

Chapter 1

The Asia-Pacific Region: The New Center of Gravity for International Business



Nailin Bu and Terry Wu

1.1 Introduction

A shift in the center of gravity of the global economy from the industrialized West to Asia is underway. At the end of the World War II, Asia was the world's poorest region with a dismal prospect (Myrdal, 1968). Today, the Asia-Pacific region—including Japan; the Four Asian Tigers of South Korea, Taiwan, Hong Kong, and Singapore; China; and the 10-member Association of Southeast Asian Nations (ASEAN)—has emerged as the most vibrant economic bloc in the world, accounting for nearly one-third of the global GDP (World Bank Data, 2021b) as illustrated in Fig. 1.1.

In this broad context of a regional success story, it is worth noting that the Chinese economy alone accounts for more than half of the Asia-Pacific region's GDP. The rise of China to economic prominence is indeed a fascinating tale. When it abandoned Mao's policy of isolationist planned economy in 1978, China was one of the poorest nations in the world with approximately 80% of its population living below the international poverty line (Zhou & Hu, 2021). Four decades later, China has become the second largest economy in the world.

The economic rise of the Asia-Pacific region has profound implications for international business. On the one hand, the region's manufacturing success has resulted

N. Bu (✉)

The Stephen J. R. Smith School of Business, Queen's University, Kingston, ON, Canada
e-mail: nailin.bu@queensu.ca

T. Wu

Ontario Tech University, Oshawa, ON, Canada
e-mail: terry.wu@ontariotechu.ca

© Springer Nature Switzerland AG 2022

T. Wu, N. Bu (eds.), *International Business in the New Asia-Pacific*,
Advances in Theory and Practice of Emerging Markets,
https://doi.org/10.1007/978-3-030-87621-0_1

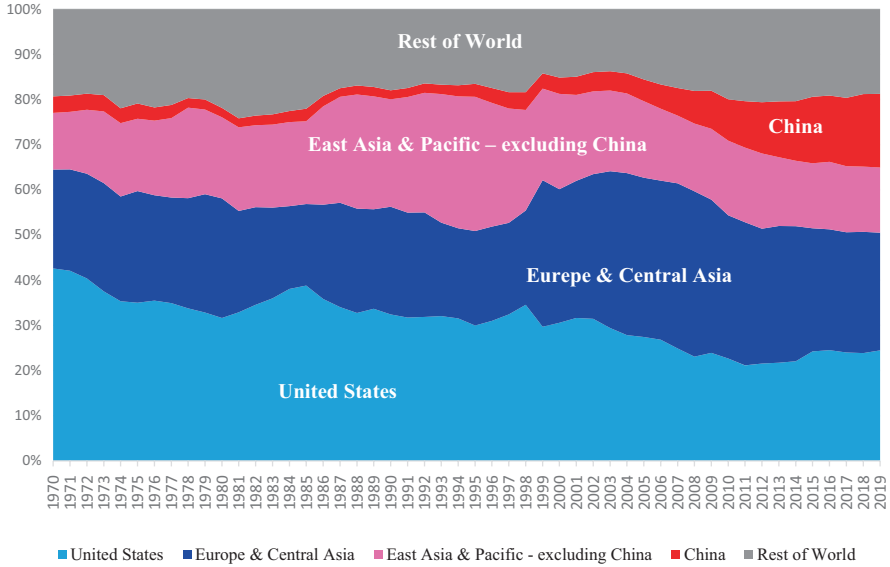


Fig. 1.1 Share of global GDP, current US\$. Source: Based on data from the World Bank. 2021. GDP (current US\$). <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

in economic disruptions in other parts of the world. In response, retreats from globalization in the form of trade wars have gained popular support recently in some parts of the world, which will likely have drastic impact on global firms' existing manufacturing supply chains in the Asia-Pacific region and beyond. On the other hand, the emergence of the Asia-Pacific region as an economic powerhouse has reshaped the global economy beyond manufacturing supply chains. Consumer spending by the region's emerging middle-class will likely become the most important driver of global economic growth in the decades to come. Furthermore, the Asia-Pacific region has become fertile ground for cutting-edge technological innovation and new global brands, presenting global firms with both exciting opportunities and mortal threats. Indeed, global companies need to re-examine the emerging threats and opportunities in every dimension of their business, including investment, technology, production, innovation, and marketing.

This book is motivated not only by the economic significance of the Asia-Pacific region, but also by a stirring anticipation that this region is on the cusp of a massive transformation driven by both external forces, such as changing attitudes in the West toward trade and globalization, and the supply chain shockwave triggered by the COVID-19 pandemic; and internal factors, including rising income and aging population. As a result, this is an important moment to observe and analyze the changes underway in Asian manufacturing supply chains, the ways in which Asian consumers are reached and served, and the regional and global reach of Asian firms.

1.2 Major Developments in the Twenty-First Century

The twenty-first century began with a period of uncertainty and transformation for many Asia-Pacific countries. As will be explained next, six major developments have significantly reshaped the economic and geopolitical environment in the Asia-Pacific region: economic integration, the 2007–2008 global financial crisis, important changes in the international environment, technological competition, an aging population, and the global COVID-19 pandemic.

1.2.1 *Economic Integration*

The first of these key developments is the increase in economic integration and gradual reduction of trade and investment barriers within the Asia-Pacific region since the turn of the century. Due to the export-oriented nature of their economies, most Asian countries are clearly committed to trade liberalization through removing tariff and non-tariff trade barriers (Fukushima, 2009). Most notably, China joined the World Trade Organization (WTO) in 2001, which supercharged its rise as a pivotal player in the global economy (Agarwal & Wu, 2004; Winter, 2020). Economic integration of the region was further strengthened when 11 countries concluded the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in 2018 as a replacement for the original Trans-Pacific Partnership (TPP) after the exit of the United States. Paralleling the CPTPP is the China-led free trade bloc known as the Regional Comprehensive Economic Partnership (RCEP), signed in 2020.

This economic integration has resulted in increased trade and investment within the Asia-Pacific region over the past two decades. According to UN statistics, 60% of trade in Asia is now intraregional (UNCTAD, 2020). Consequently, Asia-Pacific economies have become tightly intertwined, with China as the central trade link in the region. Given its economic size, China has become the largest trading partner of every single Asian economy (IMF, 2021).

1.2.2 *Global Financial Crisis*

The second development is the global financial crisis of 2007–2008, which resulted in a deep economic recession in Western industrialized nations. The financial crisis also brought its devastating effect to the Asia-Pacific region, sparing none except perhaps China. Many highly trade-dependent economies in the Asia-Pacific region, such as Hong Kong, Taiwan, Thailand, Malaysia, and South Korea, were hit hard (Bernanke, 2009). However, the Asia-Pacific countries had entered the crisis with ample fiscal space, given their generally sound macroeconomic policies and fiscal

conservatism shaped by lessons from the Asian financial crisis two decades earlier (IMF, 2000). As a result, they were able to launch timely and decisive countercyclical responses (Das, 2012). China, in particular, delivered a hefty stimulus package, which accelerated the growth of its economy (Bernanke, 2009; Das, 2012). These measures energized demands in the region and boosted intraregional trade. Furthermore, the crisis and China's powerful response highlighted the relative economic decline of the West in the minds of many Asians, further strengthening the centrality of the Chinese economy to trade flows within the Asia-Pacific region (Das, 2012; Leng & Rajah, 2019; Vaswani, 2018).

1.2.3 International Environment

The third development to emerge in the early 2000s was the rise of a new wave of protectionism and anti-globalization movements triggered by populist and nationalist political attitudes (Casadei & Iammarino, 2021; Evenett, 2019). These political forces have negatively impacted on international trade involving global value chains (Handley & Limao, 2015, 2017). The international trade environment has been further aggravated by growing tensions between the United States and China on both economic and political fronts. In 2016, the election of Donald Trump—a self-proclaimed “tariff man”—as the president of the United States epitomized the populist hostility toward globalization (Rooney, 2019). The large trade deficit with China is increasingly detested, as it is believed to have cost millions of American jobs (Scott & Mokhiber, 2020). Trade contests with China and “re-shoring” of supply chains have become the priority of both the Trump and the subsequent Biden administrations. Indeed, the punitive tariffs imposed by the Trump administration on many Chinese imports remain in place 6 months after President Biden has taken office (Mullen, 2021b).

In addition, as a result of its assertive foreign policy and coercive diplomacy, China is facing a more hostile international environment compounded by the constant anti-China rhetoric from the United States. In particular, China's neighbors in the Asia-Pacific region are increasingly suspicious of its ambitions of regional domination and control of the South China Sea (Chung, 2009). These changes to the geopolitical environment have significant implications for the region's business environment.

1.2.4 Technological Competition

The new century marked an economic transformation from a traditional, production-based economy to a new, knowledge-based economy. Technology and innovation have become the new drivers of international business. New products are developed

by latest innovations in technology across the world. As a result, the international business landscape is evolving into complex webs of online shopping and electronic commerce, replacing traditional domestic retail (Agarwal & Wu, 2018).

As the early industrializing economies in the Asia-Pacific region, Japan, South Korea, and Taiwan are the region's technological leaders with a long history of technological innovations. For example, Japan has become a commanding force in industrial robotics, semiconductor manufacturing equipment, and biomedical devices (Chen, Watanabe & Griffy-Brown, 2007; Foster, 2020; Inoue & Miyazaki, 2008; Statista Research Department, 2021b). South Korea, in turn, has emerged as a technological leader in a variety of high-tech products such as high definition digital television, semiconductors, and consumer electronics; while Taiwan has become an indispensable global player in semiconductor manufacturing (Choi, Narasimhan & Kim, 2016; Glosserman, 2020; Hwang, Kim & Kim, 2009; Irwin-Hunt, 2021; Kim, 2021). Today, South Korea, Taiwan, and Japan continue to invest heavily in technology, spending 4.6%, 3.5%, and 3.4% of their respective GDPs on R&D in 2019, surpassing the US investment of 3.1% and the OECD average of 2.5% (OECD Data, 2021).

