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Report

How the Regional Comprehensive Economic Partnership (RCEP) shapes supply chains in Vietnam

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HOW THE REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP (RCEP) SHAPES SUPPLY CHAINS IN VIETNAM

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LIST OF ABBREVIATIONS

AANZFTA	ASEAN-Australia-New Zealand Free Trade Agreement
ACFTA	ASEAN-China Free Trade Agreement
ADB	Asia Development Bank
AEC	ASEAN Economic Community
AHKFTA	ASEAN-Hong Kong, China Free Trade Agreement
AJCEP	ASEAN-Japan Comprehensive Economic Partnership
AKFTA	Framework Agreement on the ASEAN-Korea Free Trade Agreement
ASEAN	The Association of Southeast Asian Nations,
ATIGA	ASEAN Trade in Goods Agreement
CPTPP	The Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CTC	Code Transfer of Commodity
CC	Change of Chapter
C/O	Certificate of Origin
CTH	Change of Tariff Heading
CTSH	Change of Tariff Sub-Heading
SoE	State-owned Enterprises
EU	European Union
EVFTA	EU-Vietnam Free Trade Agreement
FDI	Foreign Direct Investment
FVA	Foreign Value Added
GDP	Gross Domestic Product
GVC	Global Value Chain
IMF	International Monetary Fund
M&A	Mergers and Acquisitions
MFN	Most-Favoured Nation
MNEs	Multinational Enterprises
NAFTA	The North American Free Trade Agreement
SBV	The State Bank of Vietnam
NT	National Treatment

OECD	The Organisation for Economic Cooperation and Development
PSRO	Product-Specific Rules of Origin
RCEP	The Regional Comprehensive Economic Partnership
RoO	Rules of Origin
R&D	Research and Development
RVC	Regional Value Content
IP	Intellectual Property
SME	Small and Medium-sized Enterprise
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers To Trade
UNCTAD	United Nations Conference on Trade and Development
USD	US dollars
VJEPA	Vietnam-Japan Economic Partnership Agreement
VKFTA	Vietnam-Korea Free Trade Agreement
WB	World Bank
WTO	World Trade Organization

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SUMMARY

1. The Regional Comprehensive Economic Partnership (RCEP), signed in 2020 between ASEAN and five partner countries (Australia, New Zealand, China, Japan and South Korea), is the world's largest free trade agreement (FTA), covering 30% of global GDP. RCEP was built on commitments made in the framework of ASEAN's previous FTAs with the aforementioned partner countries. RCEP is expected to eliminate about 90% of import tariffs within 20 years of coming into force. The pace of cuts, however, is different from industry to industry. RCEP also includes many commitments on trade facilitation, such as simplification, transparency of customs procedures, and settlement of trade disputes. In addition, many commitments are related to investment, market opening, investment protection and intellectual property. Besides the commitments of a traditional free trade agreement, RCEP also covers e-commerce, telecommunications, competition, small and medium enterprises (SMEs) and public procurement. The most important part of the agreement is probably the harmonisation of regional origins by applying the unified Rules of Origin (RoO), thereby opening up many opportunities and benefits for intra-regional exports.

2. The assessment reports on the impact of RCEP (Park et al., 2021; WB, 2022) have pointed out that the Agreement would bring many positive impacts on the regional economy. By 2030, it will increase the income of the whole region

by about 0.6%, equivalent to an increase of USD245 billion per year and create 2.8 million jobs. In addition, countries with export-oriented growth will see more benefits. As for Vietnam, recent studies have shown that Vietnam will benefit significantly from RCEP. The World Bank's research (2022) forecast that Vietnam's GDP would increase by about 4.9% and exports would increase by 11.4% by 2030. Meanwhile, other analyses (Pettri, 2018; CIEM, 2022) showed that RCEP would pose many challenges for Vietnam. The benefit from tariff reduction is not remarkable because Vietnam has been enjoying this within ASEAN+6 FTAs and bilateral and multilateral FTAs with regional countries such as VKFTA, VJFTA, and CPTPP. Moreover, the unified RoO in RCEP may stimulate the import of intermediate goods into Vietnam, especially from China, which could discourage Vietnamese enterprises from developing supporting industries or joining the supply chain. The influence of the three largest partners in RCEP, including South Korea, China and Japan, is worth mentioning since these partners have established free trade relations within the framework of RCEP. They will, therefore, create a huge trade and investment diversion effect for partners in ASEAN. Those impacts and the volatility of major regional trends will reshape the supply chains in Vietnam. However, most research has focused on quantifying RCEP's impacts on economic growth, trade, investment, employment, or institution. In contrast, there have been few analyses on RCEP and supply-chain shaping in Vietnam despite the fact that this is an important aspect which needs to be further explored to provide policy recommendations in the medium and long term to help Vietnam participate more deeply in regional and global value chains and supply chains.

Objectives, methods

3. This research is implemented by the National Centre for Socio-Economic Information and Forecast (NCIF), Ministry of Planning and Investment, and Konrad Adenauer Foundation (KAS Vietnam). The study focuses on: (i) an overview of related commitments, assess the structure of trade in goods according to the supply chain and investment relationship between Vietnam and RCEP countries; (ii) analysing the tariff reduction roadmap and rules of origin between Vietnam and RCEP countries, thereby assessing the impact on the supply chain in Vietnam (iii) proposing several policy recommendations for FDI attraction and supply chain improvement for Vietnam. Apart from general analysis, the study focuses on several supply chains in the

manufacturing industry, including electronics, automotive and textile, which are currently attracting special attention due to their large proportion of exports and imports. The impact of RCEP on reshaping supply chains in these industry groups in the medium and long term will impact Vietnam's future growth, investment and exports.

4. Unlike other studies conducted by NCIF, which mainly use quantitative models to assess the impact, this research uses a qualitative approach, analysing the strengths and weaknesses of each chain in Vietnam, combined with tariff analysis and RoO commitments of Vietnam to partner countries and between countries in the agreement to clarify the trend of supply chain movement in and into Vietnam in the medium and long term. The primary method is chain analysis, which divides goods into production segments from raw materials to intermediate goods, production materials and final products. In addition, the report uses secondary data sources from the World Bank's international trade data (WIT), the roadmap for tariff reduction according to the HS code of the RCEP. In addition, the survey data of the General Statistics Office from 2010 onwards is also used to assess the capacity and investment flows of enterprises in the segments of the chain.

5. The theoretical overview shows that the chain-shaping impact of an FTA like RCEP comes from some of the following basic channels:

    (a) Through the tariff reduction channel: the rate of tariff cuts between end-consumer goods and intermediate goods and between different industry groups will change the price correlation, which in turn can change the structure of imported goods. Cheaper intermediate inputs can make downstream enterprises more efficient and productive and have more export capabilities, which can promote downstream industries to develop by attracting both FDI and domestic investment to expand production in breadth and depth. Meanwhile, tariff cuts in the downstream could stimulate both downstream and upstream investment. However, such impacts are not wholly one-sided positive but still have adverse effects, depending on upstream and downstream enterprises' production and R&D capacity. Tariffs reduction in the upstream can increase imports in the upstream, so it can negatively affect upstream businesses and cause supply chain disruptions;

(b) Through the commitment to rules of origin (RoO): strict commitments on RoO can promote investment from intra-bloc countries in both downstream and upstream industries; meanwhile, flexible or loose RoO commitments can stimulate FDI inflows from non-bloc countries to and investment in the industries that tend to trade more widely and globally than just within the bloc. Applying combined rules of origin in RCEP could be understood that RoO within this trade agreement is less stringent than other FTAs. Nonetheless, depending on specific industries, the level of RoO rigour is quite different, leading to different effects on FDI and reshaping the supply chain.

Overall impact on the supply chain

6. The comprehensive analysis shows that, due to previously signed FTAs between many member countries, some product groups, such as electronic components and textiles of some countries in RCEP, already have very low tariffs. Thus the trade impact of RCEP (on both trade creation and trade diversion) is far to be significant. However, tariffs on some types of goods (that Vietnam is deeply involved in the supply chain, e.g. textiles, automobiles, and some electronic products) are cut, and the application of unified RoO in RCEP will help Vietnam participate more deeply in the regional supply chain. The trend of shifting supply chains into Vietnam that has taken place before, thanks to bilateral FTAs or within the framework of "ASEAN +6", will be further promoted thanks to the enforcement of RCEP. The FDI inflows into Vietnam are also expected to increase since major regional investors tend to specialise more strongly in developing supply chains.

7. Regarding supply chains, Vietnam currently focuses mainly on downstream processing and assembling such products as electronics, automotive and garment or low- or medium-tech finished products like textiles. RCEP also creates opportunities for Vietnam to improve its added value and increase productivity as well as overcome the state of simple production by: (1) promoting market expansion, enhancing economic efficiency by improving production scale, attracting investment in upstream industries; (2) increasing specialisation in the industries where Vietnam has advantages, thereby attracting more FDI in the supply chain to Vietnam; and (3) supporting domestic enterprises to participate more extensively in the global supply chain by taking advantage of RoO as well as taking full advantage of tariff incentives with partners in RCEP.

8. Vietnam has the opportunity to participate more deeply in the chain. However, this opportunity is not just for Vietnamese firms but also FDI enterprises. Vietnam's FDI inflows are expected to increase as major investors in the region promote specialisation to develop their supply chains. This could be a disadvantage for Vietnamese enterprises given there is no appropriate adaptation strategy, as competition between FDI and domestic enterprises will increase in upstream.

Impact of RCEP on electronics supply chains

9. Vietnam has achieved many achievements when participating in the global supply chain of the electronics industry, reflected in the increase in both import and export and FDI attraction. Export has increased rapidly in recent years, in which the proportion of exports of finished products and electronic components has kept increasing. RCEP countries, especially South Korea and China, are Vietnam's largest electronic parts and components suppliers, accounting for 66% of the total import value of this group. However, the volume of exports is substantial, and Vietnam limits its role as a component integrator or components integrator into final products. Other upstream stages of the chain are mainly occupied by China, South Korea, Japan, the EU, the US, and Taiwan. Regarding finished products, Vietnam focuses on manufacturing household appliances and communication equipment. More than 2,000 enterprises are participating in the chain in Vietnam, of which 54.8% are domestic. However, a considerable proportion of revenue falls into FDI enterprises, with over 93% of export and over 90% of imports. Electronic enterprises from South Korea and Japan play leading roles in the field.

10. Tariffs on many component products before RCEP were very low (RCEP partners applied to VN was 4.5%) and continued to decrease by nearly half in the first year of coming into force and decreased to 2.0% in 2027 and nearly 0% by 2042. Vietnam's average tax rate to RCEP partners has also been meagre (2.7%) and decreased to only 1.5% in 2022. The main electronic components Vietnam exports to and imports from RCEP partners are integrated circuits and semiconductors.

11. The rules of origin in RCEP are generally similar to previous FTAs of ASEAN with partners (except for some more flexible points related to regulations on simple processing stages and more favourable certificates of origin). RoO applied in the electronics industry has the same strictness level as previous

FTAs, but combined RoO is applied. As a result, Vietnam can import electronic components from any country in RCEP to continue processing or manufacturing finished products while still enjoying tax incentives when exporting these products to other RCEP countries.

12. Generally, intra-bloc exports and imports with RCEP may increase due to tax reductions, but it is difficult to attract supply chains into high-value-added segments. In other words, the scale of activities in the chain may increase, but the depth of participation in the chain requires a suitable development strategy. Therefore, the impact of RCEP in terms of tariffs and RoO on the supply chain can be summarised as follows:

	Impacts of tariff	*Impacts of RoO*
On Export	Exports of electronic components are not affected much because tariffs on key products (electronic integrated circuits and other semiconductor equipment) are already very low. It is possible to boost some household products and communication equipment exports to China and South Korea due to faster tariff reductions. Exports of mobile phones and laptops are not affected much because the tax is already at 0% or very low.	Increased imports of electronic components from suppliers in RCEP: China, South Korea and Japan. The risk of a trade deficit also increases. Diversification of export markets in RCEP besides traditional markets.
On FDI attraction	Continue to attract FDI in some industries producing household electronics (television) and communication equipment. Increasing FDI into Vietnam due to the trend of diversifying supply chains under the "China+1" strategy.	

Impact of RCEP on the supply chain of the automotive industry

13. More than one thousand enterprises are participating in the chain, with foreign firms accounting for 31.8% of enterprises with 85.2% capital. Vietnam participates mainly in assembling Completely Knocked Down (CKD) cars for the domestic market, producing some components for CKD assembly and export. As a result, imports of Complete Built-Up (CBU) automobiles tend to

increase rapidly and reached $1.46 billion in 2020, but automobile exports remain modest (although they have increased faster from more than USD6 million in 2018 to USD35million in 2019 and USD123 million in 2020).

14. Referring to the supply chain of the automotive industry of Vietnam, the components being produced are mainly labour-intensive products such as seats, glasses, tires and wheels. Vietnam is a net importer of most supporting industry products with high technology, capital and added value, especially important parts in the engine, brake, clutch systems, gearbox and steering systems. Some automobile components and accessories exported by Vietnam gained a sharp increase (reaching USD5.64 billion), of which the highest increase is recorded in the export of simple items, namely electrical wires, tires and plastic details.

15. Within RCEP, Vietnam and partner countries grant each other significant tariff incentives in importing auto components and spare parts. However, Vietnam is a relative protectionist for finished products, while partner countries give Vietnam more significant tax incentives. Like the electronics industry, RCEP's rule of origin (RoO) for automobile production differs significantly from previous ASEAN agreements. Nonetheless, the RCEP's unified RoO helps the automobile products assembled in Vietnam increase their ability to meet criteria of origin to enjoy tax incentives when exported to RCEP countries because Vietnam's input suppliers are all members of RCEP (Japan, China, South Korea and Thailand).

16. Noticeably, RCEP will help Vietnam attract FDI investment in producing several components, spare parts and modules. Large regional automobile corporations have been planning to specialise in producing some components and modules in Vietnam to export to the ASEAN market (to enjoy 0% tax incentives between Vietnam and ASEAN after 2018). Therefore, the further expansion of the export market outside ASEAN (RCEP includes ASEAN and five other partners), plus tariff cuts and rules of origin aggregation in RCEP, will help Vietnam attract more specialised investment flows from major automobile manufacturers in the region. The impacts of RCEP on the automotive supply chain can be summarised as follow:

	Impact of tariffs	*Impact of RoO*
On Import &Export	Vietnam is under less pressure to compete for imports of CBU cars from RCEP due to the low tariffs reduction road map. Japan and South Korea get more tax cuts than other RCEP countries.	Promote intra-regional import and export due to reduced trade costs, especially thanks to imports of spare parts and components from RCEP.
	There might be a trade diversion of Vietnam's auto components imports from non-RCEP countries to RCEP countries. However, the impact is not significant because Vietnam imports components from Japan, South Korea, Thailand and China.	Promote exports of complete cars to RCEP countries thanks to the improved ability to meet origin criteria.
On FDI attraction	Attract FDI to the production and assembly of complete cars due to the following: - The reduced cost of importing spare parts helps enhance production efficiencies. - The expanded output market (due to increased export to RCEP) helps improve production efficiency at scale.	
	Attracting more investment in the production of electronics components and complete cars to export to the ASEAN market when some large regional automobile corporations plan to use Vietnam as a springboard to assemble cars to export to ASEAN or specialise in producing some components and modules for the ASEAN market.	

Impacts of RCEP on textile supply chain

17. In 2019, 4,483 enterprises participated in Vietnam's textile supply chain, of which 87% were domestic and mainly small enterprises (88%). South Korea, Taiwan, and China were the largest investors in the industry and are mainly involved in producing finished products, yarns and threads. There is a shortage of linkage in the textile industry along the value chains and links between FDI and domestic enterprises, from producing cotton and fibre materials to spinning and weaving. Regarding trade, the textile industry has a trade surplus for yarn but a large deficit for fabrics. The yarn produced is not to be used domestically to weave fabrics but mainly for export, while domestically produced fabrics only meet less than 50% of the demand, causing Vietnam to import over 10 billion USD of fabrics of all kinds each year.

The main reason is that the type and quality of domestic fabrics are not entirely suitable for the needs of the garment industry, especially for export garments.

18. Regarding tariffs, the pace of tariff reduction of Vietnam and RCEP countries is quite fast in the first year for raw materials, inputs and finished products (fabrics). For example, it decreased from nearly 10% to 2% for fabrics and yarn from 6 to 1.3%. RCEP countries have a slower rate of reduction than Vietnam. RoO in RCEP for the industry is mainly one-stage, relatively loose compared to some previous FTAs of Vietnam (such as the 2-stage rule in VJFTA and EVFTA and the three-stage rule in CPTPP). FTAs between Vietnam and Japan, including VJCEP and AJCEP, all require two-stage rules of origin, meaning that fabrics must be produced in ASEAN or Japan. The 3-stage rules of origin in the CPTPP are even stricter; accordingly, all stages of textile and garment production from yarn onwards, including (i) spinning, weaving and dyeing fabrics; (ii) cutting and (iii) sewing clothes must be done within the CPTPP bloc. With RCEP, Vietnam can import fabrics anywhere; they just need to cut and sew in Vietnam.

19. The trend of shifting the textile industry's supply chains into Vietnam has been evident in recent years when imports of raw materials and textile products tend to decrease/or increase more slowly. In contrast, FDI projects in the production of garment materials tend to increase to take advantage of export expansion opportunities from FTAs (including CPTPP and EVFTA). RCEP will promote the trend of shifting the supply chain to Vietnam even more intensely due to the roadmap of rapid tariff cuts for textile raw materials and finished products. In addition, the RoO for the textile and garment industry in RCEP is relatively flexible, making Vietnam more attractive to foreign investment flows.

20. RCEP also promotes the formation and consolidation of domestic textile supply chains, strengthens the link between yarn and fabric production, and reduces imports from abroad by better identifying the risk of increasing trade deficit from China, when the import tax on input from RCEP is reduced. The impact of RCEP on the textile supply chain can be described as follows:

	Impact of tariffs	*Impact of RoO*
On Import &Export	Increased imports of fibres, yarns and threads from RCEP countries, especially China.	Promote intra-regional exports thanks to reduced trade costs.
	Increased pressure to compete with imported fabrics from South Korea and Japan due to higher quality and decreased import costs.	Diversify the textile export market in RCEP, in addition to traditional markets.
On FDI attraction	The cost of importing inputs into the textile industry decreased, as RCEP countries are the leading suppliers, helping Vietnam attract FDI to downstream production (fabrics and other finished textile products).	

Impact of RCEP on garment supply chain

21. Vietnam currently ranks 4th in the world in textile and garment exports after China, the EU and Bangladesh. In 2021, garment exports reached 32.8 billion USD, up 9.9% compared to 2020, of which FDI exports reached 20.1 billion USD. Of 12,000 enterprises, 87.3% are domestic, and 81.5% are small. FDI enterprises focus mainly on producing finished products (58.7%) and auxiliary materials (32.5%). Vietnam's garments rely heavily on imported fabrics because FDI enterprises, especially big brands, already have their supply chains. Domestic enterprises mainly process foreign firms according to their specified materials and designs.

22. FDI in the garment industry mainly comes from South Korea, Taiwan, China, Japan and Hong Kong. The highest labour productivity in the garment supply chain belongs to enterprises producing accessories and fabrics regardless of the small number of enterprises. On the other hand, the enterprises producing finished products have the lowest labour productivity, except for FDI businesses from Japan and Taiwan.

23. In RCEP, Vietnam and partner countries offer each other relatively large tariff cuts. For garments, the average tax rate that Vietnam applies to partners will be cut more than the rate that other countries apply to Vietnam. Therefore, RoO applied for the textile and garment in RCEP is more flexible than the two-stage RoO in the FTAs with Japan and EVFTA and the three-stage RoO in the CPTPP.

24. Similar to the textile industry, the trend of shifting the supply chain of the garment industry into Vietnam has been more evident in recent years after Vietnam signed new-generation FTAs. Exports of finished garments (clothing) from significant markets in RCEP (China, South Korea) are decreasing or increasing slowly, while exports and FDI are still increasing, helping Vietnam maintain its solid position as the world's top 4 garment exporter. RCEP will help accelerate FDI attraction and shift the garment supply chain into Vietnam by further expanding the export market through tariff reduction measures and flexible RoO, as well as the cheaper import of input materials from significant partners in RCEP.

25. Impact of RCEP on garment supply chain:

	Impact of tariffs	*Impact of RoO*
On Import &Export	Increased pressure to compete with imported fabrics from South Korea and Japan due to higher quality and decreased import costs.	Promote intra-regional exports due to reduced trade costs. Diversification of export markets in RCEP, in addition to traditional markets.
		Promote exports to the Japanese market thanks to more flexible RoO.
On FDI attraction	Improve investment attraction and accelerate the trend of shifting supply chains into Vietnam for raw materials, accessories and finished products of the textile industry thanks to tariff reduction, flexible rules of origin and the advantage of incentives of some other FTAs (EVFTA and CPTPP).	

Recommendations

26. Overall solution: Further promoting the dissemination of information about RCEP, especially the benefits and challenges of the regulations in RCEP from the perspective of shaping supply chains, thereby helping businesses to be more ready in production, business planning and global supply chain participation.

27. Strengthening capacity and accelerating programs to develop supporting industries in Vietnam, especially those facing significant challenges from RCEP due to tariff regulations and harmonisation of rules of origin in Vietnam; attracting selective FDI enterprises, and at the same time embracing suitable forms of protection and support to develop better the component manufacturing industries. Improving the export capacity of Vietnamese

enterprises by boosting exports of Vietnamese commodities has advantages for RCEP countries, thereby promoting accumulation and gradually moving to the higher value-added segment of the market. In the short term, select FDI partners suitable for each specific industry, especially high-tech enterprises and businesses investing in high-value-added upstream products, to take advantage of RCEP rules of origin and upgrade Vietnam's value chain.

28. For the electronics industry: Attract more investment in high-value-added upstream industries, such as electronic chips. Forster trade promotion to diversify export markets to RCEP countries in addition to traditional markets, especially when Vietnam still has a large room for electronic exports to RCEP.

29. For the automotive industry: Promote and facilitate the attraction of FDI from large automobile corporations to specialise in manufacturing components, spare parts and assembling automobile products in Vietnam to export to RCEP countries (focusing on ASEAN market, specifically export components, spare parts and modules to ASEAN countries who already have a more developed automotive industry such as Thailand, Malaysia and Indonesia, while export cars assembled in Vietnam to Myanmar, Laos, Cambodia and the Philippines. At the same time, it combines with trade promotion to further expand the export market. Furthermore, take advantage of the strategy of diversifying the production of auto parts abroad to export back to Japan by attracting Japanese FDI enterprises to produce auto components and spare parts in Vietnam.

30. For the textile industry, strengthen links between stages in the supply chain of textile products, from fibres and yarns to producing fabrics and other finished products, particularly focusing on upgrading the fabric-producing industry, encouraging investment in modern technology to produce high-quality fabrics using domestic fibre materials. Support domestic enterprises to effectively participate in the textile supply chain, reducing the gap in technology level with foreign countries. For other textile products, encourage investment in producing high-tech textiles such as protective outfit, products used in healthcare and sports with clearly defined standards to improve Vietnamese textiles' competitiveness and added value.

31. For the garment industry, attracting more investment from world-famous branded garment corporations, thereby attracting suppliers of these firms to

Vietnam to produce high-quality raw materials, reducing the trade deficit and improving added value for the economy.

INTRODUCTION

1. Context

1. The Regional Comprehensive Economic Partnership (RCEP) is a free trade agreement signed between ASEAN and five partner countries (Australia, China, Japan, the Republic of Korea and New Zealand). RCEP creates a free trade area with a market of over 2.2 billion people, accounting for 30% of the global population. The region shares a total GDP of USD26.2 trill., equivalent to 30% of GDP, and accounts for 28% of global trade. RCEP is expected to create a new trade structure and form Asia's largest regional value chains and supply chains.
2. RCEP is a large FTA with features designed to support global value chains. It has some advantages compared to bilateral FTAs. From a value chain perspective, bilateral FTAs only lower barriers between two economies, not providing much support for complex value chains that involve several countries. In addition to pursuing a multilateral approach, RCEP includes many new features, including a uniform RoO and transitioning from a positive to a negative list approach in investment and service liberalisation. These

factors create new impetus in the agreement's implementation and create impacts that differ from those of other FTAs.

