# **Chapter 20**

## Developing a New Approach to Japan–Viet Nam Industrial Cooperation

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# 1. Introduction<sup>1</sup>

In 2023, Japan and Viet Nam celebrate the 50th anniversary of the establishment of diplomatic relations.<sup>2</sup> The purpose of this chapter in this commemorative publication is to define the role of industrial cooperation in deepening and developing the partnership between Japan and Viet Nam, and to sketch out possible directions for cooperation content. Japan is actively engaged in bilateral partnerships in the Mekong region (Shiraishi, 2014), especially in the Japan–Viet Nam relationship, with a high level of interaction between the two leaders. This includes a visit to Viet Nam by Prime Minister Yoshihide Suga in October 2020, a visit to Japan by Pham Minh Chinh, Prime Minister of Viet Nam in November 2021, and Prime Minister Fumio Kishida's visit to Viet Nam in May 2022. Regular visits continued even as the coronavirus disease (COVID-19) pandemic hit the world. This is an important bilateral relationship for both countries. At the November 2021 Japan-Viet Nam summit meeting, Prime Minister Kishida mentioned the launch of the Digital Transformation (DX) Initiative, the Supply Chain Diversification Initiative, and the Technology Innovation Cooperation Partnership between the two countries for the post-COVID-19 economic revival (MOFA, 2021a). The summit meeting adopted the Joint Statement: Toward the Opening of a New Era in Japan-Viet Nam Extensive Strategic Partnership for Peace and Prosperity in Asia, which stated that the countries' Extensive Strategic Partnership would be substantive and effective in all areas (MOFA, 2021b). In 2022, Prime Minister Kishida visited Viet Nam and held a seminar on Japan-Viet Nam cooperation in technological innovation, DX, and supply chain diversification, where he spoke about the steady deepening of cooperation in each initiative and stated that new initiatives such as the Asian Future Investment Initiative would benefit Viet Nam (Prime Minister's Office of Japan, 2022).

Progress has also been made in ministerial discussions. On 23 August 2022, the Fifth Meeting of the Japan–Viet Nam Joint Committee on Cooperation in Industry, Trade and Energy was held in Tokyo and a Joint Ministerial Statement between the Japanese Ministry of Economy, Trade and Industry (METI) and the Vietnamese Ministry of Industry and Trade (MOIT) was adopted. The statement lists four areas of industrial

<sup>2</sup> The authors use the sequence of 'Japan and Viet Nam' or 'Japan–Viet Nam', following alphabetical order.

<sup>&</sup>lt;sup>1</sup>The authors conducted several interviews with the Japanese Ministry of Economy, Trade and Industry (METI) in March 2022 and January 2023, and the content of these interviews was reflected in this chapter. The authors would like to take this opportunity to thank all the organisations that provided valuable inputs to finalise this chapter. Errors are attributable to the authors. The views expressed are solely those of the authors, and represent neither the organisations to which the authors belong nor the Economic Research Institute for ASEAN and East Asia (ERIA).

cooperation to be pursued by Japan and Viet Nam: deepening cooperation to strengthen resilient supply chains, strengthening industrial competitiveness through digital technology, fostering supporting industries, and strengthening human resources cooperation to improve industrial capacity and competitiveness (METI, 2022a). A fact sheet was also issued to help develop such cooperation, confirming the objectives and discussing the points to be achieved in each cooperation item (METI, 2022b). As mentioned above, discussions on deepening cooperation for the development of the two economies in the post-COVID-19 period are being conducted today amongst heads of state and ministers in the context of the 50th anniversary.

This chapter is structured as follows. First, it presents an overview of the industrial cooperation undertaken between Japan and Viet Nam. This is followed by a detailed discussion of new technologies and ideas that could benefit from Japan–Viet Nam cooperation, mainly in digital and cyber technologies and supply chain resilience. Finally, it provides policy recommendations for future directions. It analyses a single case study dealing with economic and industrial cooperation between Japan and Viet Nam. The data used for the analysis are mainly based on information from government publications and online government and media sources. The discussion on new technologies regarding the future direction of industrial cooperation is mainly structured using information from interviews at METI, conducted by the authors in March 2022 and January 2023, each lasting about 20 hours.

