

Summary of Insights: Taiwan

Taiwan's strength in high-tech provides a strong base to capture trade opportunities presented by rapid digitalisation in Asia, with the value of its trade with 11 other top Asian markets potentially more than doubling in value from USD420 billion in 2020 to USD1.1 trillion by 2030

This market summary provides an overview of some of the main insights on intra-Asia trade for Taiwan as part of a larger study commissioned by UPS and developed by AlphaBeta entitled: "Clearing the Runway for Intra-Asia Trade: Key insights for unleashing the potential for intra-Asia trade by 2030." The 12 markets (i.e., "Asia-12") covered in this report are Australia, China, Hong Kong, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. The purpose of this research is to offer key critical insights on the rise of intra-Asia trade and prospects for future growth through 2030, in the context of Asia's continuing economic growth and against the backdrop of increasing volatility in global trade relationships today. The findings from this research showcase the potential for intra-Asia trade to continue its rapid growth over the coming decade, and support governments and businesses in identifying key enablers for this opportunity and steps to capture the potential. This summary is without prejudice to the status of or sovereignty over any territory or boundary. In cases where China is referred, it predominantly refers to mainland China. For the full set of insights, including data sources and methodology, please refer to the full report at: https://about.ups.com/sg/en/home.html

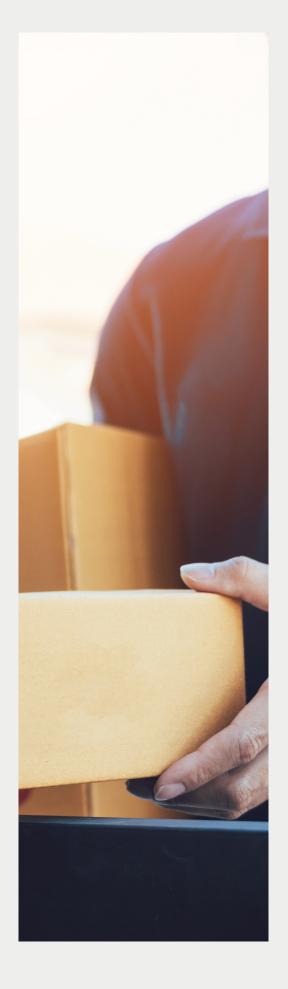


Top 3 insights on intra-Asia trade prospects for Taiwan

- Taiwan is a major trade partner for many economies in Asia and could solidify its regional trade hub status in the coming decade. Supported by deeper regional integration and rapid digitalisation, Taiwan's trade with 11 other major markets (together, the "Asia-12") could more than double between 2020 and 2030 to reach USD1.1 trillion.
- Trade in four key product segments is expected to drive Taiwan's trade growth with the rest of the Asia-12. These segments are retail, industrial manufacturing and automotive (IM&A), high-tech, and healthcare. The high-tech segment alone accounts for 56% of Taiwan's trade with the rest of Asia in 2020 and will drive future growth given the rise in digitalisation across the Asia-12.
- Businesses in Taiwan can capture the intra-Asia trade opportunity through three areas of multistakeholder action that could address major barriers to regional trade. (1) Negotiate comprehensive regional economic partnerships; (2) Collaborate on harmonising product standards across the region; (3) Build resilience into supply chains.

Top 3 takeaways for businesses in Taiwan

- Digitalise comprehensively, especially in advanced technology. Digitalisation in manufacturing and retail sectors lags other sectors, where many Taiwanese businesses in these sectors could leverage advanced technologies to drive productivity improvements in their operations and supply chains.
- Plan for both headwinds and opportunities by diversifying supply chains. This includes exploring resilient trade routes, such as with South Korea, and targeting high-value and high-growth trade routes, such as with China and ASEAN. Diversifying supply chains is critical to building resilience in trade flows.
- Partner with and promote deep integration of micro-, small-, and medium-sized enterprises (MSMEs) into regional supply chains. MSMEs typically face higher costs in navigating trade barriers and often lack the scale of operations needed for trade profitability. Larger companies can partner with these smaller firms to supplement resources that could improve both companies' competitiveness.