- Firstly, in terms of partners, RCEP is one of the few FTAs covering most regional economies, except for India, Taiwan (China) and Hong Kong. This is a big advantage of RCEP compared to other major regional FTA; for example, the CPTPP does not cover China, South Korea and much of the ASEAN. Accordingly, instead of just liberalising a bilateral relation, RCEP unlocks regional supply chains.
- Secondly, RCEP provided a standard and harmonised set of commercial rules. In complicated chains, the different regulations defined by different partners have created complicated and large transaction costs for businesses. By creating a unified set of rules, the RCEP significantly reduces these costs, encouraging the development of deeper supply chains. For example, currently, there are differences in the RoO for each bilateral FTA, which complicates trade in the supply chain. RCEP helps solve this bottleneck on a unique basis. This allows products to be exchanged more efficiently and reduce business compliance costs.
- Thirdly, RCEP liberalises many "beyond border" regulations that affect trade. RCEP consists of chapters with 14 policy areas, all based on existing minimum standards defined in WTO. The most important is the investment provision, in which the RCEP members agreed to the negative list approach for market access. For many RCEP members, this is the first time they have committed to this approach. The fact that the whole RCEP bloc makes investment open in such a way will help the region become more attractive to cross-border value chain investments.

3. The recent assessment reports on the impact of RCEP (Park et al., 2021; WB, 2022) have pointed out that the Agreement creates many positive impacts on the regional economy. By 2030, it will increase the income of the whole region by about 0.6%, equivalent to an increase of USD245 billion per year and create 2.8 million jobs. In addition, countries with export-oriented growth will gain more. Vietnam also is specified as one of the largest gainers in RCEP. The World Bank's research (2022) estimates that the country's GDP will grow by about 4.9%, and exports will increase by 11.4% by 2030.
4. However, other analyses (Pettri, 2018; CIEM, 2022) show that RCEP would pose many challenges for Vietnam. The benefit from tariff reduction is not large

because Vietnam has been enjoying this within ASEAN+6 FTAs and already implements various bilateral and multilateral FTAs with regional countries such as VKFTA, VJFTA, and CPTPP. Moreover, the unified RoO in RCEP may stimulate the import of intermediate goods, especially from China, which could discourage the supporting industries' development and hinder the country from further joining the supply chains. Besides, issues related to trade and investment diversion from major economies in RCEP are also worth mentioning. Those impacts and the volatility of major regional trends reshape Vietnam's supply chains. However, most research has focused on quantifying RCEP's impacts on economic growth, trade, investment, employment, or institution. In contrast, there have been few analyses on RCEP and supply-chain shaping in Vietnam, even though this is an important aspect which needs to be further explored to provide policy recommendations in the medium and long term to help Vietnam participate more deeply in regional and global value chains and supply chains.

5. The National Centre for Socio-Economic Information and Forecast (NCIF), Ministry of Planning and Investment, and Konrad Adenauer Foundation (KAS Vietnam), conduct this research to clarify the impacts of RCEP on the supply chain in Vietnam. The re-shaping of supply chains depends on many factors, such as changes in trade and investment patterns, economic fluctuations, geopolitics, technological developments, and regional bilateral and multilateral trade and investment agreements. Therefore, assessing the trends of supply chains requires an integrated, multidimensional and rather complicated approach. Within the framework of this report, the research team does not intend to provide analysis on the formation and development of Vietnam's supply chains in general but to focus more deeply on the impact of only RCEP. Even with this agreement, many different commitments may imply reshaping the supply chain, such as tariff reduction, origin of goods, investment protection, intellectual property, business development, and commitments of other partners in RCEP to each other. The report focuses on the first two factors, which are to examine the tax reduction roadmap and the harmonisation of RoO, to point out the potential impact of these provisions in the RCEP on shaping Vietnam's supply chains.

2. Methods and approach

6. The primary method of this report is based on the value chain and supply chains analysis approach, which divides the production of goods into different

stages, from raw materials to intermediate goods, semi-final and assembling final products. Based on the analysis of the tariff reduction schedule of intermediate goods and final products between Vietnam and other RCEP countries, and among RCEP countries, along with the impact of RoOs and FDI and local firms' capacity evaluation, the team concludes (quantitative) positive and negative impacts on Vietnam from the supply chain perspective. Besides overall analysis, the report focuses on a deep analysis of the supply chain of four sectors that Vietnam is deeply involved in the supply chain (textiles, garments, automobiles and electronics products). These are types of goods that have been discussed heavily in studies on the supply chain in Vietnam. Though garments and textiles are often incorporated into one sector, they are divided into two in this report due to the difference in technology, goods features and policy implications. Calculations on tariff reduction are made for the period from now until 2045, while another analysis is made for the period from now until 2030.

7. Data from WITS, UNCOMTRADE and the roadmap for tariff reduction according to the HS code of the RCEP will be used for analysing and evaluating goods trade flows. The survey data of firms by the General Statistics Office in 2019 will also be used to assess the capacity and investment flows of firms in the segments of the chain, focusing on the analysis of the criteria, including the number of participating firms, total contributed capital and labour productivity.

3. Structure of the report

8. The report is divided into two main sections. In the first section, the research team focuses on an overview of commitments in RCEP related to the supply chain, an overview of the theoretical framework of the impact of a free trade agreement on the supply chain of participating countries, and an overview of the trade and investment of Vietnam and RCEP partner countries. This section provides a foundational basis for analysis in the next section, which focuses on an analysis of the RCEP's impact on the supply chain of some important sectors of Vietnam (focusing on automobiles, electronics, textiles and garments). Finally, the last part of the report offers some conclusions and recommendations for Vietnam to enhance its ability to participate in the supply chain in the medium and long term - a goal that has been set.

9. The report was made under the direction of Dr Luong Van Khoi, Deputy Director of NCIF, and a research team led by Dr Tran Toan Thang (team leader) and members, including Dr Nguyen Doan Trang, MA. Nguyen Thi Hoang Yen, MA. Le Thi Minh, MA. Ta Xuan Quang, Ta Hoang Anh and other members of the NCIF's Department of Industrial Forecasting and Enterprise Development. The research team is sincerely thankful for the comments and contributions of Dr Nguyen Thi Thu Trang - Director of the Center for WTO and Integration - VCCI, Assoc. Prof. Dr Nguyen Anh Thu - Vice Rector of the University of Economics & Business, Vietnam National University, Hanoi, Ms Trinh Thi Thu Hien, Head of Origin Goods Unit, Agency of Foreign Trade, Ministry of Sector and Trade and many other comments from representatives of associations and experts in the consultation workshop held in Hanoi, November 10, 2022. Special thanks go to Konrad-Adenauer Foundation (KAS Vietnam) for their valuable support in making this report possible. Due to the complexity of the research topic, short time frame, and limited information, the report may still have many limitations. All comments should be sent to the representative of the research team, Dr Tran Toan Thang: email: trantoanthang@mpi.gov.vn; phone number: 0898981172).

Our sincere thanks,
Research team

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SECTION 1: OVERVIEW

I. SOME KEY COMMITMENTS IN RCEP

1.1. Tariff elimination commitments

10. The tariff elimination schedule is different from country to country in RCEP. Vietnam has 06 tariff commitments with 06 countries/groups of countries, including ASEAN, Japan, Australia, New Zealand, China and South Korea. The longest roadmap for tariff commitments of Vietnam and other countries in the RCEP is 25 years. Currently, the existing FTAs under ASEAN+6 have tariff liberalisation at a relatively high level. RCEP builds on such existing tariff reduction commitments and eliminates about 90% of import duties within 20 years from the date of entry into force of the Agreement. In general, tariff liberalisation in RCEP is slower than in other FTAs, but there are still some notable points:

- 63.4% of tariff lines will be zero as soon as RCEP comes into effect, and 89.7% of tariff lines will be fully liberalised in the 21st year;
- RCEP is more vulnerable to non-agricultural products than CPTPP;

- Tariffs on capital goods (especially machinery), intermediate goods (especially chemicals) and raw materials (some base metals such as nickel) are cut rather quickly compared to that for consumer goods, agricultural products, and transport equipment.

1.2. Non-tariff commitments

11. RCEP provides provisions for harmonising and simplifying RoO and the self-issuance of certificates of origin. The rules include provisions that allow the accumulation of originating materials from any country member of the agreement, as well as continuing to be included in the originating material of final goods and taking advantage of RCEP's preferential tariff rates when trading among the agreement members. In addition, the mechanism of self-issuance of RoO certificates will be applied by Vietnam and most member countries (except Laos, Cambodia, and Myanmar) no later than 10 years from the date RCEP takes effect.

12. Food sanitary and phytosanitary measures (SPS) and technical barriers to trade (TBT) comply with the principles of the WTO, clearly defining the important role of transparency and the scientific basis in the formulation and application of measures. SPS is not covered by the RCEP Dispute Settlement Mechanism and emphasises the need for mutual recognition and understanding of TBT exchange of information and cooperation in this area, as well as cooperation and technical consultation in resolving implementation-related issues.

13. RCEP also includes commitments to trade facilitation and the implementation of customs procedures, standards, and technical regulations. Specifically, it provides transparency and simplification of customs procedures, as well as timely disclosure of information on the Internet; measure and publish the results of the time for releasing goods; use information technology to support customs operations based on internationally accepted standards for fast-tract customs clearance; facilitate trade for "authorised economic operators," and allow negotiation for mutual recognition of "authorised economic operators." Meanwhile, the complaints and appeals provisions give any individual to whom a customs authority has made a non-discriminatory administrative decision within its territory the right to complain and protest.

1.3. Investment liberalisation and protection commitments

14. The principles of investment liberalisation in RCEP are of a high standard, similar to those in the CPTPP and EVFTA, and far beyond the current commitments of the WTO. The group of investment liberalisation principles in RCEP covers most of the core contents of this issue in recent modern and new generation FTAs, including national treatment (NT) principles, most-favourable nation (MFN) treatment, operational requirements, and principles on senior personnel. As for market access (the opening of trade in services, including mode 3 - commercial presence - which is foreign investment in the service sector), both the "positive approach" and the "negative approach" are applied. Eight out of 15 RCEP member countries opted for the "positive approach" in the transition period, including Cambodia, Laos, Myanmar, New Zealand, the Philippines, Thailand, China, and Vietnam. In comparison, seven out of 15 countries opened their doors under the "negative approach" from the beginning, including Australia, Brunei, South Korea, Indonesia, Malaysia, Japan, and Singapore. The transition period applied to countries that are open under the "positive approach" is six years from the date of entry into force (it is 15 years for Cambodia, Laos, and Myanmar).

15. Regarding performance requirements, RCEP stipulates that the parties do not provide performance requirements (export rate, local content ratio, constraint of quantity or import value with the quantity or value of exports or foreign currency earnings associated with such an investor's investment, technology transfer requirements, etc.) for investors as conditions for market entry or expansion of operations in RCEP. For investment protection, The Investment Chapter sets out regulations allowing investors to legally transfer money related to their investments abroad and does not allow forfeiture/confiscating of investors' property, except in some force majeure cases. Investors are granted national treatment (NT) and most-favourable nation (MFN) treatment. Regarding intellectual property rights protection, the highlight of RCEP is focusing more on the balance between rights and obligations to prevent the abuse of intellectual property rights. The intellectual property rights chapter in the RCEP covers many aspects, such as copyright, trademarks, geographical indications, patents, industrial designs, genetic resources, traditional and folklore knowledge, and domain names. The intellectual property rights commitments in the RCEP are comprehensive

and at a higher level than those in other ASEAN agreements (such as the ASEAN+1 Agreement).

II. OVERVIEW OF THE INFLUENCES OF FTAS ON SUPPLY CHAINS

2.1. Impacts of tariff elimination

16. Literature review shows that reducing tariffs in FTAs positively affects reshaping supply chains. According to the IMF (2022), tariff reductions and improvements in transport and communication technologies have contributed to the closer integration of production. Tariff elimination can impact supply chains in various ways:

- Firstly, by lowering costs and improving input quality, tax reductions on intermediate inputs can help businesses increase their exports. Research by Feng et al. (2016) shows that China's export success is partly due to cheaper imported intermediate goods, and businesses also have access to better-quality inputs. Since China joined the WTO, businesses there have experienced higher export growth than those without. This is because these businesses benefit from the lower taxes on intermediate inputs.
- Second, the impact through productivity improvement. Many studies demonstrated that the productivity gains from tax reductions on intermediate inputs are very large. Two studies (Khandelwal, 2011; Konings, 2007) for India and Indonesia both showed that the impact of input tax cuts on firm productivity is larger than the impact generated through tax reductions on final goods. The IMF's study (IMF, 2021) also shows similar results. Among the four different supply chain-related tariffs, which include tariffs on intermediate products, downstream tariffs, protection tariffs on domestic production, and diversion tariffs[1], the upstream and downstream tariffs strongly influence the value added

[1] The imposition of upstream tariffs - taxes on intermediate inputs that are directly imported, including taxes already applied at previous production steps - will make inputs more costly and is considered a negative shock for the supply side. Meanwhile, the imposition of tariffs on downstream products (downstream tariffs), whether on intermediate or final goods, also makes the country's output more expensive, leading to a decrease in demand. Diversion tariffs (taxes that a partner country imposes on other countries) cause trade restrictions on competitors, so an increase in tariff measures will boost demand for that region/country.

from the supply chain. Relatively lower tariff barriers than competitors (imposed by higher diverting tariffs) also support the supply chain. Similarly, labour productivity is also most strongly affected by upstream and downstream tax rates.

- Third, the impact through investment attraction, whereby reducing upstream tariffs affects investment downstream (Acemoglu, 2016). On the one hand, tariff reductions in the upstream could lower input costs for downstream production, leading to more investment. On the other hand, lower tariffs may expose suppliers to more foreign rivalry, raising the risk of supply chain disruptions, which can discourage investment. The first channel of impact may be greater than the second, depending on different contexts.

17. For downstream tariff reductions, the benefits are not equal across industries but depend on factors such as the level of research and development (R&D), concentration and financial resources of the sector. In particular, tariff reductions in upstream industries lead to a stronger response of investment in downstream manufacturing sectors to homogeneous goods (e.g., cement) rather than diversified goods (such as industrial machinery). Similarly, tariff cuts in the upstream only affect downstream industries with low R&D. These findings suggest that companies using homogeneous inputs, with low R&D content, gain more from tax reductions in the upstream than those using heterogeneous inputs with high R&D content. Some implications for investment from the findings are that the nature of inputs is an important determinant of the extent to which economic shocks are transmitted through the supply chain. An increase in downstream investment after tariff cuts in the upstream is mainly due to low input costs, meaning there is a tendency to attract FDI inflows taking advantage of lower input costs rather than FDI flows with high technology.

18. Some other analyses (Clemens A. 2021) also showed that the response to upstream tariff reductions is stronger if input costs account for a larger share of the total expenses of downstream firms and if revenue from firms' capital is more sensitive to upstream tax breaks. The response is also stronger in more concentrated downstream industries, meaning companies have more bargaining power over suppliers and customers. Finally, the increase in investment after the reductions in upstream tariffs occurs only for downstream firms that are not financially constrained. This result suggests

that financial contradictions play an important role in the magnitude of the impact of upstream tariff reductions on rising downstream investments.

19. In addition, according to Miroudot (2013), it is also important to note that one should not only look at the tariff reductions of a particular transaction or agreement but rather pay attention to the accumulation of tariffs in the supply chain. Although tariff cuts have a cost-reducing effect, the lower trade fees encouraged businesses to fragment their production processes further. As a result, products move across borders more often and, therefore, are affected by cumulative tariffs. UNCTAD (2013) said that even small tariffs could significantly impact trade due to their cumulative effects. Taxes are not only imposed repeatedly because intermediate inputs are exchanged across borders many times, but downstream firms also face tariffs on the entire value of their exports, including imported inputs and previously refunded tax. As a result, when finished goods are available to customers, they have accumulated a significant tax. If the foreign content accounts for most of the value of the goods, even a small tax rate has a significant effect.

2.2. Impacts of rules of origin (RoO)

20. RoO is a trade policy instrument that affects the investment decisions and exploitation of external resources of firms; however, the impact of RoO on investment flows has not received much attention. Cordova (2006) developed theories on the impact of RoO on FDI. RoO can be divided into two groups: strict RoO and flexible RoO. Strict RoO requires manufacturers to use internal inputs rather than source inputs from the global market, while flexible RoO requires easier criteria of origin, such as a lower RVC regional value content requirement or not requiring all production steps to take place within the FTA region. From this classification, there are several reasons why RoO helps attract FDI inflows:

    - First, strict downstream RoO can help promote FDI as it can force downstream producers to use supplies within FTAs, even if supplies in other countries outside the bloc come at a lower price. Strict downstream RoO makes FTA-based intermediate producers more profitable, attracting intermediate producers to move to the FTA region. Moreover, RoO could alter the comparative advantage between an FTA member and a non-member, essentially expanding the number of intermediate goods produced in the FTA, even if the FTA area is not a globally efficient

production site (Rodiriguez 2001). As a result, FDI can flow into "new" intermediate goods industries - industries in which FTA partners do not have a comparative advantage outside the FTA. In short, RoO can promote both more diversified production and intermediate goods in the FTA, which is expected to help attract more FDI.

- Second, for flexible and non-binding RoO, the provision facilitates investment in downstream industries and imports from both outside and within the FTA. Investors are more favourable to a flexible RoO even if internal suppliers are in the FTA (investors have more options for hedging purposes with the internal suppliers and/or the risk of a technology shortage within the FTA). Flexible RoO is appropriate for (1) industries where links between different production stages in the sector are tight, causing downstream manufacturers to have difficulty identifying components and suitable input suppliers to create new contracts in the FTA, even if they have located production there, and (2) industries where production chains cannot be easily divided so that production can be distributed within and outside the FTA area in a cost-effective manner, which means moving only activities that meet RoO to the region covered by FTAs.

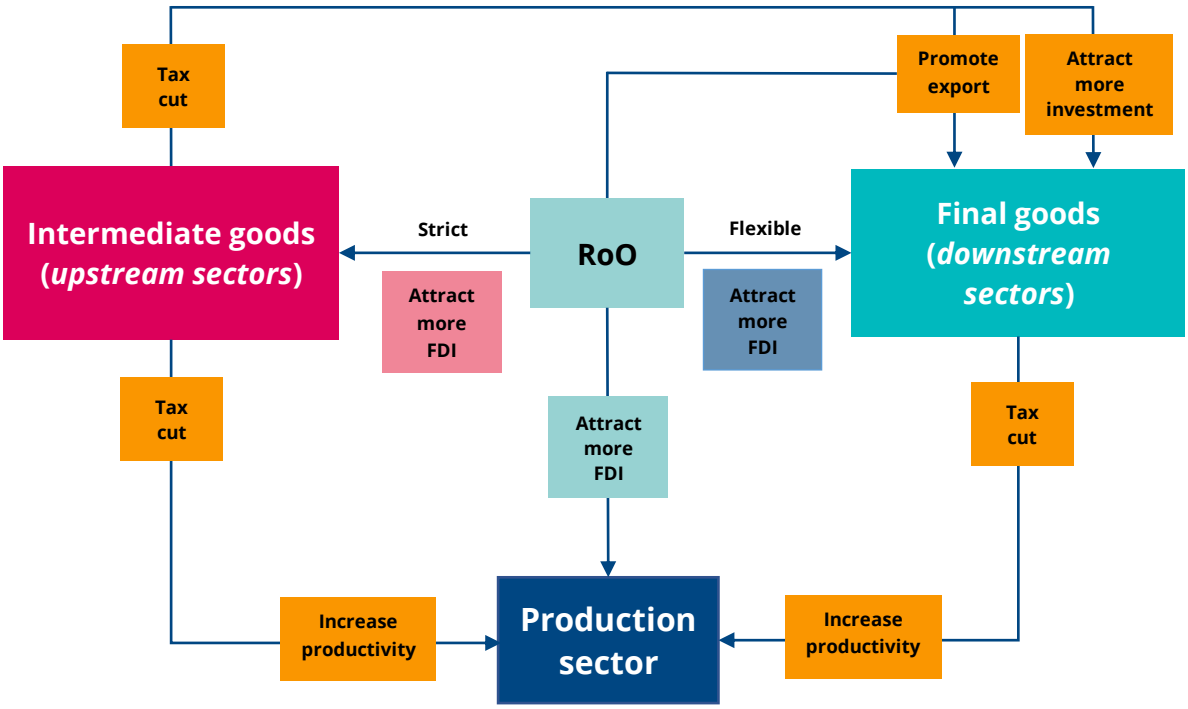
21. Just as upstream investors are interested in RoO commitments for downstream industries, a potential investor in downstream industries may be interested in "upstream" RoO. For example, strict RoO commitments in upstream industries that supply downstream industries may signal to downstream investors the presence of an uncompetitive upstream supplier, with no ability to access low-cost inputs from other sources. Furthermore, the strict RoO commitments for upstream industries may be seen by downstream investors as an alternative to high tariffs on upstream industries from the outside, another signal of the presence of inefficient suppliers that can further complicate investors' ability to access efficient and affordable sources of supplies outside the FTA area. In summary, downstream industries are incentivised to invest in an FTA region when RoO commitments for their industries and upstream industries are more flexible.[2]

[2] Regarding empirical results, in the study of NAFTA, the authors (Paola and her co-workers) also pointed out that RoO in NAFTA plays a central role in assessing the costs of foreign investors when shifting production activities to Mexico, and FDI into Mexico after NAFTA did indeed flow into industries with flexible RoO

2.3. Analysis framework of RCEP's impacts on supply chains

22. Based on theoretical studies, the analytical framework of this study is built according to the map below. Accordingly, RCEP can affect the supply chain of Vietnam through two main channels: reduction of tariffs and RoO. Reducing tariffs on intermediate inputs (upstream) leads to expanding downstream export production, leading to stronger downstream investment. Similarly, downstream tariff cuts stimulate both upstream and downstream investments.

Figure 1: Analysis framework map



Source: The research team.

a) Given other factors constant, if RCEP countries' tariffs on consumer goods exported from Vietnam ($CC_{RCEP->VN}$) are cut faster than the rate of import tax on intermediate goods into Vietnam ($TG_{VN->RCEP}$), it can promote investment flows (including FDI) into the field of intermediate goods production. In other words, the supply chain of input goods in Vietnam would develop more favourably, and the chain would shift upstream.

commitments. However, flexible RoO in downstream industries will encourage investment in upstream industries. Both findings indicated that as a result of flexible RoO, effective and internationally competitive businesses invested in Mexico's final goods and intermediate manufacturing sectors during the NAFTA era.

b) On the contrary, if $TG_{VN->RCEP}$ is reduced faster, it stimulates the import of intermediate goods instead of developing the supply chain and simultaneously stimulates a more concentrated production chain downstream. In that case, the labour productivity of downstream firms increases thanks to the return of scale, while downstream investment also grows. The chain shifts more downstream. However, the specific fluctuations depend on the proportion of exports of final consumer goods outside the bloc and the rate of reduction of other FTAs that Vietnam participates in.

c) The impact of RoO depends on commitments with specific commodity groups at different levels of flexibility (tight vs flexible RoO). However, it should be noted that accumulative RoO increases the possibility of enjoying preferential tariffs on goods entering Vietnam; in other words, it makes imported goods cheaper. In the case of intermediate goods, the chain develops downstream instead of upstream. In the case of consumer goods, it adversely affects downstream chain development due to competition in the domestic market.

23. In addition, other commitments could also affect the supply chain. The summary from UNCTAD (2013) shows some possibilities as follows:

Table 1: Impact mechanism of RCEP on GVCs

Mechanism	*Related commitments*	*Impacts on intra-regional trade and investment*	*Impacts on foreign trade and investment*
Trade and investment liberalisation and/or protectionist provisions	Chapter 2: Trade in Goods; Chapter 4: Customs Procedures and Trade Facilitation; Chapter 5: Sanitary and Phytosanitary Measures; Chapter 7: Trade Remedies; Chapter 8: Trade in Services; Chapter 9: Temporary	Facilitating the promotion of GVCs through investment flows from regional investors, including third-country investments already operating in the region.	Facilitate the promotion of GVCs by increasing investment flows from traders and investors from third countries who have not yet operated in the region.

	Movement of Natural Persons; Chapter 10: Investment Chapter 19: Dispute Settlement		
Trade, investment and market integration	Chapter 3: RoO; Chapter 6: Standards, Technical Regulations, and Conformity Assessment Procedures	Reshaping supply chains at the regional level, including trade, investment (or divestment), and outsourcing (or repatriating operations).	Attracting trade and investment from third countries through market expansion.
Harmonisation of policy	Chapter 11: Intellectual Property; Chapter 12: Electronic Commerce; Chapter 13: Competition; Chapter 16: Government Procurement	Incentivise supply chains by reducing transaction costs and risks.	Promote GVCs by attracting investment capital if harmonisation is applied to third countries' traders and investors.
Others	Chapter 14: SMEs; Chapter 15: Economic and Technical Cooperation	Create platforms for GVCs through trade and investment opportunities.	

