Korea Institute for International Economic Policy

Studies in Comprehensive Regional Strategies
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On behalf of the research team
Dr. Tran Toan Thang

Abbreviations

ADB	Asian Development Bank
AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Area
AIIB	Asian Infrastructure Investment Bank,
AKFTA	ASEAN- Korea Free Trade Agreement
APEC	Asia-Pacific Economic Cooperation
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
ASEM	Asia-Europe Meeting
BFA	Boao Forum for Asia
BRICS	Brazil, Russia, India, China and South Africa
CAFTA	Central American Free Trade Agreement
CDB	China Development Bank
CEPEA	Comprehensive Economic Partnership for East Asia
CEPT	Common Effective Preferential Tariff
CIEM	Central Institute for Economic Management
EAEC	East Asian Economic Community
EAFTA	East Asia Free Trade Agreement
EAS	East Asia Summit
ECB	European Central Bank
EFTA	European Free Trade Association
EVN	Vietnam Electricity
FDI	Foreign Direct Investment
FED	Federal Reserve System
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GSO	General Statistics Office

GVCs	Global Value Chains
IMF	International Monetary Fund
IPEA	International Preliminary Examining Authority
ISA	International Searching Authority
ISDM	Investor - State Dispute Mechanism
KERI	Korea Electro technology Research Institute
KIEP	Korea Institute for International Economic Policy
KIPO	Korea Intellectual Property Office
KOICA	Korea International Cooperation Agency
K Petro	Korea Institute of Petroleum Management
KRISS	Korea Research Institute of Standards and Science
KTL	Korea Testing Laboratory
MFN	Most-Favored Nation
MNCs	Multinational Corporations
MNEs	Multinational Enterprises
MOET	Ministry of Education and Training
MOIT	Ministry of Industry and Trade
MOU	Memorandum of Understanding
NCS	New Concept of Security
NOIP	National Office of Intellectual Property
NT	National Treatment
ODI	Overseas Development Investment
OECD	Organization for Economic Co-operation and Development;
PCT	Patent Cooperation Treaty
POP	Population
PPP	Purchasing Power Parity
RCEP	Regional Comprehensive Economic Partnership

RMB	Renminbi
R&D	Research & Development
SCIC	State Capital Investment Corporation
SCO	Shanghai Cooperation Organization
SMBD	Senior Management and Board of Directors
SOEs	State-Owned Enterprises
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers to Trade
TPP	Trans-Pacific Partnership
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UN	United Nations
UNCOMTRADE	United Nations Commodity Trade Statistics Database
UNCTAD	United Nations Conference on Trade and Development
US	United States
VCA	Vietnam Competition Authority
VKFTA	Vietnam-Korea Free Trade Agreement
VNA	Vietnam Airlines Corporation
WB	World Bank
WTO	World Trade Organization

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Introduction

Vietnam and the Republic of Korea (Korea) have enjoyed a very fruitful bilateral relationship for the last two decades since they established the official diplomatic relationship in 1992. The relations between the two countries were upgraded to "comprehensive partnership" in 2001, and then to "strategic partnership" in 2009. In 2014, Korea had 505 new projects and 179 expanded projects with a total investment of USD 7.32 billion which accounts for 36.2% total FDI inflow in Vietnam. Recently, Korea has become the biggest foreign investor in Vietnam (USD 19 billion, accumulatively by the end of 2015). Meanwhile, Vietnam is Korea's third biggest export market (after China and the US). Total trade between the two countries increased from USD 4.9 billion in 1992 to USD 36 billion in 2015 and is expected to reach USD 70 billion in 2020.

In 2015 the two countries signed a bilateral Vietnam-Korea Free Trade Agreement (VKFTA) which sets a new stage for bilateral economic cooperation. VKFTA covers various aspects, not only tariff elimination and trade facilitation but also commitments on investment, intellectual property rights, e-commerce, competition and transparency. Together with Korea's free trade agreement with ASEAN (AKFTA), VKFTA will bring about great growth opportunities for both countries in the coming years. It is expected to further boost the bilateral relations, especially in trade and investment.

Inter-dependence among regional countries is an emerging issue in the literature in economics. The term itself reflects the specialization of each country and covers both economic and geopolitical dimension. In purely economic sense, the change in dependency reflects the change in the advantages of each country. It also implies that the change in bilateral trade/investment will affect and be affected by the trade/investment interactions of other partners. On the other hand, the term reflects the concern of governments that economic reliance may lead to political reliance and vice versa. In other words, any move or bilateral commitments in terms of trade and investment between any pairs of countries in a region will influence the trade/investment

pattern of other pairs of countries; and the geopolitical factor should not be ignored when analyzing international trade and investment.

Given the above mentioned, the Vietnam-Korea bilateral relationship will be determined by not only the VKFTA but also many other factors. First, the regional trend in signing FTAs is strong and both Vietnam and Korea have signed many FTAs with other partners. Vietnam participated in 16 FTAs by 2015 while the number of FTAs involved by Korea is even higher (24 FTAs). Their partners, in turn, also have a large number of commitments. In addition, TPP is expected to be signed soon while negotiation for RCEP is also gaining momentum. In this context, it is possible that the trade and investment impacts of VKFTA will be diverted/neutralized by other FTAs and the gains from VKFTA will not be as big as expected. Too many FTAs may be distracting for firms when capacity to produce and export is limited. In fact, an ADB research paper (Kawai and Wignaraja 2009) pointed out that the ratio of firms using FTAs in ASEAN is relatively low (around 25%). The "Spaghetti Bowl" effect as suggested by Jagdish Bhawati (1995) can be at play in this circumstance.

Second, bilateral economic activities do not take place in a vacuum. Investment and trade policies of other economies will have substantial impacts on Vietnam-Korea trade and investment. In other words, we will have to analyze spatial factors in order to understand the bilateral economic relations and have sensible forecasts for the future. In this way, many empirical studies have shown that a spatial gravity model can produce a better estimate for trade flow models and give better prediction for future trade flow.[1)]

Third, geopolitical, cultural and historical factors are also very important determinants of international trade and investment. In fact, it is difficult to separate the trade and investment relations from the geopolitical and cultural /historical relations. The level of trade and investment relations also reflect the political relations between the two countries (in addition to other factors

1) See, for example: Porojan, A. (2001).

such as competitive advantage, geographical location ...). By contrast, strengthening geopolitical relations is also a good signal for further investment and trade flows in the future. Therefore, it is not sufficient to study bilateral economic relationship or level of economic inter-dependence based solely on economic factors, or geopolitics, culture and history. In the context that the geopolitical situation in the region has become more and more complex with the emergence of China in the sea territorial disputes it is very important to study trade and investment inter-dependency between Vietnam and its key partners such as Korea, Japan, the US, China and ASEAN in a comprehensive, multi-factor framework.

From this background, this research is designed to:

Overview the geopolitics in the region, particularly the emergence of China which is shaping the trade and investment flow in the region

- Overview the relationship between Vietnam and Korea, identifying the role of Korea in Vietnam's economy, especially in trade and FDI, taking into accounts the inter-dependency among regional economic partners.
- Analyze the impacts of the geopolitical factors as well as the trade and investment of other countries in the region on the bilateral trade and investment relations between Vietnam and Korea.
- Provide forecasts of the trade and investment flows among countries in the region in the context of rapid changes in geopolitics and macroeconomic of the region due to the emergence of China.

In order to investigate such questions, we combine both qualitative and quantitative approaches and base on the multi-region analysis. Recent studies normally measure the dependence based on bilateral trade data and focus on some traditional indicators such as concentration or product concentration by partner, trade intensity index. Such indicators, however, do not entirely reflect the meaning of dependence. In this book, in addition with such in-

dices, we use a complex measure developed by Carlot *et al.* (2015). The advantage of the index is it captures not only the bilateral trade flow, but also the influences of the third parties as well as the capacity to decide the international price of the partner.

The research team constructed the dependency index over time from 2006 up to 2014 and among different partners in the region, including ASEAN countries, Korea, Japan, China, and some TPP members. Based on the results, the trade inter-dependency will be analyzed in combination with information from regional FTAs to depict the interdependence pattern in the region.

Spatial gravity econometric model was employed in this book as a major tool for analyzing the inter-dependence. The model has great advantage in analyzing the trade and investment flows. We consider that the trade/investment among any pairs of countries is determined by not only the gravity force (e.g. GDP, distance) of such countries, but also the trade/investment from other countries. For example, the changes in China economy leads to the move of FDI from Japan and Korea to ASEAN. In other words, the determinants of FDI inflow from Japan or Korea to ASEAN are determined by not only Korea, Japan or ASEAN but also China. While the classical gravity model does not allow incorporating the role of third parties in the estimation framework, the spatial gravity model, by using dependence matrix approach, can help to do so. Furthermore, the spatial approach also allows incorporating other non-economic factors (for example, the geopolitical factors) into the model.

The inclusion of geopolitical factors into a purely economic model like the gravity model is one of the innovations of this research. As mentioned, the issue of how the changes in the regional geopolitics affect the trade and investment of Korea and Vietnam as well as other major partners in the region needs to be investigated. The team, based on the scoring method, will quantify those factors and incorporate them into the model. In combination with

other variable matrices, namely distance, FTA matrix, language matrix, the hypothesis on the influence of geopolitics in determining trade and investment flows is tested.

Forecasting: Based on the spatial gravity model we will forecast the trade and investment flows from Korea to Vietnam for the coming years. The scenarios are constructed based on assumptions about geopolitical factors, the implementation of TPP,[2] VKFTA and some other FTAs in the region such as RCEP, KOREA-JAPAN-CHINA FTA…

For some reasons most of the data used in this book is extracted from UNCOMTRADE, UNCTAD, Korea Eximbank (KXIM) and secondary data from Vietnam. The data for constructing forecast scenarios is from IMF and WB reports.

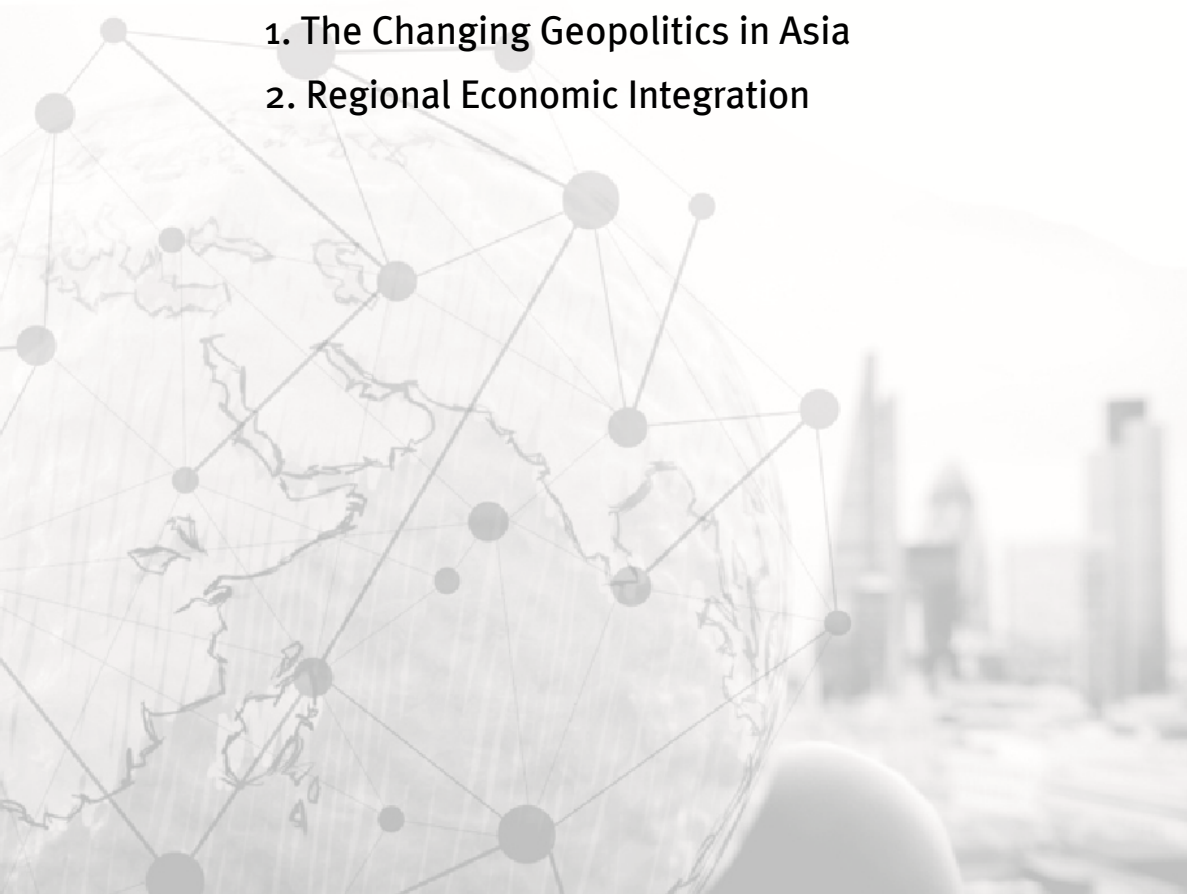
The book consists of five chapters. Chapter One focuses on overviewing the geopolitical situation and regional economic integration. It points out the role of China's emergence in making the changes in the regional geopolitics and economic pattern as well as the responses from other countries including Japan, Korea and ASEAN. Chapter Two is designed to summarize the relationship of Vietnam and Korea in various aspects from diplomatic, culture, labor to trade and investment. The economic integration of Vietnam and Korea is discussed in Chapter Three. Special emphasis is put on the VKFTA which is believed to provide great opportunities and also challenges to Vietnam. Chapter Four is a key chapter for analyzing the dependence (both export and import) and the investment relation of Vietnam and Korea. The original contribution of this chapter is that it examines the bilateral dependence in combination with that of other countries in the region so that

2) It is challenging for TPP to be ratified as Donald Trump vowed to withdraw from this agreement once he is elected to become the president of the US. However, at the time of completing this research there is still a debate on this issue, particularly on the potential that the remaining countries have expressed their willingness to pursue TPP without the participation of the US. Therefore, we assumed that the TPP would be continued in the future.

the reader can have a more overall picture about the economic interdependence in the region. Due to short of methodology for investment dependence, this chapter only provides the descriptions of investment from Korean MNEs in Vietnam. Chapter Five is a bit technical. Using spatial gravity model, we focus on analyzing and forecasting trade and investment flows in the region, particularly bilateral trade and investment between Vietnam and Korea. Unlike other research this chapter emphasizes the role of third parties in determining trade and investment flows. The question of how China's strategies will determine the trade and investment flows between countries in the region is particularly in focus.

This book was prepared in a short period of time from March to October 2016 with financial support from KIEP. On this occasion, the CIEM research team would like to express our sincere thanks to Korean colleagues for providing a great opportunity for us to carry out this research, and is looking forward to further cooperation in the future.

Ⅰ. Regional Geopolitics and Integration



In reality, it is hard to separate the geopolitics from the economic ties. The mutual relationship between them is two sides of a coin. The country's location and the power to control resources shape their political relationship and foreign policy. It also determines their economic transactions with others. On the other hand, economic interests, particularly trade and investment, also form political, military, and diplomatic policy.

In addition, with the overall trend in regional and global integration, particularly the growing number of FTAs, which has enhanced the inter-dependence within the region, geopolitics and economic integration in Asia are a forefront topic of research on Asia, at least since the economic crisis in 1997-1998 (Corrigan 2016). The Asia-Pacific region has witnessed the emergence of China which implies considerable impact on regional political, economic and military cooperation. Recent analyses pointed out a close link between the rise of China and strategic adjustments of several countries such as the US, Japan, ASEAN members, India, and Australia (Mills 2015). Profound evidence can be seen from the US pivot strategy, TPP and ongoing negotiations of regional trade agreements. More importantly, such movement is by not only governments exercising their strategic policy but also MNEs. As an example, a partly movement of Korean and Japanese MNEs from China, or the so-called "China plus one" strategy, is partly explained by the slowdown of the Chinese economy and also by the unstable and political risks (Lida 2015)

This chapter focuses on describing the geopolitics in the region. In particular, it concentrates on the rise of China which is believed to be the core factor creating the regional political changes. It also represents the regional economic integration, the common trend between countries. All of those factors have substantial implications on the trade and investment relations between any pairs of countries among which those of Vietnam and Korea are not exceptions.

1. The Changing Geopolitics in Asia

A. The Emergence of China

1) Dramatic improvement of growth and economic influence

Entering the 21st century, together with the transferring of power to the fourth generation of leaders led by President Hu Jintao, China introduced a new strategy, known as "Peaceful Rise" or "Peaceful Development", and has successfully made a breakthrough and become one of the most powerful and influential nations in Asia.

The rise of China has reflected through the significant economic records of this powerful country. After the profound achievements in the 90s, entering the 21st century, China's economy has continued growing strongly at approximately 10% per annum. After the global financial crisis in 2007, its economic growth peaked at more than 12% in 2010 and the country officially took over Japan's position to become the world's second largest economy after the US. China model is considered a successful application of the East Asian model of economic development which was initiated by Japan and followed by four "Asian tigers."[3] Despite the slowdown recently (8% in 2011, 7.3% in 2014 and 6.9% in 2015), China's growth rate remains impressive compared to other powerful nations in the context of the overall economic downturn in the world caused by the global financial crisis in 2007 and the European sovereign debt crisis in 2009.

With China's significant economic growth, it is undeniable that China may surpass the US to become the world's largest economy in the near future. In 2012, the size of the Chinese economy was equivalent to 80% of that of the US. China's share in the world's total GDP has taken a dramatic upward trend; from 3.7% in 1990 to 15% in 2012 while that of US declined from

3) Including Hongkong, Singapore, Korea and Taiwan, a territory of China.

24.3% in 1999 to 18.7% in 2012 (Hang 2015). According to the forecast by the Economist Intelligence Unit (EIU),[4] China's share of the world's total GDP will be on par with that of the US in 2017 then reach to 24.1% in 2030 to overtake the US position.

In terms of international trade, China has shown a transformation to become a powerful trading partner with a continuously increasing value of both exports and imports. Within 13 years (from 2001 to 2013), the total exports and imports of China to the world increased by 8 times.[5] In 2009, China overtook Germany to be the largest exporting country and the world's second largest importing country (after the US). In 2012, China continued to surpass the US to become the world's largest trading country. Due to its trade surplus, large-scale foreign investment and its ability to acquire massive foreign reserves, China's foreign-exchange reserves is at the top of the world, attaining nearly US$ 3.7 trillion (Morrison 2013).[6]

For investment, China is one of the most attractive destinations for FDI inflow among developing countries. Despite of some fluctuations due to global economic downturn and the country's economic restructuring, in general, FDI inflow to China is on a rising trend. According to a report by the United Nations Conference on Trade and Development (UNCTAD), in 2012 China is the world's second largest destination for FDI inflow after the US. Not only an impressive destination of FDI inflow, the country is also one of the biggest FDI investors as a result of its "Go Global" strategy. In 2012, China was the world's third largest FDI source (ranked 6th in 2011) with the total outward FDI of US$ 450 billion (UNCTAD 2013).

Confronting with slowing domestic growth and excessiveness in manufacture capacity, the Chinese government has taken various restructuring

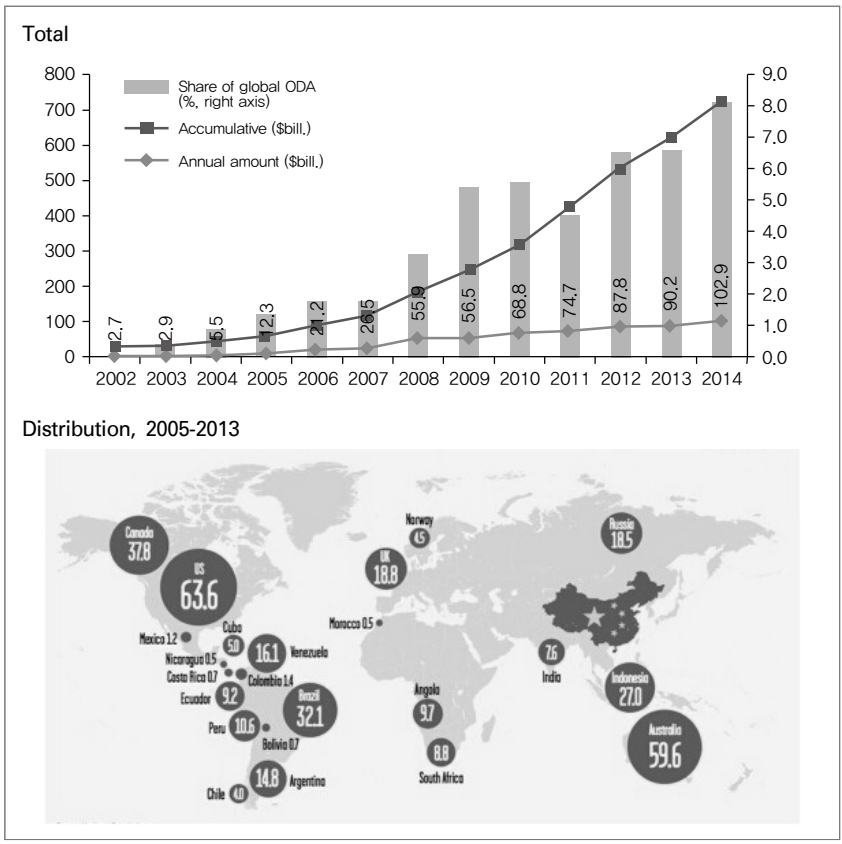
4) A business within The Economist Group.