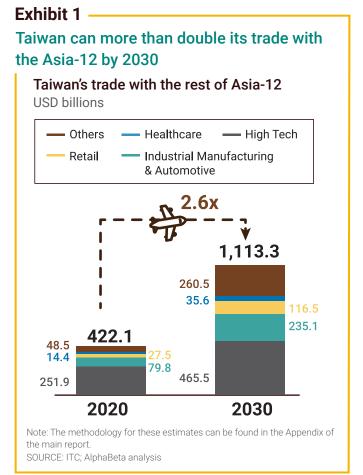


Taiwan could solidify its status as a major high-tech Asian trade hub in the coming decade

Asia is a critical component of global trade. Over the past half century, Asia has developed into the world's largest manufacturing hub, with Taiwan positioning itself as a key trade node in the production of semiconductors that are critical to electronics and machinery supply chains. However, as Asian markets become the global epicentre for new consumer demand, building off a sustained period of economic growth and improvements in standards of living, trade lanes within Asia are gaining importance. Already, intra-Asia trade accounts for two-thirds of the region's trade with the world.

Taiwan is a major Asian trade hub and could solidify this status over the coming decade. As a key electronics manufacturer in Asia, Taiwan plays an important role in shaping regional trade and supporting its economic growth. Taiwan's trade with 11 other major markets (together, the "Asia-12") could more than double from USD422 billion in 2020 to USD1.1 trillion by 2030 (Exhibit 1). Asia-12's growing middle class and urban areas is expected to spur greater demand for traded goods and services to support this growth. Taiwan could also stand to benefit significantly from entry into regional agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Efforts to improve economic cooperation in Asia, such as its New Southbound Policy, which covers 18 economies of which seven are part of the Asia-12, are also key to unlocking this potential.

Trade in four product segments is expected to drive growth in intra-Asia trade: (1) retail; (2) industrial manufacturing and automotive (IM&A); (3) high-tech; (4) healthcare. Among these four segments, trade in high-tech, which accounted for 56% of Taiwan's trade with the rest of Asia in 2020, is expected to continue driving post-pandemic trade growth.1 It could potentially almost double in value by 2030, riding Asia's wave of digitalisation. Asia-12 economies are already more digitalised than the global average while also advancing on digital adoption metrics faster than the entire region.² Nearly 700 million people in Asia Pacific will join its Internet population by 2025, creating a new generation of e-commerce consumers.3 This will create greater demand for high-tech products, and Taiwan's dominance of the global semiconductor industry and strong base of electronics and machinery exports position the economy to capture these opportunities.4 Trade in the IM&A segment, meanwhile, could nearly treble by 2030. Key trade lanes will facilitate growth in both of these segments. Taiwan's



close economic ties with South Korea and Japan in the electronics sector are an example, where mutual foreign investment in manufacturing capabilities is expected to drive further trade in the coming decade. China and Hong Kong could also continue to be stable sources of high-value trade.

By restructuring and investing in its manufacturing supply chains, Taiwan is building long-term trade resilience. Taiwan is doubling down on efforts to build more integrated supply chains with key regions such as ASEAN, in particular to outsource manufacturing for certain segments of the value chain to a wider sample of economies.⁶ Further, investment by the Taiwanese government and businesses in advanced manufacturing technology such as automation, artificial intelligence (AI), and Internet of Things (IoT), coupled with its promotion of innovative business models, will allow businesses to be more responsive to cross-border demand – many businesses are already using advanced data analytics to target customers in online retail.⁷

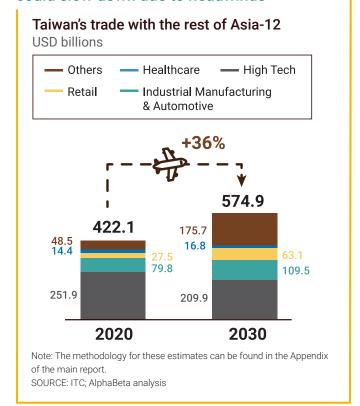
Taiwan faces many existential challenges that could dampen trade prospects in Asia