In recent years, China's ambition of technological self-sufficiency and supremacy has been made abundantly clear in its heavy investment in cutting-edge technology. Indeed, the country has made incredibly rapid advancement in technology, including 5G, artificial intelligence, and electric vehicles. These developments have alarmed many in the United States. The US government has blacklisted many Chinese firms that, it claims, threaten the US national security or foreign policy interests, have ties to the Chinese military, or sell surveillance technology used against religious minorities and dissidents. Depending on which of the two blacklists a Chinese firm is on, Americans or American firms are prohibited from investing in, or conducting business with, that Chinese firm (Lam & Ossinger, 2021). Some of China's key technology firms, including Huawei most famously, belong to both lists (*The Straits Times*, 2020). During a press event at the White House in March 2021, President Biden stated: "China has an overall goal ... to become the leading country in the world, the wealthiest country in the world, and the most powerful country in the world ... That's not going to happen on my watch because the United States is going to continue to grow" (Renshaw, Shalal & Martina, 2021).

This techno-nationalism, embraced by the world's top two economies (Evens, 2020), has profound implications for the Asia-Pacific countries and their firms. On the one hand, the intense rivalry and the resultant mammoth investment in research and technology by both China and the United States will spur technological innovation and demand for products such as semiconductors, which are primarily manufactured in the Asia-Pacific region. On the other hand, many technology firms in the Asia-Pacific region are forced to walk a tightrope, in constant fear of offending either economic giant.

1.2.5 Aging Population

While it has been well documented that women's fertility rates decline as their income and education levels rise, the drop in fertility in the Asia-Pacific region has been uncharacteristically rapid. The fertility rates in Philippines, Laos, and Cambodia range from 2.5% to 2.7%, and the rate in Indonesia hovers just above 2.2%. However, in the rest of the Asia-Pacific economies, they have dropped below the 2.1% replacement rate needed to maintain the population size (World Bank, 2021a; *The Japan Times*, 2021). In the Four Asian Tigers of South Korea, Hong Kong, Taiwan, and Singapore, the fertility rates are at or below 1.2% (World Bank, 2021a; *The Japan Times*, 2021). Japan, with a fertility rate standing at around 1.4% and life expectancy among the highest in the world, is unlikely to alter its status as a superaged society any time soon (World Bank, 2021a). Given their extremely low birth rate and high life expectancies, the four Asian Tigers can be expected to join Japan as superaged societies over the coming decades. Perhaps most significantly, given its role as the world's leading producer of manufacturing goods, China's working-age population (those aged 16–64) has begun to fall, and is expected to decline by an additional 9% from 2015 to 2035, and then by 20% in 2050. In 2016, after 37 years of the one-child policy, the Chinese government implemented a two-child policy. However, the country's birth rate continued to drop in 2017 and 2018. In 2021, the government further relaxed the two-child limit to three, which many observers believe will be a case of too little, too late (Black & Morrison, 2019; Mullen, 2021a; Obe, 2019). These demographic trends in the Asia-Pacific region will have serious consequences for labor costs and patterns of consumption.

1.2.6 Global Pandemic

The latest major event is the global pandemic of COVID-19, which has sent the world into a state of turmoil since the spring of 2020. The spread of the coronavirus around the world has paralyzed the global economy, including many in the Asia-Pacific region. It is the first time in history that all nations have been simultaneously adversely affected by a global pandemic.

The impact of the pandemic on the economy has been mixed. On the one hand, human tolls notwithstanding, some business sectors in the Asia-Pacific region have benefitted from the booming demand for technological equipment due to the pandemic lockdown that moved business and social lives into the virtual space (Rees, Schussler, Wittenstein & Remondini, 2021). In the semiconductor industry, in particular, this demand has contributed to a severe worldwide shortage and rising prices of semiconductor chips. Three-quarters of the semiconductor chips in the world are manufactured in the Asia-Pacific regions, in particular in Taiwan, South Korea, and China (Irwin-Hunt, 2021).

On the other hand, the COVID-19 pandemic further exposed the extent to which the supply chains of many key products, including pharmaceuticals and personal protective equipment, are highly concentrated in Asia (Donnan, Rauwald, Deaux & King, 2020; EIU, 2021; Serhan, & Gilsinan, 2020). For example, China made half of the world's masks before the coronavirus emerged and has since ramped up the production multifold (Bradsher & Alderman 2020). Southeast Asia dominates the global market for medical gloves, with Malaysia alone supplying nearly 60% of the North American market (Tognini, 2021). For many in the West, the pandemic has highlighted the risk of this supply chain structure and ignited a desire to rethink this model (Donnan, et al., 2020; Winter, 2020). This changing perspective is likely to lead to much future uncertainty in the Asia-Pacific region.

Given these new developments, governments and firms in the Asia-Pacific region must build on their decades of stunning success and recalibrate their outlooks and strategies to adapt to the seismic shifts. This recalibration is already under way in the Asia-Pacific region resulting in major transformations in the region, some of which are outlined in the next section.

1.3 A Transformed Asia-Pacific Region

The broad economic, geopolitical, and demographic forces described above are driving profound transformation in the Asia-Pacific region. We will now examine these transformations from three perspectives.

1.3.1 *Asia as the World's Manufacturing Center*

Despite the historical suspicion and acrimony among Asian countries as a result of wars, people of the Asia-Pacific region have forged resilient ties through trade and migration for centuries (Khanna, 2019). In recent years, these ties have evolved into massive webs of production networks that span the entire region. Numerous products consumed around the world are primarily made in the Asia-Pacific region, including not only labor-intensive, low value-added products such as textiles and garments (WTO, 2020), but also sophisticated products such as automobiles (OICA, 2020), cargo ships (UNCTAD Stat, 2020), solar panels (IEA-PVPS, 2020), lithium-ion batteries (Willuhn, 2020), and semiconductor chips (TrendForce, 2021). Churning out 45% of the entire planet's manufacturing output (World Bank, 2021c), the Asia-Pacific region is clearly the most important global manufacturing hub, and the accolade of Factory Asia is fully deserved (see Fig. 1.2).

As indicated in Fig. 1.2, China currently accounts for 28% of the global manufacturing output, double that of the rest of the Asia-Pacific economies combined. The US–China trade rift thus creates both havoc and opportunity for the region as substantial evidence suggests that supply chain dislocation from China is indeed

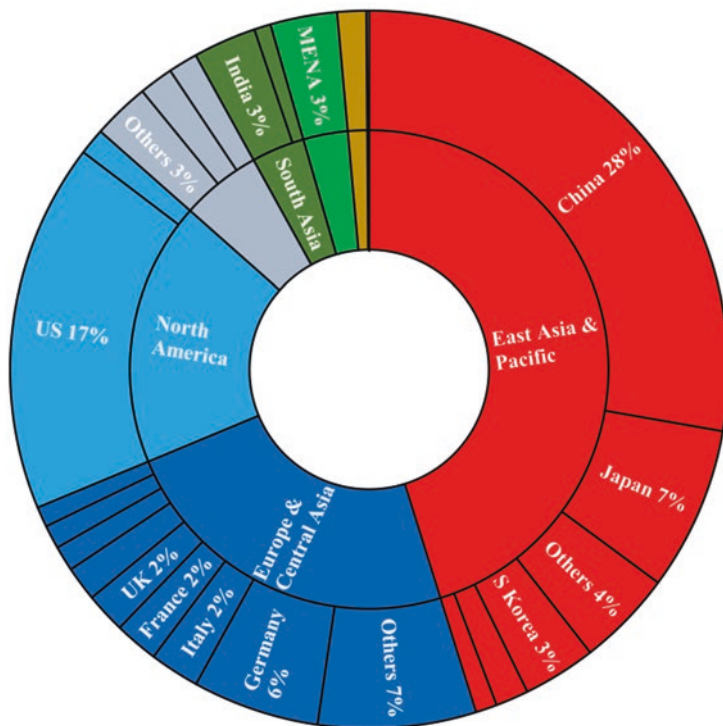


Fig. 1.2 Share of global manufacturing output (current US\$) by country/region in 2018. *Source:* Based on data from the World Bank. 2021. Manufacturing, value-added (current US\$). https://data.worldbank.org/indicator/NV.IND.MANF.CD?most_recent_value_desc=true

taking place (Wolf, 2020). A survey by Gartner, a global research and advisory firm, reveals that one-third of leading supply chain firms have either moved some of their operations out of China or plan to do so by 2023 (Gartner, 2020). Businesses that are involved in manufacturing labor-intensive products in China are particularly jittery, not only because of the US tariffs but also because of the rapidly rising labor costs in China, due to its shrinking working-age population (Obe, 2019, 2021). However, a recently released report by the Economist Intelligence Unit does not forecast significant supply chain reshoring to the United States anytime soon (EIU, 2021). Rather, businesses are far more likely to move their factories from China to Southeast Asia. For many lower- and middle-income ASEAN countries—such as Vietnam, Cambodia, Thailand, and Malaysia, which have to date been somewhat overshadowed by China’s size and efficiency—this US–China trade rift creates

great business opportunities (Pananond, 2019). Indeed, in 2019 ASEAN member countries received US\$177 billion foreign direct investment, breaking the region's 2018 record of US\$155 billion (Rouhneen, 2020).

Experts caution, however, that exporters are unlikely to be able to cut China completely out of their supply chain for two main reasons. First, unlike China, many of the ASEAN countries do not have high-capacity deep-sea ports that can handle the largest ships for direct transportation to major markets. Second, over the past few decades, China has built broad and deep networks of suppliers for numerous products, which are impossible for the ASEAN countries to duplicate at least in the near term (Serhan & Gilsinan, 2020; Shih, 2020). These supply networks are a key reason, for example, why American bike makers—such as Kent, which recently moved its factories out of China to avoid the Trump tariffs—chose Cambodia as their new factory locations. Bike assembly plants located in Cambodia, which shares a border with China, can rely on parts and components transported across the border from China (Singh, 2020). For the same reason, many consumer electronics exporters have moved from China to Vietnam, which is also adjacent to China. For example, China-based GoerTek and Luxshure, both of which assemble Apple's AirPods, have now begun making the popular Apple product in Vietnam (Cheng & Li, 2020). Yet, the fact that the combined population of Vietnam, Thailand, and Malaysia is less than 200 million, compounded by fertility rates in all three of these nations currently below the population replacement rate, will strain labor supply in Asia in the future.

It is in China, however, that the pressure of a shrinking working-age population and rapidly rising labor costs is felt most keenly. It should not be surprising, therefore, that the Chinese market for industrial robots has been the world's largest since 2013 and quadrupled in size in 5 years. By 2018, China accounted for 36% of total worldwide installations of industrial robots. This is excellent news for Japanese makers of industrial robots such as Fanuc, Yaskawa, and Kawasaki. Together, these Japanese firms are responsible for at least 60% of the installed industrial robots worldwide (Foster, 2020).