Source: ASEAN-Japan Centre (2022), UNCTAD (2013)

III. VIETNAM'S TRADE AND INVESTMENT WITH RCEP

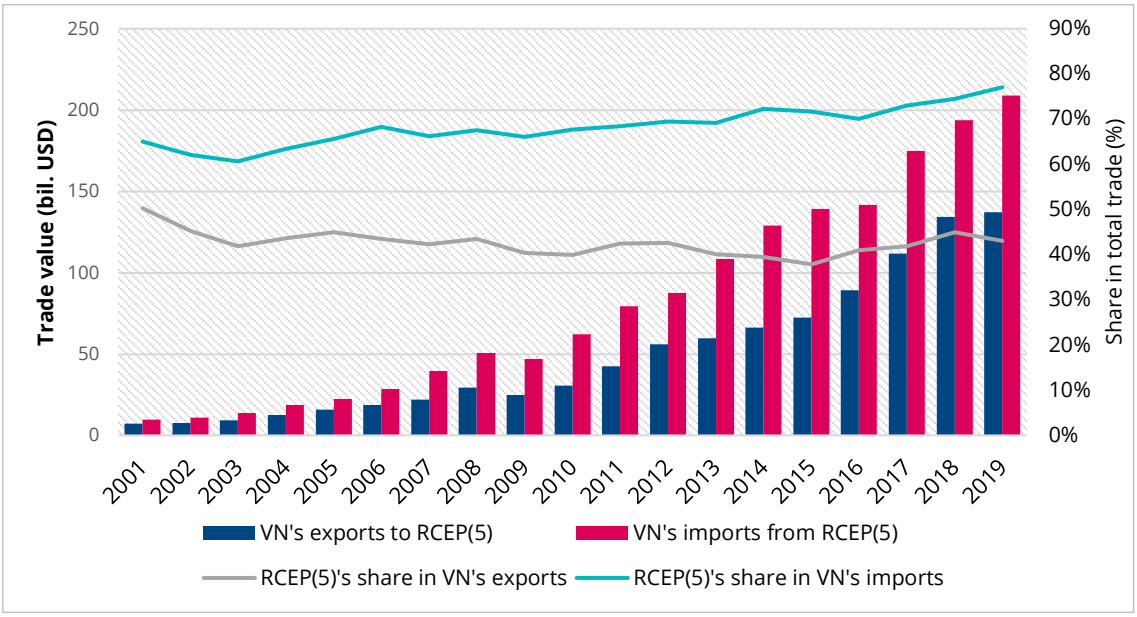
3.1. Trade relations between Vietnam and other RCEP countries

24. Trade between Vietnam and RCEP countries has continuously increased at the same time with an increasing trade deficit (from USD32 billion in 2010 to over USD70 billion in 2019). The share of RCEP imports in total import turnover in Vietnam has steadily increased, from 65% in 2001 to 77% in 2019, while the share of RCEP in total exports has declined from 50% to 43% during the same period, despite an 18% gain in absolute value, indicating that RCEP is gradually becoming a major source of export production outside RCEP of Vietnam (Figure 2). This is also reflected in the product structure between Vietnam and RCEP. Capital goods for production account for a large proportion of Vietnam's imports, while the proportion of these goods exported to RCEP has also tended to increase in the past decades. At the end of the 2000s, nearly 50% of Vietnam's exports to RCEP were raw materials and consumer goods, but recently, the proportion of capital goods has risen to about 30%, while the market share of raw materials has plummeted to about 10%. Meanwhile, the RCEP's share of Vietnam's imports has not changed much in the past two decades. Capital goods accounted for the highest proportion of imports, with a gain from 30% to over 40%, whereas the share of imports of other goods decreased slightly (Figures 3 and 4).

25. Commodity trade between Vietnam and the RCEP is also on the rise, with a greater emphasis on capital- and technology-intensive goods. Figure 4 shows

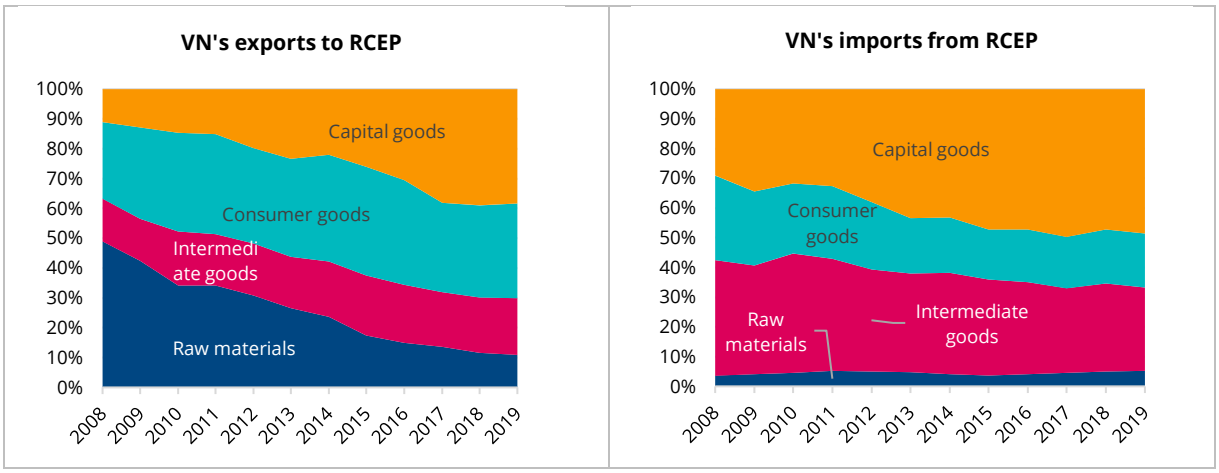
that though fuel was Vietnam's main export item to RCEP in the late 2000s, it has declined sharply in recent years and has been replaced by electronic products, computers, and electrical equipment. Textile and vegetable products still maintain their market shares. Imports see a similar trend, as electronic products and electrical equipment account for an increasing share of Vietnam's total imports from RCEP, while some products still maintain the same proportion as before, such as metals, textiles, plastics, rubber, and chemicals.

Figure 2: RCEP's share in Vietnam exports and imports



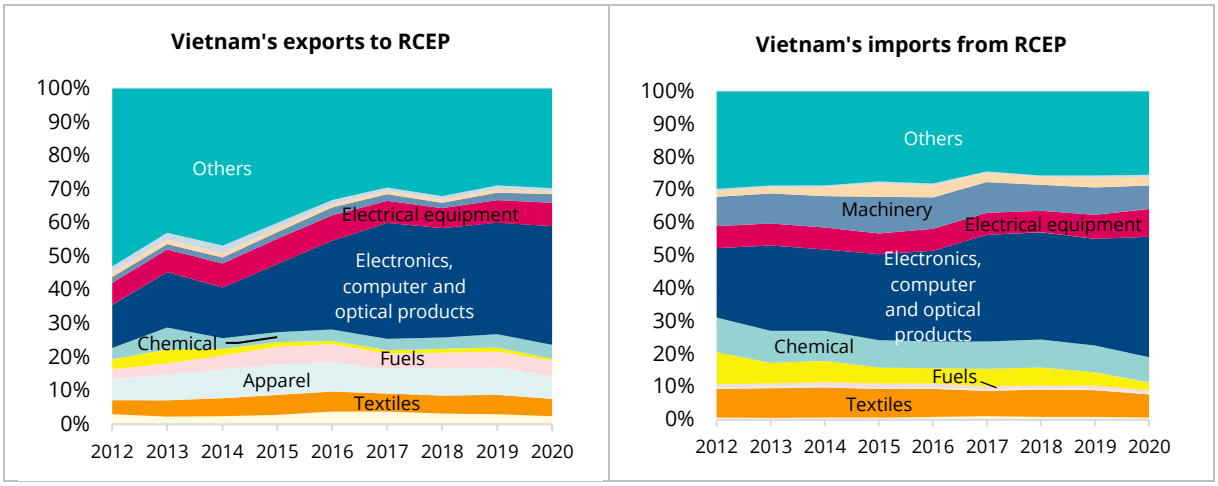
Source: ITC Trademap.

Figure 3: Trade between Vietnam and RCEP by classification of goods (%)



Source: UN Comtrade, UNCTAD commodity classification.

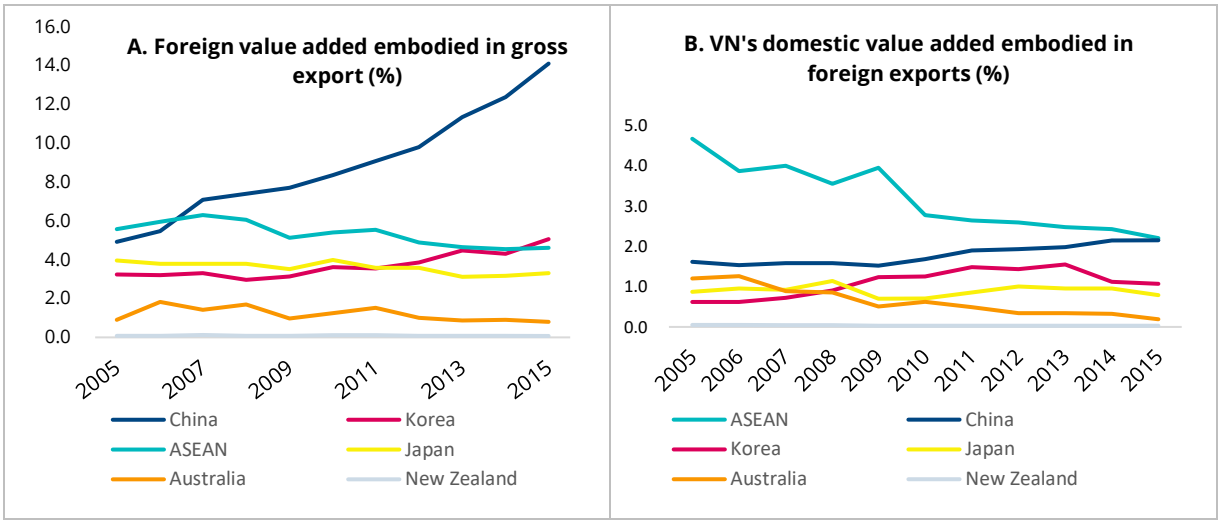
Figure 4: Trade between VN-RCEP by sectors (%)



Source: Calculations based on data from WITS.

26. Vietnam's participation in GVCs is relatively low, with a higher level of backward participation implying that Vietnam's exports have a higher and rising import content. Meanwhile, Vietnam's value added (VA) (through forward participation) on foreign exports has a lower level and has gradually decreased, from 9% to 6.4% in the same period. Calculations showed that among RCEP members, China is the only country that has contributed to the gains in both the share of foreign VA in Vietnam's total exports (Figure 5, table A) and the domestic VA (of Vietnam) in foreign exports (Figure 5, table B). Notably, Vietnam's forward participation with China has also advanced, which means that Vietnam has been exporting intermediate products with more domestic content to China. However, for other partners, the rate of forward participation is not only low but also dropping. This shows that in the Vietnam's exports pattern to the RCEP, the VA on intermediate products does not improve much.

Figure 5: Foreign value added and domestic value added



Source: Calculations based on data from TiVa.

27. Calculations from OECD TiVA data show that RCEP countries account for nearly 60% of Vietnam's intermediate input imports for the primary production sectors in which Vietnam involves in GVCs.[3] However, the focus is on three principal partners, including China (27.5%), Japan (10.4%), and South Korea (9.2%). The rate is extremely high for some key industries, such as automobiles, motorcycles, textiles, wood, paper, leather, and footwear. Most of the remaining industries, except seafood, have an import rate of intermediate goods from RCEP above 50%. In the electronics sector, China provides 41.4% and Korea 11.6%. For the automobile and motorcycle industries, Vietnam imports 83% of intermediate inputs from RCEP, while Japan alone accounts for 69% of total imports of this item. It is similar to the textile sector.

[3] Including: electronics, computers and optical instruments; textiles, leather and footwear; rubber and plastic products; automobiles, motorcycles; machinery, equipment; electrical equipment; metals and metal products; chemicals, pharmaceuticals; wood, paper and products; rubber and plastic; agriculture, forestry; and fishing and aquaculture (excluding services).

Table 2: Imports of intermediate inputs by markets (%)

	China	*Japan*	*South Korea*	*ASEAN*	*Austra -lia*	*RCEP*	*Outside RCEP*
Electronics & optics	41.4	0.3	11.6	5.4	1.5	60.2	39.8
Rubber & plastic products	4.9	14.6	7.5	9.0	2.0	38.0	62.0
Textiles, footwear	44.8	7.1	12.6	5.7	1.2	71.4	28.6
Wood, paper & products	29.2	15.9	17.0	8.1	1.8	72.0	28.0
Chemicals, pharmaceuticals	35.8	7.6	7.2	11.7	0.4	62.8	37.2
Basic metals & metal products	6.5	10.9	7.0	15.0	2.0	41.4	58.6
Machinery, equipment	12.1	31.8	4.6	6.5	1.2	56.0	44.0
Agriculture, forestry	36.1	3.7	2.8	8.0	0.6	51.2	48.8
Automobiles	5.3	69.4	3.1	4.7	0.1	82.5	17.5
Electrical equipment	25.4	18.9	10.2	11.4	1.1	66.9	33.1
Food, beverages	22.8	5.9	10.0	13.2	2.8	54.8	45.2
Seafood	8.3	3.2	1.8	0.8	0.1	14.1	85.9

Source: Calculations based on TiVA data.

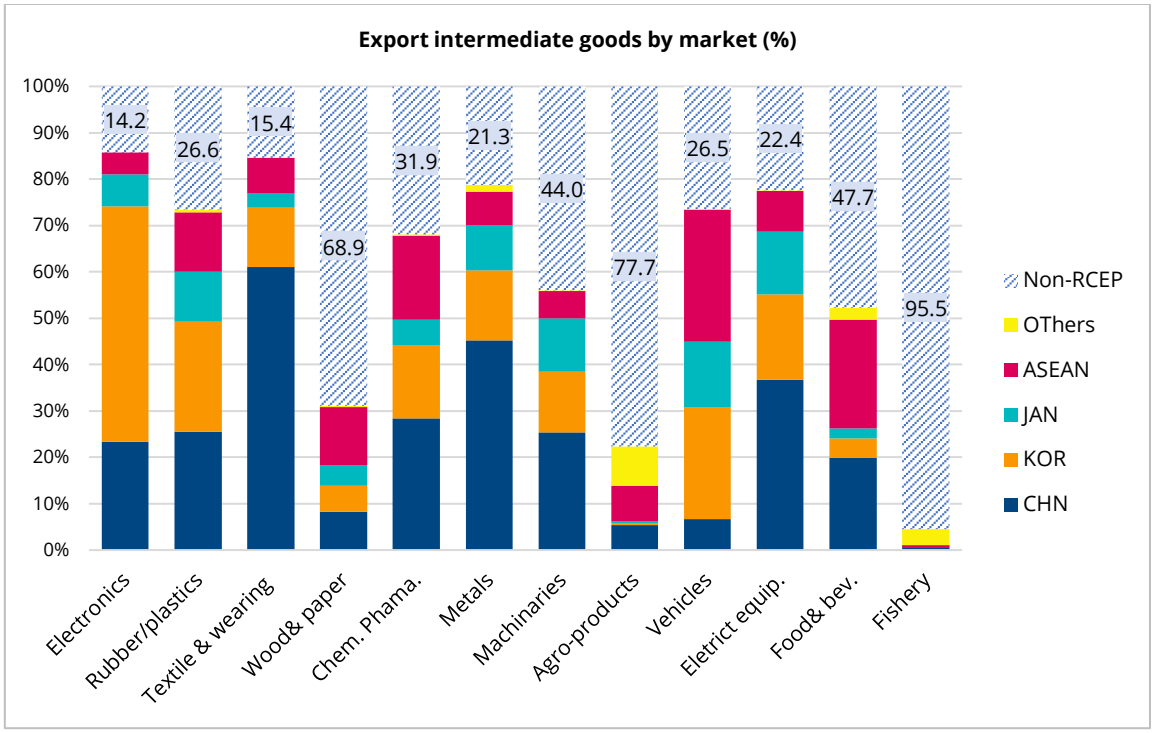
28. The three countries mentioned above are also major export partners for intermediate goods. China accounted for 34.5%, South Korea 16.6%, Japan 7.4%, and Taiwan (China) 6.3%, followed by the US with 5.5%, ASEAN countries, EU countries, and some South American countries. RCEP countries accounted for 71.1% of Vietnam's total exports of intermediate goods in key industries where Vietnam participated in GVCs in 2018, showing that Vietnam is actively participating in GVCs with East Asian countries as an intermediary input provider.

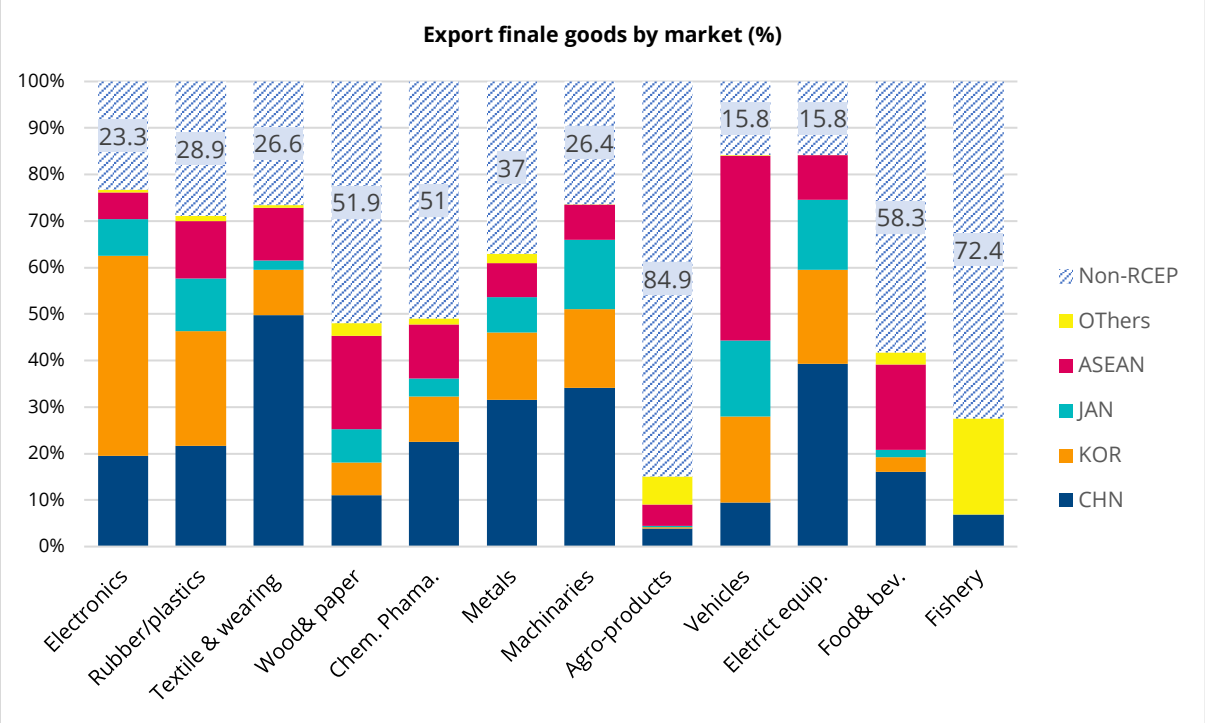
29. Many Vietnamese industries have a proportion of intermediate goods exporting to RCEP of over 80%, including electronics, textiles, automobiles, electrical equipment, rubber and plastic. Vietnam exports intermediate goods mainly to Korea (48%) and China (22%) in the electronics, computer, and optical equipment industries. For the automobile sector, it exports mainly to Korea (27%), Thailand (26%), and Japan (16%). For the textile sector, Vietnam depends on the Chinese market (30%), South Korea (28%), and Japan (13%). Vietnam's export market share to countries outside the RCEP is quite low, and

the main markets are Taiwan (China) and the US in several industries such as electronics, textiles, chemicals, machinery and equipment.

30. RCEP countries account for 64.5% of the final goods export market share for key export products of Vietnam. Vietnam's three largest export partners besides the EU and the US are China, South Korea, and Japan. In the electronics sector, RCEP accounts for 76.7% of the export market share, of which South Korea is the main market (43%), while ASEAN has a negligible proportion. There are several major partners for countries outside of RCEP with specific industries. For instance, RCEP holds a 74.3% market share in the textile sector, of which nearly 50% is exported to China. Besides RCEP, the territory of Taiwan (China) (China) holds the largest market share (7.2%), followed by the US (3.4%) and India (3.3%). Similar to other sectors, key partners are very different, but in general, RCEP still plays a fairly large role, except for fisheries, agricultural products, food and beverages (Figure 6).

Figure 6: Vietnam's export to RCEP (%)





Source: Calculations based on data from OECD, TiVA (2021).

3.2. Investment relations between Vietnam and RCEP

31. RCEP is a region that attracts large amounts of FDI while also investing greatly within the bloc. In 2021, total FDI reached USD 174 billion, of which China, Singapore, Indonesia, and Vietnam were on the list of economies attracting large net FDI. Regarding intra-regional investment, RCEP countries account for 40% of FDI inflows into ASEAN. According to data from fDi Markets, Japan has been the main source of capital in the new investment sector in the region, followed by peers in South Korea, Singapore, and China. For Vietnam, RCEP members are the leading investors regarding the number of projects and total registered capital. By the end of 2021, RCEP had more than 22,000 investment projects in Vietnam with registered capital of USD 255 billion, accounting for 62.5%. South Korea and Japan are Vietnam's two largest foreign investors, focusing on electronics and automobile manufacturing. As for the sector, the accumulated FDI in the process manufacturing sector by the end of 2019 accounted for about 48% of RCEP's total FDI into Vietnam. In particular, FDI in the electronics, apparel, automobile manufacturing, and textile industries is among the top 7 industries attracting the largest FDI from RCEP.

32. There are a few noteworthy aspects of the three biggest investors' RCEP investments:

- South Korea focuses more on the electronics sector. Samsung is the main one, with a total investment value of more than USD20 billion that tends to keep increasing [4]. In addition, major Korean corporations investing in Vietnam also include LG, Hanwha, SK Group, Hyosung, Hyundai, CJ Group, SK Telecom and Shinhan Finance Group. In recent years, the investment capital of South Korea has tended to shift to other fields such as blockchain, metaverse, fintech, the high-tech sector, medical services, health care and beauty.
- Japan is the second-largest investor, and investment is focused on the process manufacturing sector (electronics, automobiles), energy, information technology services, and food processing. Large Japanese FDI firms such as Canon and Panasonic in the field of electronics; Toyota, Honda, Yamaha, Suzuki, and Mitsubishi in the automobile manufacturing sector; and representatives of the energy sector such as Marubeni, Sojitz, Idemitsu, Mitsui, or Toray Textile and Garment Group all play an important role in meeting energy consumption demand and improving production and export capacity, helping Vietnam step by step participate in a deeper, wider, and more prominent position in the global value chain. Japan's FDI into Vietnam during 2018–2021 was concentrated in the two industries of electronics and computers and electrical and transportation equipment, accounting for 10.5% and 8.9% of Japan's total FDI into Vietnam, respectively. Meanwhile, Japan's FDI into ASEAN in the above two sectors only accounts for 5.3% and 5.8%, respectively. That shows that Vietnam has become an important destination for advanced Japanese manufacturing industries in ASEAN in recent years.
- Although China's investment in Vietnam is less than that of South Korea, Japan, and Singapore, the share tends to grow, especially since 2015 and following the US-China trade war in 2018.

33. Investment by industries of RCEP countries in Vietnam (Table 3) is quite different, showing that RCEP's strategy and assessment of investment in Vietnam are not the same across countries. Summarising the six largest

[4] In June 2022, Samsung raised USD841 mill. in investment capital for Samsung Complex HCMC – SEHC (Samsung's largest global factory for manufacturing TV products and home electronics)

partners providing FDI in the process manufacturing sector to Vietnam in RCEP pointed out that:

- South Korea focuses on electronics, textiles, automobile manufacturing and leather goods.
- Japan emphasised electronics, food manufacturing and processing, furniture, automobile rubber manufacturing, and apparel.
- China concentrates on textiles, rubber production and rubber products, electronics, computers, and electrical equipment manufacturing.
- Singapore specialises in food processing, apparel, electronics, beds, furniture, and other transport equipment.
- Thailand processes food and produces refined petroleum.
- Malaysia focuses on metal production.

Table 3: FDI of RCEP countries into Vietnam (2019, million USD)

	South Korea	*Japan*	*China*	*Singa-pore*	*Thai-land*	*Malay-sia*
Electronics, computers and optics	18.812	4.545	850	516	6	8
Garments	4.125	1.205	1.677	541	243	51
Leather and leather goods	3.478	76	679	-	0	-
Cars and other motor vehicles	3.034	1.766	35	25	47	96
Weaving	2.801	84	1.662	66	24	15
Rubber and plastic products	2.271	1.102	1.359	153	109	16
Prefabricated metal products	1.772	5.429	576	95	85	52
Food processing	1.274	1.984	295	780	2.023	68
Metals	761	633	372	54	3	641
Electrical equipment	401	815	1.188	233	5	7
Wood and products from wood, bamboo	169	3.377	130	11	27	3
Furniture	25	1.832	774	449	-	50
Other process manufacturing	2.095	2.854	2.216	1.487	1.944	309

Source: Calculation based on Enterprise Survey 2019.