- Despite the significant potential that intra-Asia trade holds for Taiwan, there exists a range of barriers to greater regional trade today that may intensify over the coming decade. Taiwanese businesses surveyed for this study indicated tariffs and other punitive measure as the top barrier to trade, among five other barriers identified (Exhibit 2). These six barriers largely remain unaddressed by policy and business action due to trade tensions, supply chain shifts, and uneven investment and engagement of micro-, small-, and medium-sized enterprises (MSMEs) in supply chains.
- As a result of these barriers, Taiwan's trade with the Asia-12 could slow down in the coming decade. Trade could total USD575 billion in this scenario of intensifying barriers to trade with overall growth of just 36% by 2030 or a third of the potential growth in the previous scenario (Exhibit 3).
- Intensifying geopolitical tensions contribute significantly to these trade barriers. Geopolitical risks such as territorial, economic, and political disputes with other economies have proven detrimental to trade in the past, particularly in the high-tech and retail segments.
- Pressures caused by the COVID-19 pandemic, and rapid advances in robotics and automation limit the flow of trade. These trends could expose a shortage of labour, skills, and shorten supply chains due to shifting cost competitiveness, which could restrict trade for Taiwanese businesses. Two-thirds of Asian businesses surveyed by the Asian Development Bank (ADB) in 2021 stated that they planned to source more goods locally in the coming years potentially constraining the potential for Taiwan to trade more intensively with markets more distant from home.⁸



Exhibit 3 -

Taiwan's trade growth with the Asia-12 could slow down due to headwinds



Governments and businesses must proactively mitigate these risks to capitalise on the intra-Asia trade opportunity

Multistakeholder action is required to reduce impediments to regional trade and harness the opportunities to steer intra-Asia trade towards take-off. Action by businesses or governments alone is not enough to address the key barriers to trade – active involvement by all stakeholders within the region and across the supply chain is key. There are three main areas for multistakeholder action in Taiwan: (1) Negotiate comprehensive regional economic partnerships that address tariffs, harmonise standards, simplify customs, promote MSME competitiveness, and ensure cooperation and diplomacy in the event of geopolitical disputes; (2) Collaborate on harmonising product standards, by creating

meaningful partnerships between business leaders, trade associations, certification bodies, and regulators; (3) Build resilience into supply chains via supportive public-private investment.

Businesses with trade interests in Taiwan must proactively account for opportunities from intra-Asia trade and build resilience against potential headwinds.

Three key actions that can be taken by businesses include digitalising completely, diversifying supply chains, and promoting integration of MSMEs into regional supply chains.



Digitalise comprehensively, especially in advanced technology. The pandemic has pushed many organisations to adopt digital systems for their operations as it builds their connectivity and efficiency. Within Taiwan, many sectors could digitalise further, particularly non-high-tech manufacturing and retail, where the prevalence of less competitive MSMEs is higher as compared to sectors such as high-tech and finance. Firms within these sectors can adopt advanced technologies such as AI or Internet of Things (IoT) to drive productivity and mitigate potential disruptions. Through autonomous technologies that detect the progress

of production lines, manufacturing facilities can track productivity to meet customer demand, enabling them to quickly capture export opportunities. UPS uses AI to learn individual shipping patterns and behaviour to simplify the shipping process and make it much easier for small businesses to ship their goods. Adopting digital tools that are compatible with international logistics networks also allows efficient tracking and improved visibility of shipments. For instance, UPS's My Choice® for Business allows MSMEs to centralise and control shipment data on a customised dashboard and reduces the need to manage different systems. For businesses selling online, UPS's Digital Access Program works with e-commerce platforms to integrate shipping into the customer purchasing journey, enabling small businesses to focus more on selling.



Plan for both headwinds and opportunities by diversifying supply chains into resilient, high-value, or high-growth trade routes. Diversifying supply chains has become critical to building resilience in trade flows that faced severe disruptions during the COVID-19 crisis. Many trade routes offer opportunities for resilient growth when considering trade with Taiwan (Exhibit 4). These include trade routes for the retail and high-tech segments with South Korea and the Philippines. Taiwanese businesses have already been increasingly exporting electronics and retail goods to both these markets. Trade with China could also

remain resilient in the healthcare, retail, and IM&A segments due to current interdependencies between both economies in these segments. In a scenario where intra-Asia trade takes off, a number of high-value and high-growth trade lanes are available for Taiwanese businesses (Exhibit 5). Trade routes with China, Japan, and Hong Kong could remain the largest by value in the coming decade. However, routes with ASEAN markets such as the Philippines, Indonesia, and Thailand provide opportunities for more aggressive growth. Not only do these markets present Taiwanese businesses with a wider range of manufacturing bases to outsource production across parts of their value chains, they also provide increasingly wealthy and urbanised export markets.