At the same time, it seems that China has further consolidated its position as a supplier of increasingly sophisticated products and their parts and components despite the uncertainty it faces as a result of trade spat with the United States. For example, Apple actually increased its component sourcing from Chinese firms in 2021 (Cheng & Li, 2021). China also made massive investments in the entire supply chains of electric vehicles and lithium-ion batteries in recent years. As a result, it has surpassed both Japan and South Korea in the lithium-ion battery supply chain, with the latter two countries ranking second and third (Bloomberg NEF, 2020). However, it is speculated that Toyota Motor, the world's largest automaker, may in a few years launch the first vehicle powered by solid-state battery, which will be more stable and faster to charge than the lithium-ion batteries used in electric vehicles today (Sugiura, 2021).

Overall, according to the EIU's recent estimates (EIU, 2021), both China's and ASEAN's share of global exports are poised to rise between now and 2025. Furthermore, because China is the largest market for many categories of consumer

products, international firms appear to remain committed to manufacturing locally to sell in this massive, rapidly expanding, and, in many ways, very sophisticated market, a topic on which we will elaborate in the next section.

1.3.2 Asia as a Thriving Consumer Market

1.3.2.1 Growing Consumer Market

Japan and the Four Asian Tigers are already high-income Asian economies with robust consumption on par with advanced Western economies. However, with the exception of Japan, these high-income Asian economies are relatively small population-wise, with Singapore and Hong Kong each being the size of a city. Therefore, the impact of Asian consumers has not been particularly visible internationally until this decade when rising incomes in China and ASEAN, which have a combined population of over 2 billion, have created a massive consumption boom. This boom will continue, according to data published by McKinsey (an American worldwide management consultancy). The data shows that consumers in the Asia-Pacific region are expected to account for over 40% of global consumption growth between 2015 and 2030 (see Fig. 1.3) (Tonby, Woetzel, Choi, Seong & Wang, 2019). While part of that growth is propelled by an ever-larger swath of the population escaping abject poverty and gaining disposable income for basic mass-market merchandise, consumption upgrade is also rapidly occurring at the same time. As illustrated in Fig. 1.4, in 2018, Asians spent about €140 billion (approximately US\$165 billion) on personal luxury goods, nearly 55% of total spending in this category worldwide. By 2025, about 60% of the global consumption of personal luxury goods will be by Asians, which translates to a total spending in this category of about €200 billion (Approximately US\$240 billion) (D'Arpizio, Levato, Prete, Del Fabbro, & de Montgolfier, 2019). Looking at these numbers, it is fair to say that the renowned “factory Asia” has indeed given birth to a booming “market Asia.”

Based on Figs. 1.3 and 1.4, it is also clear that China is a massive driver behind the Asian consumption boom, at least at the present and for the next decade. More specifically, China is predicted to make up more than 30% of global consumption growth between 2015 and 2030 (see Fig. 1.3). Furthermore, 46% of the global consumption of personal luxury by 2025 is forecast to be by Chinese consumers, up from 33% in 2018 (see Fig. 1.4). In the automobile sector, for example, China—the world’s largest automobile market—absorbs 40% of the Volkswagen Group global car sales. China is also the largest market for BMW and Mercedes-Benz (*The Economist*, 2021a; OICA, 2020). Noah Barkin of the Rhodium Group research firm believes, “China is the present and the future of German carmakers” (*The Economist*, 2021a: 59). Most ironically, given former President Trump’s tweet in 2019 ordering US companies to “immediately start looking for an alternative to China” (Breuniger, 2019), American automaker General Motor sells more cars in China than in its home country (Wagner, 2021).

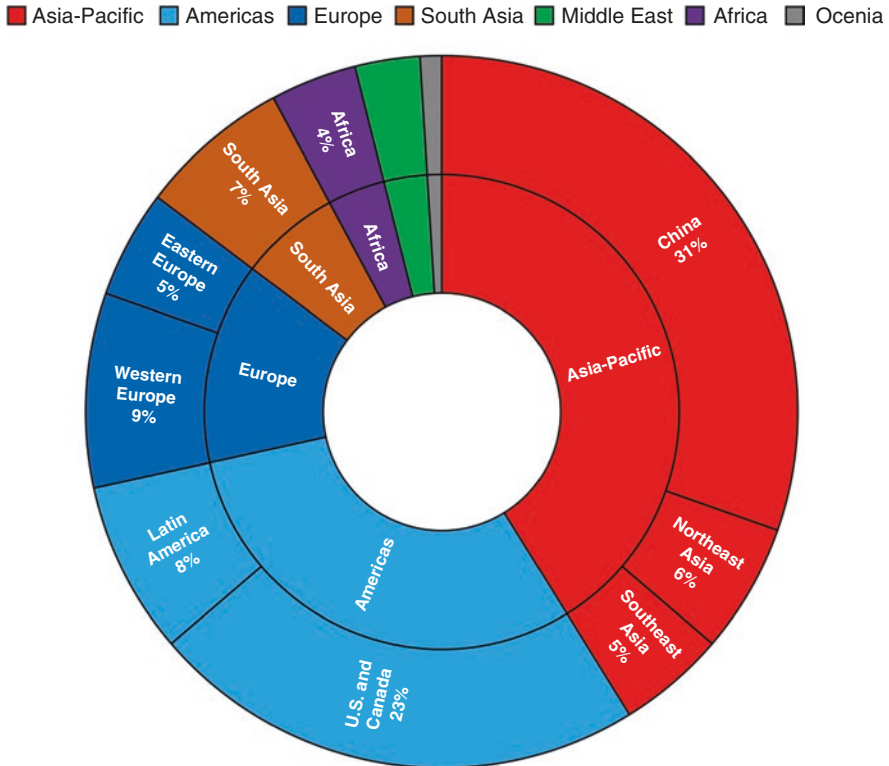


Fig. 1.3 Share of global urban consumption growth, 2015–30, by country/region. *Source:* Based on information from Tonby, O., Woetzel, J., Choi, W., Seong, J., Wang, P. 2019. Asia’s future is now. *McKinsey Global Institute*, July. <https://www.mckinsey.com/featured-insights/asia-pacific/asias-future-is-now> (Accessed: 11 June 2021)

For many multinationals, the Chinese market is indispensable to their survival. Unsurprisingly, these companies choose to keep their production in China to compete more effectively in that market, despite the fact that this action often runs counter to the wishes of their governments. Not only has Washington tried to persuade American multinationals to divert their manufacturing supply chain from China but it has also pressured the governments of its allies, including Japan, to do the same. However, according to a survey in September 2020 by JETRO, a non-profit trade promotion organization funded by the Japanese government, only 7.2% of Japanese firms operating in China were ceasing or planning to cease production in China. “I don’t think that the Japanese manufacturing industry could survive globally without being present in a market as big as China’s,” says Homma Tetsuro, CEO of Panasonic’s In-house China & Northeast Asia Company (Obe, 2021). Likewise, Japan’s largest cosmetic brand, Shiseido, well-established internationally, is also doubling down on the Chinese market. In 2019, the firm made 55% of its sales outside its home country, of which China accounted for the largest share. Shiseido also

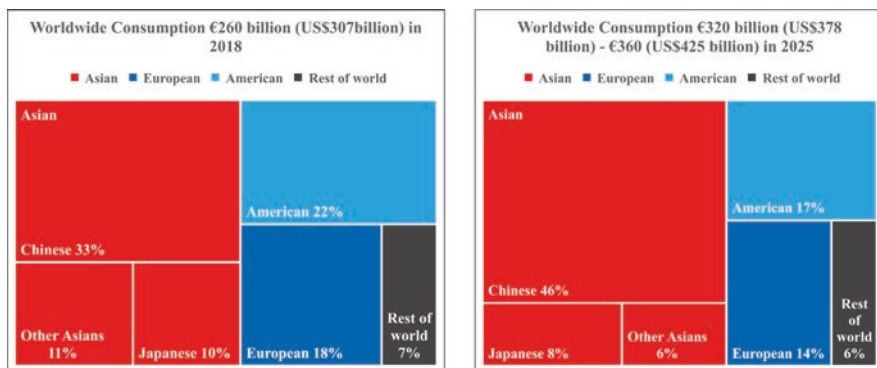


Fig. 1.4 Estimated share of the personal luxury goods consumption worldwide by consumer nationality in 2018 and 2025. *Source:* D'Arpizio, C., Levato, F., Prete, F., Del Fabbro, E., & de Montgolfier, J. 2019. The future of luxury: A look into tomorrow to understand today. *Bain & Company*, January 10. <https://www.bain.com/insights/luxury-goods-worldwide-market-study-fall-winter-2018/>

recently became the first global cosmetic firm to open a research and development center in Shanghai's Oriental Beauty Valley, and formed a partnership with e-commerce Chinese giant Alibaba to better promote the brand in China (Shibata et al. 2021). These Japanese firms certainly hope that their bets on China are as wise as that of another Japanese firm, Softbank, whose founder and CEO Masayoshi Son took a chance in 2000 on then little known Chinese startup—Alibaba—with an investment of US\$20 million. Today, Softbank's 25% stake in Alibaba is worth US\$150 billion (The Economist, 2021b).

China has also attracted ASEAN investments. Thailand's largest conglomerate—the Charoen Pokphand Group (the CP Group)—is among the first foreign firms to enter the Chinese market. Today, the firm obtains 40% of its US\$68 billion in annual revenue from its Chinese subsidiaries—ranging from animal-feed factories to shopping malls and supermarkets—and holds a big stake in the Chinese technology and insurance giant, Ping An (The Economist, 2020). The government of Singapore has formed a 50–50 joint venture with the Chinese government to build the Guangzhou Knowledge City, which, when complete, will cover 50 miles² and house half a million inhabitants in China's Greater Bay Area, which encompasses Hong Kong, Macau, Shenzhen, Guangzhou, and other nearby cities (Lim, 2018; Saïdi, 2019).

The global impact of Chinese consumers is also felt in international tourism. In 2018, prior to the COVID-19 outbreak, Chinese tourists spent US\$277 billion overseas, accounting for approximately one-fifth of all international tourism spending. The spending by Chinese outbound tourists is likely to recover and rise further, post COVID-19, given that only 10% of the Chinese population has to date travelled internationally. It is estimated that this percentage will double by 2027, translating to a total of 300 million Chinese citizens with passports by that date (McCarthy, 2019).