### 2. Development of Japan–Viet Nam Cooperation

Since the 2000s, Japan–Viet Nam relations have made a lot of progress, particularly in summit diplomacy. In October 2006, the Joint Statement on Strategic Partnership for Peace and Prosperity in Asia was issued, and in November 2007, the Agenda for a Strategic Partnership between Japan and Viet Nam was released. In April 2009, the Joint Statement on the Strategic Partnership for Peace and Prosperity in Asia between the General Secretary of the Communist Party of Viet Nam Central Executive Committee Nong Duc Mainh and Prime Minister Taro Aso was released (MOFA, 2009). Specific industrial references included investment promotion and improvement of the investment environment, followed by cooperation in the traditional areas of infrastructure development, energy, manufacturing, supporting industries, logistics, information and communication technology (ICT), disaster prevention, and environmental protection, as well as cooperation in new areas such as the peaceful use of nuclear energy, space exploration, and environmentally friendly aircraft.

In March 2014, President Truong Tan Sang visited Japan and it was agreed that the partnership would be developed into an Extensive Strategic Partnership. This included support for Viet Nam's industrialisation strategy, with close collaboration to implement action plans in six key areas – agro-fishery processing, electronics, automobiles and parts, agricultural machinery, environmental industry and energy conservation, and shipbuilding – as well as cooperation in developing supporting industries, formulating industrial policies, and support for the formulation of industrial policies and capacity building for their implementation (MOFA, 2014).

In June 2017, Prime Minister Nguyen Xuan Phuc visited Japan and held a summit meeting with Prime Minister Abe, where a Joint Statement on Deepening the Japan–Viet Nam Extensive Strategic Partnership was issued. The statement confirmed support for the implementation plan in six areas of Viet Nam's industrialisation strategy, as well as support for the automotive and supporting industries, with the objective of maintaining and expanding domestic production of complete build units as a priority (MOFA, 2017).

In November 2021, Prime Minister Chin visited Japan and held a summit meeting with Prime Minister Fumio Kishida. During the meeting, Prime Minister Chin stated that Viet Nam wanted to take the Extensive Strategic Partnership to a new level (MOFA, 2021a). The Joint Statement: Toward the Opening of a New Era in Japan–Viet Nam Extensive Strategic Partnership for Peace and Prosperity in Asia specified cooperation in areas such as economic revival in the post-COVID-19 era, supply chain resilience, DX, diversification of production bases, and fostering supporting industries. The statement also specified cooperation in areas such as the development of the digital economy, ICT, smart cities, and strengthening information security (MOFA, 2021b). As stated in the introduction, Prime Minister Kishida mentioned the launch of three initiatives and partnerships, which were highlighted during his visit to Viet Nam in May 2022. During the summit meeting in May 2022, President Phuc expressed his expectation of a revitalisation of people-to-people exchanges between the two countries in the post-COVID-19 period and stated that he would like to strengthen cooperation in all fields, as befits an Extensive Strategic Partnership.

In February 2023, Prime Minister Kishida and General Secretary of the Communist Party Central Committee Nguyen Phu Trong held an online meeting. After noting that the two countries have cooperated with each other over the past 50 years to build a good relationship, they agreed to take bilateral relations to a higher level in the next 50 years and develop Japan–Viet Nam relations, especially in the area of the economic affairs and cooperation such as investment, green transformation (GX), and DX, as well as strengthening cooperation on the political and security fronts (MOFA, 2023).

In addition to examining exchanges at the leaders' level, we review interactions at the ministerial level between relevant economic ministries and agencies, with emphasis on industrial cooperation, which is the scope of this report. We focus on the Japan–Viet Nam Joint Committee on Cooperation in Industry, Trade and Energy, which was established in July 2015. It was set up as a forum to discuss pending issues on industry, trade, and energy between the two countries (METI, 2015).<sup>3</sup> On 5 June 2017, at the second meeting, an automobile and support industry working group was established and the compilation of a joint action plan between the two countries was confirmed (METI, 2017). In October 2018, the third meeting continued cooperation on the automobile and supporting industries and discussed cooperation on the food industry (METI, 2018).

<sup>&</sup>lt;sup>3</sup>The establishment of the committee was agreed after a meeting between the then Minister of METI Mogi and the Minister of Industry and Trade Hoang in December 2013, when Hoang proposed that a working group be formed by METI and the Vietnamese Ministry of Industry and Trade to discuss a range of pressing issues. Both parties decided that the committee would be ministerial level and a deputy director general-level task force meeting would be set up under the ministerial-level meeting.