5) Chinese exports increased from US$ 266.2 billion to US$ 2,213.7 billion. Chinese imports grew from US$ 243.6 billion to US$ 1,949.6 billion.

6) By September 2013.

measures, which are facilitated by its abundant foreign exchange reserves and efforts to internationalize their currency (CNY). Those attempts have helped to boost up the expansion of capital flow from China. In 2014, China significantly increased its outflow investment, both in terms of FDI and ODA. This capital flow was approximately US$ 760 billion (in 2015). Though equivalent to 1/10 that of the US, Chinese investment outflow has remarkably increased and expanded in size. China now ranks as the world's second largest recipient of FDI and the world's third largest FDI outflow source to the world (Figure 1).

Figure 1. China's Oversea Development Investment



Source: State Administration of Foreign Exchange (SAFE) of China's statistics.

By the end of 2011, the China Development Bank (CDB) had made a total lending of CNY 5,520 billion, consisting of various large investments in the energy sector in Central Asian countries, Russia and the Southern US. The 2012 statistics showed that compared to the World Bank's lending (US$ 136.3 billion) and that of the Asian Development Bank (ADB) (US$ 71.4 billion), CDB was the largest shadow lender with the total capital of US$ 220 billion. China has quietly participated in global investment and funding races in order to gain favorable areas.

Before the 2010 crisis, China's investments in developing countries were mainly to explore energy and minerals and its investments in developed countries were to look for strategic assets. Since then, its investment in advanced countries has poured into various areas, especially energy. Nearly 50% of China's oversea development investment is in the energy sector, followed by transport (15.5%) and mining (13.3%).

The Asian Infrastructure Investment Bank (AIIB) is China's success in the multilateral game led by China which is reflected by the large number of countries joining the Bank despite objections from the US. By mid-2015, 57 countries joined the AIIB (of which, 35 are founding members and Vietnam is one of them). Notably, AIIB is part of the Chinese initiatives aiming at comprehensive objectives including security and political ones, but more importantly, ithe economic target. In this aspect AIIB may create effects that will help China gain more benefits in various fields: (1) Increasing investment and job creation; (2) Promoting trade; (3) Accelerating the internationalization of the CNY; (4) Enhancing competitiveness with other international financial institutions; (5) Exerting greater pressure on international financial institutions to leverage China's position and (6) Making China become the Central Asian market.

However, there are some questions concerning about the successes of the AIIB, for instance, whether to consider AIIB an international financial institution or a financial institution controlled by China; a debate about the

Bank's capital contribution mechanism and voting rights as well as China's weak experience in operating an international financial institution. The primary challenge is to resolve the dilemma of having the participation of Western countries with highly developed financial and monetary systems like the UK, Switzerland and Luxembourg. The second one is to make AIIB's operating mechanism to be more transparent and multilateral whereas it also would invalidate the Chinese initiative to use AIIB as a tool to increase its influence. In contrast, if there is China's influence, AIIB will lose its initial appeal.

In recent years, China's "One Belt, One Road" initiative has often been referred to as a means for China to go global through the lure of infrastructure improvement. In essence, this is a plan to set up a portfolio of cross-border projects including ports, highways, hydro-power plants, rail ways and airports that connect continents, economies and cultures. Having China at the centre, it links surrounding regions, comprising of Central Asia, the Far East of Russia, Southeast Asia and Europe. The objective of developing these projects is not only to earn profits but also to build a bridge between China with neighbouring countries and regions. The "One Belt, One Road" Plan was announced at the 2014 APEC Summit in Beijing. Following that, necessary financial assistance would be provided by financial institutions led by China, notably through the Silk Road Fund and the AIIB. The mission of these two financial institutions is to use financial instruments to form "partnership relations". These projects are assessed to have significant impacts and, like the above cases, also present many challenges and risks.

On the one hand, statistics show that this strategy stemmed from the actual and increasing need to renovate the infrastructure systems in China and other Asian countries. At the same time, it is also part of China's "Infrastructure Diplomacy" strategy to enhance its sphere of influence in the region. Through the strategy to provide capital for infrastructure, China gave

an attractive offer to countries in the region. However, the offer will be more appealing if it comes from another country instead of China. The reason behind is multifaceted emergence of China, which is always known under the name of "Peace". On the one hand, China offers economic cooperation projects through investment. On the other hand, it pushes forward with the acceleration of modernizing national defense, together with fueling conflicts and unresolved disputes over waterways and territories. The consequence of this multifaceted approach is an ambiguity in the "strategic intention" of a rising superpower, causing intensified concern about the combining of security and economic purposes behind mega projects proposed by China.

2) The Geopolitical Rising of China

After 1945, the order in Asia was described as "Hub-and-Spoke" system in which the US took the leading position in bilateral security relations with its Asian allies. The rise of China, however, has now changed the balance of power not only in Asia and the Asia- Pacific region but also in the world. Recent situations show that regional geopolitics become more and more complicated. On one hand, the US's weakening economic and geopolitical position makes it less attractive to Asian countries. Attempting to keep the statusquo, such as US "Pivot to Asia" policy, TPP is challenged by the increasingly confident leadership of China, showing that China has been actively working on establishing the new order in its surrounding area.

Since 2012, the rise of China has been much more assertive and stronger than before. This was marked by three important "changes" in its diplomatic policy. Firstly, China shifted from the philosophy of "hide your capabilities, bide your time" to "strive for success" to lay emphasis on a rising China. This signalled the trend of interventionism of big countries. Secondly, China shifted its priorities to expand its scope of influence. Unlike what was in the 1990s, when the country's influence was just limited to East Asia, through its "One Belt, One Road" initiative, China has been expanding its influence

across East, Middle and South Asia. Lastly, China changed its approach. It seems that China has made the decision to place the country's sovereignty priorities over economic interests and protect its sovereignty using comprehensive strengths. Although China has always been trying to reassure the international community that its "soft power" and "peaceful rise" would not disrupt the regional and global security, its increasing political and military power in recent years has brought fear to many countries. Being aware of its existing power, China has been implementing measures to improve its influence on countries in the region so as to compete on fair terms with the US despite of losing and reactions from its traditional allies. More details of such geopolitical picture can be seen from three aspects, including military power, international relations, territory dispute settlement and trade.

Military power: With the support of remarkable economic achievements and ambitious strategies to reach global, China has increasingly demonstrated significant improvement in its political, security and military position on the world's geopolitical map. According to the Global Firepower (GFP 2016) ranking of countries' military strengths based on each nation's military capability across land, sea and air, China currently ranks third after the US and Russia in the top 10 most powerful military forces in the world. China not only possesses nuclear weapons but also has growing military strength with expenditure budget keep increasing in recent years. China is also in the world's top 3 major space superpowers (together with the US and Russia). China successfully launched the Shenzhou 6 spacecraft, sending a man into space for the second time and became the third nation to conquer space. (China successfully landed its spacecraft on the Moon in 2013.)

International relations: international activities such as participating in more than 20 UN peacekeeping missions, proactively participating in solving up the nuclear issue in North Korea and Iran as well as addressing the ethnic conflicts in Africa have helped China to strengthen its voice.

China has also accelerated the organizing of and participating in international fora. In 1998, China introduced the New Concept of Security (NCS), advocating the creation of the multi-polar world order and emphasizing the important role of the UN in resolving disputes through negotiations. In its relations with developing countries, China has put forward the principle of win-win cooperation so that participating countries can mutually benefit from the cooperation. This has received positive responses from countries, including ASEAN members. In 2001, it was co-founder of the Shanghai Cooperation Organization (SGO) to promote cooperation between Central Asian countries and established the Boao Forum for Asia (BFA), attracting an increasing number of countries in the continent.

Territory disputes and tension: China has repeatedly asserted its sovereignty and taken specific steps to realize its affirmation of its sovereignty over surrounding islands and ocean areas, causing disputes in the region (the Diaoyu Islands in the East China Sea and the Spratly Islands in the South China Sea). Analytical experts believe that this is part of China's moves to "expand" to the region. To implement this strategy, China has exerted efforts against the internationalization of the disputes on the South China Sea, offering bilateral dialogues and claiming that the dispute simply is with that individual country, not ASEAN; at the same time, attempting to interrupt ASEAN's solidarity and cohesiveness in order to prevent ASEAN's intervention in this issue. In order to reach its goal, China maintains the conflict at a moderate level to ensure that other countries, especially the US, will not take direct military intervention while still being able to exert enough pressure on countries in the region to support its strategy. To claim the leading role, on the one hand, China starts disputes to expand its interests. On the other hand, China uses its economic leverage such as preferential investment policies to influence less developed countries. China seemed to succeed in dividing ASEAN countries at the ASEAN Summit in July 2012 as ASEAN members failed to

reach an agreement on South China Sea disputes. The South China Sea issue was also not mentioned at the subsequent ASEAN summits and ministerial meetings. For this issue, China's diplomatic moves tend to make ASEAN nations more divergent rather than convergent.

Regional free trade: In its relations with Japan and Korea, China has been pushing negotiations to sign various trade agreements and quickly overtaken the US to become the largest trading partner of both Japan and Korea. It also grabbed the chance to re-establish the good relationship which it had with Russia before to gain the latter's support on the international stage. China has also been actively playing its role in regional cooperation mechanisms such as ASEAN+3, ASEAN Regional Forum (ARF), the East Asia Summit (EAS), the Asia- Pacific Economic Cooperation (APEC) forum and SCO. Notably, China has actively accelerated the negotiations of the Regional Comprehensive Economic Partnership (RCEP) with 10 ASEAN countries and 5 ASEAN trade and dialogue partners, including Australia, New Zealand, India, Japan and Korea. The aim is to create one of the world's largest free trading group which acts as a counter-balance to the US-led TPP Agreement.

From above analyses and according to forecasts by the Japan Institute of International Strategy, in 2016 and the coming years, the regional order in East Asia will be in disorder due to changes resulting from the rise of China and responses from the US and Japan. The US foreign policy regarding the South China Sea tensions remains ambiguous. Compared to the strong rise of China, responses from both the US and Japan have been very cautious. This is the opportunity for China to step up activities in the South China Sea, increase tensions in the region and weaken the roles of the US and Japan.[7]

7) In September 2015, Indonesia selected China instead of Japan to be contractor for the high-speed railroad between Jakarta and Bangdung. This implies that the economic role of Japan or the US in the region has been threatened.

However, the US might have a clearer foreign affairs strategy after it has a new president in 2017.[8)]

B. Coping with the Rise of China

The rise of China has resulted in quick changes of economic and geo-political factors in the region. Consequently, most countries in the region have acknowledged the important role of China in the regional development, peace and security and pursued different policies to respond and adapt to that in the new context.

Japan

The rapid and strong development of the Chinese economy is believed to have blurred Japan's image, hurting the pride of a country which used to be the first in rank in Asia. This is the reason why Japan always fiercely competes with China to regain its leading status in the region.

In cooperation with South East Asian countries, both China and Japan have used various approaches (trade, investment and diplomacy) to gain these countries' support. For the economic dimension, Japan has been creating challenges to Chinese power in South East Asia and using its economic power to pursuade countries in the region to take Japan's side. At the 40th anniversary of ASEAN-Japan relation, Japan announced its financial aid worth US$ 20 billion for ASEAN countries. Besides, Japan has also used

8) At the time of revising this report, the presidential election in the US had completed and Donald Trump became the president of US. Initial analysis indicated that the foreign policy of the US may critically change, by such the US will intervene less in the world, postpone or cancel regional trade agreements. Such movement may support the rise of China in the region. However, the harder policy of Trump to China in term of trade may trigger an unstable trade pattern in the region.

FTAs as its regional trade and foreign relation policies to compete with Beijing to achieve the leading role in the East Asian Economic Community (EAEC). It has been seen that while China supports the EAEC-centralized development through the East Asia Free Trade Agreement (EAFTA) to ensure its strong influence and leadership role, Japan and some ASEAN countries want to bring in other partners countries namely Australia, New Zealand and India with the Comprehensive Economic Partnership for East Asia (CEPEA) (based on decisions made at the East Asia Summit) to create a non-US counter-balance to the Chinese influence in the region.

The China-Japan rilvary was also apparent in great efforts from both sides to improve their sphere of influence on countries in the region and, at the same time, blurring the rival's image. In response to China's unlawful set up of the Haiyang Shiyou 981 drilling platform in Vietnam's waters and exclusive economic zone in 2014, Japan strongly criticized this action and pledged its full support for Southeast Asia for maritime freedom and expressed its willingness to step up its maritime aid for Vietnam through providing patrol ships. Japan once again reaffirmed its support for ASEAN countries, especially for Vietnam and the Philippines at the Shangri-La Dialogue in Singapore.

Moreover, on the diplomatic front, in order to enhance its competitiveness, Japan decided to expand its diplomatic delegations to compete with China. Japan sees the need to deploy more diplomatic missions overseas to increasingly propagate its policies and views to the international community.

Korea

Although Korea is not on par with China like Japan, the country has also implemented its own policies in response to changes in the regional order. Korea has some options: tilting, balancing, standing in the middle, bridging, competing fairly, community and remaining unchanged. It opted for the "standing in the middle" strategy, following which Korea would play a bal-

ance role and tilt toward neither side. In the current situation, Korea's policy and action choices are considered based on its relationships with two superpowers including the US and China. Korea wants to develop its relationship with the treaty ally, the US. On the other hand, it also wants to maintain a good relationship with the neighbouring country, China. While the US is Korea's military partner, China is one of Korea's largest trade and investment partners. Apart from the economic aspect, China also plays an important role in the six party talks on North Korea's Nuclear Program. It can be said that Korea receive tangible benefits from both China and the US and maintaining a balance strategy is not easy for Korea as China and the US both place their focus on Asia.[9)]

Besides, Korea also has silently increased its influence in the region, especially on the economic aspect. Since late 2000s, Korea has pushed forward the growth strategy targeting at export and regional as well as global integration through accelarating trade commitments with regional countries. By March 2014, Korea had signed 8 FTAs with key partners, including ASEAN, the EU and India; completed 2 FTA negotiations with Turkey and Colombia, and has had ongoing FTA negotiations with 10 partners such as China, Australia, Canada and Japan as well as participated in RCEP. According to ADB database, with the total of 25 FTAs of which 16 have entered into force, Korea has proved to be very active in pursuing its FTA strategy compared to other economies in the region such as Japan (26 FTAs), China (27 FTAs) and Taiwan (10 FTAs). By such momentum, Korea shows their preference in economic influence rather than geopolitical interests.

More evidence is found in Korea's investment attempts. In 2010, at the 13th ASEAN-Korea Summit Meeting in Hanoi, ASEAN and Korean leaders agreed to upgrade their relationship to a strategic partnership and approved the joint decleration on strategic partnership for peace and prosperity. Since

9) According to the opinion of Han Sung Joo, based on modern strategy to shape East Asian order.

then, the size of trade, investment and ODA from Korea to the region have increased rapidly. The bilateral trade between ASEAN-Korea rose from US$ 74.7 billion in 2009 to US$ 135.3 billion in 2014. FDI from Korea into ASEAN doubled from US$ 1.4 billion to US$ 3.8 billion in 2013, making Korea become ASEAN's second largest investor.[10] Specifically, Korea's investment in Vietnam grew by 82.3% in the first half of 2015. Korea surpassed Japan to be the largest investor in Vietnam. In 2015, Korea's ODA for ASEAN countries increased 3 times from US$ 862 million in 2009.

ASEAN

In response to the dramatic emergence of China and responses made by major countries in the region, ASEAN become one of critical partners with a decisive voice in the region's development. In the complex international context with inter-connected interests and risks, ASEAN has to find appropriate ways to take advantage of opportunities and minimize challenges.

Promoting regional integration and enhance resilience: On 31/12/2015, the ASEAN Economic Community (AEC) was established after tremendous determinations and efforts. The establishment of the AEC has an important implication in helping ASEAN to maintain its leading role in building the East Asia's regional institution as the ASEAN Regional Forum (ARF), ASEAN+3, ASEAN+1 and the EAS. AEC is expected to create favorable conditions for ASEAN to implement its regional strategies without compromising interests of its member states and to develop a stable, prosperous and highly competitive economic region up to 2020. In addition, the formation of the AEC will significantly contribute to affirm ASEAN leadership role in South East Asia and further enhance the position of the association in the international arena, especially in its relation with superpowers.

10) http://www.aseankorea.org/egn/page50.

Reinforcing relationships with major countries besides China: In order to balance the growing influence of China, ASEAN countries have been forced to rely on the US as the first choice of counter-balance factor because of the US's economic power as well as considerable political advantages in the international arena. In a rather earlier study, Dillon and Tkacik (2005) emphasized the emergence of China as the leading superpower in Southeast Asia which would erode the US's position in the region as well as causing problems for its allies in the region unless the US increased its activities with ASEAN twice or three times. In fact, the US has taken various measures to implement its strategy in the region such as the Joint Vision Statement on the ASEAN-US enhanced partnership signed on 17 November 2015 to affirm its common interest in developing ASEAN as a regional institution. On the other hand, ASEAN has also acknowledged the significant contribution and the important role of the US in maintaining peace and stability as well as promoting prosperity in Southeast Asia. In terms of security and politics, the US has increased its presence in Southeast Asia and the ASEAN-US relationship revolves around the two treaties with its allies, Thailand and the Philippines.

ASEAN has not only expanded its cooperation with the US but also enhanced its relationships with Japan, Russia and India to seek for support and cooperation in various aspects. For Japan, both parties announced the Tokyo declaration on the dynamic and enduring Japan-ASEAN partnership in the new millennium, emphasizing the aim to promote not only economic but also political and security cooperation, which is not only limited to cooperation between the two but also at regional and international flora. According to UNCTAD (2015) since 2013, Japan is one of the leading investors in ASEAN countries, providing significant financial assistance on socio-economic development. For India, the first ASEAN-India summit took place in 2002. Prior to that, India became ASEAN's full dialogue partner in 1997 and joined the ARF in 1996. A landmark for the relationship is the FTA signed in 2009 (AIFTA). The relationship with Russia was officially es-

tablished in 1996 when Russia became ASEAN's full dialogue partner. Both parties issued the Joint Declaration and signed the Comprehensive Program of Action 2005-2015 to promote ASEAN-Russia cooperation dialogue partnership, sustainable economic development, prosperity and social advancement on the principles of fairness, shared responsibilities and mutual benefits at the ASEAN-Russia Summit on 13 December 2015.

Enhancing national security capabilities and economic strength: In order to adapt to changes and effectively respond to challenges, ASEAN members have been trying to strengthen regional linkages, expand cooperation to countries outside ASEAN and strive to adopt appropriate national strategy so as to attain the targeted objectives. The ultimate goals of each country are to protect its independence, sovereignty and socio-economic development as well as to ensure regional security and successful integration. In the complex international relations and inter-connected benefits among countries, ASEAN has proactively and flexibly adjusted their foreign policies

As examples, for Indonesia, enhancing relationship with China helps the country to balance the influence of the US and the West and restrict foreign forces from affecting its sovereignty. In Thailand, implementing the strategy on promoting relationship with China is to seek a newly-emerged force to lean on in the new era. In the Philippines, after the new president came into power, the country looked for strengthening relationship with China and expected such relations would not only bring in mutual benefits but also contribute to ensure peace, stability and prosperity in the region. Malaysia's strategy is to work together with China in a way which they can complement each other in various aspects and mutually benefit their people. Singapore has considered its relationship with China as a "very close", "constructive" and "balanced" one. This relationship has been developed at different levels, from the political leaders to the business community, citizens and youths. With respect to the four remaining countries, Vietnam, Laos, Cambodia and

Myanmar, promoting cooperation and strengthening relations with China have been one of the top priorities in their foreign policies (Hiep 2016).

2. Regional Economic Integration

Regional integration theories (Sink and Krapohl 2010) showed that economic interdependence lies at the heart of integration dynamics. Regional trade increases welfare, because it allows participating countries to exploit comparative advantages and economies of scale. The potential to exploit these advantages creates demands for regional integration, which can be either directed towards national governments, or towards supranational institutions. If these demands are met, economic interdependence increases, which may lead to even more demands for regional trade liberalization. Empirically, Kosandi (2014) and Rodrigo (2015) raise a concern that East Asian countries are now more interdependent in accordance with the increasing number of regional free trade agreements.

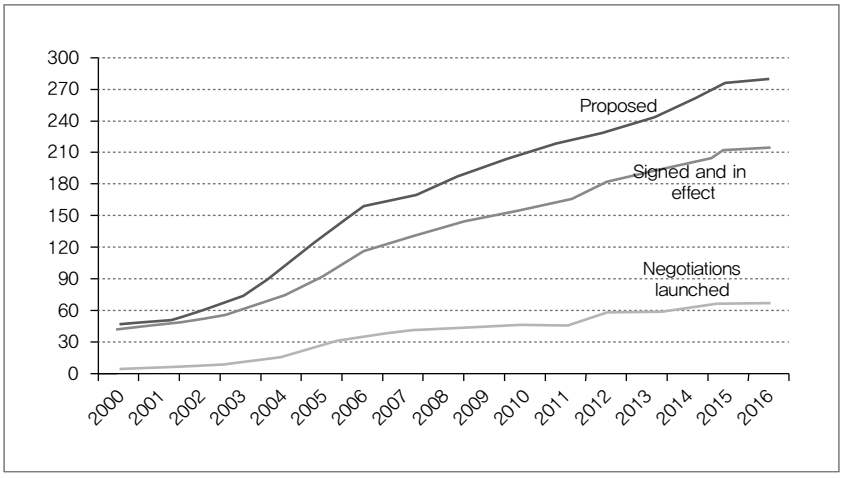
A. Overview of FTAs among Asian Economies

Since late 1990s, together with multilateral trade policy, the region has emphazied the importance of FTAs as a trade policy instrument, and currently taken the leading position in the world in FTAs-related activities (Kawai and Wignaraja 2010). By 2016, there are 226 signed FTAs in Asian countries, in which 147 are in effect, six have been signed but have not yet been in effect and 73 are under negotiations the framework agreements of five of which have been signed. Moreover, by 2016, another 67 proposals on FTAs are being discussed within the region (Figure 2).