However, the boom in consumer spending is taking place across the Asia-Pacific region beyond China. For this reason, South Korean skincare and cosmetics firms,

riding the popularity of the Korean Wave (*Hallyu*) in ASEAN (Choon, 2019), invest heavily in promoting products in the region, including in Indonesia, Philippines, and Vietnam. In Indonesia, Sulwhasoo, the premium skincare line by the largest K-beauty firm, Amorepacific, is now capturing market shares from American and French premium brands (“Future of Consumption in Fast-Growth Consumer Markets: ASEAN,” 2020).

The ASEAN market is important also for Chinese firms which face intense competition in their domestic market and anticipate eventual declining growth in that market given the demographic trend. Chinese smartphone brands Oppo, Xiaomi, and Vivo, for example, are taking over the lead from Samsung and Apple in the region, with market shares ranging from 57% in the Philippines to 74% in Indonesia in 2019 (“Future of Consumption in Fast-Growth Consumer Markets: ASEAN,” 2020; *South China Morning Post*, 2019). In the automobile sector, China’s largest carmaker, SAIC, formed a partnership with Thailand’s CP Group to manufacture cars in Thailand and challenge Japanese automakers’ dominance in the ASEAN market. Currently, the SAIC-CP plant is making MG sports cars and pickups, a British brand now owned by SAIC, and the partners are committed to jointly begin making electric vehicles in the near future (Muramatsu & Suzuki, 2019; *The Economist*, 2020).

1.3.2.2 Increasing Consumer Market Digitalization

The Asia-Pacific region has emerged as a hotbed for consumer-driven, tech-enabled innovations. The digital economy—which broadly includes e-commerce, ride hailing and food delivery, and fintech—is trending in the Asia-Pacific region. With respect to e-commerce, the Asia-Pacific region, according to one estimate, makes up 62.6% of the total global revenue (Oberlo, 2021). This growth is driven by good-to-outstanding, and rapidly improving, mobile internet connectivity, as well as by declining costs of mobile phones and mobile internet subscriptions across the region (Devanesan, 2020; GSMA, 2019).

In 2021, China’s e-commerce sales of nearly US\$2.8 trillion accounts for over half of all e-commerce sales worldwide (Oberlo, 2021), and more than 50% of the country’s total retail sales, a global historical first (Cramer-Flood, 2021). China’s e-commerce market is not only massive, but also hyper-competitive and dynamic, enhanced by the ubiquitous acceptance of mobile payments, AI-driven logistic and delivery services, and livestreaming-enabled social commerce (*The Economist*, 2021c). Alibaba’s Singles Day sales events that take place on November 11 every year are filled with exhilarating livestreaming commercials hosted by influencers, during which exclusive discounts are offered. Appearances by international stars, such as Taylor Swift, Mariah Carey, and Kim Kardashian, are also huge attractions (Kharpal, 2019). In 2019, Alibaba’s Singles Day sales reached US\$38.4 billion, selling more than half of what Amazon sells in an entire quarter in just 24 hours (Klebnikov, 2019).

E-commerce quickly became serious business during the 2020 Covid-19 lockdowns in Wuhan and surrounding areas in the Hubei Province. China's e-commerce giants came through for their customers by keeping supplies flowing and adding new crucial services during the most difficult circumstances. For example, [JD.com](#) used remote-operated driverless smart vehicles to deliver critical supplies and groceries without the deployment of personnel within the lockdown parameters, a task made easier because of the deserted streets. Alibaba and [JD.com](#)'s respective grocery-delivery subsidiaries, Freshippo and 7Fresh, coped with the surge of orders by hiring suddenly unemployed workers from the shuttered restaurant industry. Turning crisis into opportunity, 7Fresh expanded their semi-processed, ready-to-cook offerings by leveraging the talent of newly hired, temporary workers from the restaurant industry. These e-commerce firms' fast, on-the-fly innovations demonstrated their logistic capability and operational competence, expanded their reach, and garnered goodwill (Lin, 2020).

Japan and South Korea's e-commerce sales at US\$144 billion and US\$120 billion, respectively, rank fourth and fifth worldwide after China, the United States, and the United Kingdom (Oberlo, 2021). However, if factoring in the fact the population of Japan is nearly 2.5 times that of South Korea, e-commerce is far more prevalent in South Korea than in Japan on a per capita basis or as a percentage of GDP. In fact, e-commerce's share of total retail sales in South Korea is at nearly 30%, which places it second only to China in terms of e-commerce penetration (Cramer-Flood, 2021). This uptake of e-commerce in South Korea is not surprising given that it had an internet penetration rate of 95.1% in 2017, one of the highest in the world, and its population is both highly educated and tech-savvy (Eriksson, Matheson, Pitt, Plangger & Robson, 2019). South Korea also resembles China in the way e-commerce is conducted, with the prevalence of mobile payment, influencer marketing, efficient product delivery, and special-holiday shopping events (Eriksson et al., 2019). Hailed as South Korea's Amazon, South Korean e-commerce giant Coupang offers free-next-day delivery service, known as the "Rocket Delivery," and is soaring in popularity in its home market (Baek, 2019). In June 2021, Coupang, backed by capital injection from Japan's Softbank, made its first international foray in Japan to compete with Rakuten and Amazon Japan (Jennings, 2021).

Unlike Japan, whose population is already very grey, or South Korea and China, whose population is rapidly aging, in ASEAN countries, Millennials, and Gen Zs—who are digital natives—will account for 75% of the consumer population by 2030. Internet connectivity is also expected to improve drastically in the ASEAN region ("Future of consumption in fast-growth consumer markets: ASEAN" 2020). Therefore, in ASEAN countries, the digital economy, while currently still in its early stages, is showing great potential. Figure 1.5 charts the forecasted growth of e-commerce between 2019 and 2025 among six of the ASEAN economies, all of which are poised for rapid growth. In Indonesia, the Asia-Pacific region's third largest economy with a population of 275 million, e-commerce sales reached US\$21 billion in 2019. This figure is predicted to hit US\$83 billion by 2025, which will amount to over 50% of the entire e-commerce market in the ASEAN region (Statista

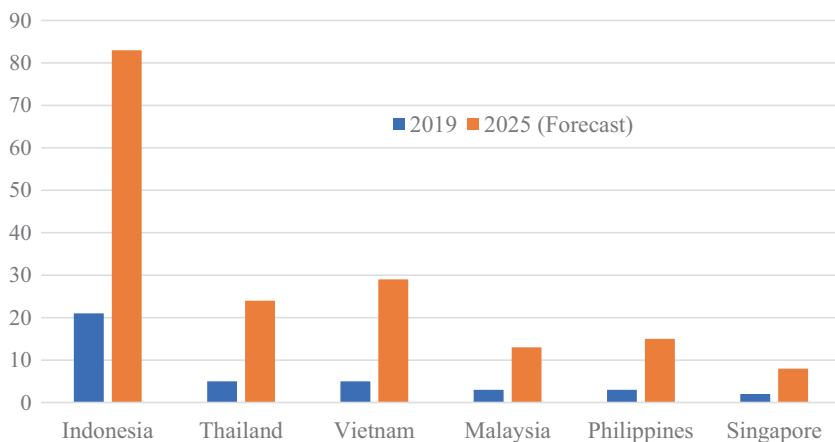


Fig. 1.5 Retail e-commerce market in Southeast Asia, 2019 and 2025 (forecast), by country (in billion US\$). *Source:* Based on data from Statista Research Department. 2021. E-commerce market volume SEA 2019-2025 by country. *Statista*, March 29. <https://www.statista.com/statistics/647645/southeast-asia-ecommerce-market-size-country/>

Research Department, 2021a). The ride-hailing market in ASEAN countries, which includes online transport and food delivery, at approximately US\$11 billion in 2020, is expected to reach US\$42 billion by 2025 (Statista Research Department, 2021c). Along with e-commerce and ride hailing comes the necessity of digital payment. In the ASEAN region, digital payments stood at US\$600 billion in gross transaction value in 2019; the same figure is predicted to exceed US\$1 trillion by 2025. Broadly, fintech is also expected to rise sharply in the ASEAN region, given that over 70% of adults in the region are currently unbanked or underbanked. The fintech industry in the ASEAN region is presently estimated to be worth US\$11 billion and could reach US\$60 billion by 2025 (“Fulfilling its promise,” 2019). Given all this potential, ASEAN countries have become home to innovative digital startups, as will be discussed in the next section.

1.3.3 Asia as a Leading Hub for Innovation

The Asia-Pacific region also claims a growing collection of world-class firms, with over 40% of those included in the 2020 Fortune Global 500 list now calling the region home (Fortune, 2020) (see Fig. 1.6). The Asia-Pacific region is also beginning to shed its “all brawn and no brain” image of being where many products are manufactured but few great innovations or impactful brands are created (The Economist, 2014). In fact, the region is becoming a hotbed for innovation; as of April 2021, more than 25% of all unicorns (privately held startup companies with a

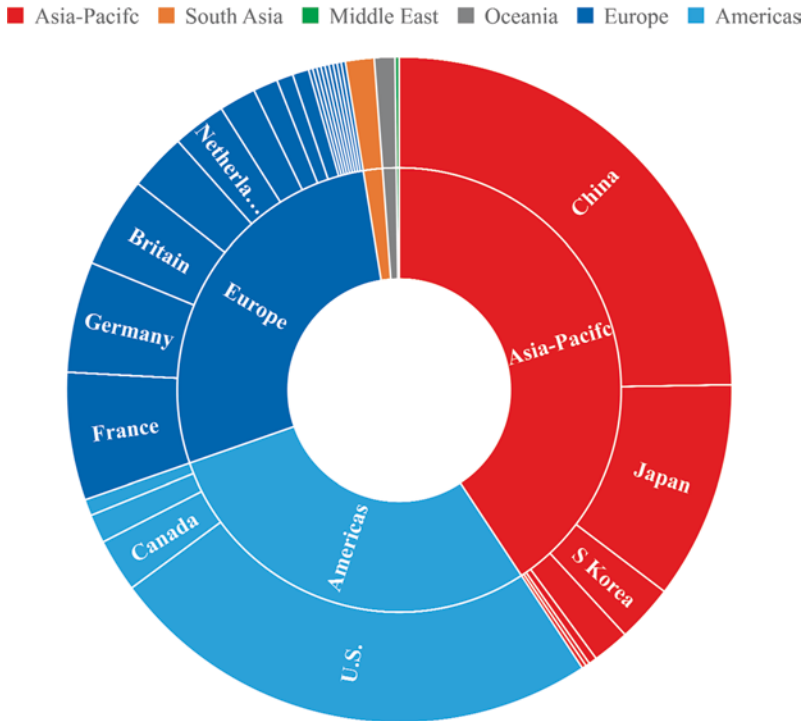


Fig. 1.6 Fortune global 500 by country/region, 2020. *Source:* Based on information from Fortune 2020. Global 500. <https://fortune.com/global500/2020/search/?sector=Technology>

value of over US\$1 billion) worldwide have been incubated in the Asia-Pacific region (Rudden, 2021) (see Fig. 1.7).