Ministerial statements have been issued since the fourth meeting in August 2020, which discussed the challenges identified by COVID-19, such as resilient supply chains, as well as the use of digital technologies (METI, 2020b). The Joint Ministerial Statement adopted at the time specified three perspectives on industrial cooperation: deepening cooperation towards strengthening supply chain resilience, strengthening cooperation in upgrading industrial capacity and competitiveness, and facilitating DX and Industry 4.0 (METI, 2020a). Then, in August 2022, the fifth meeting listed four items as the field of industrial cooperation: 1) deepening cooperation to strengthen resilient supply chains, 2) strengthening industrial competitiveness through digital technology, 3) fostering supporting industries, and 4) strengthening human resources cooperation to improve industrial capacity and competitiveness (METI, 2022a).

Having reviewed the items related to industrial cooperation at the Viet Nam–Japan Summit and in ministerial dialogue over the past decade, a number of features can be noted. First, in the early years around 2009, only a list of major areas of cooperation was listed. However, the development of the automotive and component industries, as well as supporting industries, was a consistent focus during this period. Second, new items such as DX and supply chain resilience appeared around 2020. This was clearly stated in the Joint Statement of the Fourth Meeting of the Joint Committee on Cooperation in Industry, Trade and Energy, and was listed as an initiative of Japan and Viet Nam to be focused on at the 2021 summit.<sup>4</sup> As mentioned in the ministerial and summit statements, themes such as the digital economy and supply chain resilience have come to the forefront of cooperation since the impact of the COVID-19 pandemic, pointing to discontinuity in the policy focus from earlier years. At the same time, these policy developments suggest that it is appropriate to suggest a direction for the major themes of Japan–Viet Nam industrial cooperation to be addressed in this report, such as DX, supply chain issues, and the development of new industrial human resources capable of implementing them. In the following sections, the authors focus on these themes and mention the direction of technological development and policy development.

### 3. Theoretical Background of Digital Technology and Supply Chain Resilience

The driving force behind the economic development of the Association of Southeast Asian Nations (ASEAN) Member States, including Viet Nam, since 1990 has been foreign direct investment in the manufacturing sector, mainly from developed countries (see Chapter 6). This is due to the global optimisation of production bases by multinational corporations in developed countries and the acceleration of the relocation of multinational corporations' manufacturing bases in ASEAN Member States, which have abundant labour forces. Global production base optimisation has been made possible by the development of ICT, which has dramatically reduced the cost of communication amongst regions, resulting in goods that are built through multi-stage manufacturing processes that no longer require the same or nearby locations. More labour-intensive processes have moved

<sup>&</sup>lt;sup>4</sup> Supply chain resilience was discussed during Prime Minister Suga's visit to Viet Nam in October 2020, but it is not possible to confirm whether topics such as the promotion of a digital society and DX were mentioned (MOFA, 2020; Prime Minister's Office of Japan, 2020).

to regions where labour is plentiful and labour costs are lower. Baldwin (2016) described this movement as the second unbundling, which encourages the fragmentation of production processes and the global relocation of fragmented processes, following the first unbundling where the development of the internal combustion engine dramatically reduced the cost of transporting goods and separated production and consumption areas.

In the context of the second unbundling, the East Asian region, including ASEAN and Japan, has built a robust international production network (IPN). This resilience was demonstrated during the COVID-19 pandemic. For example, the export dynamics of the East Asian region's machinery industry since 2020 have shown that the bottom of the decline was shallow compared with that of other IPNs such as the United States (US) and Europe, and the timing of the return to the previous year's level was quicker (Ando and Hayakawa, 2021). ERIA (2022) emphasised the importance of maintaining and strengthening the competitiveness of this robust IPN for the sustainable development of the ASEAN region.

Interregional connectivity is important for the resilience of IPNs. There are two main types of connectivity: physical connectivity, through the development of infrastructure and the reduction of customs clearance costs, and digital connectivity, through the reduction of the cost of moving information, including internationally (ERIA, 2022). Physical connectivity is responsible for reducing the cost of transporting goods between regions. Digital connectivity, on the other hand, facilitates the interregional distribution of ideas and complements physical connectivity. With digital connectivity, even sophisticated ideas that utilise state-of-the-art information processing technologies, such as artificial intelligence (AI), the internet of things (IoT), and robotics, can reach remote areas instantly, supporting everything from production to transport. By deepening both physical and digital connectivity, the competitiveness of East Asia's IPN can be maintained and strengthened.