SECTION 2:
RCEP IMPACTS ON SOME SUPPLY CHAINS

I. OVERVIEW OF THE SUPPLY CHAIN SHIFT IN RCEP

34. The RCEP region, especially East Asia, is considered to be one of the three largest global supply chain hubs, with a prominent role played by China and two other East Asian countries, South Korea and Japan (besides two other centres in the world: Germany in Europe and the US in the Americas). The formation and development of the production network in the RCEP region have supported the expansion of exports and imports for the machinery sector, especially parts and components. As a result, countries increased trade of parts and components in the region, imported raw materials from countries outside the region, and increased exports of final goods to other regions of the world, such as the US and European markets (Obashi, 2022). This pattern was more pronounced and grew during 2001–2018, as demonstrated by the relatively high average annual growth of parts and components compared to other product categories in each trade line. The proportions of manufactured parts and components in intra-regional trade stand at 25%–27%, surpassing the average of other trade flows (11%–22%). Meanwhile, the proportion of primary goods and processing materials imported from outside rose from 47% in 2001 to 62% in 2018, and the proportion of final goods exported to the region remained at an outstandingly high level of 57% -61%.

35. The formation of the supply chain pattern is also reflected in the large proportion of the region's global trade in parts and components. As of 2018, East Asian countries alone were involved in 59% of world trade in manufactured parts and components, half of which was intra-regional trade (up from 20% in 2001 to 29% in 2018). Meanwhile, East Asian countries have been more deeply integrated with the rest of the world by importing primary goods and processing materials and exporting final goods (the share of imports from outside the region in total trade turnover in primary goods and processed materials increased from 14% in 2001 to 22% in 2018). As a result, East Asia's share of exports outside the region in final goods trade increased from 22% in 2001 to 26% in 2018. The changes in the relative importance of

East Asia in world trade indicate that East Asia's intra- and inter-regional trade patterns have become more apparent since 2001.

36. However, there is a shift among chain segments within each production base, which is closely tied to a shift in each country's absolute or comparative advantage. For example, more developed economies such as Japan and South Korea initially had a dominant advantage in producing both final goods and manufactured parts and components due to their technological superiority, which helped them overshadow the low-wage advantages of developing countries. However, later, these countries outsourced more to others in the region. For example, Japan initially focused on the production and assembly of both components and final goods for the machinery, electrical, electronic and transport equipment industries, but declined during 2001-2018 in the machinery, electrical and electronic equipment industries due to the relocation of assembly sites to developing economies with lower wages. South Korea was initially like Japan, but from 2001–2018, the processing was outsourced in machinery, electronics, and transport equipment.

37. From 2001-2018, China maintained its comparative advantage in electrical and electronic machinery and equipment. China has integrated well with GVCs electronic and electrical machinery and equipment as an export platform by importing parts and components manufactured for assembly into the final good and exporting those final goods to the world market. However, comparative advantage in final goods has been on a downward trend since 2011. While China is strengthening its domestic industrial base for parts suppliers, rising demand for imported (as well as domestic) transport equipment may have reduced the comparative advantage for the final good.

38. For developing economies such as the ASEAN region, production fragmentation or diversion from advanced economies is promoted through FDI, accompanied by a shift in management, marketing, engineering, organisational and logistical tips. In the electronics, machinery, and electrical equipment industries, the Philippines, Malaysia, and Thailand have gained a comparative advantage, attracting electrical and electronic equipment assembly facilities moving out of advanced economies and benefiting from technology transfer in improving the production capacity of components and spare parts. These economies are already well integrated with electronic, machinery, and electrical equipment GVCs. During 2001–2018, the Philippines increased its use of imported parts from neighbouring countries and other

developing East Asian countries. Unlike the Philippines or Malaysia, Thailand has attracted transport equipment assembly facilities and has been increasing the production capacity of parts and components.

39. Vietnam and Cambodia also extend their participation in GVCs in the machinery and equipment sector. In particular, Vietnam was initially a net importer, but there has been a clear transformation of advantages in the fields of electronics and machinery and electrical equipment. Vietnam attracted assembly facilities and transformed into an electronics and electrical equipment export platform during 2001–2017. Cambodia and Vietnam have also lured investment in the electronics and automotive sectors since 2011 and benefited from technology transfer from advanced economies in improving the production capacity of components and parts. Indonesia experienced a transformation in the transportation equipment sector during 2001–2018 but witnessed a decline in its comparative advantage in the machinery, electronics, and electrical equipment sectors from 2001–2011.

40. The investment pattern to Vietnam by partners and some ASEAN countries is different, showing the level of development. The main investors in ASEAN are the US and the EU, followed by China, Japan and South Korea. This is mainly because the US and EU are Singapore's largest investment partners, attracting more than 50% of FDI into ASEAN. Meanwhile, the largest source of FDI to Malaysia and Indonesia is within ASEAN and the EU; Thailand receives the largest investment from Japan, followed by ASEAN. Although South Korea only injects modest capital into other ASEAN countries, it is the largest investment partner in Vietnam. That shows the important role of Vietnam in South Korea's investment strategy in ASEAN (Obashi, 2022).

41. FDI inflows into the machinery and equipment sectors show the relative importance of foreign investment in chain production. For Malaysia and the Philippines, about a third of manufacturing FDI flows into machinery, electrical equipment, and electronics[5]. These countries have benefited from FDI inflows related to fragmented and outsourced manufacturing, enabling them to enhance their comparative advantage in producing final goods and components in electronics and electrical products. For Thailand, about a

[5] Due to data limitations, the authors used the structure of Japan's FDI into ASEAN countries to represent the general structure of FDI in these countries, since Japan is a major investment partner in the region.

quarter of FDI production is in transport equipment. Thailand has experienced a remarkable shift in comparative advantage in the transport equipment sector in GVCs, and the country has benefited from FDI inflows related to fragmentation and processing in strengthening comparative advantage not only in transport equipment but also in parts and components of this chain. For Indonesia, half of manufacturing FDI goes to transport equipment. For Vietnam, investment in electronics, computers, optical products, and electrical equipment accounts for about 1/5, transport equipment nearly 1/5, and general machinery and equipment about 1/10.

42. With such investment structure, distribution, and chain development in recent years, the overall assessment is that RCEP will continue to promote FDI attraction. As many countries do not have a direct FTA with China, RCEP can be used to access the Chinese market through FDI into RCEP member countries, including Vietnam. Moreover, Vietnam is expected to receive investment flows from the new trend of shifting supply chains, including shifting investment away from China. Vietnam and other ASEAN countries have been receiving more and more FDI into the manufacturing sector from Japan and South Korea, which is already larger than their FDI into China. Investment in ASEAN has increased sharply due to higher labour costs in China and to diversify away from the value chain currently too focused on China.

43. There are many opportunities to boost FDI in upstream industries with strict RoO. Strict RoO commitments require increasing the proportion of production costs incurred in the preferential trade agreement area, so strict RoO rules can force final-goods producers to use sourcing and/or conduct production processes within the FTAs, even if it is cheaper to source and produce in the rest of the world.

44. Regional production and supply chains among RCEP countries are concentrated in the three sectors of automotive, electronics, and textiles due to the linkages in trade and investment among member countries. For Vietnam, FDI from RCEP countries, especially key partners such as China, Japan, and South Korea, has helped Vietnam strongly participate in regional and global supply chains in these years. Therefore, the deeper integration with

these partners in RCEP is expected to help Vietnam increase its participation more effectively in the global supply chain in the future.

II. IMPACTS ON THE ELECTRONICS SECTOR

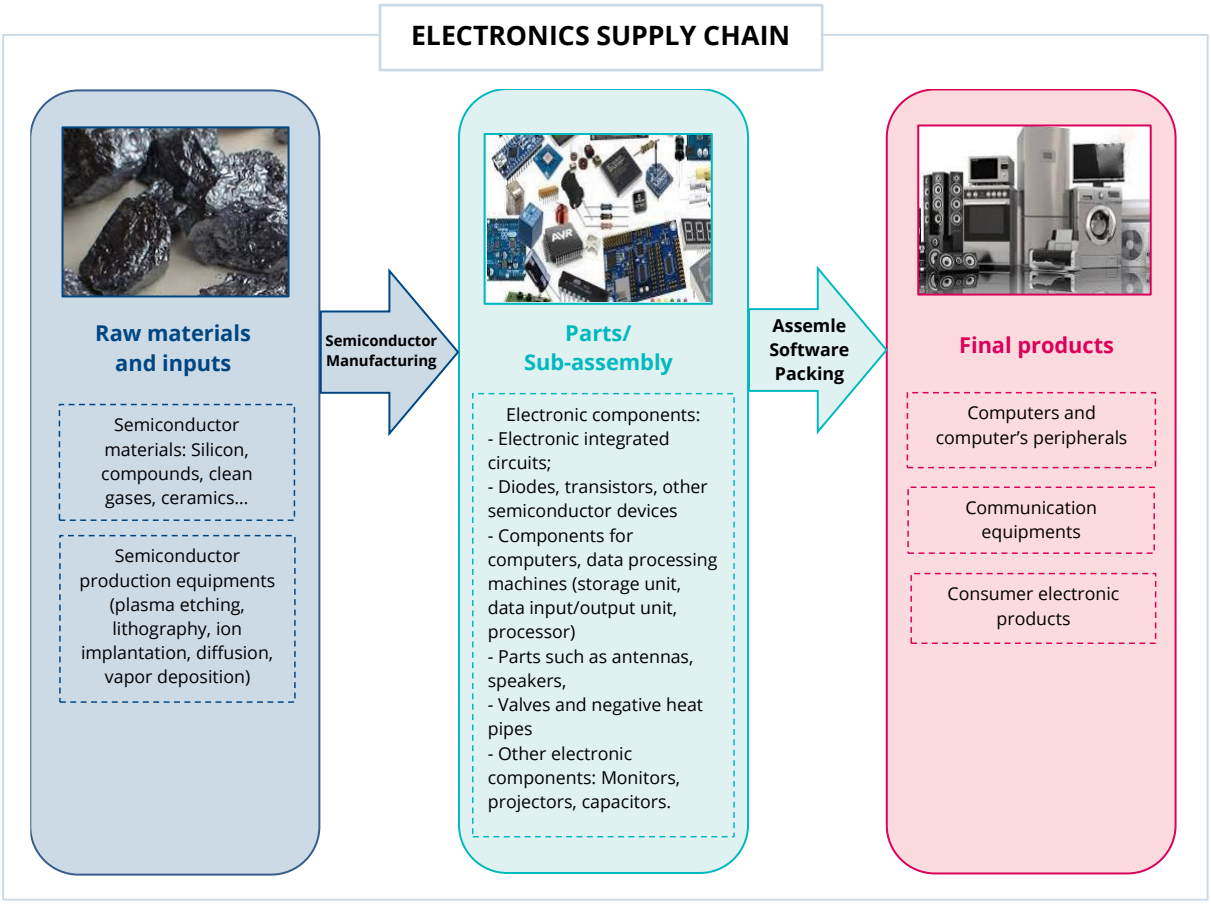
2.1. Vietnam's participation in the electronics supply chain

45. The electronics sector has a complex supply chain with production stages from raw materials (chemicals used in electronics, metals, rare earths); machinery and equipment used in electronic assembly; components and parts; and the final products are quite diversified (Figure below), including: computers, communication equipment, household appliances (such as televisions, refrigerators); and projectors. Complex GVCs and regionalisation trends characterise the electronics sector. The relationship between countries in the electronics sector supply chain shows that Vietnam participates in the supply chain of the electronics sector mainly through FDI investment, in which South Korea plays a prominent role.

46. Vietnam has many achievements in participating in the global supply chain of the electronics sector, reflected in the increase in both import and export and FDI attraction. Vietnam is currently ranked 12th worldwide and 3rd in ASEAN in exporting electronic products. Vietnam's electronics sector exports have witnessed the highest average growth rate in the world, at 13.9% in the 2016-2020 period. The export value of electronic components has increased rapidly from USD2.7 billion in 2012 to USD26.9 billion in 2020; exports of final goods

increased from USD13.1 billion to 53.1 billion. Imports of electronic components increased from USD9.8 billion to USD51.95 billion in the same period, while imports of final goods increased from USD3.4 billion to USD5.7 billion. Electronic components account for an increasing proportion in the total export and import of electronic products. Trade in raw materials, machinery, and equipment is trivial (Table 4).

Figure 7: The electronics supply chain



Source: Compiled by the research team.

47. Vietnam has started to participate strongly in the electronics GVC since 2010 (including components, component groups, and final goods) and has become the world's electronic component assembly centre. In terms of components, Vietnam limits its role as a component integrator. For example, integrated circuit design is done abroad in the semiconductor sector, and key components - such as electronic chips - are imported from other countries. Only a handful of companies conduct R&D activities in Vietnam. Vietnam only has an advantage in the mid-stream stage, whereby domestic companies focus on assembling final goods and sub-assemblies for export, with the lowest value added. The stages of designing and manufacturing high-value-

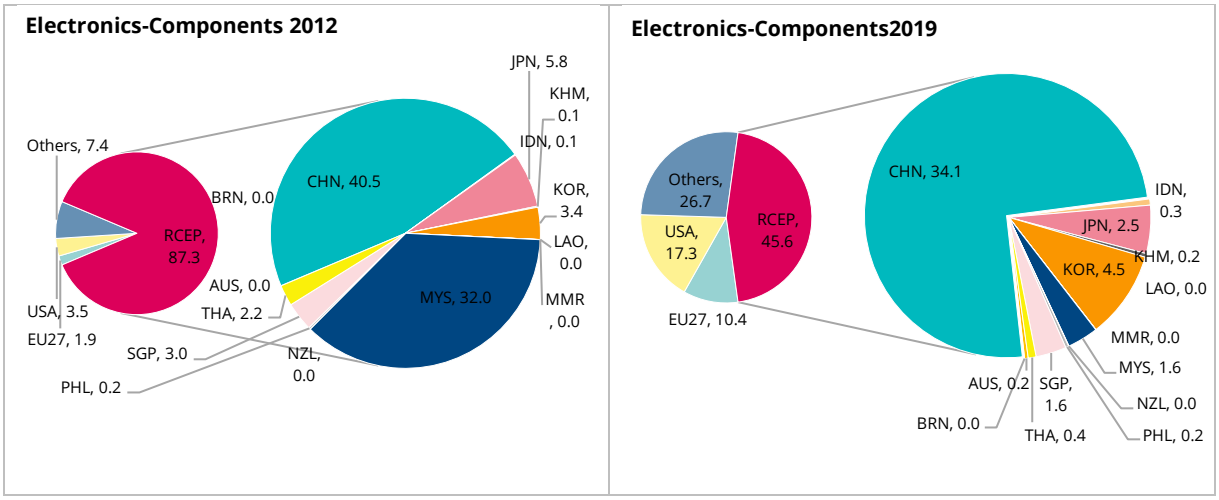
added electronic chips are mainly performed by China, South Korea, Taiwan (China), Japan, and the United States. Vietnam has been engaged in upstream activities but mainly in low-value-added products such as plastics, glass and packaging. Downstream activities are also carried out outside of Vietnam due to domestic companies' lack of marketing and capital capacities.

Table 4: Imports and exports of electronic products (million USD)

	Exports (million USD)			
Year	Raw materials	Machinery and equipment	Components and parts	Final goods
2012	40.4	0.3	2728.9	13137.4
2015	119.4	0.5	5868.0	33415.2
2019	92.9	0.1	20480.8	49140.8
	Imports (million USD)			
2012	5.5	6.0	9812.5	3419.9
2015	42.8	22.5	16767.5	5382.6
2019	165.2	10.4	39802.4	6620.1

Source: Calculation based on WITS.

Figure 8: Vietnam's electronics exports pattern (%)



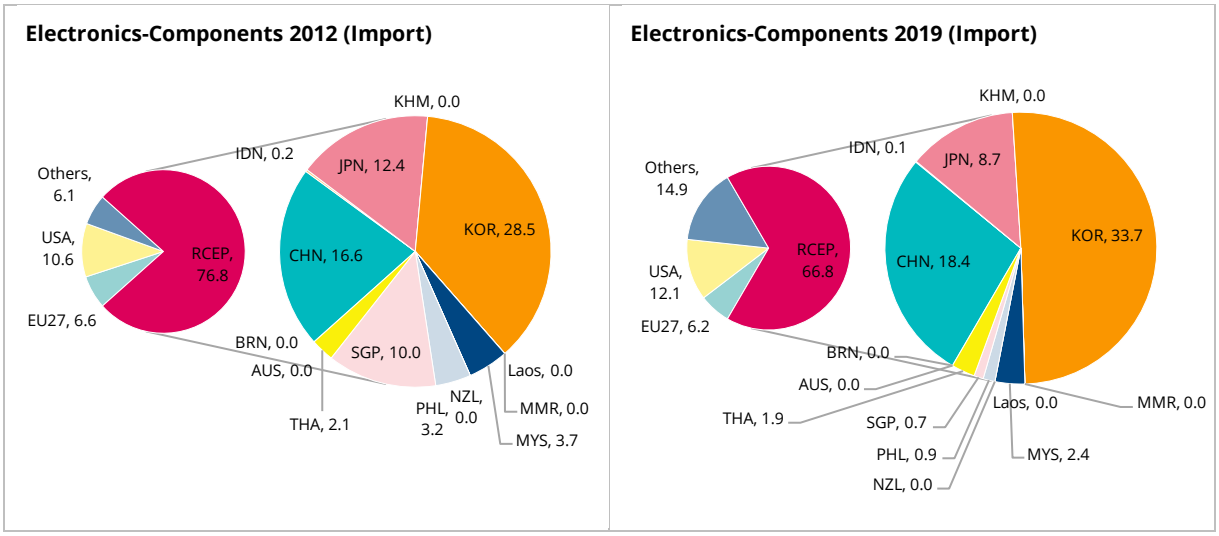
Source: Calculation based on WITS.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

48. Data on imports and exports of components and final goods of the electronics sector shows that Vietnam tends to import more from RCEP and export more outside. The share of component exports to RCEP has decreased from 87.3%

in 2012 to 45.6% in 2019 (Figure 8); however, it shows that supply chain participation of the electronics sector has expanded to other countries outside RCEP, especially the US and EU. However, it should be noted that exports to China increased significantly, implying the increase of this country's role in the future. Contrary to exports, the share of Vietnam's component imports from RCEP is increasing, showing that RCEP countries have increasingly served as those providing intermediate input products for electronic production in Vietnam, in which South Korea and China have emerged as key players (Figure 9).

Figure 9: Share of Vietnam's import of electronic parts and components by marker (%)



Source: Calculation based on WITS.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

49. In terms of domestic production capacity and structure, analysis shows that FDI accounts for a dominant proportion of the electronics sector. More than 2,000 firms are involved in the electronics sector, with domestic firms accounting for 54.8% and FDI accounting for 45.18%. However, considering the proportion of revenue and labour, the FDI sector accounts for over 90% (Table 5). FDI firms also have higher labour productivity than domestic firms. Among FDI firms, South Korea leads in terms of the number of firms, investment capital and labour productivity, followed by Japanese firms. The labour productivity of FDI firms from Japan and South Korea surpasses that of other countries.

Table 5: Firms in the electronics sector in Vietnam

	Labour			*Sales*	
	Total	Domestic	FDI	Domestic	FDI
Electronics	740076	4.83	95.17	1.07	98.93
Parts	264536	6.80	93.20	2.19	97.81
Final goods	475540	3.73	96.27	0.86	99.14

	Labour share		*Productivity (million VND)*		
	Domestic	FDI	Average	Domestic	FDI
Electronic part	6.80	93.20	303.71	218.63	361.34
Computer, phones	0.78	99.22	277.18	292.54	262.45
Telecom. Equipment	3.76	96.24	339.51	244.70	363.13
Home appliances	3.82	96.18	191.31	142.01	262.17
Radar, remote controls	48.55	51.45	272.00	272.61	269.92
Projectors	1.34	98.66	190.75	129.22	313.81

Source: Enterprise Survey 2019.

Note: Because the number of FDI firms producing raw materials for the electronics sector is small and difficult to determine, the statistics are only based on components and final goods.

Table 6: FDI by country and production stage

	Number of firms		*Investment capital (million USD)*		*Productivity*	
	Compo-nents	Final goods	Compo-nents	Final goods	Compo-nents	Final goods
South Korea	331	305	1542.8	17247.3	387.7	375.5
Japan	86	37	2965.9	1557.8	447.3	247.9
China	34	44	336.4	503.2	168.5	264.3
Hong Kong	17	20	176.1	225.6	162.2	176.5
Singapore	7	8	32.0	341.7	193.2	244.1

Source: Enterprise Survey 2019.

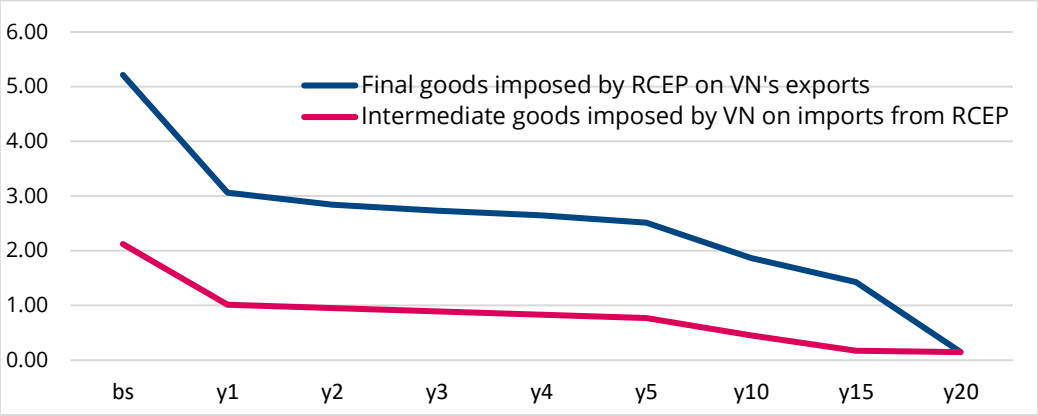
Note: Labour productivity is calculated in million VND/labourer/year.

2.2. Impacts of RCEP on the supply chain of the electronics sector

50. The analysis of the impact of RCEP on the electronics supply chain shows that the impact of RCEP tariffs on the shift of the electronics sector chain is not much because Vietnam has opened up quite a lot in this sector; particularly import-export goods, like electronic components, parts and final goods of

Vietnam, to countries that have already been exempted or have low tax rates (such as electronic integrated circuits, laptops, mobile phones). However, Vietnam can still exploit the tax reduction impact on several specific products by markets, notably colour TVs, communication devices (microphones and stands, video recorders, radio transceivers, video recording and reproducing equipment) and other equipment such as antennas, and loudspeakers. Generally, tariffs on final goods that countries are applying to exports from Vietnam have been reduced by nearly half in the first year and will continue to fall to zero within 20 years. The difference between the reduction of intermediate goods tariffs that Vietnam applies to imports from RCEP and the finished product tariffs that Vietnam's exports are subject to is relatively large. This shows that tariff reduction in RCEP is stimulating imports to produce exports. The important implication is that the domestic supply chain may face more difficulties due to cheaper imports.

Figure 10: Tariff elimination schedule in the electronics sector in RCEP



Source: Calculation based on RCEP tariff.

2.2.1. Electronic component group

51. Vietnamese firms do not have the advantage of intensive development of components; however, they are quite successful in attracting FDI into component production. The labour productivity of FDI firms nearly doubles that of domestic firms in the same sector. Investment capital is mainly from Japan and South Korea, accounting for 55% and 28.5%, and from China which is 6.2%. The structure of import and export of electronic components shows that Vietnam mainly uses input from RCEP to produce goods to export to

countries outside RCEP[6]. South Korea and China are the largest suppliers of electronic components. China plays a special role as a large exporter and importer of parts and components of Vietnam, contributing to the increased added value in both forward and backward linkages. The model of import-export and FDI from South Korea shows that Vietnam is becoming the assembly base of electronic products for South Korean FDI firms, with components imported from South Korea.

Table 7: Factors related to electronic components under RCEP

Tariffs in RCEP	**Imposed by Vietnam** (**%,** *Base - First year – 20th year)*	
	- General - Electronic integrated circuits, semiconductors - Antennas, loudspeakers, other printed circuit boards	2.17%-1.01% - 0.15% 0% (tax exemption before RCEP) 3.67%-2.85%-0.07%
	Imposed by RCEP on Vietnam (**%,** *Base – First year – 20th year)*	
	- General - Electronic integrated circuits -Semiconductors - Antennas, loudspeakers, other printed circuit boards - Screens and other projectors	4.58%-2.47%- 0.21% 2.15%-1.15%- 0% 1.26%-0.5%- 0% 5.66%-3.52%-0.05% 11.73%-6.13%-2.31%
RoO	Diodes, transistors and other semiconductor devices: CTSH or RVC40. Electronic integrated circuit: CTSH or RVC40. Other electronic components: CTH or RVC40. **Conclusion:** RoO rules are moderately strict. RVC40.	
Import - Export	**Biggest importers**	**Biggest exporters**
	South Korea, China	China, South Korea
Production capacity	**Sector structure: Number of firms**: domestic 54.9%, FDI 45.1%; **Labour**: domestic 6.8%, FDI 93.2%; **Revenue**: domestic 2.2%, FDI 97.8%. **Labour productivity** (million VND/person/year): **Domestic** 218.6; **FDI:** 361.	