ASEAN is a pioneer in FTAs. The very early ASEAN FTA (AFTA) was

signed in 1993 for increasing intra- bloc trade. Most FTAs in the region were signed after the Asian financial crisis of 1997. The FTAs between ASEAN and six key partners which are ACFTA (ASEAN-China), AJFTA (ASEAN-Japan), AKFTA (ASEAN-Korea), AIFTA (ASEAN-India) and AANZFTA (ASEAN-Australia and New Zealand) are important ones shaping trade in the region. China, Japan and Korea who were thought to be latecomers in the FTA game have shown great interest in free trade agreements. A trilateral FTA among them is under negotiation though China and Korea already have a bilateral FTA, and another one between Korea and Japan is under negotiation. East Asian countries are pioneers in taking advantage of FTAs to support their policy on promoting trade (Kawai and Wignaraja 2010). In addition, by 2016, there are 68 proposed FTAs in Asia, half of those are bi-lateral (Table 1).

Figure 2. FTAs in Asia



Source: aric.adb.org/fta-trends-by-status.

Table 1. Proposed Bilateral FTAs in Asia

Framework agreement signed	
Myanmar – US	Pakistan – Bangladesh
Chinese Taipei – Paraguay	Pakistan – Morocco
Thailand – Bahrain	Pakistan – Singapore
Framework agreement not signed	Singapore – Egypt
India – Australia	Singapore – Mexico
India – Canada	Singapore – Ukraine
India – Egypt	Singapore – Canada
India – Indonesia	Singapore – Sri Lanka
India – Israel	Chinese Taipei – Dominica
India – Thailand	Chinese Taipei – Macao
India – New Zealand	China – Georgia
India – Mauritius	Malaysia – US
Indonesia – Australia	Korea – Indonesia
Indonesia – Chile	Korea – Israel
Japan – Canada	Korea – Mexico
Japan – Colombia	Korea – Ecuador
Japan – Korea	US – Thailand
Japan – Turkey	Vietnam – Israel

Source: aric.adb.org/fta-trends-by-status.

Although there are some theoretical arguments about the interdependence effect by FTAs in Asia, in fact, the relation between trade interdependence among countries and the decisions of signing FTAs has not been examined thoroughly. Economic theories set out two assumptions on FTA-related dependence: (1) FTAs are results of the highly economic dependence among countries (similar to NAFTA);[11] (2) FTAs are necessary to take advantage of implicit trade potential among nations (AFTA). Both assumptions imply that trade interdependence is the core consequence of FTAs (Hamanaka 2012).

11) Somehow similarly to "Natural Trading Partner" hypothesis.

The interdependence of a region/group can be examined based on three aspects simultaneously: (1) the intra-regional share of trade, (2) the intra-regional trade intensity and (3) the introversion index. Hamanaka (ibid) suggested that in the ASEAN region, the intra-regional share of trade is insignificant (because most of the nations' scale of trade is small), but the intra-regional trade intensity and the introversion index are equal to that of the EU and NAFTA (attaining 0.7 score), indicating the remarkable economic integration among ASEAN nations.

The examination of trade relations between ASEAN+1 countries, in particular, ASEAN+Japan, ASEAN+China and ASEAN+US, show that trade dependence between ASEAN and Japan is significant, while that between ASEAN and China and that between ASEAN and the US are insignificant. This is attributable to the increased number of MNCs in Japan that help promote trade in not only Japan but also ASEAN nations. Through FDI outflow, Japanese MNCs have created closed trade linkages, thus strengthening the dependence among ASEAN economies and Japan.

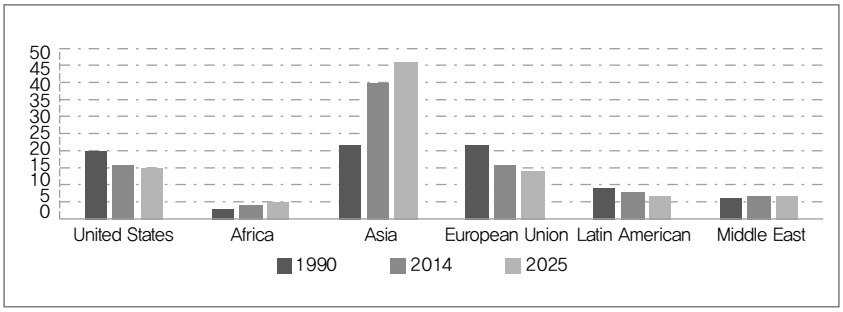
Meanwhile, China and the US influence trade at world-wide rather than regional scope. The trade dependence between these two countries and ASEAN is modest. In the case of ASEAN+3 countries, the intra-regional share of trade of these countries is more significant than that of the ASEAN+1. This implies that Japan-China trade affects ASEAN+3 countries more than trade between ASEAN and Japan or ASEAN and China. Finally, in the ASEAN+3+1 model, the ASEAN+3+Australia model is more advantageous compared to the ASEAN+3 as it strengthens trade dependence among member countries.

B. Economic Interdependence in the Region

Recently, Asia has emerged as the most dynamic economic region in the world. Average growth rate of the region was recorded at 6.1% in the period

of 2002-2008, the highest in the world. Though a bit slowdown in 2010-2015, the growth rate was still high (5.9% in 2015). The share of Asia in the global GDP has increased rapidly (Figure 3). In 1990 Asia shared 23.2% of the world's GDP (1990 in PPP), the figure jumped to 38.8% in 2014, which was considerably higher than that of the US and European countries. If this trend is maintained in the coming years, Asia will take the leading position in the world in terms of economic growth.

Figure 3. Asia's Share in the Global GDP



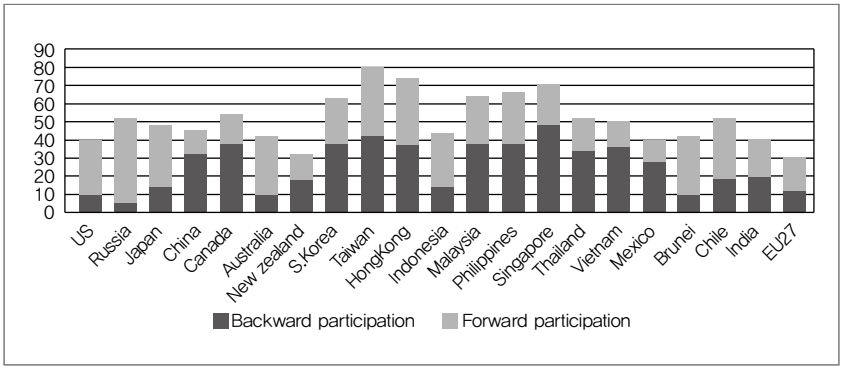
Source: Oxford Economics, Deloitte Services Lp economic analysis.

Four biggest economies which are China, India, Japan and Korea play the prominent role in the economic development of Asia both in terms of size and influence to the regional and global economy. The share of China and India in the total GDP of Asia tends to increase considerably. In 2014, China accounted for 43.1% of Asia's GDP (in PPP), twice as much as in 1992; the corresponding figures for Japan is 30% and 10%, and for India is 15% and 12%. By doing so, and in association with increasing trade and investment from/to those economies, those countries have shaped the interdependence among economies in Asia, particularly the small economies in East Asia which is believed to be the most dynamic area in the region.

Dependence among Asian countries can be reflected in the paricipation of the region in the global value chains (GVCs) (Figure 4). While participating

in the GVCs, the countries themselves have created closed regional production linkages, and consequently strengthened significant dependence among them. For instance, famous Japanese motor corporations established their production centers in such countries as China, Thailand and India. The cooperation among those countries is enhanced thanks to the rapid growth of the economies in the region, which in turn makes such nations become large markets for other corporations in the world. In 2010, China took over the US's position to be the biggest motor market in the world. Statistics from the OECD reveals that Asian countries will increasingly integrate into the GVCs in the future, thus facilitating global trade, investment and growth. Prominent Asian players to involve in the GVCs include China, Korea and Singapore.

Figure 4. Participation in the Global Value Chain



Source: OECD, Deloitte services LP economic analysis.

Besides, strengthened dependence among economies can also be attributed to political factors due to the emergence of China and the policy of competing for influence over the region of key economies. In 2003, China was the most important export market of Japan, Korea and Chinese Taipei. Import demand as well as exports of raw materials from China helped

Japanese economy recover after a decade of economic downturn. The significant role of China in world trade and the expectation of the world of the potential growth of China make China become an attractive market and result in China's influence becoming stronger in their relationship with other trading partners in the region.

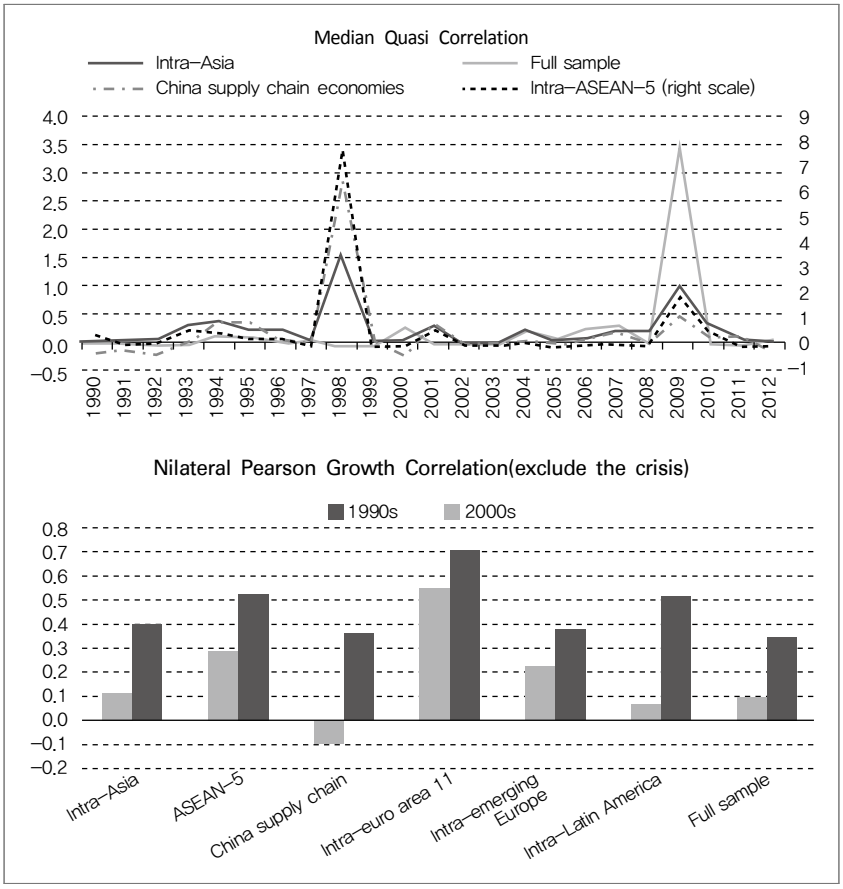
The emergence of China is coupled with fiercer competition between China and other economies in the region, in particular the weaker ones, including ASEAN countries. China is becoming ASEAN countries' direct competitor in attracting FDI, and taking away many cooperation opportunities from ASEAN enterprises due to the similarities in trade and production structure. Besides, China is more advantageous than ASEAN countries in exporting traditional consumption goods such as apparel, toys, utensils and office equipment. Especially, ASEAN countries have been facing with significant pressure from China in traditional markets like Japan, the US and the EU. Even countries with relatively advanced industries such as Thailand and Malaysia are unable to avoid these challenges.

Besides, competition in attracting FDI between China and ASEAN countries has become visible. In 2003, China attracted more than US$ 54 billion which was equivalent to 60% of total FDI to Asia. In 2004, FDI to China was US$ 60 billion, three times higher than the accumulated FDI to ASEAN nations. By September 2011, Europe and the US invested US$ 1.8 billion in China, and China's FDI was estimated to attain accumulatively US$ 351 billion in 2015, and China would become the biggest FDI receiver in the world. Rapid economic growth rate, cheap labor force, continuously improved legal and administrative system in recent years are main reasons for the attractiveness of China as the key destination for foreign investment. This is a headache for ASEAN countries in its international and regional integration process.

Study by Cheng and Duval (2014) on the business cycle synchronization raised an interesting question on the role of countries in the region, particularly China, to other Asian countries, during the 1997-1998 and 2008-2009

crises. They concluded that even if these crises were excluded, business cycle synchronization would have still become more steadily intensified, particularly in the case of ASEAN-5.[12] The business cycle synchronization tends to increase in line with China's change of output. This indicates the increasing dependence among ASEAN countries as well as among ASEAN and major partners (Figure 5).

Figure 5. Correlation of ASEAN and China



Source: Kevin Cheng and Romain Duval (2014).

12) Indonesia, Singapore, Thailand, Malaysia and the Philippines.

How can this dependence be explained? There might be three reasons: the role of trade integration, financial integration and synchronization of macroeconomic policy in the region of which the first one is the most important.

The role of trade integration (intensity and types of value added trade or gross trade) is pro-cycle, either by transmitting the shocks from one to another or by making the same shocks commonly shared (for instance, the impacts of lower demand for imported goods from China on ASEAN economies). However, dependence relies more heavily on deep vertical trade integration, in which demand for intermediate goods of regional economies is growing, while it is difficult to find substitute sources from other partners. Also regarding vertical trade integration, China is playing a vital role and is the main driving force for other economies' deeper dependence on China, not to mention the transmission of external shocks to countries in the region via China. The share of foreign value added in exported goods from China and ASEAN economies is going up. The figure of the former increased from 11.9% to 35.5% during the period of 1995-2012, that of the latter was 29.9% and 38.8%, respectively. Similarly, value added of goods exported from China to ASEAN also grew rapidly. This indicates the expansion of China's scale of trade as well as changes of its structure in the value chain with ASEAN, of which ASEAN countries are increasingly dependent on China. The following section provides more insight into this picture by reviewing the picture of trade among countries in the region, especially among ASEAN economies with major partners of Asia.

C. Trade among Countries in the Region

The trade of goods in Asian economies grew at positive and stable rates of 4-5%/year) during the period of 2010-2014, which much outpaced the world's average rate of 3.5% (Table 2). Asia contributed about 1/3 of total exports of the world in 2014, up dramatically from its share of ¼ in 2001.

Such economies as China, India, Korea and Japan remain widely impacting in the global and Asian regional trade.

In 2014, China was the biggest importer in the region, accounting for 37% of total exports of goods, followed by Japan (10.9%) and Korea (9.0%) (ADB 2015)[13] Asian countries contributed to 31.99% of total export value of the world in 2014 (Figure 6).

Thanks to the significant expansion of FTAs in Asia recently, intra region trade has increased rapidly, accounting for the major share of exports of Asian economies. 52.3% of total exports value in the region in 2014 was intra-region trade, only 15% was exported to North American countries, while that of European countries was 15.2%.

China, Korea and Japan are leading countries in terms of intra-regional exports and imports. Total export and import value of China is the biggest in the region for many years. Notably, during the period of 2000-2013, the top three exporters to China were Asian countries, Japan, Korea and Taiwan; and three out of four traditional export destinations for China were in Asia as well. In 2014, China's export to Japan and Korea were US$ 149.4 billion and US$ 100.3 billion, respectively; while China's imports from these countries were US$ 163 billion and US$ 190.1 billion, respectively. Asian economies accounted for 57.97% of total exports and 56.46% of total imports of China.

Table 2. The Growth Rate of Trade of Selected Regions

(Unit: %)

Exports			Region	Imports		
2010-2014	2013	2014		2010-2014	2013	2014
3.5	3.0	2.5	**World**	3.0	2.0	2.5
4.5	2.5	4.0	North America	3.5	1.0	4.5
4.0	2.0	5.5	Canada	2.5	1.5	2.0

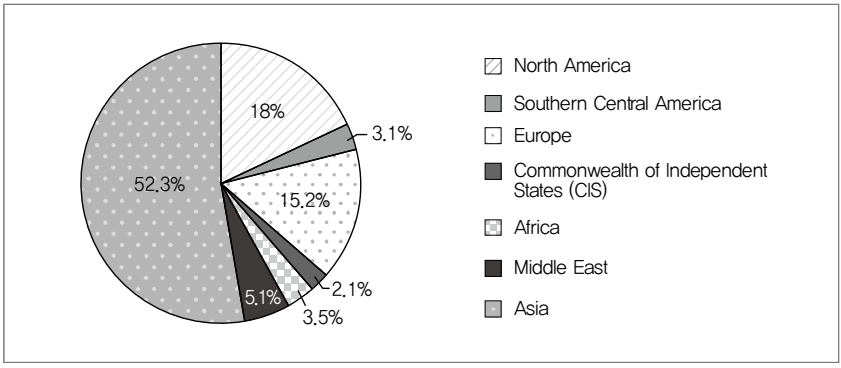
13) *ADB, Key Indicators for Asia and the Pacific 2015, October 2015.*

Table 2. Continued

Exports			Region	Imports		
2010-2014	2013	2014		2010-2014	2013	2014
6.0	4.5	7.0	Mexico	6.0	3.0	7.0
4.5	2.5	3.5	The US	3.0	1.0	4.5
2.0	2.0	-1.5	Latin&Central America	3.5	3.5	-2.5
2.5	2.5	1.5	Europe	1.0	0.0	2.5
2.5	2.0	2.0	EU28	1.0	-0.5	3.0
-1.5	-5.0	1.5	Norway	1.5	1.5	1.0
4.5	16.0	-6.0	Switzerland	-2.5	2.0	-13.0
1.0	1.0	0.0	SNG	2.5	-1.0	-10.0
4.5	5.0	4.5	Asia	4.5	5.0	3.5
3.5	6.0	6.0	Australia	2.5	-2.5	2.0
7.5	7.5	7.0	China	6.5	10.0	4.0
6.0	8.5	3.0	India	4.5	-0.5	3.0
-1.0	-2.0	0.5	Japan	3.0	0.5	2.5
3.5	3.0	4.0	East Asia*	3.0	3.5	3.0

Source: WTO, International Trade Statistics 2015, Special focus: World trade and the WTO: 1995-2014;
* Including: Hong Kong, China; Malaysia; Korea; Singapore; Chinese Taipei and Thailand.

Figure 6. Asia's Share in Total World Exports in 2014



Special focus: World trade and the WTO: 1995-2014.
Source: World Trade Organization. International Trade Statistics 2015.

In the region, trade between ASEAN and three Northeast Asian countries is very important. Intra-regional trade of ASEAN+3 countries increased from 50.7% in 2005 to 59.4% in 2013. China is the largest independent trading partner of ASEAN with total trade value of US$ 350 billion in 2013. China's share in ASEAN's total trade took the upward trend (from 9% in 2005 to 15.6% in 2013); while that of other major trading partners tended to decrease. Japan accounted for 12.6% of ASEAN's total trade in 2005, but the proportion was down to 10.7% in 20143. The US figures were 12.6% and 9.2%, respectively.

However, trade relations between ASEAN and China are not seriously affected by political issues. China became ASEAN's biggest trading partner since 2009, while ASEAN consolidated its position as China's third largest trading partner. The total bilateral trade between the two attained US$350 billion in 2013 which was equivalent to 14% of ASEAN's total trade. The figure was estimated to be US$500 billion in 2015.

Japan is another important partner for ASEAN in both political and economic aspects. Investments and ODA from Japan have significantly contributed to the economic growth of ASEAN, strengthening Japan's position as a key trading partner. Unofficial dialogue on the supply of synthetized rubber marked a milestone in the relations between ASEAN and Japan, and the partner relation was official established in 1997. Japan maintains its role as one of ASEAN's most important economic partners. In 2013, bilateral trade value attained US$240.7 billion, accounting for 10.7% ASEAN's total trade value. Japan ranks 2nd in the list of FDI investors in ASEAN, which was about US$22.9 billion in 2013, equivalent to 18.7% of total FDI poured into ASEAN (Jong 2015).

Korea is one of ASEAN's key economic partners. The bilateral trade increased by 17 folds from US$8.2 in 1989 to US$138 billion of which export was US$84.6 billion and import US$53.4 billion. ASEAN became Korea's second largest trading partner, only after China. Since the AKFTA came into

full force in 2009, economic cooperation has expanded in various areas such as investment and service, making ASEAN the second largest investment Destination for Korea.[14]

As a summary of this chapter, the trade and investment relations between any pairs of countries cannot be separated from the economic interdependence in the region as well as the regional geopolitical momentum. China's emergence is an important factor shaping Asia's geopolitical and economic interdependent pattern, particularly the East Asian countries'. The rise of China is reflected not only in its remarkable growth records during two decades but also in the recent changes in the international policies of this country which have led to the changes in foreign policies of some large countries like Japan and Korea toward ASEAN. For ASEAN, together with deeper integration into the global economy through regional and bilateral FTAs, ASEAN members become more interdependent on one another. More importantly, however, is the potential of increased dependence upon China, Japan, and Korea. Because of increasing dependence between countries, a bilateral relationship like that of Vietnam and Korea is no longer independent from multilateral relations as well as between other countries. To measure the relationship between Vietnam and Korea, the next chapter provides an overview about the cooperation between the two countries; more focus is on the economic side.