Supply chain digitalisation is one concrete measure to strengthen IPNs. For example, supply chains can be mapped and monitored digitally to instantly identify risks and bottlenecks. Facilitating freight customs clearance and investing in e-commerce platforms can help to ensure the security of cross-border trade.

The wave of digitisation is also changing the nature of innovation. Digitalisation is shifting its weight from incremental innovations, mainly in manufacturing, to disruptive innovations that can significantly change the market order in all industries, including services. Digital technologies are creating new business opportunities. Digital technologies also have the power to leapfrog the economy and society, e.g. by simply implementing them in society, such as e-payments, where people who do not have a bank account can use similar services in real terms through digital technology (ERIA, 2022).

Following this theoretical background, the next section examines the path that industrial cooperation between Japan and Viet Nam should take to contribute to the development of the digital sector and new industrial human resources, and to further development of growth-driving industries, as discussed in previous chapters.

# 4. Developing a New Approach to Japan–Viet Nam Industrial Cooperation

Industrial cooperation in the new era is found in two directions, as discussed in the previous section: (i) towards dramatic technological innovation using digital technologies; and (ii) transforming supply chains to be resilient to all risks, such as disasters and infectious diseases. Amongst others, Nishimura et al. (2019) stated that the Fourth Industrial Revolution has achieved various technological and industrial innovations through IoT, big data, AI, and robotics. Now, however, the prerequisite for implementing the reforms associated with these digital technological advances is to thoroughly implement the principles in the digital society that seem to underlie all reforms, and to change the judiciary, administrative structures, and the state of society on this basis (see Chapter 8).

The following sections are based on the findings of interviews conducted by the authors at METI in March 2022 and January 2023 on the potential for industrial cooperation between Japan and Viet Nam on digital technology and the nature of industry and society based on digital technology and supply chain resilience.

#### 4.1. Digitalisation and AI Technology

Chapters 6 and 8 of this publication discuss Viet Nam's ambition to become a high-income country by 2045, and state that the new driving force will be the development of the digital economy. In fact, the spread of robotics and new forms of digital technology is not just a matter of various manufacturing industries and services being converted to IoT and AI but is moving into a phase of creating new value by combining digital tools. For example, Gojek in Indonesia started with a mobility dispatch app but has expanded into grocery and housekeeper dispatch as well as payment services (Gojek, n.d.). These needs are not uniform across the world, and it is important to customise services according to the specific circumstances of a country or region. We are beginning to see that the development of products addressing the lack of infrastructure in emerging economies is capturing market needs and becoming a prerequisite for the growth of unicorn companies locally in Southeast Asia. 'Reverse innovation', where products developed for emerging markets are imported to developed countries and spread in developed markets, is also becoming more widespread.

There are also cases, mainly in Southeast Asia, of further development by incorporating financial services, as in the case of Gojek. In some cases, these services are provided by acquiring companies in regulated industries, such as banks and other financial institutions or telecommunications companies, but the relatively loose regulation of such industries is another reason for the low barrier to entry.



Low-cost products that sell well in emerging economies may also increase sales in developed economies, as developed economies are preoccupied with the development of high value-added, high-quality products. Furthermore, bringing the concept of services developed in loosely regulated emerging economies to developed economies may promote deregulation in developed economies.<sup>5</sup> Aiming for such a 'co-creating relationship' between Japan and Viet Nam could be considered as industrial cooperation in the digital age.

#### 4.2. Digital Regulations

To ensure the smooth operation of a digital society, it is necessary to establish the infrastructure required for digitisation across all socio-economic activities. In terms of laws and other regulations, the development of some laws and responses to them have become an obstacle to digitalisation, along with the rapid development of society (Digital Agency, 2022).

In addition, although the administration of many regulations requires human intervention, others may be monitored more accurately by machines. In the wake of COVID-19, the conduct of face-to-face operations, visual safety checks, and many other processes mandated by law or government decree should be deregulated to allow machines and AI to perform them. Japan could support Viet Nam's efforts, if called upon, in relation to initiatives such as deregulation and harmonisation.