[6] While RCEP countries are Vietnam's largest supplier of electronic parts and components, reaching USD34.436 billion in 2020 (accounting for 66% of Vietnam's total import value from the world market), and Vietnam's exports of components to RCEP accounts for 32% of Vietnam's total exports, the export of final products to RCEP only reaches over USD9 billion (out of a total of USD53 billion in Vietnam's exports of finished electronic products).

	Production capacity: Strong in midstream and downstream FDI, the group of domestic firms is weaker, labour competition is relatively fierce, and the degree of technology spillover is moderate.
FDI	**Largest investors in RCEP** Japan, South Korea, China, Singapore More and more Japanese FDI firms invest in manufacturing components in Vietnam. When entering Vietnam, South Korea companies brought along many satellite companies of the supporting sector to serve South Korea production on a large scale. Chinese FDI firms invest more in Vietnam to take advantage of Vietnam's FTAs and avoid US tax, but their scale and labour productivity are lower than Japanese and Korean firms.

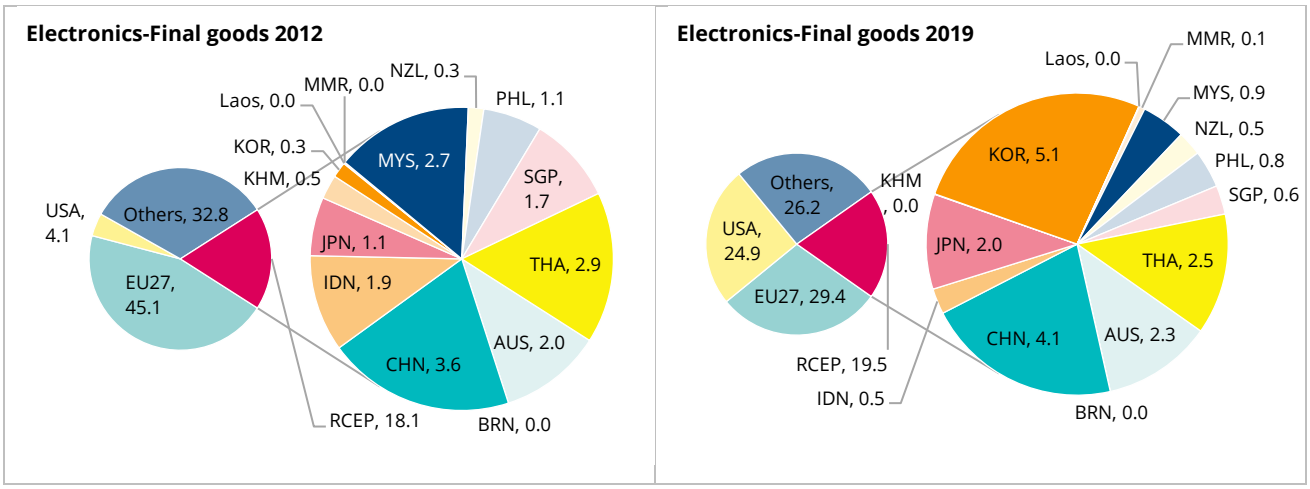
Source: Compiled by the research team

52. As the tax rates on electronic components are already low due to previous FTAs, especially the electrical components that Vietnam imports and exports, including electronic integrated circuits and diodes, transistors and other semiconductor devices, tariff measures in RCEP do not have much impact on the export and import flows of Vietnam's electronic components, except for boosting the export of some parts such as antennas, speakers, screens and projectors. However, Vietnam still expects to attract more FDI into the production of electronic components thanks to the RoO rule. However, the impact of RoO in RCEP may be limited to promoting internal import and export and attracting FDI in processing and manufacturing electronic components. This is because Vietnam only focuses on low-value-added segments to take advantage of labour advantage and tax incentives, and it is difficult to attract high-value-added and high-tech segments in the short term. In the long term, only when domestic resources increase, or Vietnam can attract upstream FDI will it be able to move to the higher chain higher.

2.2.2. Final goods

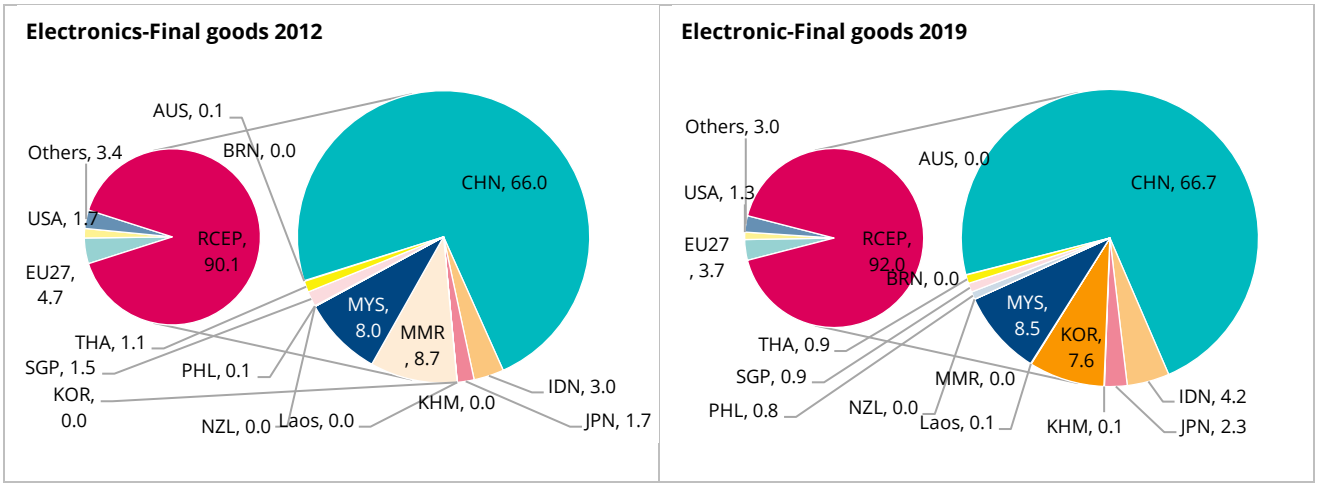
53. Final goods of Vietnam’s electronics sector are mainly exported to markets outside of RCEP. The proportion of exports to RCEP countries has not changed much recently, from 18.1% in 2012 to 19.5% in 2019. Meanwhile, the proportion of exports to the US increased sharply from 4.1% to 24.9%. The EU is still the largest export market, but its share has decreased from 45.1% to 29.4%. In RCEP, a notable expansion of export market share is to South Korea, from 0.3% of Vietnam's total exports in 2012 to 5.1% in 2019.

Figure 11: Share of Vietnam's export of electronics final goods by market (%)



Source: Calculations based on WITS.

Figure 12: Share of Vietnam's import of electronics final goods by market (%)



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54. RCEP is Vietnam's main import market of final electronics goods, with over 90%, and this market share tends to increase slightly. Vietnam's imports from RCEP are mainly from China, accounting for 66% in 2012 and 66.7% in 2019. Notably, Vietnam's imports from South Korea increased from negligible in 2012 to 7.6% in 2019. Vietnam's imports of final electronics products are quite small in number, and the growth rate tends to slow down, while exports and FDI into the production and assembly of final products are still high, showing that the trend of shifting supply chains into the downstream group in Vietnam has been strong and helped Vietnam become a centre for final assembly of electronic products. This trend is boosted by the FTA agreements that Vietnam

has already participated in, helping Vietnam to attract FDI from large electronics corporations of RCEP countries (especially South Korea) and currently holds a high position among the top exporters of electronic products in the world.

55. The continued reduction of taxes on some final goods exported from Vietnam to RCEP countries, such as colour receivers (including colour televisions), microphones and stands, broadcasting and radio transmission equipment, combined with the fact that there is still a large room for Vietnam's exports of final goods to RCEP[7], shows the possibility of continuing to increase exports of these products to RCEP, especially to markets with faster tax reduction such as China, South Korea or other potential markets like Australia. With an expanding export market, Vietnam can continue to attract the downstream FDI flow. However, it is difficult for Vietnam to expect a breakthrough in export growth and downstream FDI attraction after RCEP because Vietnam's key export products, namely mobile phones and laptops, have previously enjoyed very low taxes in RCEP partners' markets.

Table 8: Factors affecting electronics products under RCEP

Tariffs in RCEP	**Imposed by Vietnam** (**%,** *Before RCEP- First year – 20th year)*	
	General	7.57% - 7.12% - 3.95%
	- Mobile phones	0%
	- Microphones and stands	10.63% - 6.88% - 1.8%
	- Data processing machines	0%
	- Audio/video receivers/transmitters	0.63% - 0.58% - 0%
	- Transmission equipment	3.57% - 3.38% - 0.3%
	Imposed by RCEP on Vietnam (**%,** *Before RCEP- First year – 20th year)*	
	General	5.58% - 3.4%-0.27%
	- Mobile phones	2.08% - 1.26%-0% (main markets=0%)
	- Data processing machines	1.79% - 1.25%-0% (main markets=0%)
	- Colour video receivers	13.17% - 8.65%-1.88%
	- Audio/video receivers/transmitters	2% - 0.97%-0%
	- Transmission equipment	4.19% - 2.17%-0%
	- Microphones and stands	7.4% - 4.5%-0.12%

[7] Currently, Vietnam's final good exports to RCEP only reach USD9 billion compared to USD53 billion of Vietnam's export of final goods to the world.

<table>
<tr><td>FDI</td><td colspan="2">Largest investors in RCEP:
South Korea, Japan, China and Singapore, with much focus on South Korea.</td></tr>
<tr><td>RoO</td><td colspan="2">Telephones, computers: CTSH/ RVC40; Audio/video receivers/transmitters: CTSH or RVC40.
Microphones/stands: CTSH/ RVC40; Other products: CTH or RVC40.
RoO rules imposed on electronic components are moderately strict.</td></tr>
<tr><td rowspan="2">Import – Export</td><td>Biggest importers</td><td>Biggest exporters</td></tr>
<tr><td>China, Malaysia</td><td>South Korea, China</td></tr>
<tr><td>Production capacity</td><td colspan="2">Sector structure: Number of firms: domestic 54.7%, FDI 45.2%;
Labour: domestic 3.7%, FDI 96.3%; Revenue: domestic 0.9%, FDI 99.1%.
Labour productivity: Domestic firms: 216.6; FDI firms: 334.1</td></tr>
</table>

Source: Compiled by the research team

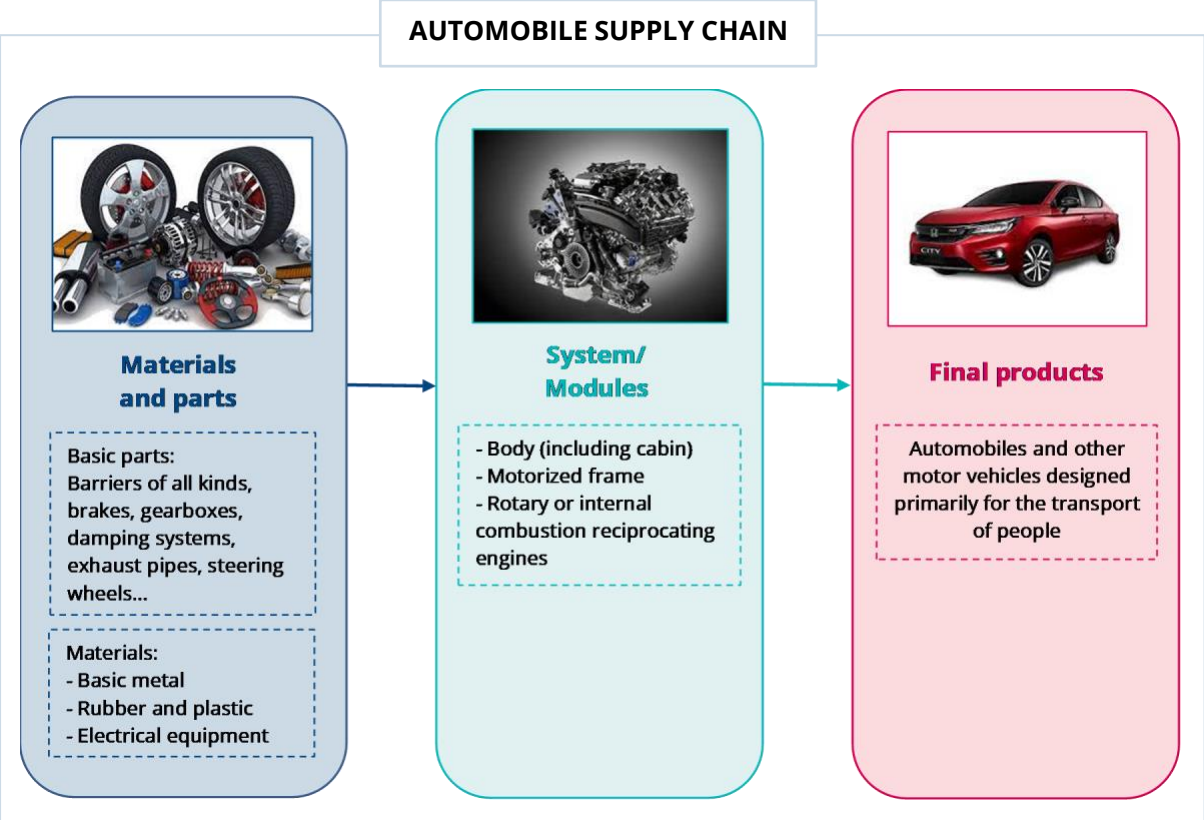
III. IMPACTS ON AUTOMOBILE SECTOR

3.1. Vietnam's participation in the automotive supply chain

3.1.1. Structure of the automobile supply chain

56. The automobile sector requires many input products and intermediate goods, including components and spare parts, systems and modules, and system integration for final product assembly (Figure 13). The sector is highly concentrated, with a small number of the world's top manufacturing countries and companies, and the top 20 countries account for 90% of the total world production. The value chain of this sector has become increasingly complex and is characterised by an increasing number of players operating in different sectors and different geographical areas. Production has moved from countries that were previously leaders (such as the US, Japan and Germany - which are home to the top auto brands) to emerging economies.

Figure 13: The automobile sector supply chain



Source: Compiled by the research team.

57. Globally, China currently leads in terms of output volume and growth rate of auto products, accounting for a quarter of global output (ten years ago, the figure was 8%). The US and Japan are the second and third manufacturers, accounting for nearly 13% and 11% of total world automobile production, respectively, and are on a decreasing trend (OECD, 2016)[8]. Among the top 20 auto-producing countries, only China, India, Mexico, Thailand, the Czech Republic and Slovakia have increasing market shares. Japan, Germany, the US, South Korea, France, Italy, India, the UK and Canada are the countries that provide the majority (90%) of FDI inflows in the automobile sector, which means shifting production chains from these countries to China and some other countries[9]. Notably, the trend of shifting the chain has emerged from

[8] OECD (2016), "Upgrading pathways in the Automotive value chain", 7th Plenary Meeting 10-11 November 2016 Mexico City, Mexico.

[9] The top 10 countries in attracting FDI inflows to automobile sector include Mexico, China, the US, India, Morocco, Russia, Romania and the UK.

outsourcing production and assembly activities to outsourcing intensive activities, including R&D, design and testing.

58. Inside RCEP, China, Thailand and Indonesia are the largest FDI attractors in the automobile sector, while the countries providing FDI are Japan and South Korea. However, the trend of shifting the chain varies from country to country. Japan is increasing its investment abroad in the auto sector and importing many parts and components while keeping most of its R&D activities at home. Indonesia, Malaysia, Thailand and the Philippines also benefit greatly from Japan's auto sector, thanks to the export of auto parts and components to Japan. China is home to most parts assembly and chip supply activities for the global auto sector. South Korea is not only holding high-value-added production stages such as spare parts and semiconductor devices but also applies more and more automation technology to assemble automobile products. Thailand tends to produce components (mainly FDI firms) and process and assemble vehicles of Japanese and South Korean firms. Currently, South Korea, China and Thailand are the countries with the highest value of auto components and parts exported to Vietnam. The value of auto parts and components from these three countries in the first seven months of 2022 reached nearly USD2.2 billion, accounting for 67% of the total.

3.1.2. Vietnam's participation in the automobile supply chain

59. Vietnam's participation is still modest, mainly due to limited production capacity and competitiveness, while low demand limits the economy of scale. Despite its large population, Vietnam's auto sector is still relatively small compared to other ASEAN countries. The domestic demand for automobiles is not large enough, leading to the underdeveloped auto parts and components sector, negatively affecting the whole automobile sector. Currently, exporting components and spare parts and importing completely built units are the leading trend in the sector's trade. Imports of CBU cars have increased rapidly and reached USD1.46 billion in 2020, but auto exports are still very modest, despite having increased from more than USD6 million in 2018 to USD35 million in 2019 and USD123 million in 2020.

60. The export pattern by partners for automobile products shows a notable shift to markets outside RCEP, even for final products, modules, or components (Table 9). For example, Vietnam exports a lot of components inside RCEP (over 70%), but the figure tends to decrease, while modules are mainly exported to the US and EU. On the other hand, RCEP partners, mainly China, are large suppliers of modules and components, while Thailand and Indonesia are large suppliers of final products.

Table 9: Import and export of automobile sector by market (%)

	Final products	*Final products*	*Modules*	*Modules*	*Components*	*Components*
	2012	2019	2012	2019	2012	2019
	Export					
EU27	0.00	32.21	5.79	14.20	2.50	3.55
USA	0.00	46.73	22.71	47.97	17.63	19.29
Other countries	34.60	10.04	38.33	17.42	5.61	9.37
RCEP	65.40	11.02	33.17	20.41	74.25	67.78
	Import					
EU27	27.93	7.29	7.99	4.80	18.87	18.86
USA	5.29	2.32	2.18	2.13	0.41	0.41
Other countries	4.49	0.92	5.76	4.05	3.04	3.03
RCEP	62.29	89.47	84.04	89.03	77.69	77.68

Source: Statistics from UNCOMTRADE.

61. In terms of domestic production and assembly, there are currently over a thousand firms participating in the supply chain of the automobile sector in Vietnam, of which domestic firms account for 68.1%, mainly producing spare parts and components. However, by labour and capital, FDI firms are still dominant. FDI firms employ 149,984 workers, three times higher than domestic firms, in which those involved in producing accessories account for the largest proportion (36.1%). FDI also accounts for a dominant proportion of the revenue of the auto sector, especially in the production of basic components, accessories and completely built units. Revenue from module products is more balanced: FDI firms hold a dominant market share in the production of tyres and engines, while domestic firms dominate in the production of lights and electrical equipment, and glass.

Table 10: Automobile firms

	Labour			*Sale (%)*	
	Total	Domestic	FDI	Domestic	FDI
Automobile	198604	24.5	75.5	26.05	73.9
Parts	138658	14.6	85.4	14.33	85.7
Modules	38006	43.3	56.7	41.71	58.3
Final products	21940	54.3	45.7	30.81	69.2

	Labour		*Sale (%)*		*Productivity (mil. VND)*	
	Domestic	FDI	Domestic	FDI	Domestic	FDI
Tire	27.2	72.8	26.1	73.9	173.5	393.5
Glass	66.4	33.6	71.2	28.8	305.2	354.1
Lights	57.2	42.8	64.3	35.7	162.0	288.2
Electrics	54.3	45.7	30.8	69.2	436.6	1022.0
Body	80.2	19.8	83.8	16.2	338.6	485.6
Parts	9.6	90.4	9.7	90.3	288.0	392.1

Source: Enterprise survey 2019.

62. Vietnam's automobile manufacturing sector is closely linked to the supply chains of RCEP partner countries, especially Japan and South Korea. Exports of auto parts and components have increased and reached a record of USD5.6 billion, of which simple products such as electrical wires, tyres, and plastic details have had impressive export growth. Auto parts and components produced in Vietnam are mainly labour-intensive parts with simple technology, such as seats, glass, tyres, and wheels. Vietnam is a net importer of supporting sector products with high technology and value-added content, especially important parts and components belonging to the brake, clutch, transmission, and steering systems. Although the export capacity is still limited, Vietnam still has good prospects to promote the production and

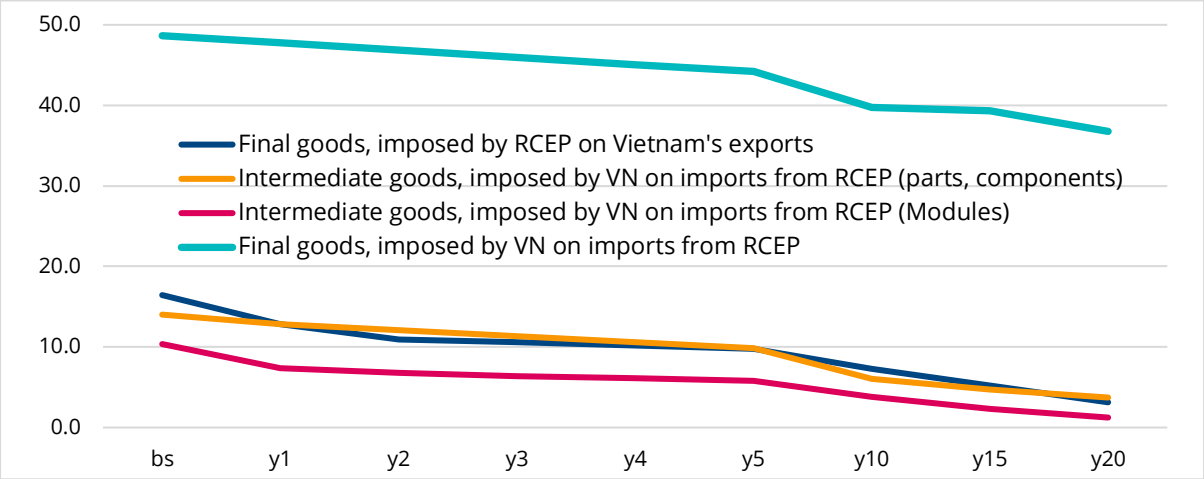
export of the automobile sector in the coming years, thanks to increasing domestic demand and production capacity, as well as the strategies of multinational companies. In 2020, Truong Hai Automobile Joint Stock Company exported more than 1,400 CBU cars of all kinds to Thailand, with a turnover of nearly USD50 million. Ford Vietnam also exports EcoSport, Transit and Tourneo models to several regional markets. In 2020, this enterprise invested an additional $82 million to upgrade the assembly plant in Hai Duong, thereby increasing its capacity from 14,000 to 40,000 vehicles per year. Ford Motor's decision to expand production in Vietnam is based on domestic consumers' stable and growing demand and the export target[10].

3.2. Impacts of the RCEP on the automobile sector

63. RCEP sharply cut taxes on some key import-export products of Vietnam in the auto sector (safety glass, tyres, spark-ignition combustion piston engines), which promotes Vietnam's trade activities with countries in RCEP. In addition, RCEP creates an opportunity for Vietnam to significantly expand the supply chain of the automobile sector by diversifying products participating in the chain, thanks to attracting FDI from large corporations to specialise in the production of some components and parts to serve the RCEP market by reducing taxes and adopting uniform RoO. In contrast, Vietnam's protection level is quite high with finished products. However, within the AFTA (ASEAN FTA) framework, cars have already enjoyed a high level of openness. Therefore, the protection by import tariffs on cars imported to Vietnam does not make much sense for the development of domestic automobiles. But tax reduction for components, modules and spare parts is of greater significance to help reduce domestic vehicle prices and create opportunities for firms to invest in the assembly sector for export.

[10] Truong Hai Automobile Joint Stock Company exported more than 1,400 CBU cars of all kinds to Thailand, with a turnover of nearly USD50 million. Ford Vietnam also exports EcoSport, Transit and Tourneo models to several regional markets. In 2020, this enterprise invested an additional $82 million to upgrade the assembly plant in Hai Duong, thereby increasing its capacity from 14,000 to 40,000 vehicles per year. Ford Motor's decision to expand production in Vietnam is based on domestic consumers' stable and growing demand and the export target.

Figure 14: Tariff cut schedule in the automobile sector under RCEP



Source: Calculation based on RCEP tariff.