14) http://www.aseankorea.org/eng/ASEAN/ak_overview.asp.

Ⅱ. Overview of Vietnam-Korea Relations

1. Non-Economic Relations
2. Economic Relations

While the interdependence does not entirely mean "bad" or "good" for a country, it reflects the deeper integration, and also a more complicated relationship between countries. Among countries in the Southeast Asian region, Vietnam has always been a key partner[15] for Korea. Also, Korea is one of Vietnam's strategic partners. The Vietnam-Korea relationship has been strongly improved in more than two decades since the establishment of their official diplomatic relations in 1992. During the time, the friendly relations and cooperation between Vietnam and Korea have flourished in various aspects with significant achievements.

1. Non-Economic Relations

A. Political and Diplomatic Relations

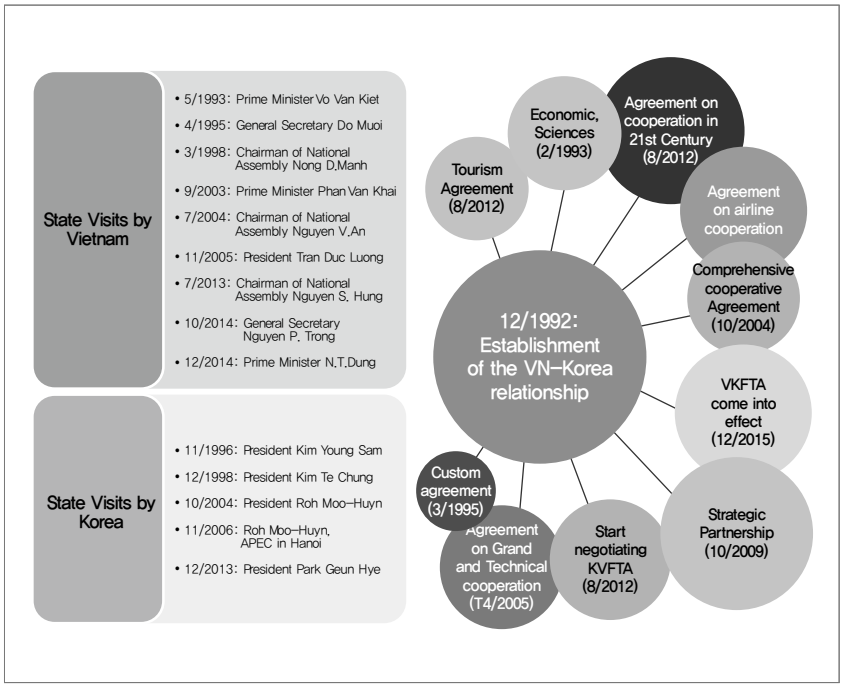
Before 1975, Korea only had diplomatic, economic and military ties with the South Vietnamese Government. After Vietnam's reunification, in the period from 1975 to 1992, the Vietnam- Korea relations were solely private and small trading. The two established a direct trading relation and non-governmental ties in 1983. Vietnam and Korea signed an agreement to open exchange liaison offices on 20th April 1992 as well as a joint statement to establish diplomatic relations at embassy level on 22th December 1992.

Since then, Vietnam and Korea have strengthened and deepened their political relations as evidenced in the official and state visits made by government officials of the two countries (Figure 7). Those frequent visits have not only helped to enhance the friendship, mutual understanding and trust but

15) "Research project on forecasting impacts and the possibility of signing the Vietnam - Korea Free Trade Agreement", the Office of the National Committee on International Economic Cooperation, May 2012.

also opened up prospects for strategic and long-term cooperation, creating a powerful force for other aspects of development between the two countries. Two months after the establishment of their diplomatic relations, Vietnam sent its Minister of Foreign Affairs to Korea to discuss about the direction and ways to develop their friendly relations and cooperation in various areas. Heads of State made official visits more frequently in the following years. For instance, Prime Minister Vo Van Kiet visited Korea in 1993, Prime Minister Lee Young Duk visited Vietnam in 1994, followed by the visits by Chairman of the National Assembly of Korea - Mr Kim Soo Han in 1996 and the visit to Korea by Chairman of the National Assembly of Vietnam - Mr Nong Duc Manh in 1998.

Figure 7. Milestones in the Vietnam-Korea Relations



Source: Compilation by the authors from various sources.

Since then, there were various visits by the two countries' leaders such as the visit by General Secretary Do Muoi in April 1995 and the visit by Korean President Kim Young Sam in November 1996. High-level meetings and dialogues between Vietnam and Korea have created a strong driving force for the development of their cooperation relationships in the 20th Century. Both sides have held talks on various fields and agreed to further expand the exchange program for officials and political leaders. In 1998, Korean President Kim Dea Jung made an official visit to Vietnam and attended the ASEAN+3 Summit in Hanoi.

During President Tran Duc Luong's visit to Korea in August 2001, the two countries issued a joint statement on establishing "Partnership in the 21st Century". This set a new development milestone in their bilateral relations. In President Roh Moo-Huyn's visit to Vietnam in October 2004, the two countries agreed to lift the Vietnam - Korea relations to "Comprehensive Partnership in the 21st Century". In bilateral visits during this period, Vietnam and Korea discussed and agreed on working towards the following objectives:

- Building trust through exchanging visits by high-level leaders, creating a driving force for the development and comprehensive cooperation between Vietnam and Korea in the 21st Century.
- Promoting important cooperative relationships in terms of economic, trade and other fields to a new level; determining deeper and more effective "Comprehensive Partnership in the 21st Century" for the benefits of the people and prosperity of each country, making a positive contribution to peace, stability, cooperation and development not only in the region but also in the world;
- Having more high-level meetings and contacts under various forms; continuing to expand networking and exchange programs for delegations at ministerial, sectoral and local levels; promoting economic co-

operation, especially in the areas of investment, labor, ship-building, iron and steel, seafood, marine transport, tourism and sports; at the same time, introducing and implementing effective measures to achieve a trade balance between the two countries;

- Strengthening cooperation at regional and international organizations and forums, promoting practical and effective multilateral cooperation within regional and international forums such as ASEAN+3, ASEAN+1, ARF, APEC, ASEM, the East Asia Summit and the United Nations.

The Vietnam - Korea relations have been developed based on these objectives. The official visit of Korean President Lee Myung-Bak on October 2009 marked a milestone in their bilateral relations by signing a joint statement to upgrade ties to "Strategic Partnership" for peace, stability and development. This is a continuation to keep up with the continuous development of the two countries. The joint statement covered six areas in the Vietnam - Korea cooperation, including politics - security, economic, technologies and science development, judicial - consular, social - cultural cooperation, and regional and international cooperation. Up to now, the two countries have signed more than 30 treaties, cooperation agreements and memoranda in different fields (Table 3):

Table 3. Selected Agreements Signed Between Vietnam and Korea

Agreement	Date
The Agreement on Economic, Scientific and Technological Cooperation	February 1993
The Agreement on Investment Promotion and Protection	September 2003
The Agreement on Aviation and Trade	May 1993
The Agreement on the Avoidance of Double Taxation	May 1994
The Agreement on Cultural	August 1994
The Agreement on Marine Transport	April 1995

Table 3. Continued

Agreement	Date
The Agreement on Customs	March 1995
The Agreement on Tourism Cooperation	August 2002
The Korea-Vietnam Extradition Treaty	September 2003,
The Treaty on Judicial Assistance on Criminal Matters	September 2003
The Agreement on Non-Refundable Aid and Technological Cooperation	April 2005

Source: Website of Vietnam Embassy in Korea.

Regarding cooperation mechanism, the two governments had established the joint committee on economic, scientific and technological cooperation in 1993, and the mechanism for annual policy discussion at the Director General level between the Ministries of Foreign Affairs since 1995. The cooperation mechanism has been regularly maintained on the annual basis and achieved practical results, demonstrating the determination of both countries to further enhance their strong bilateral relations. In 2010, Korea was the 5th country (after Russia, India, China and Japan) to bring the relationship with Vietnam up to the Strategic Partnership level. On the ground of effective cooperation, Vietnam and Korea signed VKFTA, marking a new milestone in their relations in 2015.

The recent years are considered the most flourishing period in the Vietnam-Korea. These results have been built upon common views on regional issues, mutual economic and political benefits as well as the complementarity of trade and investment. The proactive participation of Korea in regional issues brings about regional stability. Also, a strong Vietnam in Southeast Asia also matches Korea's strategic requirements in the region. Although Vietnam is not Korea's first priority in the Asia - Pacific region, the country plays an important role in implementing Korea's strategies in approaching ASEAN. On the other hand, Korea is also an important and nec-

essary factor for Vietnam's diversified foreign policy.

B. Cultural Cooperation

Together with other cooperations, cultural exchange activities between Vietnam and Korea have also been growing quickly, contributing to enhancing mutual understanding and creating a solid foundation in order to build long-term relations between the two countries.

Vietnam and Korea signed an agreement on cultural cooperation in 1994, on sports in 1995, and other agreements on education and youth exchange. On 18th November 2006, the Korean Cultural Centre was officially opened in Hanoi, aiming at enhancing the Vietnamese' understanding of Korean communities and culture. This is one of 17 Korean Cultural Centers in the world and is the first one in Southeast Asia. The center is the venue for exchange programs, exhibitions, exchange of human resources for cultural activities. It is also the place to conduct other activities such as teaching Korean language, building libraries, providing material and information about Korea and the Korean people. These have not only contributed to further promoting culture exchanges but also enhanced mutual understanding and friendship. Following that, a memorandum of understanding (MOU) on cooperation on culture, arts, sports and tourism and other relevant framework documents were signed in 2008.

To celebrate the 15th anniversary of establishing diplomatic ties between the two countries, Korea's Ministry of Foreign Affairs and Vietnam's Ministry of Culture, Sports and Tourism co-hosted the Vietnam Culture Day, namely "Vietnam - the Hidden Charm in Seoul" in November 2007. The program included significant and diverse cultural activities bearing deep Vietnamese traditional identity such as traditional and modern arts performances; a travel photography exhibition introducing famous attractions in Vietnam. These events have not only further promoted the friendly coopera-

tion relations between the two countries, bringing about cultural exchange opportunities, promoting tourism development and investment but also motivating and giving encouragement for hundreds of thousands of Vietnamese living, studying and working in Korea. Many culture, arts, and sports exchange activities have been organized in both countries every year, particularly in 2012 when the two countries celebrated the 20th anniversary of cultural cooperation.

Internationally, Vietnam and some Southeast Asian countries have participated in a wide range of cultural events organized by Korea. Notable cultural events which Vietnam have joined include performances by Vietnamese arts and cultural groups at various local festivals such as Monodrama (in Gongju, 2001); Water puppet show (in Gwacheon, 2002); Chuncheon, Geochang, (2003); Cultural Forum (2002-2003), the drama festival (2005-2006); tours and performances by Koreans comprising of Western Music (2002), Arts (2000 and 2002), Traditional Korean Dance (2000 and 2002), Traditional Korean Music (in 1999, 2000 and 2002).

C. Labour Cooperation

Thought not as much as importance like investment and trade, cooperation on labour between Vietnam and Korea is paid a lot of attenttion. It began in 1993, through a number of forms such as providing traineeships; supplying shipping crew members for Korean fishing vessels and labourers for Korean companies.

Vietnam and Korea signed a new agreement on sending Vietnamese workers to Korea under the Korean Employment Permit System (EPS) Program on 25th May 2004. This established the legal ground and created opportunities for many Vietnamese to work in Korea. The agreement was extended in 2006, 2008 and 2010. Besides, both countries also signed an agreement on sending high-skilled IT labourers to work in Korea.

Currently, Korea is second largest destination for Vietnamese workers, and Vietnam took the 2nd position in terms of number of foreign workers in Korea. According to Vietnam' statistics, from 1993 there has been 120,000 Vietnamese workers come to work in Korea, of which 52,000 were under the trainer program and the rest were under the EPS program.

Vietnamese workers in Korea are mostly low skilled, working in manufacturing sectors such as electronics, food and housing equipments and others (accounting for about 87%). The rest is working in construction, railways, irrigation and agriculture, a few working in the fisheries and aquaculture sector. In general, Vietnamese workers in Korea have secured working conditions, stable jobs and well-paid in comparision with the level in Vietnam (US$1000 per month). However, it is low compared with Korean workers. For that and many other reasons, there is a fact that Vietnamese workers tend to break working contracts and work illegally. Vietnam has set up the Labor Management Boards under the Embassy of Vietnam in Korea, often in collaboration with the Korean side, to promptly solve problems between employers and employees working in Korea.

In recent years, the rate of Vietnamese workers quitting jobs and illegally staying in Korea after their contracts expire has been considerably high (for instance, the rate was 47% in 2013 and 35% in 2015).[16] This has affected the labour cooperation relations between the two countries. Since August 2012, Vietnam and Korea did not sign a normal Memorandum of Understanding on the EPS program. The two only signed a special memorandum for a one-year term on 31 December 2013 and 10th April 2015, respectively. Accordingly, only workers who were able to pass the Korean language test in 2012 as well as those had already worked in Korea and now re-enter could take part in the program. Many Vietnamese workers lost job opportunities because of these requirements. The two countries officially re-signed the

16) http://vneconomy.vn/thoi-su/han-quoc-tai-tiep-nhan-lao-dong-viet-sau-nhieu-nam-gian-doan-20160517050112772.htm.

normal Memorandum of Understanding on the EPS program in May 2016. It is believed to be a good chance for further cooperation in this field.

The Korean government has also implemented policies to encourage foreign workers who stay illegally in Korea to voluntarily return to their countries. From May 2015 Korea dismissed monetary penalties and reduced the re-entry times for workers returning home voluntarily during the period from 1st April to 30th September 2016. Similarly, the Vietnamese Government issued Resolution No. 62/NQ-CP (2015) and Resolution No 33/ NQ-CP (2016) on the exemption of administrative penalties for people working and staying illegally in Korea who return voluntarily during the periods from 1st September to 31st December 2015 and from 1st May to 30th September 2016.

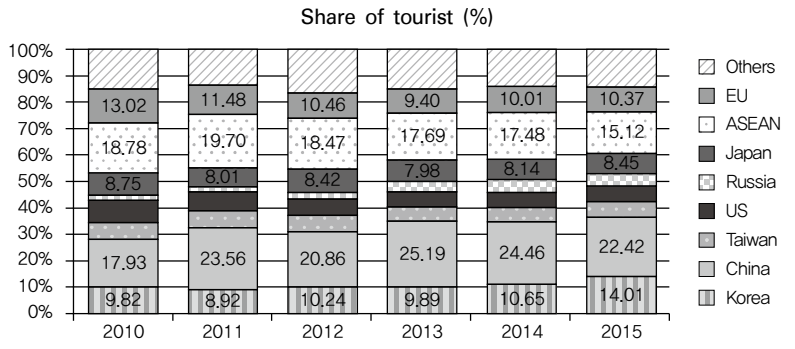
Together with the EPS Program, Vietnam has also sent workers to Korea through various Korean sectoral associations. From July 2011, Vietnamese enterprises sent labourers to work as inshore fishing crew members in Korea (Korean Fisheries Association). A number of Vietnamese labour exporting companies have also worked with Korean partners to send high-skilled workers to Korea under the Yellow card program.

In the Vietnam-Korea Free Trade Agreement (VKFTA) document, Annex 8-C of Chapter 8 on Trade in Services also mentions immigration issues of their workers (mode 4 of providing services) and stipulates the establishment of the Committee on Movement of Natural Persons which meets once a year to consider measures to remove barriers to labor mobility as well as other immigration issues. Entry and exit fees shall be reasonable in order to avoid impacts on other transactions. Furthermore, the Annex stipulated the need to have specific commitments regarding movement of labour, restrictions, conditions, migration, immigration, temporary and permanent residing with respect to each type of employment. Lastly, it also emphasized the transparency of regulations and dispute settlement mechanism.

D. Tourism Cooperation

Cooperation on tourism is one of the most notable successes in the Vietnam-Korea relations, especially after the agreement on tourism was signed between the two countries in 2002. Since 1 July 2004, Vietnam has unilaterally granted visa exemption for Korean citizens.

Figure 8. Foreign Tourists to Vietnam



Growth (%)

	2011	2012	2013	2014	2015
Total	***19.09***	***13.86***	***10.58***	***5.12***	***−0.20***
Korea	8.17	30.67	6.82	13.26	31.25
China	56.48	0.84	33.53	2.07	−8.54
Taiwan	8.11	13.38	−2.54	−2.51	12.78
US	2.06	0.89	−2.61	2.68	10.68
Russia	22.71	71.56	71.03	22.41	−7.15
Japan	8.91	19.71	4.81	7.27	3.61
ASEAN	24.93	6.74	5.95	3.87	−13.70
EU	5.02	3.75	−0.60	11.91	3.38
Others	6.47	41.38	−0.23	−0.02	−4.03

Source: General Statistic Office, Vietnam.

In recent years, tourism relations between the two countries have improved considerably. Korea is the key market of foreign tourists to Vietnam.

The number of arrivals has grown rapidly and steadily. Among countries that have the highest number of tourists to Vietnam, arrivals from Korea and Japan obtain stable and positive growth rates. In 2012, Vietnam received more than 700,000 visitors from Korea (an increase by 30.7% from 2011). In 2013, the figure was 747,000 (up by 6.8%). The figure for 2015 was more than 30% (Figure 8).

Both Korea and Vietnam are implementing and undertaking various bilateral tourist promotion campaigns, cooperating on advertising tourism products for their citizens as well as all people in the world. As an example in 2011, the two jointly promoted the voting of Ha Long Bay (Vietnam) and Jeju Island (Korea) for the world heritages.

Together with events to promote tourism held in Korea, tourism management authorities and tourism enterprises of Vietnam also implement various activities, namely advertising tourism in Vietnam on Korean mass media, organizing seminars and conferences with the participation of tourism enterprises from both countries to attract Korean tourists to Vietnam.

Similarly, Korea's programs to promote its tourism are conducted in Vietnam. In order for Korea to become one of the most attractive tourism destinations in the world, Korean Government undertook various activities to promote tourism in the Asian market as well as in other regions. Korean tourism enterprises selected Vietnam as the key and potential destination in Asia. As the number of Korean tourists to visit Vietnam is increasing and trading relation between the two countries is flourishing, Korea's Tourism Organization opened its representative office in Hanoi under the Embassy of Korea in Vietnam, which is called "Tourism and Culture Office".

Vietnam is the 4th nation in Southeast Asia that Korea has placed a tourism representative office (after Thailand, Singapore and Malaysia). This demonstrates the potential of the Vietnam market for the Korean tourism industry.

E. Science and Technology Cooperation

Vietnam and Korea signed the Agreement on Science and Technology Cooperation in 1995, and has obtained meaningful achivements. Meetings of the Committee on Science and Technology Cooperation between Vietnam and Korea were held in 1999, 2001, 2004, 2007 and 2009. After five meetings, the two parties have implemented 39 missions on scientific and technological cooperation under the framework of various treaties since 2000.

In high-technology: In 2010, there were two MOUs signed between Hoa Lac High-tech Park and Daedeok Innopolis Science Park and Chungnam Techno Science Park. Those documents cover provisions on encouraging cooperation between the two parties via such activities as technological transfer, joint R&D of new products, market development, trade cooperation or joint investment; exchange of staff, in particular training-on-jobs; sharing of experiences on technology business incubators and commercialization of products. Currently, the two parties are proactively negotiating more details to implement the signed agreement.

Cooperation on standards, measures and quality has been undertaken in various forms and diversified activities, such as: Cooperating with Korea Testing Laboratory (KTL) on testing and certification for electronics and electrical equipment through training programs funded by Korea.

A MOU with Korea Electrotechnology Research Institute (KERI) was signed in March 2010. Via this cooperation framework, four Vietnamese staff received financial assistance from KERI to attend practical trainings on testing electrical equipment in Korea.

Cooperating on managing, testing petrol quality with Korea Institute for Petro Management (Kpetro) via information sharing, participating on trainings on management skills, testing petrol quality and inter-agency testing among three technical centers of the Directorate for Standards, Metrology and Quality with testing laboratories of Korea.

Cooperating on Metrology, Science and Industry with Korea Research Institute of Standards and Science (KRISS), focusing on such issues as consultation, professional training on testing, connecting national standards on testing of the two countries.

In 2010-2011, Vietnam and Korea implemented some activities under the framework of the Treaty with Korea on "Cooperation to further enhance capacity of Vietnam Directorate for Standards, Metrology and Quality to ensure the consistency of national standards on testing". In June 2011, KRISS provided a fund for Vietnam's Directorate for Standards, Metrology and Quality in the form of lengthy and optical testing equipment with the total value of about US$ 60,793. The equipment has been installed. Moreover, with the support from Korea International Copperation Agency (KOICA), some staff of the Directorate attended trainings on testing and certification in Korea.

F. Intellectual Property

In 1993, Vietnam joined the Patent Cooperation Treaty (PCT). Under this framework, Vietnam signed cooperation agreement with Korea in 2002. Korea Intellectual Property Office (KIPO) was selected as the International Searching Authority (ISA) and the International Preliminary Examining Authority (IPEA) for PCT applications submitted by Vietnamese.

In 2009, National Office of Intellectual Property of Vietnam (NOPI) and KIPO signed an MOU on cooperation on intellectual property (IP). Accordingly, KIPO helped enhance NOPI's capacity by providing trainings for NOPI's staff, appraisers of brand, industrial designs and patents; organizing conferences on protection of IP for Korean enterprises operating in Vietnam.