#### 4.3. Cybersecurity

Another necessary element of the foundation for a digital society is measures to increase security in cyberspace. In recent years, the increasing number and sophistication of cyberattacks, combined with the fact that everything is connected to the network (i.e. IoT), has increased the number of attack origins, creating a situation where cyberattacks can have a significant impact on society and industry.<sup>6</sup>

On the other hand, cybersecurity has not reached the level where it is perceived to be a digital divide, especially for small and medium-sized enterprises (SMEs) in the ASEAN region.<sup>7</sup> Therefore, it cannot be said that digitalisation is being held back by cybersecurity measures. Nonetheless, attacks from vulnerable points in the supply chain have affected the stability of the supply chain as a whole. In this context, METI has taken measures to support cybersecurity for SMEs (Information-Technology Promotion Agency, Japan, 2021). Viet Nam could make use of such SME cybersecurity guidelines through Japanese companies operating in the country.

<sup>&</sup>lt;sup>5</sup> This idea encourages the use of so-called 'regulatory sandboxes' and other such measures. For more information on regulatory sandboxes, see Cabinet Secretariat of Japan (n.d.).

<sup>&</sup>lt;sup>6</sup> See, for example, *Yomiuri* (2021). Ransomware attacks have led to the suspension of emergency services and surgeries, and restrictions on outpatient care. The attacks were minor until 2017, such as interfering with the sending and receiving of emails on hospital PCs. However, from 2018, *Yomiuri* (2021) noted that damage to core systems, such as electronic medical records and CT image management, began to emerge.

 $<sup>^7</sup>$  Based on interviews with SMEs by the ERIA research project on Digital Divide in ASEAN MSMEs (August 2022).

Of particular importance for the development of cross-border digital technologies is the safe implementation of the free movement of trusted data, which requires an established national data ecosystem (World Economic Forum, 2022). This requires investment in hardware infrastructure, as well as regulatory and institutional reform efforts. The free and secure exchange of data between Japan and Viet Nam could further expand business opportunities.

#### 4.4. Digital Education

The need for digital education and human resources development is identified as infrastructure to support the full realisation of the digital society. In this context, Chapter 11 highlights the shortage of human resources related to digital technologies and business models. Today, the threat of job loss is more in the foreground with the introduction of robots and AI, but attention is also beginning to focus on the need to enhance human technology and skills to work with and complement robots and AI (Goldman Sachs, 2023).

The combination of digital tools and education needs to consider two aspects: (i) the development of digital education opportunities and methods, and (ii) education for mastering digital technologies. Students also need to learn how to use digital technologies in the context of autonomous learning, such as solving problems, beyond the learning of traditional subjects. Similarly, Chapter 11 describes the necessity of developing DX human resources through formal university education courses as well as part-time learning while continuing to work.

#### 4.5. Supply Chain Resilience

The spread of robotics and new forms of digital technology will drastically reduce the cost of peopleto-people communication (Kimura, 2018; ERIA, 2022). This will make it possible to build IPNs that are resilient to various shocks because the digitalisation of logistics information, procedures, and know-how makes it easier to rebuild supply chains, even if they are disrupted, through digital assets, as the information and technology accumulated is instantly available.

Until now, data sharing in the Japanese supply chain has often been limited to individual companies or affiliated companies. If supply chain resilience in Asia is to be considered, it is important to consider data sharing and collaboration in Asia.

Defining the nature of the supply chain has also been discussed in recent years. Efforts have been made to establish principles for supply chains, considering not only supply chain resilience, but also sustainability, environmental and human rights considerations, transparency, and data reliability in view of the use of digital technology.<sup>8</sup>

These initiatives will initially be bilateral and gradually evolve to multilateral. The resulting Japan– Viet Nam institutional model could then serve as a model for Asia.

<sup>&</sup>lt;sup>8</sup> An example is the G7 Leaders' Statement on Economic Resilience and Economic Security, agreed at the G7 Hiroshima Summit (G7, 2023).

#### 4.6. Automobile Manufacturing and Parts and Components Industries

Strengthening automobile manufacturing and supporting industries has been the main theme of bilateral industrial cooperation between Japan and Viet Nam. As mentioned in Chapter 13, the term 'supporting industries' often gives the impression of subcontracting to an original equipment manufacturer in the automobile industry. In fact, most of what are referred to as supporting industries are parts and component industries, and the way to strengthen these is to increase the export competitiveness of the component industries. Now, most of them are processing firms, such as plastics, so upgrading them to components for the automotive and electrical and electronics industries is crucial.