3.2.1. Automobile part, component groups

64. Vietnam attracts a large amount of FDI inflows from South Korea and Japan into the production of auto parts and components. As for Japan, Vietnam maintains a large export surplus in parts and components, especially electrical conductors, showing that Vietnam also benefits from the FDI model of Japan's automobile manufacturing sector (investing abroad and importing components and parts). Besides, imports of parts from Japan also tend to increase to serve the production of Japanese FDI firms in Vietnam. South Korea is Vietnam's largest supplier of auto parts and components in RCEP, and the trade deficit with South Korea for this product shows that South Korea imports mainly serve FDI firms. In addition, the import of components from China and Thailand also increased rapidly.

65. With Vietnam's tax on components from RCEP countries gradually lowered, the trend of importing components and parts from RCEP countries may increase, especially when domestic production capacity has not yet met the demand for complex components requiring advanced manufacturing technology. Importing from South Korea and Japan may increase at higher rates than Thailand and China (as shown in the recent trend) when many South Korean and Japanese FDI firms consider expanding investment in Vietnam.

66. Vietnam also can increase the export of components and parts that it has advantages to RCEP, such as ignition wires, safety airbags and lighting equipment, when the tax is lowered. The growth rate of Vietnam's exports of

these products has increased rapidly in recent years, including exports to and outside RCEP. RCEP also creates an opportunity for Vietnam to attract FDI from large regional corporations into specialised production of some auto parts and components to serve the whole RCEP market. Recently, some automobile corporations (such as South Korea's Kia) specialise in the production of parts in different countries in the region (such as right-hand steering wheels for Vietnam and left-hand steering wheels for Malaysia) to serve the ASEAN market and increase production efficiency by scale when tariffs between ASEAN countries have been completely exempted since 2018. This trend is expected to grow after RCEP, thanks to tax reductions and uniform RoO adoption. The specialisation scale will also increase, not only within ASEAN but also in East Asia and the Australian and New Zealand markets.

67. Tariff cuts for Vietnam by RCEP countries are insignificant, while the tariff reduction roadmap is slow. Except for Japan, which exempts Vietnam from tax for these products, and Australia and New Zealand, where the tax base is already low, ASEAN countries, especially Thailand, Malaysia, Philippines and Cambodia, have imposed quite high taxes and a slow tax reduction roadmap for Vietnamese parts and accessories. The rates of tax cuts of China and South Korea are average. Vietnam's current average tax base imposed on auto parts and accessories from RCEP countries is higher than that of RCEP on Vietnam (currently at 14.02%). Vietnam's tax reduction roadmap for RCEP countries for auto parts and accessories is not fast, except for zero tariffs for China for barriers of all kinds, anti-collision barriers, safety airbags and parts.

68. It is worth noting that the internal strength of the domestic enterprise sector is still low, and the benefits from RCEP to the component production sector will mainly boost the development of FDI firms. The slow tariff reduction rate is an opportunity for Vietnam firms to improve their internal strength.

Table 11: Factors affecting auto parts and components from under RCEP

Tariffs in RCEP	**Imposed by Vietnam (%,** *Before RCEP- First year – 20th year)*	
	General: -Barriers of all kinds -Gearboxes and parts -Electric equipment	14%-12.9%-3.7% 10.51%-10.2%-8.34% 11.21%-10.7%-4.74% 22.69%-18.92%-12.85%
	Imposed by RCEP on Vietnam	

	General: -Ignition wires -Gearboxes and parts -Airbags and parts -Electric equipment	10.1%-9%-0.2% 9.65%-8.16%-1.54% 8.35%-7.21%-0.44% 11.24%-10.22%-0.43% 8.2%-5.86%-0%
FDI	**Biggest investors in RCEP:** Korea, Japan, China, Thailand. FDI inflows in component production mainly focus on electrical conductors (for export), plastic parts (such as noise-proof panels, battery electrode covers, etc.) to serve some automobile manufacturers in Vietnam (Toyota, Honda, Ford standards), and details of air conditioners.	
RoO	Lighting equipment, lights, horns: CTSH or RVC40; Other parts/components: CTH or RVC 40.	**Conclusion:** RoO for electronic components has a moderate level of strictness.
Import – Export	**Biggest importers**	**Biggest exporters**
	South Korea, Japan, Thailand, China	Japan, the US, China, South Korea
Production capacity	**Sector structure: Number of firms:** domestic 56.4%, FDI 43.6%; **Labour:** domestic 14.6%, FDI 85.4%; **Revenue:** domestic 14.3%, FDI 85.7%. The number of Vietnamese suppliers in the auto sector is very small; only a few domestic suppliers can participate in the supply chain for automobile manufacturers and assemblers in Vietnam. **Labour productivity: Domestic firms:** 222.5; **FDI:** VND382.1 million/person/year.	

Source: Compiled by the research team.

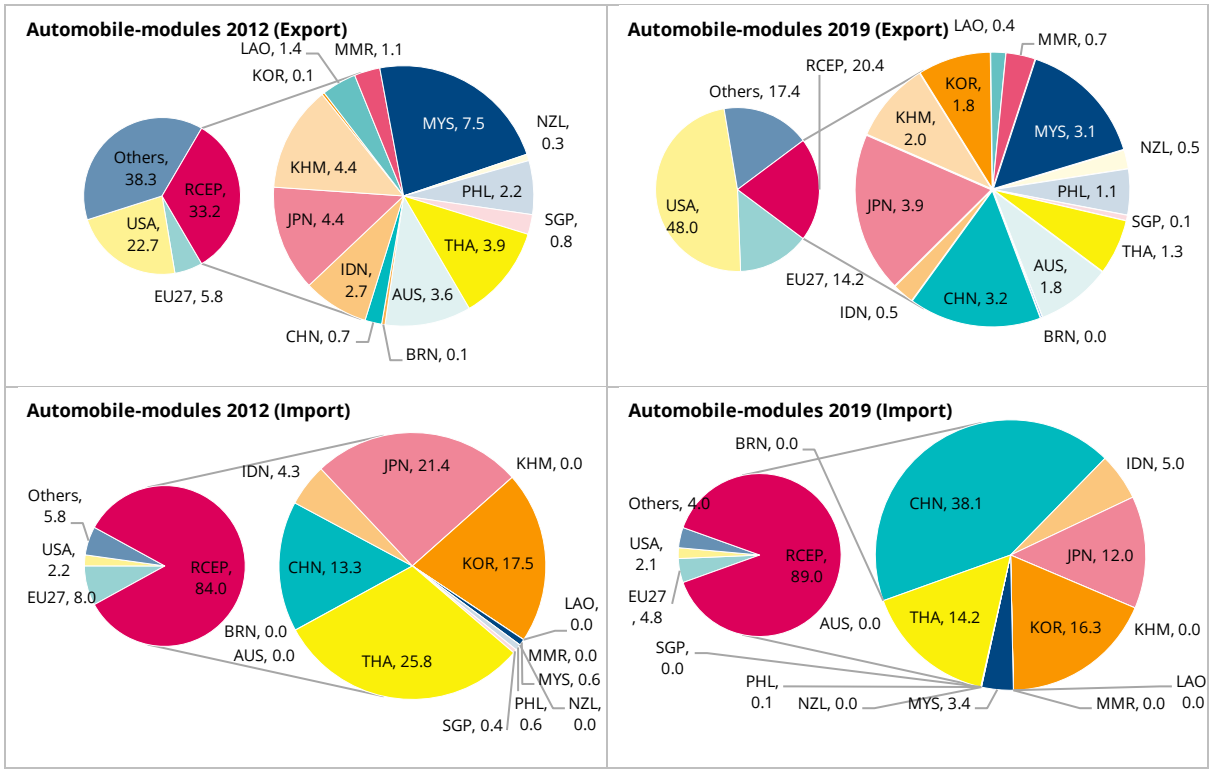
3.2.2. Modules

69. Trade data analysis shows that RCEP is the main module supplier for Vietnam, but Vietnam's exports are mainly directed to markets outside of RCEP (the US and EU). This trend has been consolidated over the years, as the proportion of module exports to the US and EU (mainly tyres) is expanding while exports to RCEP are shrinking. On the contrary, module imports from RCEP are increasing; notably, the market share of imports from China has increased rapidly and is now leading in the RCEP bloc. Imports from China are mainly safety glass, while imports from Thailand are mainly tyres and from Japan, internal combustion engines.

70. Japan, China and South Korea are currently the top three FDI suppliers to Vietnam (both in RCEP and worldwide) in module group production. FDI capital in module manufacturing is lower than that in component and part

manufacturing. Imported products are mainly safety glass, engines and tyres (high quality), while export products are mainly tyres. Bulky products such as seats, chassis and bodies are mainly produced for domestic product assembly. The sharp reduction of taxes on Vietnam's key import and export products in this group of goods (safety glass and tyres) can boost Vietnam's exports and imports to/from RCEP. In particular, the import of safety glass for motor vehicles from China has increased rapidly in recent years, while the import tax on these items has decreased sharply. This will boost Vietnam's imports of this type of product from China. Vietnam's module imports from Japan and South Korea are mainly engines. Although the import tax on this item decreases more slowly, the tax reduction will also stimulate imports from South Korea and Japan when demand increases.

Figure 15: Percentage of Vietnam's module exports and imports by market (%)



Source: Calculations based on WITS.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

71. Regarding tariff reduction, RCEP cuts tariffs for Vietnam from the average base tax rate of 10.4% to 7.4% in the first year to 1.2% in the 20th year. Some products enjoy a sharp reduction in the first year when the Agreement goes into force, such as: rotary internal combustion piston engines/spark-ignition

reciprocating pistons; used pneumatic tyres, of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber. Japan has almost exempted Vietnam from tariffs on these products. Australia and New Zealand have imposed low import taxes and are continuing to cut them. South Korea has also sharply reduced taxes for Vietnam, from the average base tax rate of 7.4% to 3.1% in the first year. ASEAN countries, including the Philippines and Laos, have strong tax cuts for Vietnam in the first year. On the contrary, despite still committing to cutting tariffs according to the schedule, Vietnam still imposes quite high taxes on these products of RCEP. Taxes for rotary internal combustion piston engines/spark-ignition reciprocating pistons remain at the rate of 18%-25%; Motorised frames, for motor vehicles of headings 87.01 to 87.05, at a tax rate of 11.4% in the 25th year of entry into force of the Agreement. For most of the countries in the RCEP, Vietnam has had slow tariff reductions and will remain high for the next 25 years. Particularly, the tax for chassis fitted with engines for the motor vehicles of headings 87.01 to 87.05 remains at 11.4% in the 25th year. For chassis fitted with engines, Vietnam imposed lower tax rates for China, Japan and South Korea.

72. Reducing taxes on modules and the uniform application of RoO in RCEP will help Vietnam attract more FDI into the production of this product group. Vietnam's tyre exports are mainly from FDI firms, such as Japan's Bridgestone Corporation. Therefore, the tyre export market being expanded after RCEP, thanks to tax cuts, will stimulate more FDI into Vietnam in the tyre manufacturing field.

73. Like auto parts manufacturing, automobile corporations have focused on specialising in automotive modules to serve the ASEAN market (e.g. Mazda's factory in Chu Lai focuses on producing vehicle body frames). Therefore, it is possible to attract more FDI projects in the automotive sector in the specialised production of some modules for export to countries in the region. Because these are bulky products, the production and consumption in neighbouring countries will be more favourable for foreign investors).

Table 12: Factors affecting automobile modules under RCEP

	Imposed by Vietnam (**%,** *Before RCEP- First year – 20th year)*	
Tariffs in RCEP	General	18.7%-17.08%-9.73%
	-Glass:	9.33%-3.17%-0.97%
	-Compression-ignition internal combustion piston engines	15.9%-15%-9%

	-Tyres	16.65%-15.36%-3.25%
	Imposed by RCEP on Vietnam	
	10.3%-7.3%-1.2%	- Tyres: 9.3%-5.9%-1.7%
FDI	**Largest investors in RCEP:** Japan, China, South Korea; Foreign investment in module manufacturing mainly produces tyres, body frames, floors, and seats.	
RoO	Tyres: CTH or RVC40; Safety glass: CTH or RVC40; Engines: CC or RVC40; Body: RVC40.	**Conclusion:** RoO for this product group has moderate strictness.
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Thailand, Japan.	Japan, China, South Korea.
Production capacity	**Sector structure: Number of firms:** domestic 85.4%, FDI 14.6%; **Labour:** domestic 43.3%, FDI 56.7%; **Revenue:** domestic 41.7%, FDI 58.3%. **Labour productivity: Domestic firms**: 280.3; **FDI firms:** VND343.3 million/person/year.	

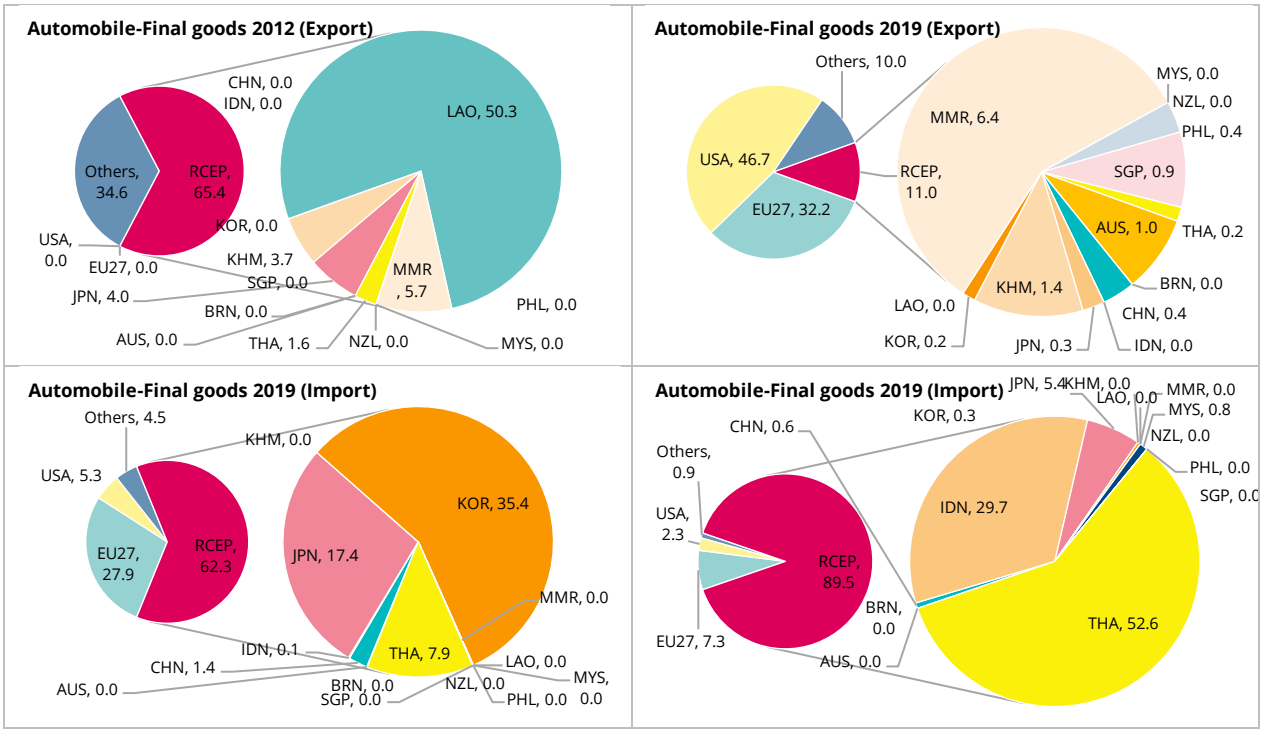
Source: Compiled by the research team.

3.2.3. Final goods (CBU cars)

74. Vietnam's imports of CBU cars have been changing in recent years: imports from RCEP account for a large proportion and continue to increase. But within RCEP, imports from ASEAN countries such as Thailand and Indonesia have increased sharply, while imports from Japan, the US and the EU decreased or slowed down due to the impact of tariff cuts in ASEAN. Vietnam's auto exports are still low but have witnessed a strong shift: the proportion of exports to

RCEP is decreasing, while exports to the US and EU have increased sharply, showing the trend of exporting to countries outside RCEP. However, within RCEP, exports to Myanmar and Cambodia tend to increase. RCEP can help Vietnam increase its capacity to export cars to ASEAN countries because the taxes on imported cars from these countries for Vietnam have been reduced. Regarding domestic production, FDI inflow in the auto assembly in the country is still mainly from South Korea, Japan and a certain amount of capital from Malaysia. However, the number of FDI firms and the amount of FDI capital in this field is still quite modest due to the limited demand in the Vietnamese market. A major shortcoming of Vietnam's automobile manufacturing and assembling sector is that it has not been able to create cooperation - association, and specialisation among firms in manufacturing, assembling cars and producing spare parts. In addition, there is an absence of a large-scale system of raw material suppliers and component manufacturers in the automotive sector, making car prices still high compared to other countries in the region.

Figure 16: Shares of exports and imports of final automobile goods by market (%)



Source: Calculation based on WITS database.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

75. For final automotive goods, RCEP countries have a faster roadmap for tariff reduction for Vietnam than Vietnam for RCEP, from an average base tax rate of 16.44% to 12.87% in the first year and 3.13% in the 20th year after the Agreement takes effect. Meanwhile, Vietnam still protects the domestic automobile sector, imposing taxes at 47.75% in the first year and keeping a high level of 36.77% in the 20th year. Japan and Brunei were exempting tax for Vietnam's automobiles before the Agreement was signed. South Korea cuts tax sharply in the first year, from the average base tax rate of 8% to 0.99%. Most ASEAN countries still keep high tax rates in the first 10 years to protect the domestic auto sector, except Thailand and Myanmar, which have significantly reduced taxes. China significantly reduced taxes for Vietnam in the first year, from 25% to 15.34%, but the reduction roadmap is very slow and will maintain at a high rate in the next 20 years of the Agreement.

76. RCEP can create a driving force to promote FDI inflows into the auto assembly sector when the export market expands and the cost of importing components and parts decreases, creating conditions to improve economic efficiency by scale. The export market is likely to expand because RCEP countries have a relatively strong tax reduction roadmap for Vietnam's CBU cars, while Vietnam still maintains a high protection barrier for this product. In addition, the reduction in costs for input importing makes assembly in Vietnam cheaper, facilitating auto corporations that intend to manufacture in Vietnam for export to ASEAN countries (e.g. Mazda's factory in Chu Lai is oriented to assemble cars in Vietnam to export to Myanmar, Cambodia and the Philippines).

Table 13: Factors affecting final automobile goods under RCEP

Tariffs in RCEP	**Imposed by Vietnam**	
	General	48.65%-47.75%-36.77%
	Imposed by RCEP on Vietnam	
	General	16.44%-12.87%-3.13%
FDI	**Largest investors in RCEP:** **South Korea, Japan, Malaysia;** FDI capital investing in producing final products is mainly from South Korean and Japanese car companies (100% foreign capital or joint ventures/associated with domestic firms) to serve the domestic market.	
RoO	RVC40; RoO has a moderate level of strictness.	
	Biggest importers	**Biggest exporters**

Import – Export	In RCEP: Thailand, Indonesia, Japan; Outside: EU, US.	In RCEP: Myanmar, Singapore, Laos Outside RCEP: US, EU.
Production capacity	**Sector structure: Number of firms:** domestic 72.9%, FDI 27.1%; **Labour:** domestic 54.3%, FDI 45.7%; **Revenue**: domestic 30.8%, FDI 69.2% **Labour productivity: Domestic firms:** 436.6; **FDI firms:** VND1.022 million/person/year.	

Source: Compiled by the research team.

IV. IMPACTS ON THE TEXTILE SECTOR

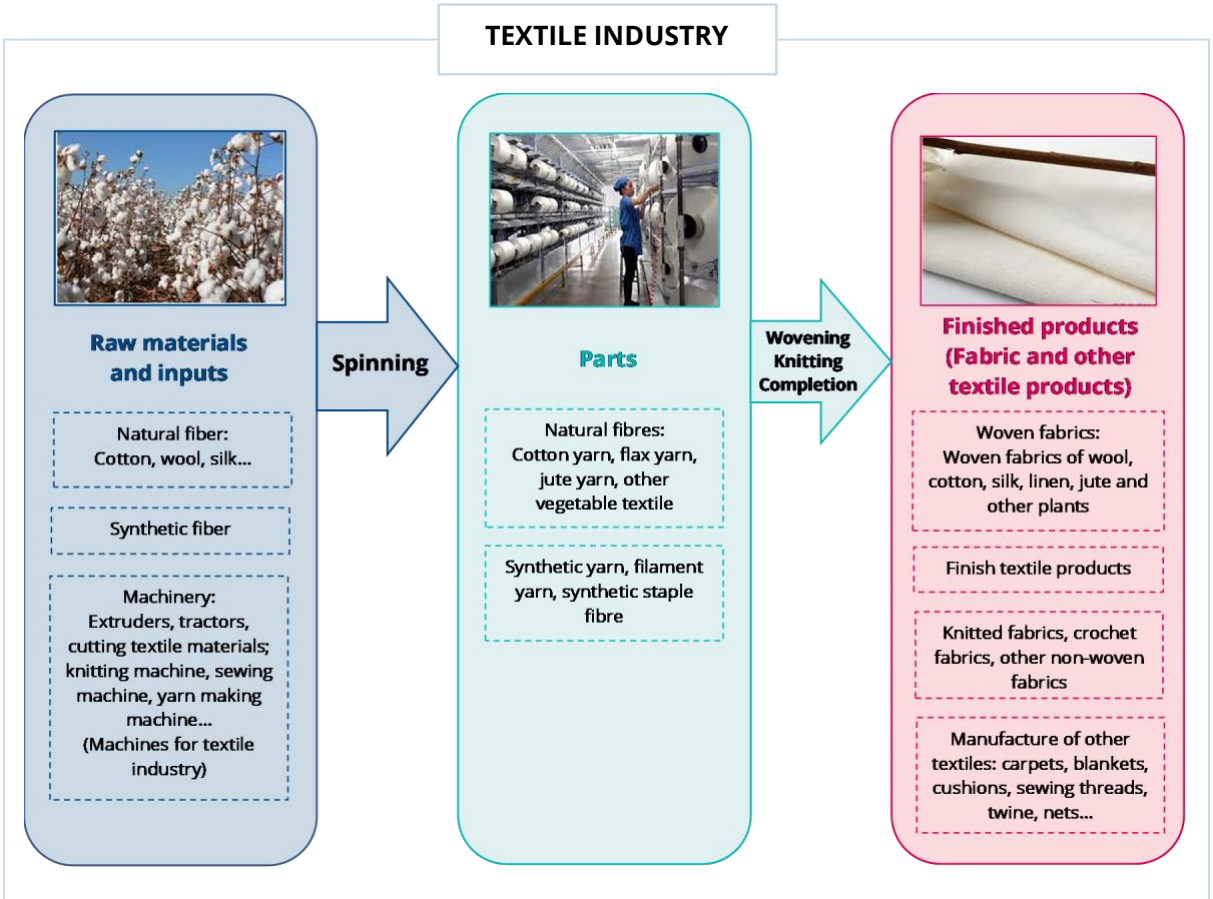
4.1. Vietnam's participation in the textile supply chain

77. The description of the textile supply chain is shown in the figure below, in which one of the important finished products of the textile sector (fabrics) is the input to the garment sector. Important inputs to the sector are natural or artificial fibres, machinery and equipment of textile sector. Vietnam was the world's 7th largest textile exporter in 2020, trailing the US and ahead of South Korea. Vietnam's exports and imports of textile products tend to increase (Figure 17), but imports are larger than exports. In 2019, more than 4,400 firms participated in Vietnam's textile value chain, of which 87% were domestic firms and 88% were small firms; meanwhile, FDI firms accounted for 62.8% of the number of labourers, showing the average size of FDI firms was

much larger. The average labour productivity of FDI firms was also 2.34 times higher than that of domestic firms. The proportion of firms with the largest export is the production of yarns and threads. South Korea, Taiwan (China), China and Seychelles are the largest investors in Vietnam's textile sector and are mainly involved in producing finished products, yarns and threads.

78. Vietnam's textile sector lacks a linkage along the value chains and links between FDI and domestic firms, from producing cotton and fibre materials to spinning and weaving. Regarding trade, Vietnam's textile sector enjoyed a surplus for yarn but suffered a large deficit for fabrics; the yarn produced is not to be used domestically for weaving fabrics but mainly for export, while domestically produced fabrics only meet less than 50% of demand, causing Vietnam to import over USD10 billion of fabrics of all kinds each year.

Figure 17: The textile supply chain



Source: Compiled by the research team.