Partner with and integrate MSMEs

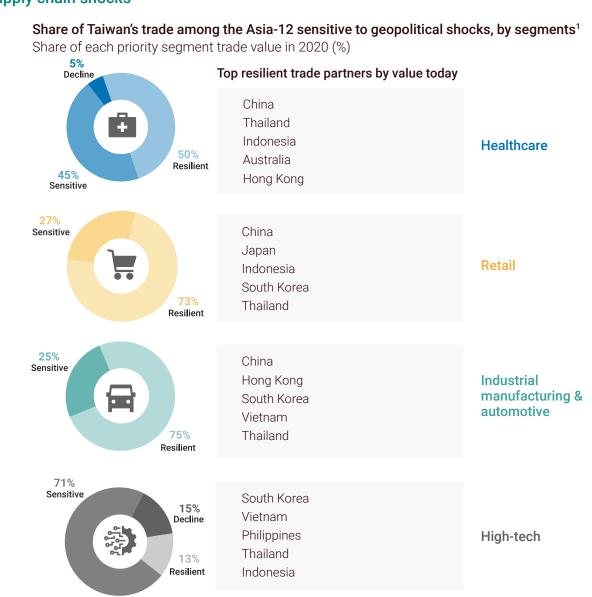
Partner with and promote deep integration of MSMEs into regional supply chains.

MSMEs typically face higher costs in navigating trade barriers and often lack the scale of operations needed to trade profitably across multiple markets. To address these challenges, leading Taiwanese corporations can partner with MSMEs to create coordinated investment strategies that target export markets.12 Larger firms can provide MSMEs a platform to participate further in trade to unlock mutual benefits, including

providing finance, consolidating supply chains, promoting e-commerce, and creating tools to help navigate customs and shipping requirements. Digital tools developed by logistics providers can also provide critical trade information to MSMEs. UPS offers a range of plug-and-play application programming interfaces (APIs) that allow businesses to get estimated duties, taxes, and brokerage fees for cross-border shipments. This leads to fewer customs delays and accurately calculates all associated fees and taxes, enabling businesses to keep track of their costs. Trade associations in Taiwan, such as the Taiwan External Trade Development Council (TAITRA), also promote MSME trade engagement through policy and support. 13 For example, TAITRA provides training courses for MSMEs on digital marketing and trade to expand their reach, particularly with firms in the food, biotechnology, and medical device sectors. 14

Exhibit 4

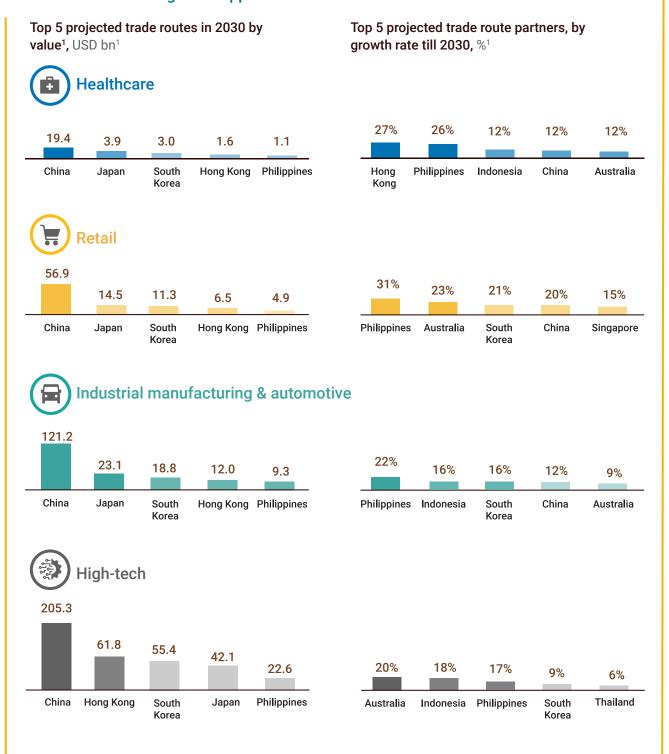
Firms can invest in resilent trade routes within each segment to hedge against supply chain shocks