In automobile manufacturing, as detailed in Chapter 9, Viet Nam is characterised by the momentum of local automobile manufacturers (e.g. Thaco and VinFast) as opposed to the prevalence of foreign companies (e.g. Toyota and Nissan) in other ASEAN Member States. VinFast is aggressively pushing the production of electric vehicles to tap the North American and European markets (Johnson, 2022). Therefore, Viet Nam's local component industries could cooperate with the Japanese automobile industry in the production of electric vehicles.

Another strategy is to utilise not only electric vehicles, but also connected, autonomous, shared/ service, and electric (CASE) and Mobility as a Service (MaaS) concepts. CASE and MaaS can be seen as effective means of reducing the social costs of such vehicles (Iwasaki and Ueki, 2022). Considering that Japan's industrial and economic development has been achieved through the development of such automobile-related peripheral technologies, the potential for further economic growth in Viet Nam is likely to increase through collaboration with Japan in automobile and related technologies and services.

#### 4.7. Energy and Decarbonisation: Initiatives in the Asian Zero Emission Community

While Chapter 15 discusses the energy and decarbonisation agenda in Viet Nam, this section describes the Asian Zero Emission Community (AZEC), an initiative for Viet Nam¬–Japan cooperation. In January 2022, Prime Minister Kishida announced the concept of AZEC, with the aim of encouraging Asian countries to share the idea of decarbonisation and work together to advance the energy transition. Subsequently, the Government of Japan hosted the AZEC Ministerial Meeting in Tokyo on 4 March 2023 and the AZEC Public–Private Investment Forum on 3 March 2023 to establish and accelerate concrete cooperation under the AZEC concept. The AZEC Public–Private Investment Forum was held on 3 March to create and accelerate concrete cooperation within the AZEC framework (METI, 2023). The chair of the Ministerial Meeting, the Minister of METI Yasutoshi Nishimura, spoke about the importance of decarbonisation in Asia, the concept of AZEC, and Japan's initiatives, while the Minister of Environment Japan Akihiro Nishimura and participants from other countries and international organisations spoke about their approaches to decarbonisation and their expectations of AZEC. A video message was also received from Prime Minister Kishida in support of the AZEC concept. A joint statement with three common views was agreed: (i) advancing cooperation towards carbon

neutrality/net zero emissions while ensuring energy security, (ii) promoting the energy transition while achieving economic growth, and (iii) recognising that there are various and practical pathways towards carbon neutrality/net zero emissions depending on the circumstances of each country (METI, 2023b).

In the future, the Asian Energy Transition Initiative will support the development of a roadmap towards carbon neutrality, encourage the financing of transition technologies and projects based on the Asian Transition Finance guidelines and other standards, and support the development of human resources for decarbonisation technologies, amongst others. The Cleaner Energy Future Initiative for ASEAN combines the introduction of decarbonisation technologies with policy and institutional recommendations to promote their diffusion and deployment. Support for human resources development related to carbon-neutral technologies, and the promotion of flagship projects through the Cleaner Energy Future Initiative, comprehensively promote cooperation with ASEAN Member States. The AZEC initiative supports balanced decarbonisation that fully ensures energy security and sustainable economic growth while addressing climate change.

### 5. Conclusion

Industrial cooperation between Japan and Viet Nam is undergoing a period of transformation due to international developments (e.g. COVID-19, the Sino–US trade war, and global uncertainties). Enhancing supply chain resilience and addressing issues related to the supply chain are important to overcome the most pressing challenges.

Digital technology is a key pillar for both countries to overcome the challenges they face. Both countries can cooperate in social transformation and regulatory harmonisation to fully realise the benefits of digital technologies. Platforms for cooperation mechanisms will be important to promote such cooperation on DX and GX between the two countries.

The automobile and components industry remains the core of Japan–Viet Nam industrial cooperation and a sector with the potential to become a major driving force in Viet Nam's aspiration to become a high-income country by 2045, with the domestic market likely to grow to 2 million units by 2030. Developing an export-oriented components industry will contribute to Viet Nam's industrial competitiveness, increase the potential for collaboration with Japanese companies, and strengthen the supply chain. In relation to electric vehicles, CASE, and MaaS, where the negative effects of motorisation could be mitigated, Japanese technology could contribute not only to vehicle manufacturing but also to social welfare through contributions in many automobile-related fields.