Table 14: Export and Import of textile products by markets (%)

Export

	Final goods	Final goods	Fiber	Fiber	Yarn & thread	Yarn & thread
Share	2012	2019	2012	2019	2012	2019
EU27	14.1	10.7	7.2	6.6	1.4	1.3
USA	22.3	21.9	3.6	6.0	0.9	1.0
Others	15.7	16.6	49.5	44.5	31.2	16.0
AUS	1.1	1.3	0.2	0.1	0.1	0.1
BRN	0.0	0.0	0.0	0.0	0.0	0.0
CHN	2.7	5.1	6.7	14.7	44.9	62.4
IDN	2.2	4.1	2.6	3.5	4.5	2.6
JPN	19.5	18.7	1.2	2.7	0.8	1.9
KHM	2.0	3.3	3.0	1.5	2.2	1.9
KOR	16.7	11.5	17.6	12.0	5.4	6.7
LAO	0.2	0.2	0.5	0.7	0.1	0.1
MMR	0.2	1.1	0.1	0.5	0.1	0.2
MYS	0.9	0.9	1.5	2.3	1.3	1.2
NZL	0.2	0.2	0.0	0.0	0.0	0.0
PHL	0.4	1.2	3.4	2.1	0.4	0.5
SGP	0.5	0.8	0.3	0.2	0.1	0.0
THA	1.5	2.3	2.7	2.5	6.6	4.2

Import

	Final goods	Final goods	Fiber	Fiber	Yarn & thread	Yarn & thread
Share	2012	2019	2012	2019	2012	2019
EU27	3.1	3.5	1.4	2.0	1.2	0.8
USA	1.6	1.2	7.4	29.9	0.2	0.7
Others	19.4	12.8	34.1	20.5	28.9	19.1
AUS	0.2	0.0	1.6	1.7	0.0	0.0
BRN	0.0	0.0	0.0	0.0	0.0	0.0
CHN	42.2	57.9	31.4	30.5	32.0	50.5
IDN	0.6	0.7	1.3	1.3	3.4	2.2
JPN	12.1	8.3	4.1	3.9	9.6	8.4
KHM	0.0	0.0	0.1	0.0	0.0	0.0
KOR	15.8	12.3	13.5	7.8	17.9	14.1
LAO	0.0	0.0	0.0	0.0	0.0	0.0
MMR	0.0	0.0	0.0	0.0	0.0	0.0
MYS	0.9	0.9	0.5	0.4	2.8	0.8
NZL	0.0	0.0	0.0	0.0	0.0	0.0
PHL	0.0	0.0	0.0	0.0	0.0	0.0
SGP	0.1	0.1	0.0	0.0	0.1	0.3
THA	3.8	2.2	4.6	2.0	3.9	3.0

Source: Calculation based on WITS database.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

79. China holds an important position in Vietnam's textile supply chain, with a growing export and import market share with products ranging from fibres and yarns to fabrics and other finished textile products to/from China. Textile firms in Vietnam mainly produce finished products (fabrics and other finished textile products) with a medium or low level of technology and technique. Vietnam's contribution to the high-tech textile sector (such as medical textiles, protective clothing, or sportswear) is limited, with low VA. Technical textile products are mainly manufactured in China, the EU, USA and India. China is the largest exporter of technical textiles, accounting for a quarter of total global exports (USD27 billion), followed by the US (8%), Germany (8%) and India (2%). However, recent investment trends in the textile sector have seen some positive changes, especially after Vietnam signed many FTAs. FDI flows into the textile sector have increased significantly, especially in the projects of textile materials, dyeing, fibres and yarns. The countries and territories pouring the biggest investment capital in Vietnam are Hong Kong, Singapore, China, South Korea and Seychelles. Japan, the US and some EU countries have also started to increase investment in Vietnam's textile sector. Along with the growth of FDI projects, Vietnam's imports of fibres and yarns tend to decrease

slightly, showing that Vietnam is gradually producing fibres, yarns and textiles to replace imported goods.

Table 15: Firms in the textile sector

	Labour			Revenue	
	Total	Domestic	FDI	Domestic	FDI
	311248	37.18	62.82	29.80	70.20
Fibres	2279	65.42	34.58	79.88	20.12
Yarns and threads	102147	34.86	65.14	26.78	73.22
Final products	197162	39.43	60.57	34.41	65.59
Machinaries	9660	8.98	91.02	3.70	96.30

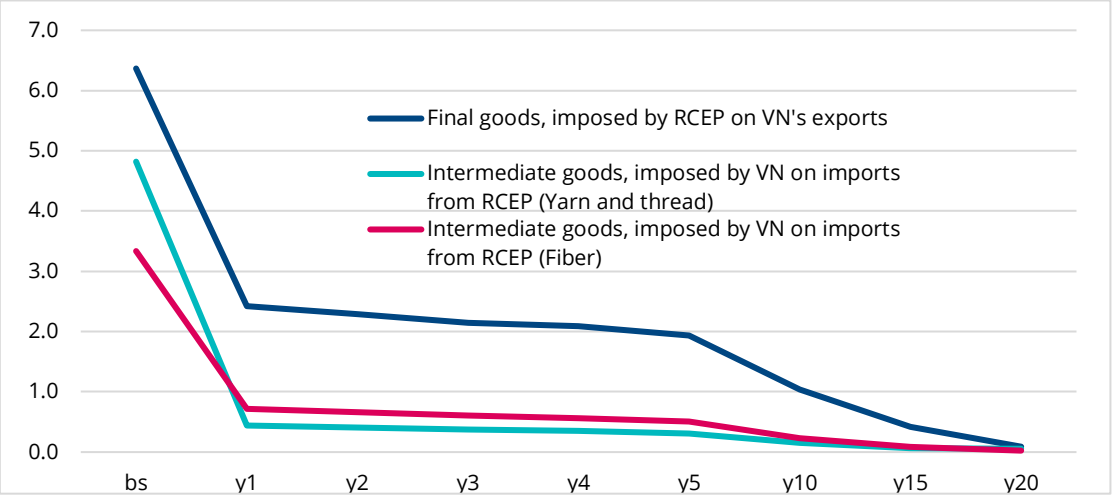
	Labour			Productivity (VND Mill.)		
	Total	Domestic	FDI	Average	Domestic	FDI
Fibres	102147	34.9	65.1	254.09	248.4	268.4
Woven fabrics	29312	32.6	67.4	171.29	141.5	301.0
Finished textiles	26264	41.0	59.0	190.11	159.0	308.9
Knitted and crochet fabrics	28862	19.4	80.6	412.37	202.7	591.9
Instant products	65298	56.2	43.8	148.99	127.9	297.9
Carpets, blankets and cushions	3426	44.6	55.4	285.50	302.9	144.2
Twine and nets	15765	23.0	77.0	227.55	163.0	328.4
Other textiles	28235	35.4	64.6	244.78	187.1	483.4
Artificial yarns	790	32.7	67.3	297.55	316.3	286.3
Machinery	9660	9.0	91.0	190.30	139.7403	278.8

Source: Enterprise Survey 2019.

4.2. Impacts of RCEP on the textile supply chain

80. The general assessment shows that for the textile sector, RCEP promotes the shift of investment into the finished product group to take advantage of the tariff reduction in the fibre and yarn industries. The tariff reductions in these industries were implemented quite quickly and sharply, from an average of 6% to over 2% in the first year, but the base level of 6% is already relatively low, so the incremental impact has not increased much. Meanwhile, Vietnam's tariffs on imported materials are also low and cut almost to zero in the first year, which also partly boosted imports for exports. The cumulative RoO promotes simultaneous increases in exports and imports from China for intermediate products (yarns and threads) and final products (fabrics) in the textile sector, as RCEP allows for regional traceability even when imports of materials mainly come from China, which was restricted in previous FTAs. The situation and impacts of RCEP on each specific segment are presented below.

Figure 18: Tariff reduction for the textile sector under RCEP (%)



Source: Calculation based on RCEP's tariff rates.

4.2.1. Fibre group

81. Vietnam imports a large amount of fibre from abroad to produce yarns for export (recycled yarns). Imports of artificial fibres are mainly from China, and natural fibres (cotton) are mainly from the US. Vietnam's synthetic fibre exports are more meagre (over USD500 million in 2020) and tend to decrease, of which the largest export market in RCEP is South Korea (approximately 100 million USD/year), followed by China. Imports are decelerating, while investments from Korea and China in fibre production remain positive, showing a trend of shifting the fibre production supply chains into Vietnam from RCEP countries, and this trend is expected to pick up after RCEP due to tariff cuts and RoO harmonisation.

82. Regarding tariffs, RCEP is committed to cutting tariffs quite strongly for raw materials, with an average tax rate of 0.72% in the first year right after the Agreement came into effect. China and Laos have the highest average tax bases and are the countries making the strongest tariff reduction (from 13.38% and 8.11% to 0.63% and 0 .05%). Most items have seen taxes cut to zero in the first year, including silkworm cocoons suitable for reeling; raw silk; silk, wool; animal hair, cotton, etc. Similarly, Vietnam also cut tariffs sharply for RCEP countries on textile and garment materials, many products enjoyed the zero tax rate in the first year, such as cotton seeds, silkworm cocoons, raw silk, silk noil, cotton scraps, etc. Some products have a strong tariff reduction in the first year and gradually reduce to zero after the 20th year, such as artificial fibres; wool/animal hair.

83. The combination of such factors (Table 16) and the rather tight regulations of RoO suggest the trend of importing silk (non-artificial silk could increase, affecting the domestic chain of this group). However, this stimulates the development of the weaving segment. FDI flows in the textile sector may continue to increase.

Table 16: Factors affecting the (natural and artificial) fibre group under RCEP

Tariffs in RCEP	**Imposed by Vietnam**	
	General -Man-made staple fires -Raw silk	4%-0.57%-0.04% 7.73%-2.98%-0.54% 5%-0%
	Imposed by RCEP on Vietnam	
	General - Artificial staple fibres - Other vegetable textile fibres:	3.32%-0.71%-0.02% 5.71%-2.29%-0.24% 2.04%-0.19%. 0%
FDI	**Largest FDI investors in RCEP:** South Korea and China; Foreign investments in fibre production are still modest. Currently, domestic firms mainly manufacture fibres.	
RoO	- Cotton, Silk, Animal hair: CC; Artificial staple fibres: CC **Conclusion:** The rule of converting the product codes in the fibre group is rather tight. However, it is still looser compared to the rules of AJCEP, VJCEP, EVFTA and CPTPP.	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Japan	South Korea, China
Production capacity	**Sector structure: Number of firms**: domestic 96%, FDI 4%; **Labourers**: domestic 65.4%, FDI 36.4%; **Revenue**: domestic 79.9%, FDI 20.1% **Labour productivity: Domestic firms**: 360; **FDI firms**: 399.6 million/person/year.	

Source: Compiled by the research team.

4.2.2. Yarn and thread group

84. Vietnam both imports and exports a large amount of yarn (imports mainly man-made filaments and exports mainly cotton). The pace of yarn imports is slowing down, and FDI inflows in this sector are increasing, typically from South Korea (imports from South Korea increase slowly, while South Korean FDI into yarn production is very high), showing that the yarn supply chain is shifting into Vietnam, which is a positive trend from the perspective of

employment and growth. However, this also creates greater pressure on labour demand (which is gradually becoming scarce), environmental problem-solving because these are likely high-polluting industries, and competitive pressure on domestic firms.

85. Regarding tariffs, RCEP countries have reduced tariffs on most products in the yarn group to a low level, particularly for artificial yarn products. Indonesia, Malaysia, and China have a slower tariff reduction schedule for Vietnam's products. While most RCEP member countries reduced or exempted tariffs for many items in the yarn group, Malaysia still maintained high tax rates in the first five years and gradually decreased in the following years for items, including cotton sewing threads and cotton yarns. On the other hand, Vietnam cut import taxes to zero for many items in the thread group, such as cotton sewing threads, cotton yarn packs, flax yarns, jute yarns or bast fibres, and vegetable textile yarns. For artificial fibres, Vietnam reduced taxes to more than 2% for RCEP member countries and will gradually decrease taxes according to the roadmap in the following years. Vietnam has a similar tax reduction schedule for ASEAN countries, Australia, New Zealand, South Korea and Japan for the thread products and makes a slower cut for China.

86. The trend of FDI flocking into Vietnam's yarn sector is predicted to continue rising under the impact of RCEP and other free trade agreements, especially CPTPP and EVFTA. Although the reduction in import taxes on fibre products in RCEP can increase imports and competition in domestic production, investing in Vietnam to produce goods for export to RCEP countries can still bring higher benefits for investors because by setting up a production base in Vietnam, foreign investors can both take advantage of RoO in RCEP and make use of Vietnam's origin to export to other markets such as the EU (thanks to EVFTA) and CPTPP member countries.

Table 17: Factors affecting the yarn and thread group under RCEP

Tariffs	**Imposed by Vietnam**	
	-General: -Man-made filament yarns -Cotton yarns (>85% cotton by weight)	4.82%-0.45%-0.06% 5.57%-2.07%-0.22% 5%-0.71%-0.13%
	Imposed by RCEP on Vietnam	
	-General -Cotton yarns	3.9%-1.24%-0.02% 3.63%-1.46%-0%

	-Man-made filament yarns	5.36%-2.35%-0.14%
FDI	**Largest FDI investors:** South Korea, China, Taiwan (China), Hong Kong, Japan; FDI in yarn production is increasing with diversified investors, in which South Korea, China and Taiwan (China) take dominant positions.	
RoO	Silk yarns, cotton yarns, jute yarns, flax yarns: CTH; Cotton sewing yarns: CTH; Synthetic filament yarns: CC. **Conclusion**: RoO for yarns and threads are more stringent than other commodity groups but looser than rules in AJCEP, VJCEP, CPTPP and EVFTA (requiring stages of raw material production to be carried out in RCEP countries).	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Japan	China, South Korea, Thailand
Production capacity	**Sector structure: Number of firms**: domestic 79.6%, FDI 20.3%; **Labour**: domestic 34.9%, 65.1%; **Revenue**: domestic 26.8%, FDI 73.2% **Labour productivity: Domestic firms**: 248.4; **FDI firms**: VND268.4 million/person/year.	

Source: Compiled by the research team.

4.2.3. Machinery group (extruders, scissors, cutters, knitting machines, sewing machines)

87. Currently, Vietnam imports sewing machines mainly from China and Japan. Export volume is very small, mainly to the EU. The number of firms producing this product is only 66, including both domestic and FDI firms, with relatively low labour productivity. FDI inflows to sewing machine production are mainly from Japan, Taiwan (China) and Korea, with limited capital. Therefore, although taxes imposed by RCEP countries on Vietnam's sewing machine products decreased, with limited production capacity, it is hard for Vietnam to promote exports after RCEP.

Table 18: Factors affecting the machinery and equipment under RCEP

Tariffs in RCEP	**Imposed by Vietnam**	
	Tax exemption	
	Imposed by RCEP on Vietnam	
	-General -Knitting machines, sewing machines	3.48%-1.52%-0.02% 3.39%-1.42%-0.03%

FDI	**Largest FDI investors:** Japan, Taiwan (China) (China), South Korea; Foreign investment in textile machinery production is still modest.	
RoO	CTH or RVC40. **Conclusion:** RoO requirement for the textile machinery and equipment group has modest stringency.	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, Japan	South Korea, China; Non-RCEP: EU
Production capacity	**Sector structure: Number of firms**: domestic 68.8%, FDI 31.2%; **Labour**: domestic 9%, FDI 91%; **Revenue**: domestic 3.7%, FDI 96.3% **Labour productivity: Domestic firms**: 139.7; **FDI firms**: 278.8.	

Source: Compiled by the research team.

4.2.4. Finished product group

88. The finished textile product group has attracted investments from many domestic and FDI firms. Notably, the number of domestic firms is very large (3,200 firms), but their labour productivity is very low at VND160 million/employee. Meanwhile, FDI firms have a fewer number (433 firms), but their productivity is nearly three times higher than that of domestic firms. Similar to yarn production, the trend of shifting the supply chain into Vietnam's fabric production is reflected in the slower growth of imports, especially from South Korea. Exports of textile products to Japan, South Korea and China are also picking up faster and are predicted to continue increasing after RCEP thanks to sharp export tax reduction. RCEP will be the driving force to attract FDI flows into Vietnam's textile sector to meet the origin criteria when exporting to RCEP and member countries of other FTAs (EVFTA, CPTPP). However, this will also pressure labour demand when the unskilled labour force is increasingly scarce. In addition, domestic firms with low productivity and limited technology will be put under considerable competitive pressure, given the trend of increasing FDI capital in the textile sector.

Table 19: Factors affecting the final textile product group under RCEP

Tariffs	**Imposed by Vietnam**	
	General	9.67%-2%-0.33%
	-Soaked, coated woven fabrics	12%-3.61%-0%
	-Special woven fabrics	12%-4.64%-1.13%
	-Knitted or crocheted fabrics	12%-5.26%-0.52%
	-Woven fabrics of cotton	12%-6.67%-1.03%

	Imposed by RCEP on Vietnam	
	General -Finished textile products -Cord fabrics	6.35%-2.42%-0.09% 10.2%-5.39%-0.1% 5.23%-1.96%-0.6%
FDI	**Largest FDI investors:** South Korea, Taiwan (China), China. South Korea is the largest source of FDI in Vietnam's textile sector. Korean investors' shift of investment from China to Vietnam started after Vietnam joined the WTO and due to the increase in Chinese labour cost, while Vietnam possesses many advantages in labour cost and business environment.	
RoO	Woven fabrics of cotton: CTH; Special woven fabrics: CC; Knitted or crocheted fabrics: CC; Wadding of textile materials: CC; Carpets and other textile floor coverings: CC; Other finished textile articles (blankets, drapes, bags, decorative textiles): CC or RVC40. **Conclusion:** RoO requirements for the finished textile product group are generally stricter than other sectors but looser than other agreements such as AJCEP, VJCEP, CPTPP and EVFTA (requiring stages of raw material production to be carried out in RCEP countries).	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Japan, Thailand	Japan, South Korea, China
Production capacity	**Sector structure: Number of firms**: domestic 88.1%, FDI 11.9% **Labour**: Domestic 39.4%, FDI 60.4%; **Revenue**: Domestic 3.7%, FDI 96.3%	**Labour productivity: Domestic firms**: 160.6; **FDI firms**: 466.

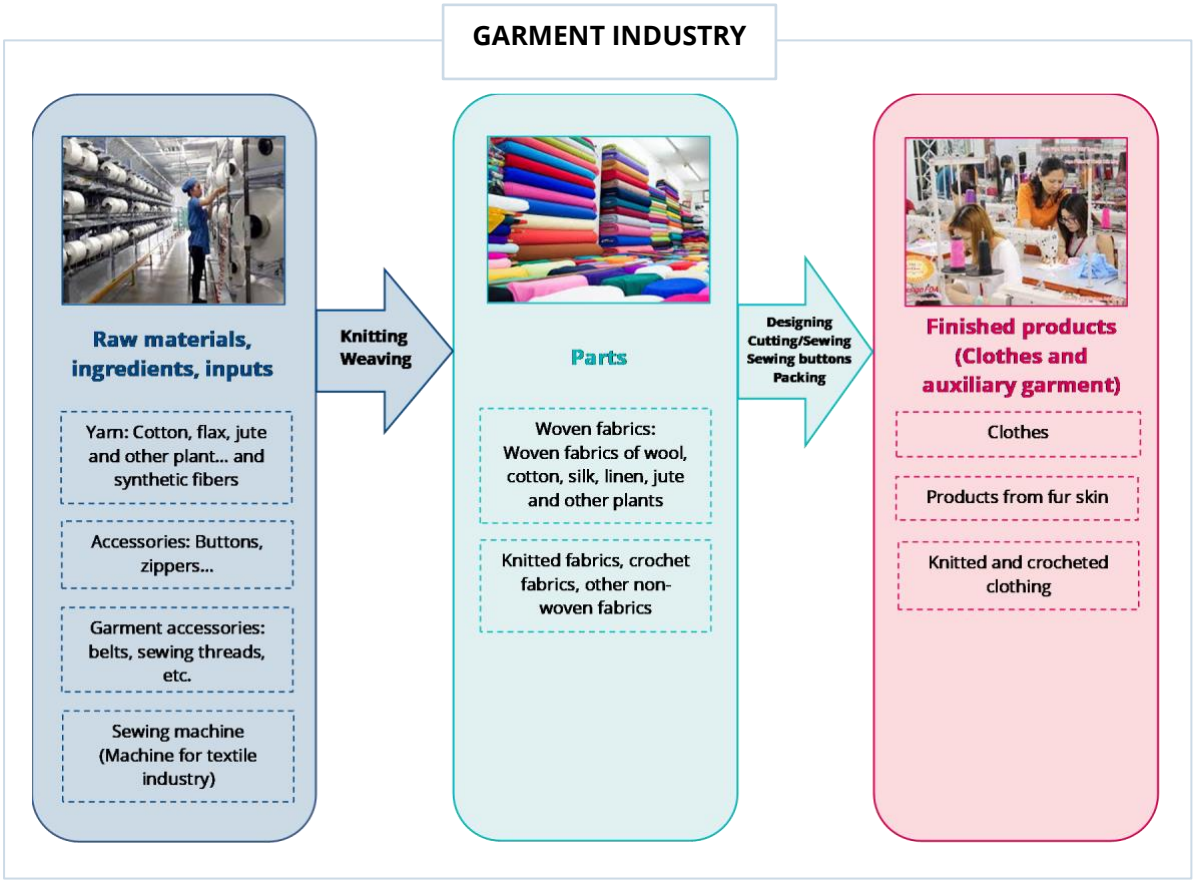
Source: Compiled by the research team

V. IMPACTS ON THE GARMENT SECTOR

5.1. Vietnam's participation in the garment supply chain

89. The garment supply chain includes the production of raw materials (fabrics, the textile sector's finished product), auxiliary materials, and cutting and sewing of the final products. China is the world's largest garment manufacturer, focusing on raw materials, accessories, fabrics and tailoring. Owing to a large workforce, low production cost and modern technology, China can manufacture high-quality raw materials and ready-made garments. The main fabric suppliers include China, the EU, the UK, the US, South Korea, Japan and India. The largest auxiliary materials exporters include China, the EU, Pakistan, Vietnam, South Korea and India.

Figure 19: The garment supply chain



Source: Compiled by the research team.

90. The garment is a leading export sector of Vietnam with a large export turnover and high growth rate. Vietnam currently ranks 4th in the world in textile and garment exports, trailing behind China, the EU and Bangladesh. In 2021, Vietnam fetched USD32.8 billion from garment exports, up 9.9 % compared

to 2020, of which FDI exports reached USD20.1 billion. The major importers of Vietnam's garments are the US and EU, with their total share increasing from 69.8 % in 2012 to 63.2% in 2019. RCEP accounted for only 22% and 29%, respectively. The two biggest partners in RCEP are Japan and South Korea (Table 20). Meanwhile, RCEP is the largest importer of Vietnam's fabric, accounting for 58.1% and 63.6%, respectively, in 2012 and 2019. RCEP is also the largest supplier of fabrics and finished products to Vietnam, mainly from China, Japan and South Korea. The fact that Vietnam imports and exports fabrics and garments is mainly attributable to the quality and diversity of garment products.

Table 20: Share of export and import of garment products by markets (%)

	Export				Import			
	Final goods	Final goods	Fabric	Fabric	Final goods	Final goods	Fabric	Fabric
	2012	2019	2012	2019	2012	2019	2012	2019
EU27	17.0	14.2	5.6	3.5	3.0	7.4	2.9	1.7
USA	52.7	49.0	3.5	4.3	0.3	0.9	0.4	0.4
Others	7.9	7.6	32.8	28.6	13.9	15.9	20.1	13.8
AUS	0.5	0.8	0.3	0.4	0.0	0.0	0.3	0.0
BRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHN	1.4	4.0	3.6	14.3	61.2	55.7	45.3	63.5
IDN	0.1	0.1	7.5	9.2	0.7	1.9	0.5	0.5
JPN	12.8	12.2	12.2	9.5	9.2	2.0	10.0	6.7
KHM	0.0	0.0	12.9	18.1	0.2	1.8	0.0	0.0
KOR	7.0	10.7	14.9	2.6	8.3	10.3	16.7	10.8
LAO	0.0	0.0	0.6	0.1	0.0	0.1	0.0	0.0
MMR	0.0	0.0	1.1	3.8	0.0	0.4	0.0	0.0
MYS	0.2	0.3	0.5	0.3	0.5	0.5	1.0	1.2
NZL	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
PHL	0.1	0.2	2.5	1.6	0.2	0.8	0.0	0.0
SGP	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.0
THA	0.1	0.3	1.5	3.2	2.1	2.2	2.7	1.4

Source: Calculation based on WITS database.

Note: AUS=Australia; BRN= Brunei, CHN=China, IDN=Indonesia; JPN=Japan; KHM=Cambodia; KOR=South Korea; MMR=Myanmar; MYS=Malaysia; NZL=New Zealand; PHL=Philippines; SGP=Singapore; THA=Thailand.

91. Regarding firms, out of 12,000 companies in Vietnam's garment supply chain, 87.3% are domestic, and 81.5% are small. Although FDI firms account for a small proportion in terms of the number, they are responsible for 58% of total

workers employed in the sector (over one million workers), focusing mainly on the production of finished products (58.7%) and garment accessories (32.5%). About 18.5% of firms participate in apparel exports, with the highest proportion belonging to the production of final products (19.3%) and the lowest engaging in fabric production (13.7%). Compared with other industries, domestic garment firms have a better balance in terms of labour and sales than FDI firms.