There have been notable changes in the types of firms that have flourished in the Asia-Pacific region in recent years. Contract manufacturing firms, such as Taiwan-based Foxconn, Quanta, and Pegatron; as well as sourcing and/or supply chain management firms, such as the now embattled Hong Kong-based Li & Fung, played pivotal roles in knitting together the supply chains that have formed factory Asia. Today, however, many successful firms in the Asia-Pacific region have built global and regional reputations in their own right. In addition to the established firms from Japan and South Korea, such as Toyota and Samsung, and from China, such as Lenovo, there has been a flurry of recent creations born of innovations driven by the needs of Asian consumers. Most prominently are digital technology firms from China, include e-commerce firms Alibaba and JD.com, the ride-hailing app Didi, the food delivery apps of Meituan and Ele.me, the home-sharing platform Tujia, online travel booking sites Ctrip and eLong.com, fintech firm Ant Financial, and social media platforms Weibo, WeChat, and Tiktok.

A dynamic group of startups has also emerged recently in the ASEAN region, which has helped to fire up the region's digital economy. Grab, a Singapore-based

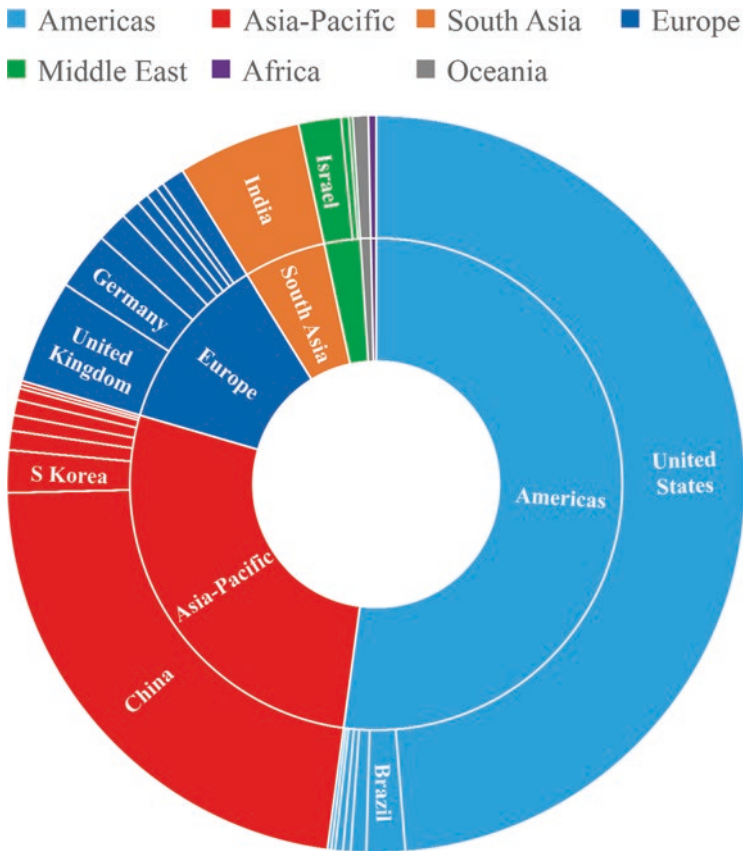


Fig. 1.7 Number of unicorns worldwide as of April 2021, by country. *Source:* Based on information from Rudden, J. 2021. Number of unicorns worldwide, by country. *Statista*, April 23. Retrieved June 11, 2021, from <https://www.statista.com/statistics/1096928/number-of-global-unicorns-by-country/>

unicorn—which started as a ride-hailing app and pushed Uber out of Southeast Asia—has now expanded its business to food delivery and digital payment across the ASEAN region. Grab’s arch-rival and Indonesia-based based GoJek recently merged with Indonesian e-commerce firm Tokopedia to form GoTo, a super-app to compete across the ASEAN region. Singapore-based SEA, an internet platform that provides digital entertainment, e-commerce, and fintech services, is also competing for domination in the ASEAN region (Tanaka, 2021). The growth of these startups in ASEAN is also accelerated by the massive infusion of venture capital from other parts of the Asia-Pacific region. For example, ASEAN’s top e-commerce app, Shopee, a part of Singapore’s SEA, is backed by Tencent; while ASEAN’s second most popular e-commerce app, Lazada, is a subsidiary of Alibaba (Chen, 2021; Tanaka, 2021). In fact, China’s tech giants have provided the lion’s share of the surging venture capital investment in ASEAN, according to British multinational

investment bank HSBC (“What’s next for China’s tech investment into ASEAN,” 2019). Japan’s Softbank, with stakes in both Grab and Tokopedia among many others, is also a significant investor in ASEAN’s startups (Iwamoto, 2021). In June 2021, it made further funding commitment in the region by leading a new round of funding for Singapore’s online car sales platform Carro, which is planning to scale up its presence across Singapore, Indonesia, Thailand, and Malaysia (Loh, 2021).

Much of Asian innovation is fueled by the technological advancement in areas such as mobile devices, internet access, autonomous vehicles, and algorithms, all of which depend on semiconductor chips. In this area, Taiwan, South Korea, and Japan are the clear leaders, both within the region and around the world. Taiwan and South Korea are home to the world’s largest semiconductor chip manufacturers, including Taiwan Semiconductor Manufacturing Company (TSMC) and Samsung (Kim, 2021). However, these firms ultimately need semiconductor manufacturing equipment (SME) and raw chemical materials for chip fabrication. Japan, along with the United States and the Netherlands, dominates the global market share in SME. The primary and most complex input in the construction of chip factories, SME accounts for about 80% of the construction costs (Glosserman, 2020). Japan is also a world leader in the chemicals that are crucial for making semiconductor chips, producing around 90% of the world’s supply of fluorinated polyimide and resists, and about 70% of hydrogen fluoride (Lee, 2019). Japanese producers of key chemical raw materials, including Tokyo Ohka Kogyo, Daikin Industries, Shin-Etsu Chemical, and Showa Denko Materials, have stepped up their investment in Taiwan and South Korea, the leading chip makers (Nikkei Asia, 2021). South Korea and Japan are also leading suppliers for other advanced components for electronics gears. For instance, Samsung dominates the smartphone display panel market, with 50% of the market share (Business Wire, 2021). Meanwhile, Sony is both a forerunner in imaging sensor technology (Vincent, 2020) and a key supplier of cameras for smartphones, with 46% of the global market, although Samsung is gaining on it (Gray, 2021).

This overview of the new developments in the Asia-Pacific region demonstrates that, while remaining an irreplaceable global manufacturing hub, the region is also shaping up to be an exciting center of commerce and a hotbed for innovation. Asia-Pacific firms’ capacity to innovate and to seek opportunities beyond their national boundaries, both within and beyond Asia, bodes well for the region’s future despite the economic and political disturbances that are likely to intensify with US–China rivalry and rapid demographic change.

Despite the growing importance of the Asia-Pacific region documented above, international business research is still confined to the traditional approach of country-specific analysis. Since the late 1990s, there has been a great deal of research on individual countries such as China, Japan, South Korea, Malaysia, Thailand, and Vietnam. In contrast, there has been little research taking a region-wide perspective on the newly transformed Asia of the twenty-first century, a region that now thrives not only as manufacturing hubs, but also as interconnected consumer markets and dynamic centers of innovation. As such, there is a need to develop a new research focus on international business with special reference to the fast changing Asia-Pacific region. Aiming to make a major contribution to capturing

these new developments, this book explores contemporary challenges, business practices, and emerging issues in the new Asia. The next section summarizes the 12 chapters presented in this book. The last section concludes with a summary.

1.4 Organization of the Book

This book is organized into 12 chapters. Part 1 (Chap. 1) is the introduction to the book, which focuses on the Asia-Pacific region as the new center of gravity for international business and summarizes the main contributions made in each chapter. Part 2 (Chaps. 2, 3, 4, and 5) discusses the changing business environment of the new Asia; Part 3 (Chaps. 6, 7, 8, 9, 10, and 11) discusses Asian firms' business strategy in the new century; and Part 4 (Chap. 12) provides a review and analysis of the current state of international business research concerning the Asia-Pacific region.

Part 2 begins with Chap. 2, which addresses the changing business environment in the Asia-Pacific region amid the growing strategic rivalry between the United States and China. It is evident that US–China relations have devolved over the past four decades from a coexistence level of mutual trust and cooperative engagement to a crisis level of growing suspicion and rival competition. The significant trend that will have a global impact is the strategic competition between the two countries on both economic and technological fronts. China and the United States are currently engaged in multiple areas of economic dispute, including advanced manufacturing, supply chains, and technology. The result is a new, fractured world order that is impacting the international business landscape not only in Asia, but also around the globe.

Chapter 3 examines the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) from both economic and geopolitical perspectives. The CPTPP is a modified version of the original Trans-Pacific Partnership (TPP) that was negotiated by 12 member countries, including the United States. However, the election of Donald Trump to the US presidency in 2016 has effectively changed the direction of US trade policies. The United States decided to withdraw from the TPP, and, to salvage the trade deal, all remaining members agreed to forge ahead with this trade bloc to form the CPTPP. This study presents four possible future scenarios for the CPTPP in the face of increasing global protectionism.

Chapter 4 examines the impact of demographic change on the Asia-Pacific labor market, with a special reference to Japan. Japan is facing a severe labor shortage caused by a sustained low birth rate and rapidly aging population. It is clear that Japan's economic strength can be substantially weakened by a demographically driven labor shortage. This chapter proposes three key strategies to address Japan's labor shortage: promotion of women's participation in the labor market, extension of working age of the elderly, and recruitment of foreign guest workers. Using extensive sources in both the English and Japanese languages, the feasibility and effectiveness of each strategy is systematically evaluated. The Japanese experience

discussed in this chapter offers a unique opportunity for other Asian countries to gain valuable insight into coping with demographic challenges.