#### References

- Ando, M. and K. Hayakawa (2022), 'Does the Import Diversity of Inputs Mitigate the Negative Impact of COVID-19 on Global Value Chains?', *Journal of International Trade & Economic Development*, 31(2), pp.299–320.
- Baldwin, R. (2016), *The Great Convergence: Information Technology and the New Globalization.* Cambridge, MA: Belknap Press.
- Cabinet Secretariat of Japan (n.d.), Regulatory Sandboxes. https://www.cas.go.jp/jp/seisaku/s-portal/ regulatorysandbox\_e.html
- Digital Agency (2022), 'Digital Gensoku ni Terashita Kiseino Ikkatsu Minaoshi Plan' (Plan for a Collective Review of Regulations in Light of the Digital Principles). https://www.digital.go.jp/assets/contents/node/ basic\_page/field\_ref\_resources/cb5865d2-8031-4595-8930-8761fb6bbe10/e3650360/20220603\_ meeting\_administrative\_research\_outline\_07.pdf
- ERIA (2022), The Comprehensive Asia Development Plan (CADP) 3.0: Towards an Integrated, Innovative, Inclusive, and Sustainable Economy. Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA).
- G7 (2023), 'G7 Leaders' Statement on Economic Resilience and Economic Security', 20 May. https://www. g7hiroshima.go.jp/documents/pdf/session5\_01\_en.pdf
- Gojek (n.d.), https://www.gojek.com/en-id/products/
- Goldman Sachs (2023), 'Generative AI could raise global GDP by 7%', 5 April. https://www.goldmansachs. com/intelligence/pages/generative-ai-could-raise-global-gdp-by-7-percent.html
- Information-Technology Promotion Agency, Japan (2021), 'Cybersecurity Otasuketai (Reiwa 2 Nendo Chusyokigyou Muke Cybersecurity Taisaku Shien Taisei Kouchiku Jigyo) no Houkokusyo nitsuite' (Report on the Cyber Security Help Team (FY2020 Cyber Security Measures Support System Development Project for SMEs). https://www.ipa.go.jp/security/fy2020/reports/sme/otasuketai\_ houkoku.html
- Iwasaki, F. and Y. Ueki (2022), 'The Role of the Automotive Sector in Regional Economic Development', in The Comprehensive Asia Development Plan (CADP) 3.0): Towards an Integrated, Innovative, Inclusive, and Sustainable Economy. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.353–76.
- Johnson, P. (2022), 'VinFast Prepares to Enter US, Europe, and Canada After Delivering First 100 VF 8 EVs', Electrek, 12 September. https://electrek.co/2022/09/12/vinfast-delivers-first-100-vf-8-evssights-sets-on-us-europe/