High-level meetings between leaders of NOPI and KIPO were held in 1998, 2002, 2008, 2009 and 2010. At these meetings, the two parties dis-

cussed and reached mutual agreement on bilateral cooperation on staff exchange, information sharing, trainings for staff via training programs provided by International Intellectual Property Training Institute (IIPTI), auto IP management, implementation of rights and other issues related to PCT.

In 2014, Korean Government provided financial support for Vietnam's Superme Court with the project on "Capacity building for the Court Academy" via KOICA. The objective of the project was to enhance capacity for Vietnam's court officials in dealing with IP lawsuits.

The chapter on IP in the VKFTA signed in 2015 establishes a framework of general principles on IP-related issues, aiming at promoting the development and transfer of technology and trade between Vietnam and Korea; reducing barriers, protecting and fully and effectively implementing IPRs; minimizing illegal trading of IP-protected products; ensuring the implementation of IPRs without creating barriers to legal trade.

Accordingly, the two parties grant national treatments (NT) to each other regarding the protection and benefits from IPRs; recognize and accelerate the implementation of IPRs under the framework of WTO (TRIPS agreement) and other treaties that the two parties participate in; may apply stricter protection rights provided that they do not conflict with commitments under the VKFTA. Moreover, the Chapter also covers other specific commitments on trademark protection, famous trademarks, fighting against unfair competition, the protection of patents, copyrights and other related rights, cooperation on IP. In general, this is a rational framework which is not too strict and does not go beyond WTO framework. Regulations under this agreement establish a better legal foundation for Vietnam and Korea to settle emerging IP-related issues on trade and investment.

G. Education and Training Cooperation

Commitments on education and training cooperation are mostly at minis-

terial level. In February 2008, the Ministry of Education and Training (MOET) and the Embassy of Korea in Vietnam signed an agreement covering several issues. As such, Korea will increase the number of scholarships provided for Vietnamese, espcially for teaching Korean languague in Vietnam through direct support for Korean languague educational institutions. Vietnam also can access more Korean assistance in training highly qualified human resource (such as PhD students) for universities and colleges in Vietnam. According to the plan, by 2020, about 300 to 500 students will go to Korea to attend PhD programs or thoses on human resource and technological transfers related to R&D and production of medical equipment.

Besides, Ministry of Industry and Trade of Vietnam (MOIT) also cooperates with Ministry of Strategy and Finance of Korea on human resource development in the industry sector under the framework of the Vietnam Korea Joint Committee on Nuclear Power, Energy and Industry. Accordingly, the two parties agreed to detailize and promote educational programs; share information on 49 educational centers under the management of the MOIT and on educational system of Vietnam under the Education Law in order to create favourable conditions and basis for the discussion on and development of educational programs (NCIEC 2012).

Financial support for education: Korea's financial support for education for Vietnam is not much. In 1994, Vietnam started to receive financial support from Korea to improve infrastructure of some technological secondary schools and primary schools in the central area. Moreover, Vietnam also receives financial support from other Korean organizations and enterprises to establish and improve material facilities and vocational training; develop research and training centers for the disabled; provide computers for some schools in Vietnam and scholarships for students.

Recently, via KOICA, the Korean Government provided the ODA of about US$25 million to set up Cyber University for CLMV countries, in which Vietnam is the focal point to receive funds and establish the host

computer. KOICA coordinated with MOET to develop the project with the initial fund of around US$1.8 million. Besides, also via KOICA, the Korean Government provided the ODA of US$10 million to build the Korea-Vietnam Technology College in Bac Giang province.

In line with the increasing expansion of trade and investment between the two countries, the demand for Korean-language speaking labour force and vocational training has grown considerably. Some universities and colleges in Vietnam have received support from Korea in the form of sending teachers and providing teaching materials for Korean-language and vocational trainings.[17] Korea wants to promote the teaching and learning of Korean language in Vietnam. In recent years, delegations at different levels of the two countries have exchanged visits to discuss about cooperation on education and training.

For student exchange, according to Ministry of Justice of Korea, by end of February 2016, there were 105,193 foreign students studying in Korea, out of which Vietnames students were 8,293 people, accounting for 7.8%, the second largest group after the Chinese with 62,318 students (59.2%). Previously, in 2014, Vietnam ranked 3rd among 91,332 foreign students in Korea.[18]

2. Economic Relations

Economic cooperation is the leading component in the Vietnam-Korea relations. Vietnam is the focus of Korea in the relations with ASEAN which in turn is placed as the center of the dialogue mechanism in the East Asian

17) Hanoi University, University of Social Science and Humanities under Hanoi National University, Korea-Vietnam Friendship Information Technology College in Da Nang province.

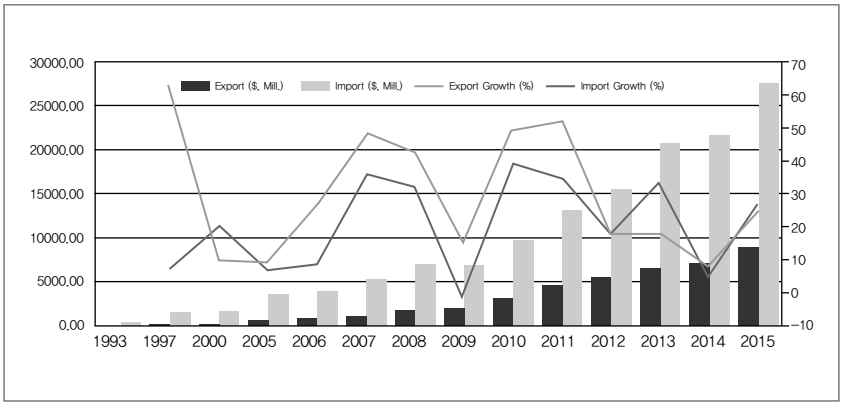
18) http://www.korea.info.vn/2016/05/so-luong-du-hoc-sinh-viet-nam-dang-du-hoc-han-quoc.html.

region. Consequently, promoting the important role of Vietnam in Southeast Asia is consistent with the strategic policy of Korea in the region. Meanwhile, from the perspective of Vietnam, economic cooperation with Korea is crucial for the modernization and industrialization of Vietnam, strengthening Vietnam's position in improving relations with other countries in the region toward diversification and multilateralization in the context of considerable changes in the region.[19]

A. Trade

Bilateral trade between Vietnam and Korea has flourished since the early 1990s after the establishment of the official diplomatic relations. Since then, the trade relations have been strengthened on the basis of regional and bilateral agreements between the two countries.

Figure 9. Trade between Vietnam and Korea



Source: www.customs.gov.vn.

19) This section review trade and investment between the two countries. More details will be discussed in Chapter 4.

Bilateral exports increased by 8.2 times during the period of 1993-2006 (Figure 9), from US$ 581.7 million to US$4.75 billion, attaining the average growth rate of 17.6% per annum. As such, Korea is the 7th largest trading partner of Vietnam after China, Japan, the US, Singapore, Taiwan and Australia.

In 2005, Korea and ASEAN signed a Free Trade Agreement (AKFTA). Vietnam's tariff cut commitments started from 2007. According to the schedule, 86% of total tariff lines will be removed by 2018. To further strengthen trade between the two countries, the Vietnam-Korea Free Trade Agreement (VKFTA) was put into effect since 12/2015 with the tariff reduction scheduled till 2029. This is a milestone for a new stage of Vietnam-Korea economic relations. Thanks to the VKFTA, Vietnamese and Korean enterprises may take advantage of trade and investment preferential treatments, which help further promote bilateral trade and investment. (More details will be analyzed in Chapter Three and Chapter Four.)

Besides, Vietnam and Korea are participating in the negotiation of the RCEP which is expected to conclude and to be signed in the coming time. Members of RCEP are 10 ASEAN countries and six economies that signed FTAs with ASEAN (including Australia, China, Japan, Korea and New Zealand).

The improvement of the framework of agreements create sound basis for promoting a more balanced and substantial trade and investment partnership between Vietnam and Korea. In 2015, Korea was Vietnam's 3rd biggest trading partner after China and the US, Vietnam's 4th biggest export market after the US, Japan and China, and Vietnam's 2nd biggest import market after China.[20] Also, Vietnam ranks the 5th among Korea's trading partners and is placed at the 3rd and 8th among Korea's largest export and import markets respectively.

Trade structure of the two countries is complementary to each another.

20) http://www.mof.gov.vn/webcenter/portal.

Vietnam is a potential export market for Korea, especially Korea's advantageous products such as transport equipment, materials of garment and textile and footwear, pharmaceuticals, electronic consumer goods. On the other hand, Korea is the key export market for advantageous products from Vietnam, including agricultural and fishery products, vegetables and fruits, textile and garment, footwear, wood products, electronics. Moreover, Vietnam can import good quality and rationale materials from Korea, which helps reduce dependence on import from China.

It's notable that Vietnam always suffers from trade deficit with Korea. The two countries have exerted efforts to further promote trade relations in order to attain bilateral trade of US$70 billion in 2020, and simultaneously proactively cooperate to gradually reduce trade deficit of Vietnam.

B. Investment

1) Foreign direct investment of Korea

Legal framework for investment cooperation was established relatively early, promoting favourable investment environment for both sides. Immediately after the introduction of Vietnam's opening policy to attract FDI, Vietnam and Korea signed an agreement on invesment promotion and protection in 1993, which was amended in 2004. Besides, there are a number of related agreements, including the Agreement on Economic and Technological Cooperation (1993); the Agreement on the Avoidance of Double Taxation (1994); the Agreement on Customs Cooperation (1995); the Agreement on Judicial Assistance in Civil and Trade (1995). Under the framework of the VKFTA (2015), provisions on investment are covered in Chapter 9, replacing the Agreement on Investment Promotion and Protection. In general, even at the early stage of upgrading or in recent period, commitments on investment cooperation, in particular FDI, between the two countries consitently aim at creating a level field for both domestic and

foreign investors (by granting NT to the one another) as well as among each other's investors (MFN).

Besides, the investment environment and policies imposed on foreign investors in Vietnam have continuously been improved in order to promote FDI attraction, including that from Korea. The dual price mechanism that differentiated domestic investors from foreign ones was removed. Similarly, Vietnam has amended policies and regulations on investment forms; barriers of investment conditions, accessing to resources (land, electricity, infrastructure); investment sequences and procedures; post-investment protection; dispute settlement mechanism. Since July 2014, Vietnam applies visa exemption for tourists from Korea, paving the way for Korean investors to explore Vietnam's market.

FDI from Korea came to Vietnam quite early.[21] Korea is always in the top 5 biggest FDI investors in Vietnam. In 2014, Korea took over Japan to be the largest FDI investor in Vietnam with total registered capital of US$48.5 billion and 5,364 in-effect projects.[22] Until now, total FDI from Korea exceeds that from Japan by US$8.7 billion, and the gap is becoming bigger and bigger (Figure 10).

Vietnam has become the 4th largest recipient of Korea's foreign investment after the US, China and Hong Kong (with 3,899 projects, total registered capital of US$22.3 billion and accumulated disbursed capital of US$ 13.12 billion).[23] Korea's FDI to Vietnam accounted for 31% of that to ASEAN, which was 1.65 times higher than that to Indonesia and 2.33 times

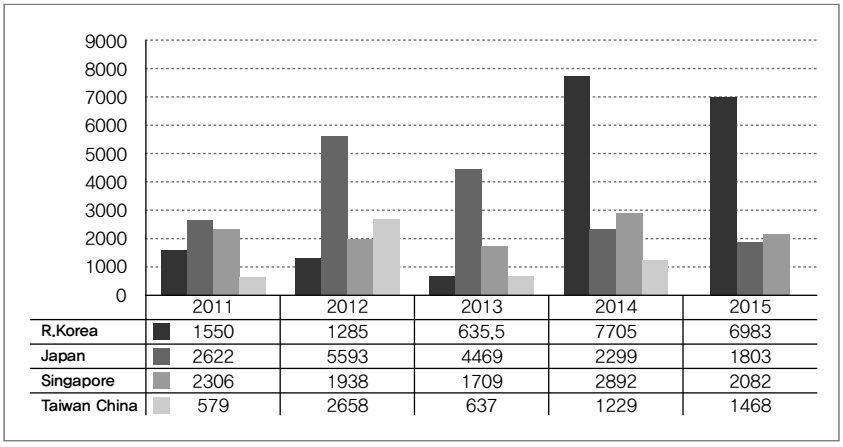
21) According to statistics announced by FIA, the first FDI project from Korea to Vietnam was licensed in 1988 in Ho Chi Minh City. It was the Mania-funded project on garment and textile industry with total capital of US$ 475,000 in the form of BCC. However, according to Korea Eximbank, the first Korean FDI project to Vietnam (after the Independence day) was licensed in 1992 in manufacturing industry.

22) If some projects of Samsung Electronics, Hyosung that were invested in Vietnam via entities based in Singapore and Turkey are included, total FDI from Korea to Vietnam may attain more than US$ 55 billion.

23) Korea Eximbank (March 2016).

higher than that to Singapore, the 2nd and 3rd largest recipients of FDI from Korea in ASEAN. In general, the Government of Korea encourages Korean enterprises to invest in Vietnam, introduce incentives and promote investment abroad. Vietnam is considered a strategic investment destination due to advantages of cheap labour force, potential consumption market, openness - easy to access, stable politics, attractive investment incentives.

Figure 10. The Four Biggest FDI Investors to Vietnam



	2011	2012	2013	2014	2015
R.Korea	1550	1285	635,5	7705	6983
Japan	2622	5593	4469	2299	1803
Singapore	2306	1938	1709	2892	2082
Taiwan China	579	2658	637	1229	1468

Note: Registered capital, million US$.

Source: Foreign Investment Agency, Ministry of Planning and Investment (MPI), June 2016.

Big corporations of Korea such as Samsung, LG, Posco, Lotte, CJ, Doosan, Shinhan, Hanwha, and others play the leading role in direct investment from Korea to Vietnam through large-scale projects on such industries as manufacturing (electronics), real estate, finance - insurance, energy, steel drilling, construction, accommodation and food services, distribution services, entertainment. Besides, there are other large-scale companies investing in garment and textile industry, namely Hyosung, Taekwang and Panko. Together with big corporations, most Korean investment projects in Vietnam are implemented by SMEs, focusing in the manufacturing

industries. In which, the majority are processing projects in light industries, including apparel and footwear.

Regarding location, though Korea invested in almost all cities and provinces across the country, investment flows from Korea concentrate in those with developed infrastructure and abundant labour force, in particular two big cities (Hanoi and Ho Chi Minh city) and neighbouring provinces.

Investment from Korea to Vietnam created jobs for about 70,000 employees and contributed to around 30% of total exports of Vietnam, which was equivalent to total export value of domestic enterprises (imports from Korea account for about 13.8% of Vietnam's total imports).[24]

Vietnam expects that the implementation of the VKFTA will help promote investment from Korea in clean, hi-tech, environmental-friendly or labour-intensive industries. Vietnam also encourage the linkage between Korean enterprises and domestic firms in order to faciliate technology transfer and the improvement of domestic firms.

C. Official Development Assistance

Korea was one of the "four Asian tigers" to successfully finish industrialization within more than 30 years (from 1960 to 1996 when Korea participated in the OECD). From an ODA recipient, Korea has became an ODA provider to developing countries since 2008. In the last 10 years, Asian countries have been the biggest recipients of bilateral ODA from the Korean Government. In 2014, Korea's ODA for economies in Asia accounted for 47.5% of total ODA of Korea, attaining US$ 663.39 million.[25]

24) General Department of Customs of Vietnam (data for 2015).
25) http://www.odakorea.go.kr/eng.result.RegionCountry_Overview.do.

Table 4. Bilateral ODA from Korean Government (2008-2014)

(Unit: Million US$)

	2008	2010	2011	2012	2013	2014
Asia	250.83 (46.5%)	553 (61.4%)	583.87 (59.0%)	637.67 (53.9%)	731.12 (55.8%)	663.39 (47.5%)
Africa	104.06 (19.3%)	139.88 (15.5%)	178.36 (18.0%)	261.01 (22.1%)	271.72 (20.7%)	332.72 (23.8%)
Near-Middle East	30.54 (5.7%)	34.29 (3.8%)	41.26 (4.2%)	42.25 (3.6%)	40.6 (3.1%)	74.63 (5.3%)
Europe	12.89 (2.4%)	38.72 (4.3%)	20.65 (2.1%)	16.56 (1.4%)	2.58 (0.2%)	9.96 (0.7%)
America	68.69 (12.7%)	64.46 (7.2%)	64.39 (6.5%)	76.2 (6.4%)	96.48 (7.4%)	109.08 (7.8%)
Oceania	2.22 (0.4%)	5.6 (0.6%)	4.15 (0.4%)	3.42 (0.3%)	3.92 (0.3%)	6.48 (0.5%)
Non-allocated capital	69.98 (13.0%)	64.66 (7.2%)	96.84 (9.8%)	146.06 (12.3%)	163.16 (12.5%)	199.51 (14.3%)
Total	539.21 (100.0%)	900.61 (100.0%)	989.52 (100.0%)	1183.17 (100.0%)	1309.58 (100.0%)	1395.77 (100.0%)

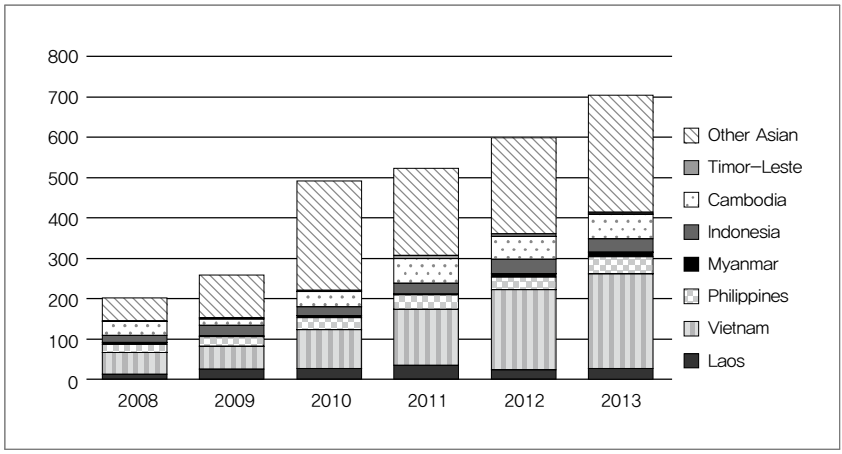
Note: figures in parenthesis is percentage by column.
Source: http://www.odakorea.go.kr/eng.result.RegionCountry_Overview.do.

The share of ASEAN countries in total Korea's ODA for Asia usually is more than 50% (except in 2010, accounting for 44%). Vietnam, the Philippines and Cambodia always receive the largest amount of ODA from Korea for ASEAN economies (Figure 11).

Korea's financial assistance for Vietnam is increasing, partly reflecting the important role of Vietnam in the strategic partnership of Korea. Total ODA provided by Korea for Vietnam was US$ 478.1 billion in the period of 1993-2008; and attained the committed capital of US$ 1 trillion in the 2-year period of 2009-2011 for development projects in Vietnam. Consequently, Korea is the 2nd biggest bilateral sponsor in Vietnam after Japan. Prioritized

Figure 11. Korea's ODA to Asian Countries

(Unit: US$ mill.)



Source: http://www.odakorea.go.kr/eng.result.RegionCountry_Asia.do.

areas to receive financial assistance from Korea include human resource development; public services such as health, education and training; humanitarian aid for vulnerable regions; institutional development in areas shifting toward market economy; agricultural and rural development.

In parallel with ODA, there are preferential loans. Vietnam has the highest number of projects funded by the Economic Development Cooperation Fund (EDCF) of Korea. Since 2005, Korean Government decided to increase financial assistance to Vietnam by 3 times compared to previous period. Specifically, during the 4-year period of 2005-2008, Korea's financial assistance for Vietnam was US$ 100 million every year. In the period of 2008-2011, Korea committed to provide Vietnam with preferential loans of US$ 1 billion from the EDCF.

In 2011, Korea declared that it considered Vietnam as the model and key recipient of ODA, and selected Vietnam to be one of 26 nations in "ODA strategic partnership", of which the three prioritized areas are green growth, human resource and infrastructure development. In 2013, Korea's ODA for

Vietnam attained US$ 234.56 million, accounting for 17.9% of total bilateral ODA of Korea for all partners. As such, since 1992 to 2015, Korean Government signed lending agreements or committed to provide credit for nearly 60 projects with the total capital of US$ 2 billion in Vietnam. According to Korean-led survey, Korea's ODA projects in Vietnam were implemented in comply with or even faster than targeted plan.

Vietnam-Korea cooperation has taken place in various fields from labor, tourism, to trade and investment. Such remarkable outcomes are driven by the political efforts of the two governments as well as the advantages of each country in the region. After over 20 years, Korea has become top investment and trade partners of Vietnam. The relation is expected to come into another period once the two start implementing the new trade agreement. However, it is also facing with critical challenges coming from deeper integration of many other countries in the region. The noodle bowl effect, the weak preparation of the government and enterprises may limit the positive benefits from that. In the next chapter, we will discuss about the Vietnam-Korea FTA which was signed and entered in force in 2015 to have more insights about this issue.

