among its members if China is not part of it. The IPEF complements and builds on existing regional architecture and free trade agreements to support the global rules-based trading system. It has a stated intention to achieve a new worker-centered approach to trade policy especially in relation to respecting the rights of workers and eradicating forced labor in global supply chains. IPEF countries are already party to trade agreements including the Regional Comprehensive Economic Partnership and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership designed to promote regional trade platforms. Without new market access from the United States on offer, it will be difficult to shift supply chains away from dominant markets like China. What Asian partners really want is trade and market access, and the trade component of IPEF is lacking.

What's next for shipping supply chains in the region?

In an increasingly complex operating environment, traders and supply chain managers are embracing various strategies to increase their agility to respond to new challenges.

The geo-economics of the Indo-Pacific region have been dominated by deeper integration in recent decades, mainly driven by the market. This trend is likely to continue in the coming decades since emerging and developing countries in the region continue to focus on economic growth as their top priority, above others such as sustainable development. The US withdrawal from the Trans Pacific Partnership enabled China to emerge as a standard-setting country. With regional economic integration through the Regional Comprehensive Economic Partnership, the Belt and Road initiative, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership and the Digital Economy Partnership Agreement, China is the top trading partners for most IPEF countries.

It is unclear whether the IPEF will succeed in reshaping China's economic influence in Asia. It is also unclear whether it will strengthen global supply chain resilience in the Indo-Pacific or whether it will pose new challenges in terms of geopolitical uncertainty. Security underscores regional interest in the IPEF since the tangible economic benefits of the Framework remain unclear. With an increasingly assertive China aiming to define rules and norms in the region, the IPEF is an economic complement to US regional security guarantees and commitment to fostering a free and open Indo-Pacific. Asia Society Policy Institute in its report on 'Strengthening Supply Chain Resiliency Through the Indo Pacific Economic Framework', stated that the IPEF Supply-Chain Pillar offers an important opportunity for the United States and its partners to reshape regional supply-chains networks to their mutual benefit. However, the maritime connectivity plans that cater to new supply chain linkages, whether for trade and good services, or digital economy, will be subjected to efficiencies and markets.

The maritime sector is at a pivotal moment, facing the daunting challenge of decarbonisation while navigating economic and geopolitical headwinds marked by the war in Ukraine and other geo-political and geo-economic uncertainty. The United Nations Conference on Trade and Development (UNCTAD) advocates for system-wide collaboration, swift regulatory intervention and stronger investment in green technology and fleets, in order to reach decarbonisation targets. In its 'Review of Maritime Transport, 2022' UNCTAD called for investment in maritime supply chains, and ports, shipping fleets, and stated that hinterland connections need to be better prepared for future global crises, climate change and the transition to low carbon energy.

The heavy financial burden of moving the shipping sector towards cleaner energy could disproportionately affect the most vulnerable nations such as the Small Island Developing States and Less Developed Countries. At the same time, these vulnerable nations on the front lines of climate change are heavily reliant on maritime transport for trade and economic growth and could face significant economic setbacks from increased costs. For developing countries, a multilateral solution adopted under the auspices of the IMO, which considers the special needs of the most vulnerable economies would provide a workable outcome and avoid fragmented regional and unilateral approaches.

A broadscale transition to zero-carbon shipping fuels requires coordination across the maritime value chain, including carriers, third-party logistics providers, ship owners, ports, and fuel producers. IMO, with funding assistance from Member States, provide supports for least developed countries and small islands developing states through a series of capacity-building and technical cooperation programmes to achieve maritime supply chain resilience in the Indo-Pacific region.

Image: Yantian Port at night. Photo by Jason Yuen on Unsplash.

This article is part of the 'Blue Security' project led by La Trobe Asia, University of Western Australia Defence and Security Institute, Griffith Asia Institute, UNSW Canberra and the Asia-Pacific Development, Diplomacy and Defence Dialogue (AP4D). Views expressed are solely of its author/s and not representative of the Maritime Exchange, the Australian Government, or any collaboration partner country government.