- Kimura, F. (2018), "Unbundling" Regimes and Development Strategies in ASEAN: Old Issues and New Challenges', *Journal of Southeast Asian Economies*, 35(1), pp.13–21.
- METI (2015), 'Signing of a Memorandum of Cooperation (MOC) between the Ministry of Economy, Trade and Industry of Japan and the Ministry of Industry and Trade of the Socialist Republic of Viet Nam on the Establishment of Joint Committee between Japan and Viet Nam on Cooperation in Industry, Trade and Energy', 3 July. https://warp.da.ndl.go.jp/info:ndljp/pid/10217941/www.meti.go.jp/english/ press/2015/0703\_05.html
- METI (2017), Second Meeting of the Japan–Viet Nam Joint Committee on Cooperation in Industry, Trade and Energy, 6 June. https://warp.da.ndl.go.jp/info:ndljp/pid/11067906/www.meti.go.jp/pre ss/2017/06/20170607002/20170607002.html
- METI (2018), 'METI Holds Third Meeting of Japan–Viet Nam Joint Committee on Cooperation in Industry, Trade and Energy', 10 October. https://warp.da.ndl.go.jp/info:ndljp/pid/11067906/www.meti.go.jp/ english/press/2017/0607\_002.html
- METI (2020a), 'Joint Ministerial Statement of the Fourth Meeting of the Joint Committee on Cooperation in Industry, Trade and Energy Between the Ministry of Industry and Trade of Viet Nam (MOIT) and the Ministry of Economy, Trade and Industry of Japan (METI)', 7 August. https://www.meti.go.jp/pre ss/2020/08/20200807010/20200807010-1.pdf
- METI (2020b), 'METI Holds the Fourth Meeting of Japan–Viet Nam Joint Committee on Cooperation in Industry, Trade and Energy', 7 August. https://www.meti.go.jp/press/2020/08/20200807010/20200807010. html
- METI (2022a), 'Joint Ministerial Statement of the Fifth Meeting of the Joint Committee on Cooperation in Industry, Trade and Energy Between the Ministry of Industry and Trade of the Socialist Republic of Viet Nam (MOIT) and the Ministry of Economy, Trade and Industry of Japan (METI)', 23 August. https://www.meti.go.jp/press/2022/08/20220823001/20220823001-a.pdf
- METI (2022b), 'Viet Nam–Japan Cooperation in Industry, Trade and Energy Fact Sheet'. https://www.meti. go.jp/press/2022/08/20220823001/20220823001-c.pdf
- METI (2023a), Asia Zero Emission Community (AZEC) Ministerial Meeting and AZEC Public–Private Investment Forum Held, 6 March. https://www.meti.go.jp/english/press/2023/0306\_002.html
- METI (2023b), Asia Zero Emission Community Joint Statement, Tokyo, 4 March, https://www.meti.go.jp/pre ss/2022/03/20230306005/20230306005-24.pdf
- MOFA (2009), 'Japan–Viet Nam Joint Statement on the Strategic Partnership for Peace and Prosperity in Asia', 20 April. https://www.mofa.go.jp/region/asia-paci/vietnam/joint0904.html
- MOFA (2014), 'Japan–Viet Nam Joint Statement on the Establishment of the Extensive Strategic Partnership for Peace and Prosperity in Asia', 18 March. https://www.mofa.go.jp/files/000034408.pdf

- MOFA (2017), 'Joint Statement on Deepening the Japan–Viet Nam Extensive Strategic Partnership', 6 June. https://www.mofa.go.jp/files/000262573.pdf
- MOFA (2020), Japan–Viet Nam Summit Meeting, 19 October. https://www.mofa.go.jp/mofaj/s\_sa/sea1/vn/ page1\_000888.html
- MOFA (2021a), 'Japan–Viet Nam Relations. Japan–Viet Nam Summit Meeting', 24 November.¬ https://www. mofa.go.jp/mofaj/s\_sa/sea1/vn/page1\_001073.html
- MOFA (2021b), 'Joint Statement: Toward the Opening of a New Era in Japan–Viet Nam Extensive Strategic Partnership for Peace and Prosperity in Asia', 25 November. https://www.mofa.go.jp/files/100265637. pdf
- MOFA (2023), Japan–Viet Nam Summit Video Teleconference Meeting, 9 February. https://www.mofa. go.jp/s\_sa/sea1/vn/page1e\_000568.html
- Nishimura. H., M. Ambashi, F. Iwasaki, and M. Maeda (2019), 'Harnessing New Technologies for Social and Economic Progress Toward ASEAN 2040', in F. Kimura, V. Anbumozhi, and H. Nishimura (eds.) *Transforming and Deepening the ASEAN Community*. Jakarta: Economic Research Institute for ASEAN and East Asia, pp.50–71.
- Prime Minister's Office of Japan (2020), Domestic and International Press Conferences on Visits to Viet Nam and Indonesia, 21 October. https://www.kantei.go.jp/jp/99\_suga/statement/2020/1021kaiken.html
- Prime Minister's Office of Japan (2022), Visit to Viet Nam, 1 May. https://japan.kantei.go.jp/101\_kishida/ actions/202205/\_00001.html
- Shiraishi, M. (2014), 'Nihon Vietnam Kanno "Senryakuteki Partnership": Sono Keii to Tenbo' (Japan–Vietnam 'Strategic Partnership': Its Formation, Development and Prospects), *Journal of Asia-Pacific Studies*, 22, pp.289–325.
- World Economic Forum (2022), 'Every Country Has Its Own Digital Laws. How Can We Get Data Flowing Freely Between Them?', 20 May. https://www.weforum.org/agenda/2022/05/cross-border-dataregulation-dfft/
- Yomiuri (2021), "Ransom" Virus Damages 11 Hospitals in Japan and Interferes with Emergency Transport and Surgery', 29 December. https://www.yomiuri.co.jp/national/20211228-OYT1T50173/