Ⅲ. Vietnam-Korea Free Trade Agreement

1. The Two Parties' FTAs
2. Vietnam-Korea FTA
3. Implementation of VKFTA

In its external relations, one of the missions set by the Korean Government is to enhance economic and trade diplomacy in order to create bigger position and strength in the region. It can be said that geopolitical factor which was mentioned in Chapter One has a remarkable impact on Korea's trade strategy. With its specific geo-politics as being surrounded by many Asia economic powerhouses, Korea faces with some certain challenges in creating and maintaining its economic and political impacts on the region. The country has achieved remarkable industrial and economic progress with strong growth of big corporations. Limited domestic market and scarce natural resources have early forced Korean companies to follow global strategies in doing their business operations which are based on export to external markets. As a result, Korea has pursued the goal of being a trade and business hub in Northeast Asia in order to guarantee its economic resource and maintain its continuous industrial growth rate. At the same time, it follows a strategy of quickly signing trade agreements with big partners which allows it access to foreign markets quicker than its economic competitors.[26] At the same time, regional countries also follow the same strategies. This chapter will depict the FTA pictures of both Korea and Vietnam, focus more on the KVFTA which is one of the latest FTAs which the Korean government has signed. On Vietnam's side, the readiness of the economy and enterprises is particularly emphasized.

26) Hidetaka Yoshimatsu. Trade Politics in Northeast Asia: The Development of the Trilateral Free Trade Agreement. Graduate School of Asia Pacific Studies, Ritsumeikan Asia Pacific University, Japan. Ritsumeikan Center for Asia Pacific Studies (RCAPS) Working Paper Series. December 24, 2014.

1. The Two Parties' FTAs

A. Korea's FTAs

Recent literature shows that Korean FTAs development in particular and of other countries in general has been much affected by concerns related to regional political issues. Typical examples are China seeking to strengthen cooperation within ASEAN+3 frameworks to be active in doing trade policies or Japan using CEPEA to balance China's role in Southeast Asia (Yoshimatsu 2014).

Through global-oriented policies, Korea can ensure its access to markets of big trading partners compared with other competing countries. This feature is especially important in its relation with Japan because the two countries are competing with each other in likewise production fields such as automobile and electronics appliances. In fact, Korea's "first comer" strategy has contributed to improving its companies' position compared with Japanese competitors (*ibid.*). As an example, Korea - EU FTA which took effect from July 2011 has had big impacts on automobile sale of Korean automobile companies in the EU market. In 2012, the number of registered Hyundai and Kia new cars increased 9.4% and 14.1% respectively compared with the previous year. Meanwhile, this number in the cases of Toyota and Nissan decreased 3.1% and 6.3% respectively in the same year.

By pursuing global-oriented strategies, Korea focuses on the "first comer" strategy with more attention paid to bilateral FTAs than multilateral ones. In recent years, its bilateral FTAs have been concluded rather rapidly (Table 5). China-Korea-Japan FTA and RCEP are multilateral FTAs, however those FTAs are all under negotiation with slow progress. The caution in joining regional multilateral agreements may originate from the fact that China is becoming an important market for its industry sector which faces with com-

petition from Japan. An important trade benefit for Korea is to facilitate its production companies in competing with Japanese competitors. This trade benefit can be much strengthened with gaining superior position in China's giant market through establishing bilateral FTAs before trilateral FTA is completed.

Table 5. Korea's FTAs

Implemented (date of entry into effect)	Singed or finalized	Under negotiation	Suspended but expected to resume negotiation	Under study or preparation
Chile (4/2004) Singapore (3/2006) EFTA (9/2006) ASEAN (Goods, 6/2007; Investment,9/2009; Service, 5/2010) India (1/2010) EU (7/ 2011) Peru (8/ 2011) US (3/ 2012) Turkey (5/2013) Australia (12/ 2014) Canada (1/ 2015)	China (12/2015) NZ (12/2015) Vietnam (12/2015) Colombia (7/2016)	Central America (6/2015) Ecuador (8/2015) Israel (5/2016) China-Japan-Korea (11/2012) RCEP (11/2012)	Japan (since 11/ 2004) Mexico (since 6/ 2008) GCC (since 7/ 2009)	MERCOSUR Israel Central America Malaysia Equator

Source: http://www.ftahub.go.kr.

Receiving substantial benefits from international trade, Korea continuously supports a broad and strong multilateral trading system and considers it as a background for encouragement of sustainable economic growth and development. The country commits to do its obligations in WTO's agreements and engages actively in efforts to facilitate a boarder and freer trade and investment.

From 2003, Korea has actively engaged in FTA negotiations in order to establish a comprehensive network of FTAs with connections to Europe,

Asia and America. It's noted that Korea pursues FTAs with high and comprehensive standards and being compatible with WTO regulations. Most Korea's FTAs are on not only trade in goods but also in services, investment, non-tariff barriers, trade protection and intellectual property. Main goals of its FTA policy are to continue international trade liberalization and create more motivations for economic growth. In ways of developing a global trade network with FTA counterparts, Korea has found market opportunities all over the world. Signing FTAs helps Korea decrease trade cost (through trade facilitation, tariff and non-tariff barrier removal) and relieve trade conflicts with FTA counterparts. On the other hand, joining in FTAs also increases the efficiency of the whole economy through pushing up competition as well as increasing well-beings for consumers with diversified choices or lower prices of import goods.

About trade of goods, within 10 years, Korea's trade liberalization with FTA partners has reached more than 90% in terms of tax and import value. In Korea-United States FTA, Korea removes more than 92% of tax lines and 92.6% of import value in 5 years and 98.3% of tax lines and 97.4% of import value in 10 years. With trade protection regulations in FTAs, Korea has tried to balance promotion of trade liberalization with protection of domestic industry from losses. By joining FTAs, Korea has also increased access to agricultural market. The market shares of agricultural products imported from FTA partners has increased steadily over the years.

About trade in services, Korea continues to liberalize services sectors outside WTO commitments through FTA negotiations, especially Korea-United States FTA and Korea-EU FTA. Korea will continue to expand and improve its main services such as legal services, education services, R&D, environmental services in order to be a hub of services in the region.

About investment, Korea has combined investment liberalization with strong investment protection in order to create a friendly, stable and transparent investment environment for foreign investors from FTA counterparts.

Joining in FTAs also helps Korea attract more foreign investment which contributes to employment promotion, living standard improvement and economic development.

In the future, Korea will continue to join in efforts to promote trade liberalization, sustainable and comprehensive economic growth and balanced development. It believes that pursuing FTAs will help build trade liberalization blocks at regional and global levels. It will try to become a bridge between developed countries and developing countries at world economic forums such as WTO and G20 Summit. It will support promotion of regional trade liberalization and economic cooperation in Southeast Asia and Asia Pacific. Besides, it will actively engage in global efforts to fight against climate change and promote sustainable development by pushing up international cooperation in fields and promoting domestic green growth policies effectively. It will also carry out domestic reforms towards efficiency improvement, market transparency and fair competition in the economy, contributing to reaching general goals of creating wealth for all citizens of the world.[27)]

B. Vietnam's FTAs

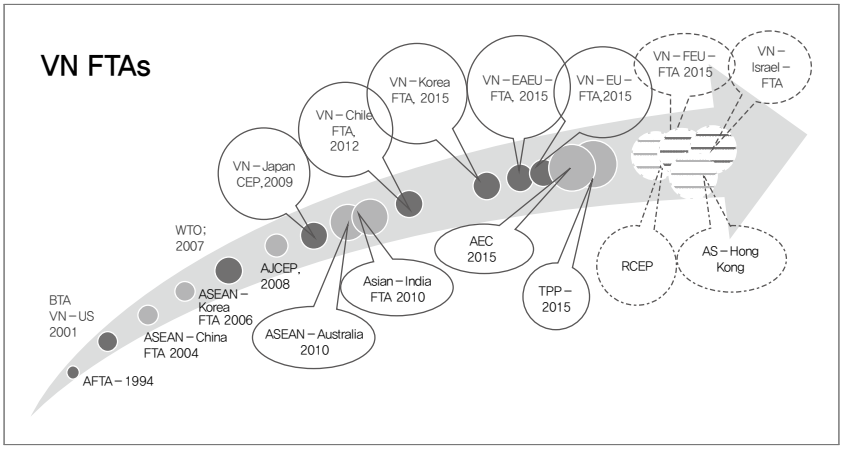
Vietnam's integration into the regional and international economy was much latter than Korea. Since the early 1990s, Vietnam has pursued international economic integration through participating in various trade and investment agreements. 40 bilateral trade agreements have been signed, mainly in the form of MFN agreements. One of the very first attempts toward trade liberalization via FTAs was the CEPT/AFTA among ASEAN countries (1996) with the commitment to reduce tariff to below 5% in 2006 and 0% in 2017. The BTA with the US signed in 2001, though not being a free trade

27) Report Korea' trade policy review, WTO 2012.

agreement, was the most comprehensive agreement during this period, which included commitments on market liberalization of trade of goods and services, IPR and investment protection that in turn help Vietnam to prepare for WTO later.

After joining the WTO in January 2007, Vietnam accelerated the signing of both bilateral and multilateral FTAs with other countries in the region (Figure 12). A part of these FTAs are under the ASEAN+6 framework, including ASEAN – China (ACFTA), ASEAN – Korea (AKFTA), ASEAN – Japan (AJFTA), ASEAN – Australia and New Zealand (AANZFTA), ASEAN – India (AIFTA). Moreover, there are effective FTAs between Vietnam and the Eurasian Economic Union (VEAEU FTA). The FTA with the EU (EVFTA) and TPP are two new-generation FTAs, of which negotiation process was completed and member countries are undertaking the ratification process. Other under-negotiation FTAs include RCEP, ASEAN-Hong Kong, Vietnam-Israel and Vietnam-FEU.

Figure 12. Vietnam's FTAs



Source: Authors' Compilation from WTO data.

Vietnam's participation in FTAs is at the average level in relative to other

ASEAN nations. By the end of 2015, Vietnam participated in 15 FTAs, ranked 5th among 10 ASEAN members (Singapore - 33 FTAs; Thailand - 22 FTAs; Malaysia - 21 FTAs, Indonesia - 17 FTAs; Brunei - 13 FTAs; Laos, Myanmar and the Philippines - 11 FTAs; Cambodia - 9 FTAs).

Recent bilateral trade between Vietnam and FTA partners accounted for more than 60% of total international trade of Vietnam, of which the share of exports and imports were nearly 50% and 70%, respectively. Tariff reduction schedules under these agreements (Table 6) are expected to considerably promote trade between Vietnam and trade partners.

Table 6. Commitments on Tariff Cut in Vietnam

Framework	Scope (% tariff lines to be reduced to 0)	Implementation	Completion
ASEAN	93/~100	1999	2015/2018
ACFTA	85/90	2005	2015/2018
AKFTA	87	2007	2018
AJEPA	87	2008	2025
VJEPA	92	2009	2026
AIFTA	78	2010	2020
AANZFTA	90	2009	2020
VCFTA	89	2014	2030
VKFTA	89	2016	2031

Source: Ministry of Finance of Vietnam.

Though having participated in various FTAs, Vietnam has yet identified a specific FTA roadmap like Korea. There are many reasons for the participation of Vietnam, including political chances and negotiation opportunities. In fact, Vietnam is rather passive in deciding on FTAs (though the country has had a strategy for international integration for several years). Many scholars argued that Vietnam's participation in the TPP was for geopolitical reasons instead of economic interests as the competitiveness of Vietnam was lagging

behind all other partners; even some advanced countries like Korea and Thailand do not participate in this agreement.[28)]

Another important point is that Vietnam has not fully and appropriately assessed opportunities and challenges in joining FTAs. Most of the results of the impact assessments of several FTAs were published when the FTA negotiation processes were almost complete. Though those documents mention significant opportunities for advantageous sectors (garment and textiles, footwear, seafood) the implicit risks of a highly concentrated export structure on a few industries have insufficiently been pointed out. Other implicit factors have been thoroughly considered, including the modest movement of capital and labour among sectors and provinces and vulnerable groups during the implementation of agreements.

Similarly to other developing countries, the acceleration of Vietnam's participation in FTAs also aims at creating pressure on domestic institutional reforms and policy adjustments. This expectation has been put on the EVFTA and TPP - the two "new generation" FTAs with many commitments that go beyond trade commitments such as environment, labor, SOEs reform and government procurements. This is entirely true as the Vietnamese government has identified institutional reforms as one of the most important pillars of economic restructuring in the current period. However, the review of existing agreements (CIEM 2016) shows that the direct impact on this matter is modest, or in other words, the requirement on adjusting existing laws and regulations or conforming domestic laws and regulations to approved commitments is not much. This can be considered as a success of Vietnamese negotiators. But on the other hand, Vietnam has missed the opportunities to

28) Moreover, according to Vietnam's strategy of international integration (Decision No. 40/QD-TTg dated 7 January 2016); Vietnam start to develop a strategy of signing FTAs. In fact, by 2015 Vietnam has signed FTAs with almost all key partners (the EU, China – under the framework of the ACFTA and ASEAN). It reaveals that Vietnam joint FTAs without any well planned strategy.

reform the domestic institutional framework, which is facing with tremendous problems. For instance, the TPP was expected to foster the reforms of SOEs and government procurement. But the actual situation shows that very few SOEs are subjected to reforms in line with TPP commitments (SOEs where the State holds more than 50% of capital share and have the total revenue of more than VND 4,500 billion - equivalent to approximately US$200 million). Also, under the EVFTA commitments, a number of big corporations such as the Petro Vietnam (PVN), Vietnam Electricity (EVN), Vietnam National Coal and Mineral Industries Group (VINACOMIN), Vietnam National Shipping Lines (Vinalines), Vietnam Airlines Corporation (VNA) and State Capital Investment Corporation (SCIC) were included in the exemption list though these corporations should be drastically reformed to create a level and transparent investment environment in Vietnam.

2. Vietnam-Korea FTA

Negotiation on the VKFTA was kicked off in August 2012. After 8 rounds of official negotiations, the two countries came into conclusion. In December 2012, the two parties signed the Minute on the conclusion of VKFTA negiotiation. On May 5th 2015, the VKFTA was officially signed and came into effect on December 20th 2015.

VKFTA includes 17 Chapters, 15 Annexes and an implementation agreement (see Appendix 1), comprising commitments on goods and serivices (annexes on telecommunication, financing, personnel movement), investment, intellectual property, food safety, Sanitary and Phytosanitary Measures (SPS), C/O, customs, trade safeguards, Trade Remedies, Technical Barriers to Trade (TBT), e-commerce, competition, economic cooperation, institution and juridical issues.

A. Trade in Goods, Market Access

Tariff reduction: Fundamentally, the tariff reduction commitments in VKFTA were based on those in the ASEAN - Korea FTA (AKFTA) but open at a higher level. Accordingly, Korea eliminates tarriffs on Vietnam's key exports; sets the schedule for tariff reduction of inputs, parts, accessories for production; ensures a proper roadmap for protection of sensitive sectors such as steel, automobile and livestock. VKFTA offers further reduction of tariff lines that are not included or committed at a low level of reduction under AKFTA. Specifically:

Table 7. Commitments on Tariff Reduction in VKFTA and AKFTA

	AKFTA	VKFTA
Korea Commitments	- Percentage of import value enjoying tariff cut (2012, %): 91,7% - Number of tariff lines eliminated: 11.173 - Percentage of tariff lines eliminated: 91,3%	- Percentage of import value enjoying tariff cut (2012, %): 97,22 % - Number of tariff lines eliminated: 11.679 - Percentage of tariff lines eliminated: 95,44%
Vietnam Commitments	- Percentage of import value enjoying tariff cut (2012, %): 86,3% - Number of tariff lines eliminated: 8. 256 - Percentage of tariff lines eliminated: 87,1%	- Percentage of import value enjoying tariff cut (2012, %): 92,72% - Number of tariff lines eliminated: 8.521 - Percentage of tariff lines eliminated: 89,15%

Source: Summary from VKFTA and AKFTA.

Vietnam also cuts tariff on commodities in the processing industry, the majority of which are the materials and accessories imported for domestic production, contributing to reduction of input costs for production, and reduce the dependence on imports from certain other countries. This serves

Vietnam's direction on restructuring of the economy, one of the targets Vietnam aimed to achieve for this FTA.

Table 8. The Tariff Lines Vietnam Committed to Eliminate for Korea

No.	Sector	No. of lines cut	Import value from Korea (2012)
1	Textile and garment materials and accessories	31 lines	US$ 434 million
2	Auto engine, parts and accessories	33 lines	US$ 96 million
3	Plastic materials	8 lines	US$ 49 million
4	Home appliances	15 lines	US$ 12,5 million
5	Machineries (battery, transformers, electric motor)	16 lines	US$ 14 million
6	Automobile (1 truck of 10 tons and above, 1 passenger cars of 3.000cc and above)	2 lines	US$ 4,6 million
7	Electronics	31 lines	US$ 33 million
8	Cosmetics	7 lines	US$ 12,7 million
9	Medicine	6 lines	US$ 0,25 million
10	Electric wire and cable	4 lines	US$ 3,2 million
11	Other commodities	the remaining lines	
	Total	2004[29] lines	US$ 737 million

Note: This table includes only those that outnumber AKFTA.
Source: Ministry of Finance, Vietnam.

Korea offers Vietnam tariff cuts and reliefs and creates export opportunities for key agro-aquaculture products including shrimp, crab, fish, tropical fruits, apparel, furniture and mechanical products. Especially, Vietnam is Korea's first FTA partner to enjoy market access and roadmap-based tariff cut for highly sensitive products such as fresh and processed fruits (with 30% - 50% of tax rates); some tropical vegetables and fruits and particularly

29) Though 265 lines were committed, 65 of those have been eliminated by MFN.

foods that are highly sensitive to Korea such as garlics, honey, sweet potatoes, red beans and the likes (used to be subjected to tariff rate as high as 241%-420%).

As such, Vietnam exports enjoy greater advantages than other competitors in the region including China, Indonesia, Malaysia and Thailand. However, the Agreement does not include rice, which is considered "relatively sensitive" to Korea during its negotiations of bilateral and multilateral FTAs with other countries and major economic institutions in the world.

Table 9. The Tariff Lines Korea Committed to Eliminate for Vietnam in VKFTA

No.	Sector	No. of lines cut	Import value from Korea (2012) or current tariff applied in Korea
1	Shrimp	7 lines (quota)	
2	Textile	24 lines	US$ 60 million
3	Wood products	64 lines	US$ 21 million
4	Tropical fruits (fresh, canned)	18 lines	US$ 9 million
5	Aqua products (frozen, canned) including fish, crab (excluding squid)	68 lines	US$ 31 million
6	Garlic, ginger (dried, frozen)	7 lines	Current tariff between 27% and 300% - 400%
7	Vegetables and agro-products	50 lines	US$ 800,000
8	Honey	1 lines	Current tariff 243%
9	Other goods (coffee, chemicals, processed food)	the remaining lines	
	Total	5022[30] lines	US$ 324 million

Note: To include only those that outnumber AKFTA.
Source: Ministry of Finance, Vietnam.

Rules of Origin: Generally, the rules of origin in VKFTA are tougher than in AKFTA, though remain relatively simple. Accordingly, besides the wholly

30) Though 506 lines were committed, 4 of those have been eliminated by MFN.

obtained list which are mainly agro-products (Article 3.2, Chapter 3), to be eligible for the preferential tariff treatments under VKFTA, the goods shall conform to one of the following criteria:

- The Regulated Regional Value Content - RVC (normally over 40%);
- Change in HS tariff classification (2 digits, 4 digits or 6 digits); or
- Undergo Specific Processes (applicable to textiles).

Additionally, similar to many other FTAs, VKFTA allows accumulation of origin, that is, the materials either produced in Vietnam or Korea are accepted during the assessment on Regional Value Content (RVC) to enjoy the preferential tariff treatments from the FTA.

However, one of key points is that although the majority of the tariff lines were committed at lower rates than in AKFTA implying the preferential tariff rates in VKFTA is more advantageous than the AKFTA, the rules of origin in the VKFTA are more difficult to comply than those of AKFTA, partly because VKFTA only allows accumulation of origin for materials originated from Vietnam and Korea, while AKFTA allows accumulation of origin for materials originated from 10 ASEAN member countries.

For C/O application, VKFTA still applies the authority issued certification system whereas government authorities or delegated bodies issue the C/O, which are seen in the previous FTAs signed and currently applied by Vietnam. The self-certification C/O system (which is applied in the EVFTA) is not referred to in this FTA.

B. Trade in Services

Under VKFTA, Vietnam and Korea committed on the general regulations and duties to ensure the benefits of service providers of a party when accessing the service market of the other Party. Each party shall accord to services

and service providers of the other Party basic privileges including (1) the National Treatment (NT); (ii) the Most-Favored Nation (MFN); (iii) and Market Access.

The Chapter Trade in Services in VKFTA was built based on the positive list approach as applied in the WTO, namely, each party shall regulate a schedule of specific list of the sectors liberalized and degree of liberalization, the sectors not listed are non-committed and regulated arbitrarily by that party. For committed sectors, depending on the specific content of the commitments, each party shall not adopt or maintain measures that may affect the service suppliers of the other party, including limitations on the number of service suppliers, the total value of service transactions, the total number of service operations or total quantity of service output, the total number of natural persons that may be employed; requirement on specific types of legal entity.

Although until now this Chapter still adopts the positive list approach, Vietnam and Korea leave open the possibility of renegotiation based on the "negative list" approach. Specifically, the Chapter includes one article stating that if a party ratifies any agreement on trade in services adopting a negative list approach with a third party, the other party may request the former to renegotiate the Chapters based on a negative list approach.