^{1.} Each figure represents a share of trade value in 2020 that is forecasted to be under either the resilient, sensitive, or decline category in 2030. Resilient trade refers to trade routes that may expect positive growth in either worst-case or optimistic scenarios, while sensitive trade refers to trade routes that may see positive growth only within the optimistic scenario. Declining trade refers to trade routes that may see slight contractions regardless of either. SOURCE: ITC; AlphaBeta analysis

Exhibit 5

Other East Asian economies will remain key trade partners across all segments, while ASEAN markets offer growth opportunities



^{1.} Projections are based on an optimistic scenario of Asia's trade environment, as outlined in Chapter 1 of the main report, where intra-Asia trade will take off and be driven by trends such as regional trade agreements, supply chain innovations, and a rise in digitalisation. These projections should be taken as an ideal outcome rather than guidance.

SOURCE: ITC; AlphaBeta analysis

Endnotes

- 1. DBS Singapore (2020), "Understanding Taiwan: Post-pandemic tech opportunities and some complications." Available at: https://www.dbs.id/id/treasures/aics/pdfController.page?pdfpath=/content/article/pdf/AIO/072020/200707_insights_understanding_taiwan.pdf
- 2. The World Bank's Digital Adoption Index (DAI) for businesses, with an index of 0 to 1, measures businesses' use of digital tools to increase productivity (with 1 being the highest). See World Bank (2016), *Digital Adoption Index*. Available at: https://www.worldbank.org/en/publication/wdr2016/Digital-Adoption-Index
- 3. GSMA (2020), *The Mobile Economy Asia Pacific 2020*. Available at: https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/06/GSMA_MobileEconomy_2020_AsiaPacific.pdf
- 4. Sources include: Deloitte (2020), *The semiconductor industry in Asia Pacific The Asia Pacific "Big 4"*. Available at: https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/technology-media-telecommunications/cn-tmt-rise-of-the-big-4-en-082820.pdf; Focus Taiwan (2022), "Taiwan retail sales hit high on strong buying before New Year holiday." Available at: https://focustaiwan.tw/business/202202230020
- 5. Government of Taiwan, Bureau of Foreign Trade (2020). "Taiwan-South Korea Economic Relations." Available at: https://www.trade.gov. tw/enqlish/BilateralTrade/BilateralTrade.aspx?code=7030&nodeID=4639#
- 6. American Institute in Taiwan (2021), "Thinking digitally and partnering globally in the era of Resilient Supply Chain 2.0." Available at: https://www.roc-taiwan.org/at_de/post/4973.html
- 7. PwC (2021), "2021 Taiwan Startup Ecosystem Survey." Available at: https://www.pwc.tw/en/publications/assets/2021-taiwan-startup -ecosystem-survey-summary.pdf
- 8. Asian Development Bank (2021), Asia-Pacific Trade Facilitation Report 2021. Available at: http://dx.doi.org/10.22617/SPR210365-2
- 9. PwC Taiwan (2020), "Business opportunities for multinationals in Taiwan in the post-COVID-19 era." Available at: https://investtaiwan.nat.gov.tw/getFile?file=8e5f61e6-af20-4853-a4a2-bf79b91569c8.pdf&Fun=ArticleAction&lang=cht
- 10. McKinsey & Company (2017), *Taiwan's digital imperative: How a digital transformation can re-ignite economic growth.* Available at: http://mckinseychina.com/wp-content/uploads/2017/10/McKinsey_Taiwans-Digital-Imperative-EN.pdf
- 11. UPS (2022), "My Choice for Business." Available at: https://www.ups.com/tw/en/services/tracking/my-choice-for-business.page
- 12. Brookings (2018), "Taiwan's engagement with Southeast Asia is making progress under the New Southbound Policy." Available at: https://www.brookings.edu/opinions/taiwans-engagement-with-southeast-asia-is-making-progress-under-the-new-southbound-policy/#cancel
- 13. Government of Taiwan, Bureau of Foreign Trade (2020), "President Tsai, Minister Wang and Director-General Chen attend TAITRA's 50th Anniversary Reception." Available at: https://www.trade.gov.tw/English/Pages/Detail.aspx?nodeID=90&pid=700859
- 14. Government of Taiwan, Ministry of Economic Affairs (2021), "Training Program Promotes Business Opportunities and Exchanges between Taiwan and Malaysia." Available at: https://www.moea.gov.tw/MNS/english/news/News.aspx?kind=6&menu_id=176&news id=93963

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