In the final chapter (Chap. 5) of this part, the differences between East Asian and North American cultures are examined using the cultural psychological concepts of self-construals and thinking styles. The chapter then explores how such cultural differences affect workplace management, marketing strategy, information exchange, and investment decisions in the two regions. Given the importance of the Chinese and the Japanese consumer markets, the fascinating examples of successful marketing strategies in these two markets by Western firms such as Starbucks, Nestlé, Coca Cola, McDonald's, Olay, and Aflac are especially instructive. Overall, the findings presented in this chapter provide interesting insights into the importance of cross-cultural knowledge for doing business in the Asia-Pacific region.

The third part of this book—focusing on Asian firms' business strategy in the new century—begins with Chap. 6, which analyzes the broad and pivotal roles of the Taiwanese electronics industry in the global electronics supply chain, both in the labor-intensive and capital-intensive segments. The Taiwanese electronics industry's roles in both of these segments are examined by focusing on two Taiwanese giants, Foxconn and TSMC, the former being an example in the labor-intensive segment of the supply chain, while the latter is an example of the capital-intensive segment. The chapter captures the two focal firms' respective "playbooks" that have led to their success and explores the emerging challenges they face—especially the US–China strategic rivalry—and their strategic responses to these challenges.

Chapter 7 shines a spotlight on Japan and contemplates the use of cross-border e-commerce (CBEC) by Japanese sake breweries to export their products to the global market. The internet has revolutionized international business, allowing online retailers and shoppers to virtually conduct business transactions across national borders. The CBEC creates opportunities for Japanese sake breweries, mostly small- and medium-sized enterprises (SMEs), to engage in exporting in the face of declining domestic demand in Japan. In contrast, the global demand for sake has increased in recent years, spurred by the growing popularity of Japanese cuisine worldwide. In order to ascertain the right choice of an e-commerce platform, Japanese sake breweries are likely to compare the operating fees of various online retailers. Simulations are conducted to compare four e-commerce platforms (Amazon, eBay, Tmall Global, and Rakuten) in terms of operating fees. The analysis reveals that a Japanese SME might choose both Amazon and eBay in the global marketplace. However, Tmall is clearly advantageous in the Chinese market due to its popularity with a high market share in the country.

Based on a sample of 45 Chinese companies, Chapter 8 explores the strategies adopted by Chinese companies, often known as the "emerging dragons", for overseas expansion. Five key strategic patterns emerge from the analysis: market dominators, export clusters, technology innovators, culture carriers, and overseas financial investment and supply chain integrators. Following the PEST framework, this chapter discusses how the "emerging dragons" use each of the five broad strategies to capitalize on opportunities and avoid threats in uncertain foreign environments.

Chapter 9 turns to the fascinating topic of exporting South Korean pop music, or K-pop, in the midst of growing worldwide interest in Korean culture. The study analyzes how YG Entertainment, one of the largest in South Korea's entertainment industry, assesses and overcomes four types of distance between nations—namely, cultural distance, administrative distance, geographic distance, and economic distance—in approaching its key export markets of Japan, China, and the United States. Using vivid examples, the chapter details YG Entertainment's successful adoption of five core strategies: leveraging local market knowledge, balancing adaptation and authenticity, localization of production to mitigate political risk, balancing local responsiveness with global brand-building, and strategically diversifying into related and supporting industries.

Chapter 10 explores the intriguing phenomenon of *shanzhai* products, mostly observed in China. These products imitate global leading brands' design, function, and appearance, and adopt trademarks that are similar, yet not identical, to the brands they imitate. Because they are typically sold at much lower prices, *shanzhai* products are favored by many middle- and low-income consumers in emerging economies, especially when the *shanzhai* products contain genuinely innovative features. Furthermore, firms that start off specializing in *shanzhai* products may later gain the capacity to create entirely legitimate products that compete directly with the brands they originally imitate, even in developed markets. Therefore, the success of *shanzhai* products and the firms that make them presents a serious threat to the established business model of leading brands in the global consumer market. Of particular interest are the several recommended strategies for leading global brands to mitigate the threat of *shanzhai* products.

Chapter 11 addresses the topic of corporate social responsibility (CSR) of multinational corporations (MNCs) through an in-depth case study of a South Korean MNC in Thailand: Samsung-Electro Mechanics Thailand (SEMTHAI). The authors demonstrate that, by carrying out its CSR activities in ways that were perceived as authentic, involved the local employees, and were closely aligned with the values and expectations of Thai culture, SEMTHAI was able to build moral capital in Thailand that ultimately led to its business success and strong reputation in the country. Therefore, the study concludes, while CSR activities have been employed as strategic tools for many MNCs to enter, survive, and perform in new markets, CSR efforts must be localized in order to achieve the desired effects.

Chapter 12 forms the fourth part of this book, which provides an extensive review of the state of the art in international business research, with a specific focus on the Asia-Pacific region. Bibliographic coupling, content analysis, and cluster analysis methods are applied to all articles published in the top six IB journals from 2010–2019 to uncover the current state of, and emerging trends in, international business (IB) research that has a focus on the Asia-Pacific region. The results show that China is the most studied country, followed by India, South Korea, Vietnam, and Japan. Trend analysis is conducted to identify future research directions, which reveals the following key trending topics: emerging markets, institutional environment, and diverse aspects of doing business in emerging markets.

1.5 Conclusion

The Asia-Pacific region, sustaining more than four decades of rapid growth, has emerged as an economic force comparable in significance to North America and the Europe Union. The success of the Asia-Pacific economies, first led by Japan, followed by the Four Asian Tigers of South Korea, Taiwan, Hong Kong, and Singapore, and then by the Southeast Asian nations including Malaysia, Thailand, and Indonesia, has made the region the world's most important manufacturing hub. The economic rise of China, resulting from its manufacturing dominance and technological advancement of the last two decades, has further propelled a massive shift in the global economy's center of gravity away from the industrialized West to the Asia-Pacific region.

This book comprises a collection of articles written by scholars with expertise in a variety of academic disciplines. These studies cover economic, geopolitical, demographic, and cultural forces that shape the international business strategies in the Asia-Pacific region. The twenty-first century began with significant changes in demographic profiles in the Asia-Pacific region, accompanied by major developments in economic integration, the 2008 global financial crisis, international environment, technological competition, and the global pandemic. In response to these challenges, Asian governments and firms have systematically recalibrated their policies and strategies in their quest to thrive in this new global environment. This book provides a comprehensive and diverse analysis of the international business landscape in the New Asia that will be of interest to scholars, managers, politicians, and policy-makers alike.

References

- Agarwal, J., & Wu, T. (2004). China's entry to WTO: Global marketing issues, impact, and implications for China. *International Marketing Review*, 21(3), 279–300.
- Agarwal, J., & Wu, T. (2018). The changing nature of global marketing: A new perspective. In J. Agarwal & T. Wu (Eds.), *Emerging issues in global marketing: A shifting paradigm*. Springer.
- Baek, B.-Y. (January 29 2019). Coupang's Rocket Delivery gaining popularity. *The Korean Times*. Retrieved July 10, 2021, from https://www.koreatimes.co.kr/www/tech/2019/01/133_262883.html
- Bernanke, B. S. (October 19 2009). *Asia and the global financial crisis*. Speech at the Federal Reserve Bank of San Francisco's Conference on Asia and the Global Financial Crisis. Santa Barbara, CA. Retrieved June 16, 2021, from <https://www.federalreserve.gov/newsevents/speech/bernanke20091019a.htm>
- Black, J. S., & Morrison, A. J. (2019). Can China avoid a growth crisis? *Harvard Business Review*, 97(5), 94–103.
- Bloomberg NEF. (September 16 2020). China dominates the lithium-ion battery supply chain, but Europe is on the rise. Retrieved July 10, 2021, from <https://about.bnef.com/blog/china-dominates-the-lithium-ion-battery-supply-chain-but-europe-is-on-the-rise/>.
- Bradsher, K., & Alderman, L. (April 2 2020). The world needs masks. China makes them, but has been hoarding them. *New York Times*. Retrieved July 3, 2021, from <https://www.nytimes.com/2020/03/13/business/masks-china-coronavirus.html>