Apart from the general principles applied to all services sectors, the Chapter Trade in Services also includes 03 Annexes on the supplementary principles with regards to financial service, telecommunications and movement of natural persons. Of which, the annexes on telecommunications and movement of natural persons are new compared to the ASEAN-Korea FTA (AKFTA). The commitments on telecommunications regulates measures, policies and legal documents relating to trade in public telecommunications transport networks and services, such as access to and use of the service, interconnection, resale, competition protection, leased circuits, universal service, transparency, dispute settlement The annex on movement of natural

persons provides for the additional rights and obligations apart from those set out in the Schedules of Commitments in Trade in Services in relation to the Mode 4 of service supply namely, presence of natural persons. This annex includes matters relating to management, permit, conditions and restrictions to movement of natural persons, transparency, dispute settlement, cooperation and consultation.

Regarding the commitments on market access through the modes of supply of trade in services, compared to those of Vietnam and Korea under the WTO and AKFTA frameworks, in VKFTA Vietnam provides more market access to Korea in the two sub-sectors, namely (1) urban planning and urban landscape architectural services; (2) machinery and equipment leasing service without operators. In response, Korea provides more market access to Vietnam in some sub-sectors, including (1) Legal services; (2) Courier Service; (3) Maintenance and repair of railway; (4) Services auxiliary to rail transport services.

C. Commitments on Investment

The Chapter on Investment is among the important chapters of VKFTA with a wider and deeper commitments than that of the Vietnam - Korea Investment Promotion and Protection Agreement and the AKFTA. The two Parties agreed on the reservation lists on the measures of each party that do not conform to the commitments on NT, MFN, PR, and SMBD (Senior Management and Boards of Directors). The lists will be concluded within one year from the date of entry into force of the Agreement.

Regarding commitments on Investment Dispute Settlement, similarly to AKFTA, VKFTA also adopts the Investor - State Dispute Settlement mechanism (ISDS). However, the ISDS under VKFTA has a wider scope and more detailed regulations on the process and procedure than in the AKFTA.

3. Implementation of VKFTA

It can be said that most of FTAs are rather complex international negotiations which require good preparation in process of negotiation and implementation. Like other agreements in which Vietnam is a member, VKFTA is expected to bring about several opportunities for Vietnam. However, it also puts forward a lot of challenges. Because VKFTA has just become effective, there has been no information to assess the implementation and real benefits of VKFTA. This section, therefore, presents the overall assessment on opportunities, challenges and the willingness of Vietnam to implement the FTA. Such assessment foresees the trade and investment trend in the near future.

A. Opportunities

Based on computable general equilibrium model (CGE) a research by CIEM (2011) suggests that in all four scenarios of Vietnam-Korea FTA, the FTA can bring about positive impacts on the economy and promote GDP growth. In the most positive scenario (increase in trade and investment with Korea along with increase in productivity due to science and technology transfer), the FTA could increase Vietnam's GDP growth by up to 3.03 percentage points. However, in the worst scenario, the VKFTA would bring about rather few impacts on Vietnam's economic growth (Table 10).

It is also a prediction that production sectors could get benefits from the FTA. Of which, labor-intensive sectors like agriculture and aquatic products and garments would obtain highest export increase. Others like construction, transportation and metal production will reach high growth rates due to diversion of investment. Compared to the scenario with no FTA with Korea, some sector can increase with positive growth rate, for example garments (14.37%), feeding (5.55%), aquatic products (3%), food processing

(3.6%), machinery and equipment (7.3%), and services (6-7%) (see Table 11).

In the best scenario (investment come along with technology renovation) the VKFTA can produce a remarkable growth. Whereas, if investment come without technology renovation, inclusive of removing trade barriers between the two countries, it would have a modest impact on economic growth and lead to increased trade deficit. It is because eliminating tariff helps increase Vietnam's export to Korea but the import from Korea also increases. Overall, the Agreement is forecast to result in an increase in the wage for Vietnamese labors, especially who with low and medium working skills. Annual income of skilled labors could increase 5.14% while that of labors with low and medium qualifications could increase 5.4%.

Table 10. Impacts of the Agreement on Some Economic Indicators of Vietnam

	Base scenario	Free trade scenarios			
		Lowest	Low	Medium	Best
1. Annual GDP growth rate (%)	6.54	6.54	6.54	6.61	6.89
2. Growth rate by 2020 compared with base scenario (%)					
+ GDP		0.006	0.01	0.82	3.033
+ Household consumption		0.068	0.10	5.28	19.81
+ Investment		0.196	0.32	5.82	23.70
+ Government consumption		0.103	0.17	4.50	9.65
+ Export		0.017	0.04	3.43	13.38
+ Import		0.201	0.35	3.18	32.66

Note: Scenarios includes "Lowest" =annual tariff cut by 30%, within 5 years; "Low" completely remove tariff within 5 years; "Medium" =Scenario "Low" + twice increase in FDI from Korea to Vietnam; "Best" = Scenario "Low"+TFP increase remarkably due to productivity spillover from FDI.
Source: CIEM 2011.

VKFTA expands more market access for Vietnam's export goods in comparison with AKFTA. Many agricultural products (sea food and vegetables)

export to Korea can obtain higher export volume. Also, the FTA with Vietnam is the first one where Korea relaxes protection for sensitive domestic products like garlic, ginger, bee's honey, sweet potato. And, among ASEAN countries, Vietnam is only the second country signing bilateral FTA with Korea (the first one is Singapore; Korea is negotiating an FTA with Indonesia). So, in the short term, Vietnam has more competitive edges than other ASEAN competitors.

The VKFTA would also increase import efficiency for raw materials used in major manufacturing such as garments, footwear and electronics. It, therefore, reduces the import reliance on some traditional markets. Due to higher quality source and reduction in the import price of raw materials, Vietnamese manufacturing products export may become more competitive. In addition to that, Vietnam also can have more benefit in terms of employment creation. Most labor intensive sectors (footwear, agriculture, textile) are predicted to grow with higher rate as the FTA comes into effect.

Table 11. Impacts on the Annual Growth Rate of Some Sectors

	Base scenario	Lowest	Low	Medium	Best
1. Annual growth rate (%)					
1.1. Agri. Forestry and Fishery					
Planting	3.54	3.55	3.56	3.57	3.05
Feeding	4.87	5.01	5.11	5.21	5.55
Aquatic products	2.78	2.91	3.01	2.73	3.02
Food processing	4.08	4.08	4.08	4.11	3.62
Wood production	7.75	7.79	7.78	7.00	4.41
1.2. Industrial sectors					
Garments	11.29	11.21	11.17	11.05	14.37
Metal	7.44	7.42	7.42	7.25	9.46
Machinery and equipment	6.86	6.86	6.85	6.91	7.32
Construction	6.67	6.68	6.69	7.14	8.40

Table 11. Continued

	Base scenario	Lowest	Low	Medium	Best
Petrochemical	0.04	0.05	0.05	0.03	0.02
Chemical	6.50	6.49	6.48	6.30	5.73
1.3 Trade and services sector					
Trade	6.93	6.93	6.93	6.99	7.16
Transportation	7.49	7.49	7.49	7.55	7.31
Financial services	8.68	8.68	8.68	8.81	7.58
Other services	6.37	6.38	6.38	6.70	6.28

Source: CIEM 2011.

Also a great advantage of this FTA is that Vietnam is going to ratify the FTA with the EU (EVFTA) and the EU also has FTA with Korea. The rule of origin in EVFTA for some specific cases allows that materials imported from Korea can be cumulative rule of origin when export to the EU. This commitment obviously expands the benefits of Vietnam in both FTAs.

B. Institutional Readiness

Opportunities for Vietnam's economic development would be many. However, the capability of exploiting the benefits of trade liberalization highly depends on institutional arrangements and policy adjustments of each country. An empirical study by Borrman, Busse and Neuhaus (2006) shows that countries with weaker institutions face more difficulties in exploiting advantages of trade liberalization. Especially, the institutional framework for labor market, market accession, cross-border trade, contract implementation and enterprise closing plays an important role in gaining benefits from trade liberalization. Additionally, research by Imbs and Waczairg (2003) shows that developing countries need a good institutional environment in order to

diversify production and take advantages of trade liberalization to move up to higher positions in global supply chains and avoid trade liberalization traps as well as reach higher development levels. As such, the institutional situation plays an important role in distributing resources, creating efficient growth as well as taking advantages of FTAs. This argument sheds a light on some overviewing about the institutional preparations for Vietnam's VKFTA implementation.

Customs services, rule of origin and trade facilitation: High costs for implementing cross-border trade procedures are said to be a minus point for Vietnam which reduces the competitiveness of Vietnamese goods. According to Doing Business (2016), Vietnam's cross-border trade indicator ranks at 99/189 countries, lower than its ranking in 2015 (98). Despite of various efforts in reforming customs procedures and trade facilitation under Resolutions No. 19 in 2014 and 2015, the gap in trade facilitation between Vietnam and the leading countries has not been much improved.

Apart from official costs, a survey by Vietnam Chamber of Commerce and Industry (VCCI 2015) shows that enterprises have to pay substantial unofficial costs. 28% of surveyed enterprises complained that they had to pay unofficial costs for completing customs procedures. The figure is 53% in Ho Chi Minh City where there are the most export and import activities. Unless there are effective measures from the government to reduce this type of corruption, the benefits from tariff eliminations will be soon undermined.

Besides corruption, Vietnam also needs to push up reforms related to institutions and customs administrative procedures in order to meet with VKFTA's requirements. In practice, after implementing Resolutions No. 19 in 2014 and 2015 on improving business environment, the time for customs clearance for export and import goods has been reduced sharply. However, there are still various difficulties in professional checking on SPS and TBT carried out by authorities. In 2015, according to the Project "Measures on

Increasing Efficiency and Effectiveness of Specific Checking for Import and Export Goods", 87 legal documents falling under the responsibilities of 13 ministries needed to be revised and supplemented.[31)]

In addition to revising legal regulations, the government also needs some supervision on professional checking agencies at border gates in order to ensure that those agencies strictly follow the rule of law and not to delay or create unnecessary inconveniences for export and import activities.

Institutions related to services and investment: the VKFTA is expected to create more motivation for the FDI inflow. However, this will only happen if investors see low investment costs, transparent investment procedures as well as predictable risks. In fact, in the VKFTA more new standards are applied to protect investors' rights and improve investment environment than in AKFTA and Korea-Vietnam Investment Protection Agreement. In addition to ISDS mechanism, VKFTA applies a clause on renegotiation for investment issues that are not resolved one year after the agreement taking effect. They are new standards which Vietnam needs to pay attention to in order to prepare institutions for ensuring a transparent investment environment and protecting the rights of investors.

More recently, Vietnam has introduced many measures to improve the investment environment and procedures applied for domestic and foreign investors. According to the Law on Investment (revised in 2014 and took effect from July 2015), several measures are applied to simplify and to transparentize the process of approving investment projects. For example, the number of conditional business lines are reduced and the list is more transparent (clearly defined with 267 sub-sectors by law instead of being regulated scatteredly in by-law documents). The time required for investment registrations is shortened. Only projects with foreign shares that are more than 51%

31) See the website www.chinhphu.vn at address, http://vpcp.chinhphu.vn/Home/Nang-cao-hieu-qua-kiem-tra-hang-hoa-xuat-nhap-khau/201511/17571.vgp.

are required to apply for investment registration. Consequently, according to Doing Business Report, the indicator relating to market entry was much improved in 2015. Vietnam ranking is up from 125 to 119/189 countries. However, this Report still points out that the investment environment in Vietnam has not been fundamentally improved. Establishing FDI projects in Vietnam is more complicated than establishing a domestic enterprise. According to a Provincial Competitiveness Index survey in 2014, nearly 65% of FDI enterprises have to wait for more than one month to complete investment procedures (though required by law is 45 days), 20% of those enterprises even have to wait for more than 3 months before they can start their business (Malesky 2015).

Investor protection is still Vietnam's weakness. According to Global Competitiveness Index 2015-2016 Report, this indicator for Vietnam is 4.7/10, ranking at 100/140 countries. The simplification of procedures on dispute settlement and contract implementation is a feasible measure to increase investor protection and foreign investors' confidence in the Vietnamese business environment. Despite of the requirements on reducing the duration of dispute settlement in courts in Resolution No.19 in 2014, up to now, not many effective measures have been implemented by the judicial system to change the situation. Vietnam's Contract Enforcement Indicator is ranked at 74, no change comparing to last year. Especially, Vietnam's Quality of Judicial Processes Indicator is only 6.5/18, lower than the average of 7.6 point of the Asia Pacific region. Reforms of judicial affairs and improving the quality of the civilian and economic court systems seem to be sluggish for a long time.

Institutions related to technical barriers (SPS, TBT): Compared with the ASEAN market (with over 600 million citizens) or China's one (nearly 1,400 million citizens), the Korea's market is rather small (with only about 50 million citizens) but it has much higher requirements on product quality, food safety

and hygiene standards or technical standards for imported goods. Compared with ASEAN and China's market Korea has a comprehensive national legal system to regulate SPS Measures. Regulations on the quality of plants, animals and food safety are organized systemically and updated frequently. In general, SPS measures are applicable to goods like foods with vegetable, animal or aquatic product origin. Foods and agricultural products which are Vietnam' strengths are key goods in the FTA negotiation with Korea but they are also a big challenge for Vietnam in the implementation of VKFTA. Vietnam has to build a system of standards on hygiene and safety which is comprehensive and to be drastically implemented so that Vietnamese producers must increase their product quality to maintain their domestic market share and overcome SPS and TBT barriers in export markets.

Vietnam has a relatively sufficient law provisions on hygiene and techniques for health protection but these standards are not as high as Korea's. In some main export sectors such as aquatic products, footwear, garments, Vietnamese producers have faced with SPS and TBT requirements from some fastidious markets in general and Korea market in particular. However, the effectiveness of Vietnam's SPS and TBT regulations is rather weak. There are still violations of SPS and TBT regulations and many batches of goods are, in reality, refused when being exported into the EU, the US and some other markets.

Because the retail and distribution systems in Korea have been well developed and crowded, it is rather difficult for Vietnamese enterprises to penetrate into goods selling channels. If there are no strategies for market approaching, advertisement, improving quality of goods and services and delivering goods, it is hard for Vietnamese enterprises to enter this market.

Competition and state-owned enterprises: In VKFTA, Vietnam is committed to guaranteeing a fair and transparent business environment, ensuring the NT principle in trade and investment. Because the room for subsidizing SOEs

has been narrowed remarkably, Vietnam cannot give wide support to SOEs, especially those with pure business operations. This is an emerging challenge for Vietnam because many SOEs, at present, have a monopoly position, especially in sectors providing important inputs such as electricity, coal, gas and gasoline and oil. The fact that many SOEs with pure business operations receive support on capital and credit is a controversial issue related to unfair competition. According to Global Competitiveness Index Report (2015), Vietnam is ranked at 71/140 on Goods Market Competition and 77/140 on Effectiveness of Antitrust Policy.

Vietnamese Law on Competition was issued in 2005 but it has not brought about much efficiency. At present, the Vietnam Competition Authority (VCA) is a subordinate agency under the Ministry of Industry and Trade with a modest number of staff. Therefore, VCA faces with many difficulties in doing investigations and dealing with anti-competition behaviors of SOEs and government bodies. This reality necessitates new policies on competition. To enhance the competitive strength of the economy and execute law provisions on competition, Vietnam intends to revise the Law on Competition towards: (1) Establishing a competition administration agency which is independent and of sufficient capability and competence to deal with heavy and difficult volume of work in terms of techniques and politics; (2) Revising sanctions applied for anti-competition behaviors towards increasing punishment for benefits originated from using anti-competition behaviors.

SOEs and state monopoly: In Vietnam, SOEs are considered as a main economic component. SOE presents in most sectors, especially such important sectors as energy, infrastructure and mining. The state at present maintains monopoly position in many fields. According to a draft decree on state monopoly applied for goods, services and locations, the government will maintain monopoly position in 16 business sectors (Table 12).

Some of these sectors are not subject to investment prohibition or invest-

ment limitation according to the Law on Investment (2015). For example, according to the law, the state only prohibits investment and business that harm national security or social order and morals. Tobacco production and import seems not to violate this regulation and maintaining state monopoly will prohibit FDI and private enterprises from investing in this field.

Table 12. Governmental Monopoly Sectors

National defense and security	Ensuring flying activities
Industrial explosive materials	Publishing
Multi-objective hydro-electricity and nuclear power	Money printing and minting
Gold production, export and import	National electricity system
Construction lottery	Management on exploitation of national railways infrastructure invested by the state
Tobacco products	System of inter-province and inter-district irrigation works
Maps serving national defense and security	Sea-wall for sea land recovery
Marine navigation services	Planting and protecting upstream forest, protected forest and special forest
Public services for marine safety assurance	

Source: Collected from government documents.

Furthermore, at present, SOEs are enjoying dominant market shares in many fields like gasoline retail, rice export, mineral mining, power generation, telecommunications… In more recent years, many SOEs have shown inefficient performances and created many market distortions and difficulties for the private sector. With monopoly position and being provided with capital, land and accessibility to bank credit,[32] SOEs are compet-

32) According to a report released by CIEM at Workshop "State-owned enterprises and mar-

ing unfairly with private enterprises. If this situation continues, when VKFTA is in effect, the Korean side can sue the Vietnamese side or apply trade sanction measures if no change is observed in Vietnam's policies and institutions on SOEs.

More recently, the Government has made great efforts to improve SOEs' performances and ensure fair business environment. Examples are Decree No. 81/2015/ND-CP on publishing of information of SOEs and Decree No. 87/2015/ND-CP on the supervision of state capital investment in enterprises. However, it takes more time to be able to assess the effectiveness of these measures on improving SOEs' performances and creating a fair business environment. The implementation of these measures will face with many difficulties because many SOEs do not want to publish their unfavorable business operating results and also the issue of self-interest behind is severe.

C. Vietnamese Enterprises' Readiness

Domestic competition in terms of output and input market (labor, land and natural resources) requires Vietnamese enterprises to be ready enough to adapt to VKFTA commitments. One positive point is that Vietnamese enterprises have accessed Korea's market and competed with Korea's enterprises through AKFTA for more than five years. However, the implementation of VKFTA still puts forward many difficulties and challenges for Vietnamese enterprises because the VKFTA has considerable commitments on opening services and investment to Korean partners (including opening certain sectors/fields to Korea's services suppliers and investors and commitments on investment protection: guaranteeing benefits and cre-

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ket distortions" organized on 26 May 2015, SOEs capture 70% of business sites of enterprise sector and account for a big proportion in total credits of many banks (40% in Vietinbank, 23% in BIDV and 27% in Vietcombank).

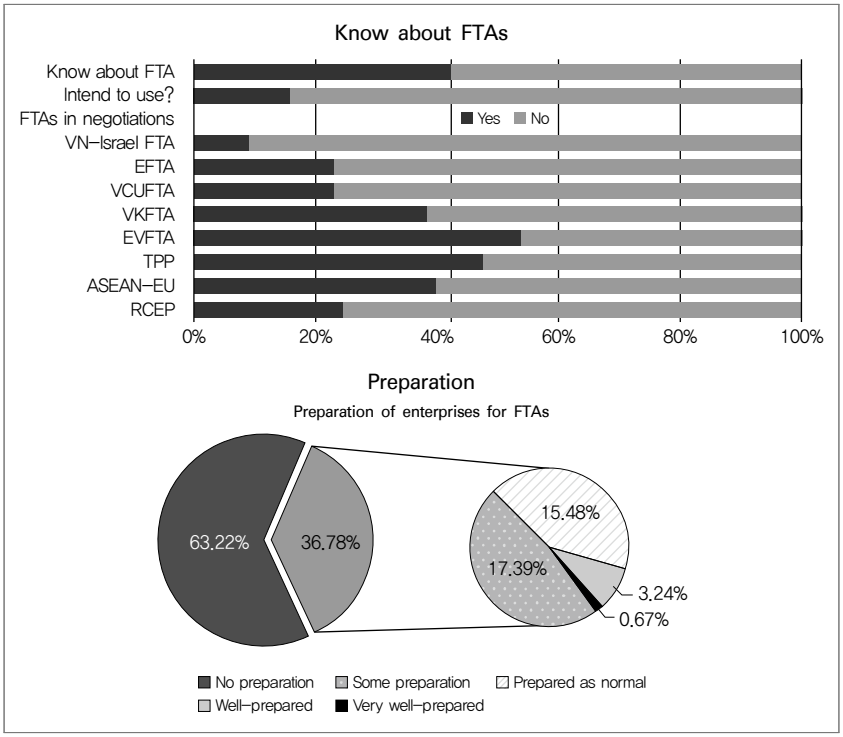
ating transparent and fair investment environment).[33] This will create more competition pressure on services and investment for domestic services suppliers and investors.

The readiness of Vietnamese enterprises in implementing VKFTA efficiently can be reflected in various aspects:

1) Knowledge of VKFTA

In general, enterprises do not have much information on in-effect FTAs and those in negotiations. A survey by CIEM (2015) on enterprises in Ho

Figure 13. Enterprises' Awareness of FTAs



Source: CIEM(2016), EU-VN FTA: Institutional and Policy Adjustments Implications for Vietnam.

33) AKFTA do not have these commitments.

Chi Minh City, Hanoi and some provinces shows that the proportion of enterprises who know about in-effect FTAs is rather low, only 42% (Figure 13). Among them, only a small number of them (16%) says they will take advantage of the preferential treatments from FTAs.

For FTAs under negotiation, the enterprises know more about TPP and EVFTA (46% and 53% of them, respectively).[34] The percentage of enterprises knowing about VKFTA is much lower, at 38%. For other agreements like the FTAs with EU Free Trade Area (EFTA), Eurasian Economic Union,[35] RCEP, the figure is only about 20%.