92. Vietnam's garments rely heavily on imported fabrics because FDI firms, especially major brands, already have their own supply chains. FDI companies invest in factories or order domestic companies to process in Vietnam to take advantage of labour, while raw materials and designs are imported from abroad. Other stages are done by China, the EU, the US, Korea and Japan. Despite that, there have been positive signals in the garment sector in recent times when FDI flows in this sector do not only focus on garment processing but now also appear in more and more projects in the production of raw materials and accessories to take advantage of export expansion opportunities from other newly signed FTAs.

93. The current FDI in the garment sector mainly comes from South Korea, China, Hong Kong, Taiwan (China) and Japan. The highest labour productivity in the garment supply chain belongs to firms producing accessories and fabrics, but the number of firms operating in fabric production is still limited.

94. Regarding tariffs, the tax cut in RCEP for garment products is generally slow except for the first year. For apparel products of all kinds, all countries maintain a relatively high level of protection with an average tax rate imposed on Vietnam's products of about 5% with a slow reduction in the first five years; taxes are only really liberalised in the 15th to 20th years. Vietnam implements tariff liberalisation faster on imported fabrics but keeps a high tax rate on garment accessories of all kinds.

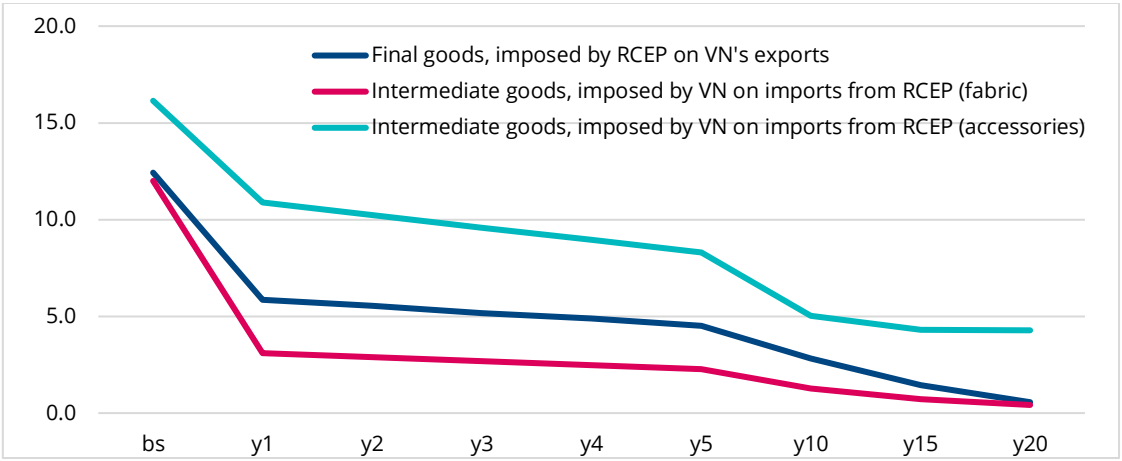
Table 21: Firms in the garment sector

	Labour			Sale	
	Total	Domestic	FDI	Domestic	FDI
Garments	1869915	41.9	58.1	45.7	54.3
Materials	223074	48.7	51.3	55.3	44.7
Final goods	1579007	41.7	58.3	46.5	53.5
Machinaries and equipments	9660	9.0	91.0	3.7	96.3

	Labour		Productivity (Mil.VND)		
	Domestic	FDI	Average	Domestic	FDI
Clothes/non-Knitwear	42.19	57.81	131.26	121.16	174.15
Apparel with leather and fur	18.41	81.59	495.20	104.36	616.33
Knitwear	26.72	73.28	129.34	126.12	140.59
Machinaries	8.98	91.02	190.30	139.74	278.78
Button, clasps, zippers	43.30	56.70	178.92	167.34	232.03

Source: Enterprise Survey 2019.

Figure 20: Tariff cut in RCEP in the garment sector (%)



Source: Calculation based on RCEP's tariffs.

5.2. Impacts of RCEP on the garment supply chain

95. In all stages of the garment supply chain, RCEP can increase fabric and accessories imports from China, but it also provides a huge market expansion

opportunity for garment products (apparel) in RCEP. RCEP continues to promote FDI flows into the garment sector, which has already moved further into Vietnam lately (from South Korea, China and Taiwan [China]).

5.2.1. Fabric group

96. Fabric is the finished product of the textile sector but is also an input to the garment sector. A notable impact is a risk that the trade deficit from China may increase following the reduced tax on fabric imports from China, putting competitive pressure on domestic firms. Although fabric imports from South Korea and Japan have increased slowly in recent years, imports from China have tended to grow sharply. On the positive side, RCEP can promote the shift of FDI flows into fabric production in Vietnam, as fabric production requires a large enough market size for investors to earn a profit (due to the high investment cost). However, due to the pollution that the fabric dyeing stage may cause to the environment, FDI in fabric production also faces higher barriers than other industries. The commitments in the RCEP by themselves do not help Vietnam increase its production capacity (because this is a long process that requires much effort from businesses and the Government). However, RCEP can help Vietnam better identify risks from the increase in the trade deficit, thereby accelerating the reform of domestic production capacity and forming domestic supply chains with close links between the stages from fibre and yarn to the production of fabrics and other finished products.

Table 22: Factors affecting the fabric group under RCEP

Tariffs	**Imposed by Vietnam**	
	-Knitted or crocheted fabrics	12%-5,26%-0,52%
	-Woven fabric of cotton (>85%)	12%-6,67%-1,03%
	Imposed by RCEP on Vietnam	
	Knitted or crocheted fabrics	7,63%-3,34%-0,2%
	Woven fabric of cotton (>85%)	6,48%-2,62%-0,44%
FDI	**Largest investors in RCEP:** Taiwan (China), China, South Korea. Taiwan (China), China, and Korea provide the largest source of FDI in fabric production, but the amount of investment capital is still modest. The chemical-polluted process of weaving and dyeing constrains FDI in fabric production.	
RoO	Knitted or crocheted fabrics: CC; Woven fabrics of cotton: CTH; Woven fabrics of flax: CTH	

	Woven fabrics of other vegetable textile fibres: CTH; Other woven fabrics of cotton: CTH **Conclusion**: RoO for the fabric group in RCEP are more relaxed than those of the AJCEP, VJCEP, CPTPP and EVFTA agreements (requiring the stages of raw materials production to be done in RCEP countries).	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Japan, Thailand	China, Thailand, South Korea
Production capacity	**Sector structure: Number of firms**: domestic 86.3%, FDI 13.7%; **Labour**: domestic 41.7%, FDI 58.3%; **Revenue**: domestic 22.5%, FDI 77.5%. **Labour productivity: Domestic firms**: 157, **FDI firms**: 313.7.	

Source: Compiled by the research team.

5.2.2. Auxiliary material group

97. Although the imports of auxiliary materials from China are still growing, the imports from South Korea and Japan have decreased or slowed down, accompanied by large FDI inflows from South Korea, China and Taiwan (China) in this sector shows that the supply chain of garment accessories production has moved further into Vietnam. FDI firms have higher labour productivity, especially the productivity of Chinese firms in the production of auxiliary materials is very high. Therefore, shifting the supply chain into Vietnam helps reduce imports and enhances labour productivity and export competitiveness, improving Vietnam's trade balance for this product group.

Table 23: Factors affecting the auxiliary material group under RCEP

Tariffs	**Imposed by Vietnam**	
	General -Zippers and parts -Clasps, buckles -Buttons, snap-fasteners, press-studs -Plastic stoppers -Cloth adhesive tape	16.1%-10.7%-4% 18.33%-17.62%-10% 24.25%-22.63%-5.88% 25%-16.56%-3.57% 15%-13.53%-0% 12%-0% right in the first year
	Imposed by RCEP on Vietnam	
	General Nylon bags containing buttons Plastic stoppers	7.4%-4.1%-0.1% 11.1%-9.1%-0.7% 10.8%-7.7%-0.3%
FDI	**Largest sources of FDI:** South Korea, China, Taiwan (China), and Japan. FDI in auxiliary materials production tends to increase after Vietnam joins new FTAs	

RoO	Zippers and parts: CTH, CTSH or RVC40; Clasps, buckle-clasps, belt buckles: CTH or RVC40; Buttons, snap-fasteners, press-studs: CTH or RVC40; Plastic stoppers: CTH or RVC40; Nylon bags for containing buttons: CTH or RVC40; Paper hang tags: CTH or RVC40; Adhesive tapes of a width of mm: CTH or RVC40; Woven adhesive tape of a width of 15-20mm: CC. **Conclusion:** RoO for garment accessories is generally moderately strict.	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea, Japan	Japan, Cambodia
Production capacity	**Sector structure: Number of firms:** domestic 86.9%, FDI 13.1%; **Labour:** domestic 48.7%, FDI 51.3%; **Revenue**: domestic 55.3%, FDI 44.7%. **Labour productivity: Domestic firms**: 152.7; **FDI firms**: 258.3.	

Source: Compiled by the research team.

5.2.3. Machinery, equipment group

98. For the sewing machine group, Vietnam has a higher export capacity than weaving machines, but exports to the main markets (Japan, Singapore) are growing slowly or decreasing, while imports are still increasing. With Vietnam's import tax on this product sharply reducing while the pace of tariff reduction made by RCEP partners for Vietnam is slower, Vietnam may continue to suffer a stronger trade deficit with RCEP countries.

Table 24: Factors affecting machinery, equipment group (sewing machine) under RCEP

Tariffs	**Imposed by Vietnam**	
	General -Sewing machine	11%-7%-2.5% 11%-7%-2.5%
	Imposed by RCEP on Vietnam	
	General - Sewing machine	5.54%-2.85%-0.03% 5.54%-2.85%-0.03%
FDI	**Largest sources of FDI:** Japan, Taiwan (China), South Korea.	
RoO	CTSH or RVC40 **Conclusion:** RoO for the finished garment products are generally stricter than in other industries but weaker than the two- or three-stage RoO in the AJCEP, VJCEP, CPTPP and EVFTA agreements (requiring production stages of yarn, fabric and tailoring must be done in RCEP countries).	
	Biggest importers	**Biggest exporters**

Import – Export	China, Japan	Japan, Singapore
Production capacity	**Sector structure: Number of firms**: domestic 68.8%, FDI 31.3%; **Labour:** domestic 9%, FDI 91%; **Revenue**: domestic 3.7%, FDI 96.3%. **Labour productivity: Domestic firms**: 139.7; **FDI firms**: 278.7.	

Source: Compiled by the research team.

5.2.4. Finished product group (apparel)

99. The cutting and sewing of finished products have attracted the largest number of participating firms, with over 6,400 domestic firms and nearly 900 FDI firms. The competitiveness of the garment sector is increasing, reflected in the evident decrease in the volume of imported finished products from the main markets, including China and South Korea, while the volume of exports to RCEP and non-RCEP countries is escalating.

100. FDI into the garment sector is huge, with more than USD4 billion from South Korea alone, USD2.68 billion from Hong Kong, and USD1.67 billion and USD1.2 billion from China and Japan, respectively. The trend of pouring FDI into the garment sector is expected to continue rising after RCEP, when more and more raw material suppliers are flocking to Vietnam, helping increase the sector's competitiveness. In addition, exports increased thanks to RCEP, especially exports to Japan, because the RoO of the textile sector in RCEP is more flexible, helping Vietnam attract more FDI projects to produce finished products.

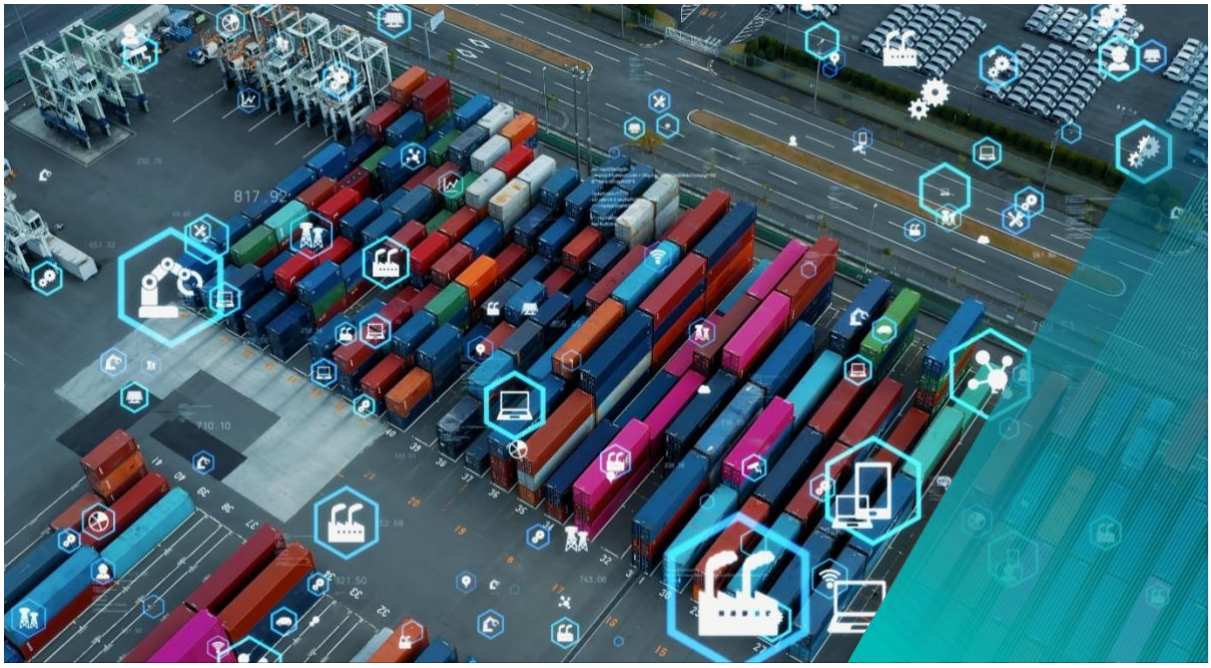
Table 25: Factors affecting the finished product group (apparel) under RCEP

Tariffs	**Imposed by Vietnam**	
	General	20.3%-to 2.7%-0.56%
	Knitwear	19.76%-0.16%-0.08%
	Non-knitwear	19.49%-0.43%-0.11%
	Imposed by RCEP on Vietnam	
	General	12.43%-to 5.85%-0.06%
	Knitwear	11.72%-5.58%-0.11%
	Non-knitwear	11.52%-5.91%-0.04%
FDI	**Largest sources of FDI:** South Korea, Hong Kong, China, Japan, and Thailand. FDI in the garment sector is large and increasing thanks to low labour costs and the origin advantage of new-generation FTAs.	

RoO	Knitwear: CC; Non-knitwear: CC; Other apparel: CTH/RVC40. **Conclusion:** RoO for the garment sector is moderately strict.	
Import – Export	**Biggest importers**	**Biggest exporters**
	China, South Korea.	Japan, South Korea, China, Australia
Production capacity	**Sector structure: Number of firms**: domestic 87.8%, FDI 12.2%; **Labour:** domestic 41.7%, FDI 58.3%; **Revenue**: domestic 46.5%, FDI 53.5%. **Labour productivity: Domestic firms**: 121.3; **FDI firms**: 178.6.	

Source: Compiled by the research team.

Conclusions and Policy Implications



CONCLUSIONS AND POLICY IMPLICATIONS

SOME CONCLUSIONS

- RCEP has entered the first years of implementation in Vietnam against the backdrop that the economy is facing many difficulties due to adverse impacts of COVID-19 and geopolitical swings, with many risks and different trends affecting the medium and long term. RCEP is built on commitments already made in the framework of ASEAN's previous FTAs with partners (ASEAN+6). Recent reports on the impacts of RCEP have agreed that the Agreement brings many positive impacts on the regional economy. Countries with export-oriented growth enjoy higher benefits. For Vietnam, evaluation research is also positive about the contribution of RCEP to growth and trade. Despite this, a rather important aspect of the agreement which is shaping the supply chain in the region and Vietnam, has not been analysed much. This report is designed to help shed light on the impact of RCEP.
- Vietnam and its partners in RCEP have established a close relationship in trade and investment in the past through bilateral and regional economic integration. FDI sources from RCEP, especially from South Korea, Japan, Singapore and China, have assisted Vietnam in engaging deeply in global

supply chains. FDI firms have played a key role in the rapid growth of Vietnam's electronics, textile, and garments exports. Most trade between Vietnam and the partners in RCEP is intermediate goods, production materials and raw materials. Therefore, the trade impact of RCEP is closely linked with the impacts on investment and the reshaping of the supply chains of Vietnam. RCEP may change the movement of Vietnam's trade flows in the direction of promoting the export of final products to RCEP member countries and increasing the import of intermediate goods, but the trend and impact differ for each product.

- The electronics sector has witnessed a relatively high degree of liberalisation in input components, so only a few output products can take advantage of tax incentives (such as televisions, antennas, speakers, monitors and projectors). Although the expectation of attracting FDI in this sector is high, it is difficult to expect a breakthrough in FDI flows after RCEP because Vietnam's key products, including smartphones and laptops, have already enjoyed very low tax rates in RCEP markets.
- The automobile sector can receive many positive impacts thanks to tax incentives for components and parts that RCEP partners have granted Vietnam, and especially RoO is applied uniformly in the whole RCEP bloc. The import tax on spare parts and components between Vietnam and RCEP partners has been reduced significantly, enabling each country to specialise in producing and exporting advantageous spare parts. Currently, Vietnam mainly exports auto parts such as tyres and electrical wires. However, with RCEP, the expansion of export markets and increase in economic efficiency thanks to trade liberalisation and RoO rules in RCEP drawing further foreign investment to Vietnam to serve the whole RCEP bloc, especially the ASEAN market. Manufacturing products can be more diversified, helping Vietnam expand its supply chain. This also implies that with RCEP, the automobile sector can expand its participation in the regional value and supply chains, in which Vietnam's current participation is rather limited.
- For the textile and garment sector, the trend of shifting the supply chains into Vietnam has been evident in recent years with increases in exports and FDI attraction, while imports from major markets have slowed down. RCEP creates more advantageous conditions for the supply chains of the textile and garment sector to continue moving into Vietnam, including reducing import and export taxes on raw materials and finished products and expanding

export markets, along with the synergistic effects of new generation FTAs that Vietnam has just joined (CPTPP and EVFTA) as well as increased intra-regional exports due to the impact of RoO harmonisation. However, Vietnam is currently heavily dependent on imported materials, so in general, RCEP can make Vietnam import more if it does not improve its domestic production capacity. The import of raw materials and accessories for the garment sector may continue rising because most of Vietnam's raw materials depend on imports despite its improved capacity.

- RCEP provides an opportunity for Vietnam to form a new supply chain in the garment sector. Although the commitments in the RCEP by themselves do not help Vietnam improve its production capacity in the direction of "self-reliance and sustainability", even having the opposite effect due to more imports from China, RCEP creates favourable conditions for Vietnam to better recognise the risk of the trade deficit from China and competitive pressure on domestic firms, especially in the short-term when the production capacity has yet to be improved. Vietnam can take advantage of this background to concentrate resources on improving domestic capacity and self-producing fabrics instead of importing from China and some other RCEP countries to create new supply chains that are more sustainable.

POLICY IMPLICATIONS

- **From the above analysis, some questions arise**: Should Vietnam build its own supply chains or engage deeper in existing ones? Should we promote domestic or FDI firms' participation in the supply chain? In fact, the international division of labour has taken place quickly in the context of integration and interdependence between economies. It is difficult for Vietnam to build an independent supply chain that does not depend on other countries, especially for industries that require high technology. Therefore, the problem is how to consolidate domestic supply sources, increase the capacity and profits of Vietnamese firms in the chain and minimise the risk of supply chain disruptions due to global economic and geopolitical volatilities.
- **It's necessary to have a strategy** to take advantage of tax incentives and RoO rules to promote the positive impacts of the Agreement and, at the same time, promote the FDI attraction into industries and sectors with high-added value as inputs for export processing when export markets in RCEP are expanded. RoO in RCEP converges many elements that benefit Vietnam in trade and supply chains, including RoO harmonisation and some more relaxed rules than in previous FTAs. The good implementation of RoO in RCEP reinforces the benefits of the Agreement. For businesses to take advantage of this benefit, the Government must provide information and guidance. Training for officials of state management agencies and businesses should be paid adequate attention to ensure a correct, clear and complete understanding of RoO in RCEP.
- **Enlarging export markets to other RCEP countries besides traditional markets** such as China, Japan, and South Korea to take advantage of preference of origin of goods. Vietnam's trade currently focuses on some export markets such as China, Japan, Korea and the US (accounting for 60%). Therefore, to take advantage of RoO in RCEP, it is necessary to seek diversification of the export markets to other RCEP partners and, at the same time, actively research market trends in goods and consumer behaviour to search for orders.
- **Having a strategy on FDI attraction** into the industries and sectors that can meet RoO in RCEP, especially investing in the production of intermediate goods, meanwhile preparing capacity to be ready to receive the new investment flows from shifting trend of supply chains.

- **Strengthening the technological capacity of domestic firms** in supporting industries and assembly to improve competitiveness, taking advantage of tariff preferences and RoO in RCEP. Vietnam's participation in global and regional value chains is still limited compared to other ASEAN countries such as Singapore, Thailand, Indonesia, Malaysia and the Philippines. RCEP can help accelerate the import and export growth of industries, but it is noted that this may be just a trade diversion, and the results have little impact on production growth. If Vietnamese firms do not improve their production capacity, they may lose competitiveness, even with countries in the ASEAN region. Therefore, the Government needs to have integrated policies to create an environment for Vietnamese firms to access modern technology and participate in the stages of creating greater value added in the value chain of manufactured products.
- **The electronics sector** needs to concentrate on solving the shortage of qualified suppliers for current electronics factories in Vietnam. Vietnam has participated in several regional electronic supply chains but is mainly engaged in assembly (with Korea) and processing (with China). With several advantages, RCEP promotes FDI and redirects investment flows into RCEP member countries, so it is necessary to strengthen the capacity of domestic firms and ability to absorb technology to take advantage of these FDI inflows better, shifting the focus of participation at a higher stage in the supply chain, firstly in the region and then in GVCs. Regarding trade: improving trade promotion to export finished products to potential markets that tend to increase imports of Vietnamese electronic products and/or continue reducing taxes for Vietnam in RCEP, such as Australia, New Zealand and some ASEAN countries. Regarding investment: attracting investment in the chip manufacturing sector to make it an input to the integrated circuit and semiconductor industries.
- **For the automobile sector**, it is essential to promote investment in the production and export of finished products to ASEAN countries with less developed automobile industries, especially Myanmar, Laos and Cambodia, while at the same time attracting FDI in specialised production and export of components and parts to countries with the more developed automobile industries in ASEAN such as Thailand, Indonesia and Malaysia. Regarding investment, attracting capital for the production of components, input parts that Vietnam is dependent on imports such as gearboxes, bumper bars,

engines, safety glasses, lighting equipment or other signal equipment, high-quality tyres, especially investment from Japan, to take advantage of its internationalisation strategy of manufacturing components and parts to export back to this market. RCEP can create favourable conditions for Vietnam to implement this strategy by expanding the consumer market's size and increasing economies of scale (specialised production of components/finished products in Vietnam can serve the whole RCEP market).

- **For the textile and garment sector**, in terms of trade, joining RCEP helps Vietnam take advantage of the incentives given by cumulative RoO, especially when Vietnam imports most of its raw materials from China, which Vietnam previously could not do. RCEP provides a large market; thus, it is necessary to support firms in finding out the product preferences of consumers and other relevant information in this market. In addition to the traditional markets, it is essential to enhance trade promotion to export to ASEAN, Australia and New Zealand. Regarding investment in the textile sector, a focus should be placed on attracting investment and upgrading the fabric manufacturing sector, strengthening the linkages between the stages of the textile sector, from fibre and yarn to the production of fabrics and other finished textile products to create a "self-resilient and sustainable" supply chain, reducing the risk of supply chain disruptions which may happen due to unexpected instabilities from the world market (such as the COVID-19 pandemic, legal risks due to new policies of the EU and the US related to the textile sector[11]). Vietnam should also promote investment in producing high-tech textile products such as medical textiles, protective clothing, and sportswear. The garment sector should attract FDI into accessories and fabrics because these industries have higher labour productivity and added value. Regarding investment partners, it needs to concentrate on attracting investment from partners with high labour productivity, such as Japan and Singapore, especially large garment companies with world-famous brands.■

[11] Recently, the EU has launched a new textile strategy on sustainable supply chains and traceability, especially in Germany, that even requests traceability on cotton, yarn and fabric. The US introduced a law against forced labour in Xinjiang, while Vietnam imports a lot of yarns and fabrics from this region. Therefore, if the US traced the origin, Vietnam's textile and garment exports could be greatly affected.

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