- Breuniger, K. (August 23 2019). Trump says he's ordering American companies to immediately start looking for an alternative to China. *CNBC*. Retrieved June 19, 2021, from <https://www.cnbc.com/2019/08/23/trump-says-hes-ordering-american-companies-to-immediately-start-looking-for-an-alternative-to-china.html>
- Business Wire. (March 25 2021). Strategy analytics: Samsung display takes smartphone display panel revenue leadership in 2020. Retrieved July 9, 2021, from <https://www.businesswire.com/news/home/20210325005598/en/Strategy-Analytics-Samsung-Display-Takes-Smartphone-Display-Panel-Revenue-Leadership-in-2020>
- Casadei, P., & Iammarino, S. (2021). Trade policy shocks in the U.K. textile and apparel value chain: Firm perceptions of Brexit uncertainty. *Journal of International Business Policy*, 4(2), 262–285.
- Chen, F. (April 8 2021). How Lazada lost out in SE Asia's e-commerce race. *Asian Times*. Retrieved June 22, 2021, from <https://asiatimes.com/2021/04/how-lazada-lost-out-in-se-asias-e-commerce-race/>
- Chen, C., Watanabe, C., & Griffy-Brown, C. (2007). The co-evolution process of technological innovation—An empirical study of mobile phone vendors and telecommunication service operators in Japan. *Technology in Society*, 29(1), 1–22.
- Cheng, T.-F., & Li, L. (May 8 2020). Apple to produce millions of Air Pods in Vietnam amid pandemic. *Nikkei Asia*. Retrieved September 10, 2021, from <https://asia.nikkei.com/Business/Technology/Apple-to-produce-millions-of-AirPods-in-Vietnam-amid-pandemic>
- Cheng, T.-F., & Li, L. (June 10 2021). China ousts Taiwan as Apple's biggest source of suppliers. *Nikkei Asia*.
- Choi, K., Narasimhan, R., & Kim, S. W. (2016). Opening the technological innovation black box: The case of the electronics industry in Korea. *European Journal of Operational Research*, 250(1), 192–203.
- Choon, C. M. (April 25 2019). ASEAN flavours can take Korean Wave to next level: Experts. *The Straits Times*. Retrieved July 21, 2021, from <https://www.straitstimes.com/asia/se-asia/asean-flavours-can-take-korean-wave-to-next-level-experts>
- Chung, J. H. (2009). East Asia responds to the rise of China: Patterns and variations. *Pacific Affairs*, 82(4), 657–675.
- Cramer-Flood, E. (February 10 2021). In global historic first, ecommerce in China will account for more than 50% of retail sales. *eMarketer*. Retrieved June 10, 2021, from <https://www.emarketer.com/content/global-historic-first-ecommerce-china-will-account-more-than-50-of-retail-sales>
- D'Arpizio, C., Levato, F., Prete, F., Del Fabbro, E., & de Montgolfier, J. (January 10 2019). The future of luxury: A look into tomorrow to understand today. *Bain & Company*. Retrieved June 8, 2021, from <https://www.bain.com/insights/luxury-goods-worldwide-market-study-fall-winter-2018/>
- Das, D. K. (2012). How did the Asian economy cope with the global financial crisis and recession? A revaluation and review. *Asia Pacific Business Review*, 18(1), 7–25.
- Devanesan, J. (May 6 2020). 3 trends underpinning Asia's booming internet economy. *Techwire Asia*. Retrieved June 19, 2021, from <https://techwireasia.com/2020/05/3-trends-underpinning-asias-booming-internet-economy/>
- Donnan, S., Rauwald, C., Deaux, J., & King, I. (March 20 2020). A COVID-19 supply chain shock born in China is going global. *Bloomberg*. Retrieved June 11, 2021, from <https://www.bloomberg.com/news/articles/2020-03-20/a-covid-19-supply-chain-shock-born-in-china-is-going-global>
- EIU. (2021). North American supply chains: Will reshoring actually happen? *The Economist Intelligence Unit Report*. Retrieved June 17, 2021, from <https://www.eiu.com/n/north-america-will-not-see-significant-supply-chain-reshoring-in-2021-25/>
- Eriksson, T., Matheson, K., Pitt, L., Plangger, K., & Robson, K. (August 23 2019). E-commerce in South Korea: A Canadian perspective. *Asia-Pacific Foundation of Canada*. Retrieved June 18, 2021, from <https://www.asiapacific.ca/research-report/e-commerce-south-korea-canadian-perspective>
- Evenett, S. (2019). Protectionism, state discrimination, and international business since the onset of the global financial crisis. *Journal of International Business Policy*, 2(1), 9–36.
- Evens, P. (2020). Techno-nationalism in China—U.S. relations: Implications for universities. *East Asian Policy*, 12(2), 80–92.

- Fortune. (2020). Global 500. Retrieved April 10, 2021, from <https://fortune.com/global500/2020/search/?sector=Technology>
- Foster, S. (August 1 2020). U.S., China both lag badly in industrial robot race. *Asia Times*. Retrieved July 9, 2021, from <https://asiatimes.com/2020/08/us-china-both-lag-badly-in-industrial-robot-race/>
- Fukushima, A. (2009). Japan's perspective on Asian regionalism. In M. J. Green & B. Gill (Eds.), *Asia's new multilateralism: Cooperation, competition and the search for community* (pp. 103–127). Columbia University Press.
- Fulfilling its promise. (2019). The future of Southeast Asia's digital financial services. Bain & Company, Google, & Temasek. Retrieved June 20, 2021, from <https://www.temasek.com.sg/en/news-and-views/subscribe/future-of-southeast-asia-digital-financial-services-report>
- Future of consumption in fast-growth consumer markets: ASEAN. (June 2020). The World Economic Forum and Bain & Company. Retrieved June 18, 2021, from <https://www.weforum.org/reports/future-of-consumption-in-fast-growth-consumer-markets-asean>
- Gartner. (June 24 2020). Gartner survey reveals 33% of supply chain leaders moved business out of China or plan to by 2023. Retrieved May 24, 2021, from <https://www.gartner.com/en/newsroom/press-releases/2020-06-24-gartner-survey-reveals-33-percent-of-supply-chain-leaders-moved-business-out-of-china-or-plan-to-by-2023>
- Glosserman, B. (May 8 2020). Micro but mighty: Semiconductors remain the key to technology leadership. *The Japan Times*. Retrieved July 10, 2021, from <https://www.japantimes.co.jp/opinion/2020/05/08/commentary/world-commentary/micro-mighty-semiconductors-remain-key-technology-leadership/>
- Gray, J. (April 21 2021). Sony lost ground to Samsung in growing smartphone image sensor market in 2020. *Digital Photography Review*. Retrieved July 9, 2021, from <https://www.dpreview.com/news/3003975391/sony-lost-ground-to-samsung-in-growing-smartphone-image-sensor-market-in-2020> .
- GSM. (2019). GSM mobile connectivity index. Retrieved June 19, 2021, from <https://www.mobileconnectivityindex.com/#year=2019>
- Handley, K., & Limao, N. (2015). Trade and investment under policy uncertainty: Theory and firm evidence. *American Economic Journal: Economic Policy*, 7(4), 189–222.
- Handley, K., & Limao, N. (2017). Policy uncertainty, trade, and welfare: Theory and evidence for China and the United States. *American Economic Review*, 107(9), 2731–2183.
- Hwang, J., Kim, E., & Kim, S. (2009). Factors affecting open technological innovation in open source software companies in Korea. *Innovation*, 11(3), 279–290.
- IEA-PVPS. (2020). *Trends in photovoltaic applications*. Retrieved June 14, 2021, from <https://iea-pvps.org/>
- IMF. (June 2000). Recovery from the Asian crisis and the role of the IMF. Retrieved July 4, 2021, from <https://www.imf.org/external/np/exr/ib/2000/062300.htm>
- IMF. (June 25 2021). Direction of trade statistics.
- Inoue, Y., & Miyazaki, K. (2008). Technological innovation and diffusion of wind power in Japan. *Technological Forecasting and Social Change*, 75(8), 1303–1323.
- Irwin-Hunt, A. (March 24 2021). In charts: Asia's manufacturing dominance. *Financial Times*. Retrieved June 17, 2021, from <https://www.ft.com/content/2b0c172b-2de9-4011-bf40-f4242f4673cc>
- Iwamoto, K. (June 21 2021). Sea tops SoftBank in market cap amid Latin America expansion. *Nikkei Asia*. Retrieved July 21, 2021, from <https://asia.nikkei.com/Business/Markets/Sea-tops-SoftBank-in-market-cap-amid-Latin-America-expansion>
- Jennings, R. (June 15 2021). SoftBank-backed Coupang, the Amazon of South Korea, expands into Japan. *Forbes*. Retrieved July 10, 2021, from <https://www.forbes.com/sites/ralphjennings/2021/06/15/softbank-backed-coupang-the-amazon-of-south-korea-expands-into-japan/?sh=3202fd93656c>
- Kim, S. (March 3 2021). South Korea and Taiwan's chip power rattles the U.S. and China. *Bloomberg Businessweek*. Retrieved July 10, 2021, from <https://www.bloomberg.com/news/articles/2021-03-03/chip-shortage-taiwan-south-korea-s-manufacturing-lead-worries-u-s-china>
- Khanna, P. (2019). *The future is Asian*. Simon & Schuster.

- Kharpal, A. (November 7 2019). From Kim Kardashian to Disney tickets: Alibaba gears up for Singles Day, a \$30 billion shopping event. *CNBC*. Retrieved June 20, 2021, from <https://www.cnbc.com/2019/11/08/alibaba-singles-day-2019-preview.html>
- Klebnikov, S. (November 11 2019). Alibaba's 11/11 Singles' Day by the numbers: A record \$38 billion haul. *Forbes*. Retrieved June 20, 2021, from <https://www.forbes.com/sites/sergeiklebnikov/2019/11/11/alibabas-11-11-singles-day-by-the-numbers-a-record-38-billion-haul/?sh=1e893f1f2772>
- Lee, Y. N. (July 22 2019). The Japan-South Korea dispute could push up the price of your next smartphone. *CNBC*. Retrieved July 10, 2021, from <https://www.cnbc.com/2019/07/23/japan-south-korea-dispute-impact-on-semiconductor-supply-chain-prices.html>
- Leng, A., & Rajah, R. (December 18 2019). Chart of the week: Global trade through a U.S.-China lens. *The Interpreter*. Retrieved July 4, 2021, from <https://www.lowyinstitute.org/the-interpreter/chart-week-global-trade-through-us-china-lens>.
- Lim, L. (August 24 2018). Sino-Singapore Guangzhou Knowledge City to be upgraded to state-level project. *Channel News Asia*. Retrieved June 19, 2021, from <https://www.channelnewsasia.com/news/singapore/sino-singapore-guangzhou-knowledge-city-to-be-upgraded-to-state-10649550>
- Lin, C. (April 1 2020). In the face of lockdown, China's e-commerce giants deliver. *HBR.org*. Retrieved August 8, 2021, from <https://hbr.org/2020/04/in-the-face-of-lockdown-chinas-e-commerce-giants-deliver>
- Loh, D. (June 15 2021). SoftBank supercharges Singapore's Carro to unicorn status. *Nikkei Asia*. Retrieved July 21, 2021, from <https://asia.nikkei.com/Business/Finance/SoftBank-supercharges-Singapore-s-Carro-to-unicorn-status>
- McCarthy, N. (August 29 2019). Which country's tourists splashed the most cash in 2018? *Forbes*. Retrieved June 20, 2021, from <https://www.forbes.com/sites/niallmccarthy/2019/08/29/which-countrys-tourists-splashed-the-most-cash-in-2018-infographic/?sh=5f5cd8be3c4e>
- Muramatsu, Y., & Suzuki, J. (November 30 2019). Southeast Asia slump sets off alarm bells at Japan's automakers. *Nikkei Asia*. Retrieved July 11, 2021, from <https://asia.nikkei.com/Business/Automobiles/Southeast-Asia-slump-sets-off-alarm-bells-at-Japan-s-automakers>
- Mullen, A. (June 5 2021a). China's three-child policy: Why was it introduced and what does it mean? *South China Morning Post*. Retrieved July 4, 2021, from <https://www.scmp.com/economy/china-economy/article/3136092/chinas-three-child-policy-why-was-it-introduced-and-what-does>
- Mullen, A. (May 23 2021b). U.S.-China relations: Is there still a trade war under Joe Biden's presidency? *South China Morning Post*. Retrieved July 4, 2021, from <https://www.scmp.com/economy/global-economy/article/3134191/us-china-relations-there-still-trade-war-under-joe-bidens>
- Myrdal, G. (1968). *Asian drama: An inquiry into the poverty of nations*. Twentieth Century Fund.
- Nikkei Asia. (May 8 2021). Japan chip material makers ramp up output in South Korea and Taiwan. Retrieved July 10, 2021, from <https://asia.nikkei.com/Business/Tech/Semiconductors/Japan-chip-material-makers-ramp-up-output-in-South-Korea-and-Taiwan>
- Obe, M. (April 19 2019). Asia's worst aging fears begin to come true. *Nikkei Asia*. Retrieved June 11, 2021, from <https://asia.nikkei.com/Spotlight/Asia-Insight/Asia-s-worst-aging-fears-begin-to-come-true>
- Obe, M. (February 11 2021). Decoupling denied: Japan Inc. lays its bets on China. *Nikkei Asia*.
- Oberlo. (2021). Ecommerce sales by country in 2021. Retrieved June 14, 2021, from <https://www.oberlo.ca/statistics/e-commerce-sales-by-country>
- OECD Data. (2021). Gross domestic spending on R&D. Retrieved July 10, 2021, from <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>
- OICA. (2020). World motor vehicle production 2020 statistics. Retrieved June 14, 2021, from <https://www.oica.net/category/production-statistics/2020-statistics/>
- Pananond, P. (October 9 2019). Southeast Asia moves from world's factory to regional powerhouse. *Nikkei Asian Review*
- Rees, K., Schussler, K., Wittenstein, J., & Remondini, C. (2021). Here's how the world's chip shortage is playing out for stocks. *BNN Bloomberg*, March 28. Retrieved July 3, 2021, from

- <https://www.bnnbloomberg.ca/here-s-how-the-world-s-chip-shortage-is-playing-out-for-stocks-1.1583343>
- Renshaw, J., Shalal, A., & Martina, M. (March 25 2021). Biden says China won't surpass U.S. as global leader on his watch. *Reuters*. Retrieved June 17, 2021, from <https://www.reuters.com/article/us-usa-biden-china-idUSKBN2BH2ZE>
- Rooney, K. (May 15 2019). In the battle of Trump personalities, 'Tariff Man' is winning, and Wall Street isn't ready for it. *CNBC*. Retrieved June 18, 2021, from <https://www.cnbc.com/2019/05/15/in-the-battle-of-trump-personalities-tariff-man-is-winning-and-wall-street-isnt-ready-for-it.html>
- Rouhneen, S. (January 21 2020). The real winners in the trade war might be found in Southeast Asia. *The Interpreter*. Retrieved June 18, 2021, from <https://www.lowyinstitute.org/the-interpreter/real-winners-trade-war-might-be-found-southeast-asia>.
- Rudden, J. (April 23 2021). Number of unicorns worldwide, by country. *Statista*. Retrieved June 11, 2021, from <https://www.statista.com/statistics/1096928/number-of-global-unicorns-by-country/>
- Saïdi, U. (January 31 2019). Singapore is helping to build a city in China for up to 500,000 people. *CNBC*. Retrieved September 9, 2020, from <https://www.cnbc.com/2019/01/31/singapore-is-helping-to-build-a-city-in-guangzhou-china-.html>
- Scott, R. E., & Mokhiber, Z. (January 30 2020). Growing China trade deficit cost 3.7 million American jobs between 2001 and 2018. *Economic Policy Institute*. Retrieved June 18, 2021, from <https://www.epi.org/publication/growing-china-trade-deficits-costs-us-jobs/>
- Serhan, Y., & Gilsinan, K. (April 24 2020). Can the west actually ditch china? *The Atlantic*. Retrieved June 18, 2021, from <https://www.theatlantic.com/politics/archive/2020/04/us-britain-dependence-china-trade/610615/>
- Shibata, N., Tan, CK, & Kim, J. (June 17 2021). Shiseido bets on luxury skin care and China's fickle consumers. *Nikkei Asia*.
- Shih, W. (2020). Global supply chains in a post-pandemic world. *Harvard Business Review*, September–October (pp. 83–89).
- Singh, R. K. (February 26 2020). How U.S. bike companies are steering around Trump's China tariffs. *Reuters*. Retrieved September 6, 2020, from <https://www.reuters.com/article/businessNews/idCAKCN1QF0G1-OCABS?edition-redirect=ca>
- South China Morning Post. (August 20 2019). Chinese brands make up most of Southeast Asia's smartphone market. Retrieved June 22, 2021, from <https://www.scmp.com/abacus/tech/article/3029557/chinese-brands-make-most-southeast-asias-smartphone-market>
- Statista Research Department. (March 29 2021a). E-commerce market volume SEA 2019–2025 by country. *Statista*. Retrieved June 20, 2021, from <https://www.statista.com/statistics/647645/southeast-asia-ecommerce-market-size-country/>
- Statista Research Department. (January 25 2021b). Medical device industry in Japan— Statistics & facts. Retrieved July 11, 2021, from <https://www.statista.com/topics/7209/medical-device-industry-in-japan/>
- Statista Research Department. (March 29 2021c). Ride hailing market value SEA 2015–2025. *Statista*. Retrieved June 20, 2021, from <https://www.statista.com/statistics/958376/southeast-asia-ride-hailing-market-value/>.
- Sugiura, E. (June 3 2021). Can Japan and Toyota win the solid-state battery race? *Nikkei Asia*.
- Tanaka, A. (May 21 2021). GoTo sets up three-way battle for Southeast Asian tech dominance. *Nikkei Asia*.
- The Economist. (May 31 2014). A world to conquer: Asian business (p. 11).
- The Economist. (May 30 2020). High-wire act (pp. 58–60).
- The Economist. (January 9 2021a). Deutschland AG in China: Riding high (pp. 58–59).
- The Economist. (June 19 2021b). The empire of son (pp. 59–62).
- The Economist. (January 2 2021c). The future of e-commerce: The great mall of China (pp. 47–50).
- The Japan Times. (April 21 2021). CIA estimates Taiwan's fertility rate to be world's lowest. Retrieved July 4, 2021, from <https://www.japantimes.co.jp/news/2021/04/21/asia-pacific/social-issues-asia-pacific/taiwan-birthrate-children/>

- The Straits Times. (June 26 2020). Pentagon names 20 Chinese firms it says are military-controlled, including Huawei and Hikvision. Retrieved June 18, 2021, from <https://www.straitstimes.com/world/united-states/pentagon-names-20-chinese-firms-it-says-are-military-controlled-including-huawei>
- Tognini, G. (February 11 2021). Billionaires making ‘boatloads of money’ from once-cheap medical gloves. *Forbes*. Retrieved July 3, 2021, from <https://www.forbes.com/sites/giacomotognini/2021/02/11/billionaires-making-boatloads-of-money-from-once-cheap-medical-gloves/?sh=5f0962e1661c>
- Tonby, O., Woetzel, J., Choi, W., Seong, J., Wang, P. (July 2019). Asia’s future is now. *McKinsey Global Institute*. Retrieved June 11, 2021, from <https://www.mckinsey.com/featured-insights/asia-pacific/asias-future-is-now>.
- TrendForce. (2021). Foundry revenue projected to reach historical high of US\$94.6 billion in 2021 thanks to high 5G/HPC/End-device demand. Retrieved June 14, 2021, from <https://www.trendforce.com/presscenter/news/20210415-10759.html>
- UNCTAD. (2020). E-book of statistics. Retrieved June 10, 2021, from <https://stats.unctad.org/handbook/MerchandiseTrade/ByPartner.html>.
- UNCTAD Stat. (2020). Ships built by country of building, annual. Retrieved June 14, 2021, from <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=89493>
- Vaswani, K. (September 13 2018). Why Asia turned to China during the global financial crisis? *BBC*. Retrieved July 3, 2021, from <https://www.bbc.com/news/business-45493147>
- Vincent, J. (May 14 2020). Sony’s first AI image sensor will make cameras everywhere smarter. *The Verge*. Retrieved July 10, 2021, from <https://www.theverge.com/2020/5/14/21258403/sony-image-sensor-integrated-ai-chip-imx500-specs-price>.
- Wagner, I. (2021). General Motors—Company’s vehicle sales by key country in FY 2020. *Statista*. Retrieved June 11, 2021, from <https://www.statista.com/statistics/304367/vehicle-sales-of-general-motors-by-country/>
- What’s next for China’s tech investment into ASEAN? (June 4 2019). *HSBC*. Retrieved June 22, 2021, from <https://www.about.hsbc.com.sg/news-and-media/whats-next-for-chinas-tech-investment-into-asean>
- Willuhn, M. (September 16 2020). National lithium-ion battery supply chains ranked. *PV Magazine*. Retrieved June 14, 2021, from <https://www.pv-magazine.com/2020/09/16/national-lithium-ion-battery-supply-chains-ranked/>
- Winter, P. (July 20 2020). Why the evolution of supply chains is picking up speed in Asia-Pacific. *World Economic Forum*. Retrieved July 3, 2021, from <https://www.weforum.org/agenda/2020/07/evolution-supply-chains-picking-up-speed-asia-pacific/>
- World Bank. (2021a). Fertility rate, total (births per woman) – East Asia & Pacific. Retrieved July 4, 2021, from <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=Z4>
- World Bank. (2021b). GDP (current US\$). Retrieved July 1, 2021, from <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>
- World Bank. (2021c). Manufacturing, value-added (current US\$). Retrieved June 7, 2021, from https://data.worldbank.org/indicator/NV.IND.MANF.CD?most_recent_value_desc=true
- Wolf, M. (December 4 2020). Chain reaction: The China link in global supply chain. *Deloitte Insights*. Retrieved June 14, 2021, from <https://www2.deloitte.com/us/en/insights/economy/asia-pacific/china-supply-chain.html>
- WTO. (July 31 2020). Share in world exports of the leading textile exporters in 2019, by country [Graph]. *Statista*. Retrieved June 14, 2021, from <https://www.statista.com/statistics/236417/share-of-the-leading-global-textile-exporters-by-country/>
- Zhou, S., & Hu, A. (2021). Chapter 2: How did China overcome the “poverty trap”? In S. Zhou & A. Hu, *China: Surpassing the “middle income trap”* (pp. 33–69). Palgrave Macmillan.