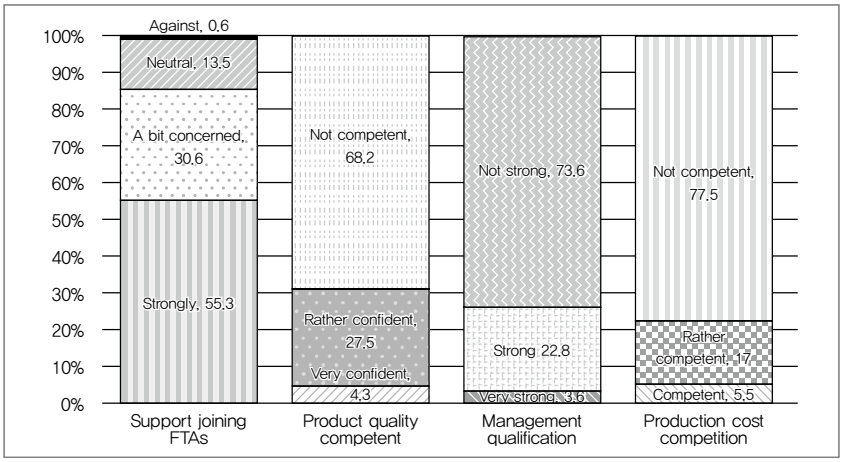
In the context of global integration, the low precentage of enterprises knowing about FTAs is a big concern. The challenges exist in carrying out activities on information dissemination and encouraging Vietnamese enterprises to pay attention to and prepare for FTAs in general and VKFTA in particular. Even when enterprises state that they know about FTAs, there is a gap between that and correctly understanding the FTAs as well as preparing to cope with challenges and taking advantage of FTAs. Knowing a little about VKFTA cannot be considered as understanding enough and actively preparing for it. This challenge is also reflected by responses from the enterprises to FTAs, most of them (63%) stated that they had not taken any action in preparation. Enterprises' poor preparation for FTAs may be explained by the fact that many of them (65%) do not have enough detailed information on the commitments because most of the information is kept in secret during the negotiations. Meanwhile, 40% of enterprises do not have enough resources or personnel to make preparations and 35% do not know what to do in preparation because they receive no guidance. Other reasons include they believe that FTAs do not have any impact on their business operations (17%).

Another survey shows interesting information on FTAs in general. A the-

34) At the time of surveying (June 2014), these agreements were under negotiation.
35) EAEU includes Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan.

matic survey by General Statistics Office which collects information for assessing international integration readiness of enterprises operating in processing and manufacturing sectors (August 2016)[36] shows that most enterprises are not confident about their readiness for the implementation of FTAs in general and VKFTA in particular. Most of the firms aware their weak competitiveness in terms of product quality, management qualification and production costs (Figure 14). However, it is surprising that most of the enterprises (83.9%) support Vietnam joining FTAs, and more than a half strongly support it. The conflicting responses from firms may be because of the way information of FTAs is disseminated to enterprises. The mass media in Vietnam normally do not fully informs the people of both advantages and disadvantages of FTAs, but normally emphasizes on the opportunities.

Figure 14. FTAs and Enterprises' Preparation



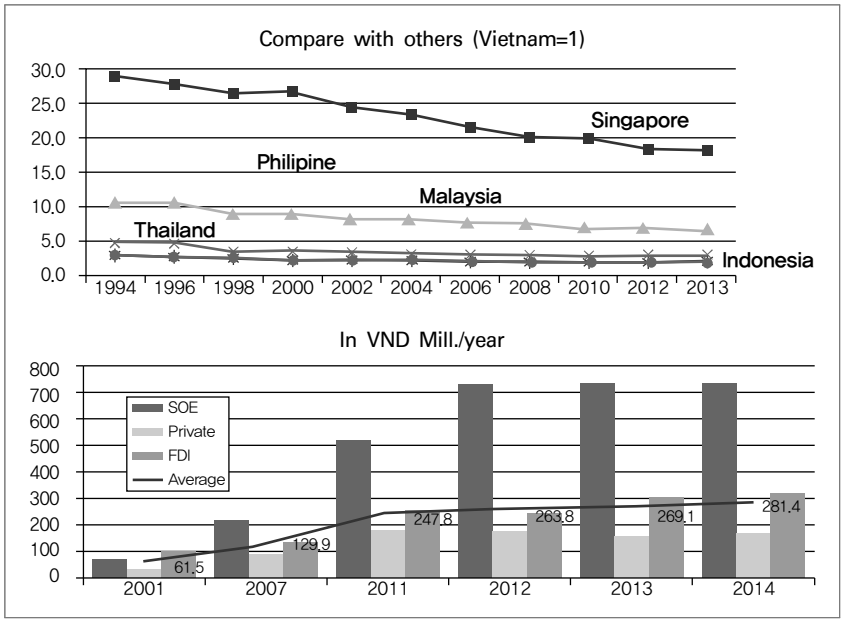
Source: General Statistic Office 2015.

36) GSO chose a sample of 3,500 processing and manufacturing enterprises, including: 200 SOEs, 100 foreign-invested enterprises and 2,200 non-State enterprises. Sectors belonging to processing and manufacturing industry with big size and big number of surveyed enterprises include: Food processing and production (601 enterprises), producing products from non-metal minerals (476 enterprises), producing products from minted metals (329 enterprises).

2) Low productivity

Enterprises' productivity demonstrates their competitiveness. Recent assessments on the productivity of the enterprises in Vietnam reveal a gloomy picture about it. According to GSO, despite of narrowing the gap with the average productivity of the region, the productivity of Vietnamese enterprises is still much lower than that of some more advanced regional economies. In details, Vietnam's productivity is 10 times lower than that of Indonesia and Malaysia, 30 times lower than that of Thailand and 135 times lower than that of Japan. By types of enterprises, SOEs have the highest productivity but this can be explained by the specific characteristics of this type of enterprises. SOEs concentrate on some sectors with high monopoly levels such as telecommunications and energy which require big investment capital and limit other enterprises' engagement (Figure 15).

Figure 15. Enterprises' Labor Productivity in Vietnam



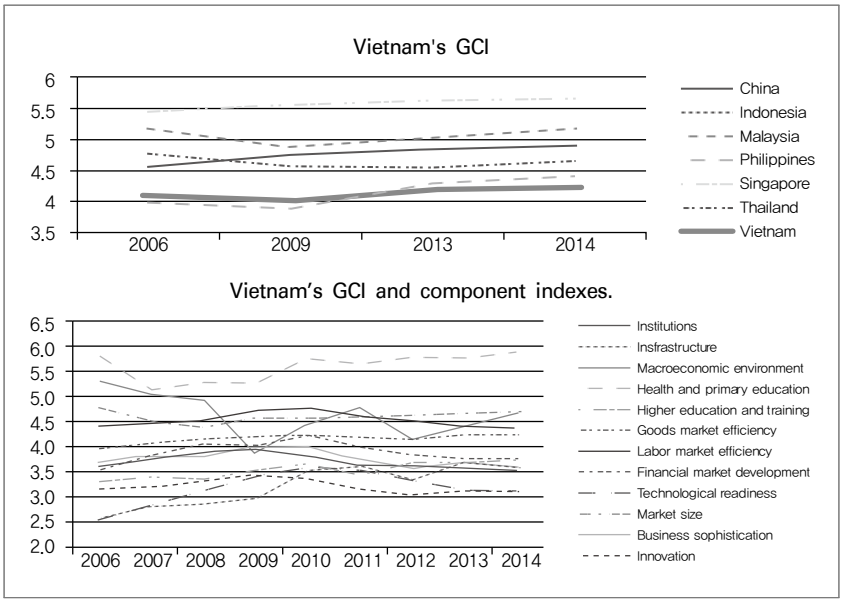
Source: General Statistic Office of Vietnam, report on labor productivity, 2016.

There are many reasons to explain Vietnam's low productivity but the most important ones are backward technologies and poor R&D. Another one is the fact that most Vietnamese enterprises concentrate on some labor-intensive sectors.

3) Low competitiveness of the economy

It is a common assessment on Vietnamese enterprises in the context of Vietnam being active in signing FTAs. Vietnam's competitiveness index (GCI) seems to be the lowest in the region (Figure 16). Despite of being improved from 2009 up to now, this index is still lower than that of ASEAN. Meanwhile, rapid improvement of this index (even at low level as well) has been observed in some countries like Philippines and Indonesia. For example, the Philippines' index has been up from 4 (in 7-point scale) to nearly 4.6; meanwhile that of Vietnam is from 4 to 4.3.

Figure 16. Competitiveness



Source: Global Competitiveness Index report 2015.

It can be said that improvement of competitiveness is not a simple issue for Vietnam. The figure in the right side shows changes of component indexes over the time. Most of the indexes tend to be unchanged or declined during the time from 2009 to now. Vietnam only witnesses big improvements of Heath and Primary Education Index which has increased from 5.3 to 5.9 and is the highest sub-index. Important indexes directly related to production and business activities of enterprises have been unchanged or decreased. Indexes on market (labor market efficiency, finance market development, goods market) have tended to decrease rapidly from 2009. This situation reflects distortions in Vietnam's markets recently due to the State's interventions into the SOE sector and the fact that measures for improving markets have not been implemented efficiently.

According to some recent researches (Nguyen Ba Ngoc 2016), basically the Vietnamese labor market has many weaknesses. Labors mostly work in agriculture sector which has low productivity and unemployment rate is low but underemployment is severe. The inherent characteristics of Vietnam labor market include: underemployment is rather severe and 2/3-3/4 of jobs are unsustainable, leading to the risk of being poor despite of being employed; laws and regulations on the labor market are insufficient; the labor market's infrastructure is not comprehensively developed, leading to weak propensity of matching between labor supply and demand; there is a big imbalance between labor supply and demand (despite of high rate of underemployment and some sectors and localities in a labor shortage); lack of appropriate policies on managing domestic and international labor movement; modern labor relationship based on the mechanism of effective dialogue and negotiation among social counterparts has not been appropriately established; educational and vocational training has not met with labor market's demands, especially for high-skilled labors; a large proportion of labors in the labor market has not been protected; the labor market is fragmented with big gaps between urban and rural areas, key economic and under-developed

regions, and unskilled and skilled labors.

Similarly, the ineffective financial market has severely influenced the operations of enterprises. The under-developed financial market can be reflected by the following issues: banks still play a dominant role in providing credit for the economy; credit institutions' dealing with non-performing loans is slow with lack of safe financial resources; cross-ownership and controlling banks still exist; banking supervision is not really effective; the channels for providing medium and long-term credit like the securities market are not fully brought into play; the institutional and legal framework, information system, management system and payment system are not sufficient and comprehensive; the compliance with and implementation of international standards is not sufficient and holistic.

In addition, there are some potential risks in the financial market related to the financial soundness of deposit-taking financial institutions; the liquidity of monetary market and capital market; the transaction behaviors of subjects in capital market; the cross-risks among areas of the financial market as well as in financial corporations; some financial institutions establishing subsidiary companies to do investment activities that violate the laws. Besides, the system of risk-based examination, supervision and inspection is facing with challenges such as the development of financial corporations and the development of the capital market, especially the bond market, which require involvement of all organizations and management agencies and necessitate coordination and cooperation in managing the national financial market (Minh Ha 2016). Despite of great attempts by the government in resolving existing problems of the labor market and financial market, a sluggish administrative system is still a barrier and makes the situation worsen.

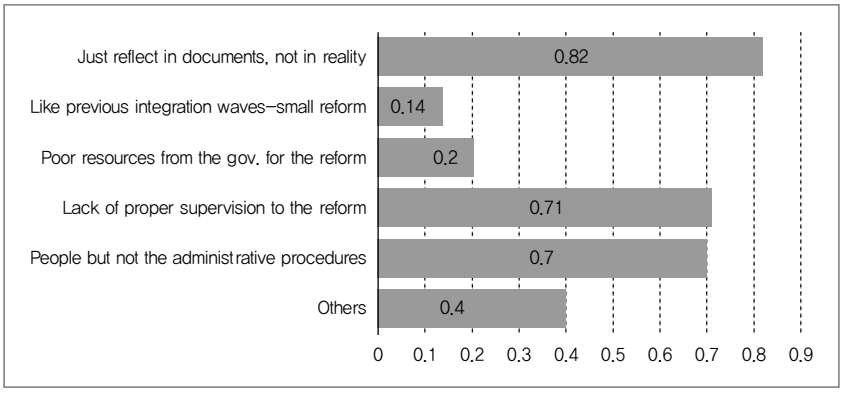
For other indicators in GCI, they need more time to be improved. For example, it is time consuming to improve such indicators as technological readiness, innovation and infrastructure. The fact that the points of these indicators are low and tend to decrease means Vietnam will face with more

challenges when joining in VKFTA or any other FTAs.

4) Enterprises have low expectations of institutional reforms

Using a sample of 120 enterprises involved in the implementation of some recent FTAs, CIEM (2015) shows that the enterprises have not highly appreciated the current improvement of business environment as well as low expectation of institutional reforms in the coming years. More than 70% of surveyed enterprises believed that the government does not have enough resources and efforts for implementing institutional reforms and policies. A similar proportion claimed that the nature of the reforms is the question of the willingness of the leadership and officials who are carrying out administrative procedures, not the issue of administrative procedures themselves. Without dramatic reforms to improve human resource quality in governmental bodies, it is hard to realistically carry out effective reforms. What is more remarkable is that over 80% of enterprises said that reforms may merely exist in documents, or be verbal, not to be realized in reality.

Figure 17. Enterprises' Opinions of Future Reforms



Source: CIEM(2016), EU-VN FTA: Institutional and Policy Adjustments Implications for Vietnam.

The fact that the enterprises are so pessimistic about recent institutions and do not expect much impacts from reforms in the coming time will have much influence on their long-term business plans which, in other words, are the enterprises' behavior of maximizing their profits. With not much expectation of the institutional and business environment reforms, the enterprises will focus on short-term plans and not pay much attention to investment in technology renovation or taking advantage of long-term opportunities brought about by FTAs.

As a conclusion, this chapter firstly presents the overall picture of the economic integration of Vietnam and Korea through their FTA participation. It shows that both countries recently have boosted up their integration via multilateral and bilateral FTAs. Such increase in the number of FTAs helps their enterprises to access more international markets but also implies that the benefits from a specific FTA through trade diversion effect should be eroded soon due to a so-called Spagetti Bowl effect. The situation described in the second section about VKFTA-a bilateral agreement between the two countries which came into effect - points out that Vietnamese enterprises may be able to enjoy preferential treatment with more opening markets, making Vietnamese firms better off, not only in terms of exporting more agro-products to Korea but also importing a better quality input. It also facilitates the restructuring of Vietnam's import market, avoiding heavily dependence on some other market. The FTA also stimulates the FDI from Korea because of more open commitments in service and investment. However, such benefits are conditional. Poor preparation and readiness of both the institutions and enterprises will hinder them from increasing trade with Korea. It may come to a conclusion that Vietnam may be switch its dependence on other market to the Korean market. Is that true? If so, does it matter for Vietnam and Korea? The next chapter will elaborate the dependence between the two countries.

Ⅳ. Trade and Investment Dependence

1. Trade Dependence
2. Vietnam-Korea Investment Relations

Does this question matter? The answer is it depends. As mentioned in previous chapters, geopolitical factors influence trade and investment between country and country. In turn, trade and investment ties can shape the geopolitical pattern. It can become an instrument for countries to influence the political dependence and for negotiating and solving the conflict between countries. Trade and investment dependence, however, also reflect the advantages of each country as well as the specialization and integration. An increase in the dependence, hence, does not entirely mean "bad" or "good". However, measuring it is a good way to evaluate the specialization, interaction, as well as the potential risks between countries. This chapter focuses on three questions. The first one relates to clarifying the concept and measures of trade dependence, because in practice, there is a diversion in understanding about it. The second question is to measure how dependent is Vietnam on Korea. Our originial contribution is that we use both conventional and a new measurement of dependence where it takes into account the multilateral relationship into a bilateral trade dependence. The third question is about investment dependence. Due to a lack of appropriate measures, this question is discussed mostly in qualitative way.

1. Trade Dependence

A. Overview of Trade Dependence

There are a number of studies on trade dependence, and it is likely that there is no concensus on this matter. The theory of comparative advantages argues that the dependence reflects comparative advantages of each party. A country will specialize on several products that have comparative advantages in relative to other countries. The more there is exchange of goods and serv-

ices, the more dependence there is. The theory of trade dependence argues that dependence is the result of the global labour specialization. Thus, that dependence reflects the position of a country on the trade map, and to a certain extent, the competitiveness of that country's products. Some other studies (Mansfield and Pollin 2009; David 2014) assess dependence from the potential risk perspective. The more open an economy and, therefore, the bigger trade dependence is, the more severely that country can be vulnerable by external shocks. The magnitude of the impact depends on the concentration of export/import of some groups of commodities with some partners. The bigger the concentration is, the more significant the impacts are.

Consequently, calculations of dependence are not perfectly consistent. A common index to be frequently used by economists is the openness to trade (which is the ratio of exports/GDP). The higher openness to trade of a country, the more dependent it is. However, this index purely indicates the overall dependence of a country on foreign economies instead of a specific bilateral relation. Hisrchman (1980) proposed three indices to demonstrate trade dependence between two countries: (1) structural dependence, which is the structure of imported goods in exports; (2) concentration by partners; and (3) concentration by products. Johston (1992) developed the trade dependence index (TDI), which is basically based on the principle of trade openness, and TDI is calculated separately for export and import. The advantage of this method is that a single index is used instead of using several indices together to describe a single concept.

Simon *et al.* (2014) also utilized the index approach to calculate dependence. As such, the trade dependence of country (A) on country (B) is developed based on the ratio of A's export structure to B and B's import structure from

A. The authors argued that export structure (proportion of A's exports to B in total exports of A) reveals the importance or B's capacity to influence A. The more signifcant this importance is, the greater is the dependence of A on B. In contrast, if A's exports account for a large share in the total imports

of B, B itself also depends on A. As the result, even if B's share in the total exports of A is critical, A will not depends on B (dependence index is close to the value of 1) because B also depends on A, so that B cannot influence A. This arguement is more appropriate than some to recent method.

Carlot *et al.* (2014) argued that together with the concentration of market and export share, the examination of dependence index should take into account a country's capacity to the influence international price of a product. As such, though A is important to B and can influence B, the dependence of B on A is not a mater if A can not affect the international price.

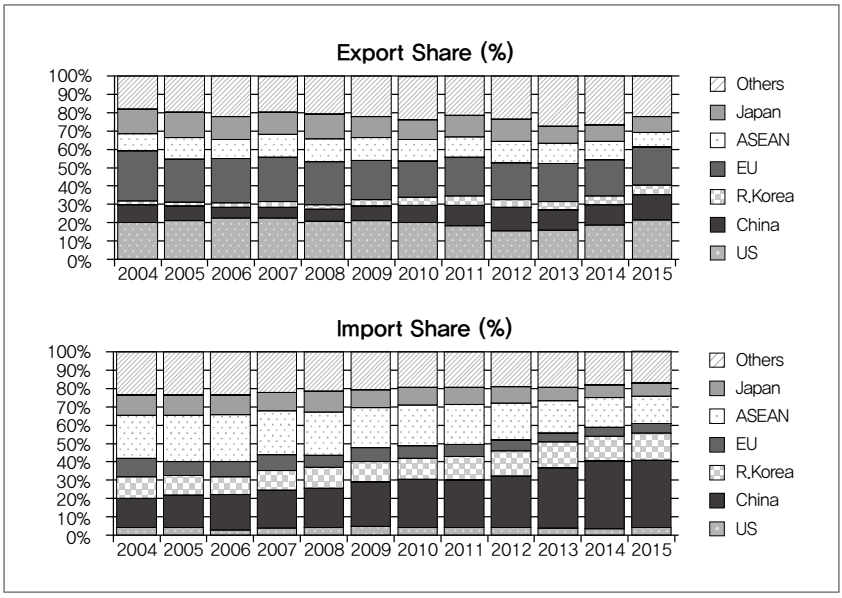
In the case of Vietnam and Korea, both countries are deepening their integration into the international economy, thus trade relations between the two countries are not soly shaped by themselves. Investment and trade relations with other partners including the US, China, Japan, ASEAN, etc also might affect the dependence of Vietnam on Korea. Any move of trade relations between a pair of countries (for instance the signing of bilateral FTAs or any action to restrict trade) will directly affect trade relations among remaining economies. As such, a single trade dependence can not fully captures the dependence between Vietnam and Korea. Consequently, the comprehensive index developed by Carlot is suitable in the current context.

The following section presents the calculation and assessment of Vietnam's dependence on Korea using several traditional trade indicators (openness, concentration) and the single-dependence-index approach, taking into consideration of the third party's role in the bilateral relations between Korea and Vietnam. Using a single dependence index help avoid shortcomings of using too many indicators when discussing dependence. The section also compares the dependence of Vietnam on Korea with the dependence of the two countries on key partners (such as the US, Japan, China, ASEAN, Russia, India and Australia) in order to demonstrate the whole picture of the dependence among countries in the region.

B. Main Features of Vietnam-Korea Trade

After the establishment of the official diplomatic relations in 1992, the trade relations between Vietnam and Korea have flourished based on the framework of regional and bilateral agreements between the two countries, in particular the ASEAN-Korea FTA (AKFTA) and Vietnam - Korea FTA (VKFTA).

Figure 18. Trade Partners of Vietnam



Source: UNCOMTRADE.

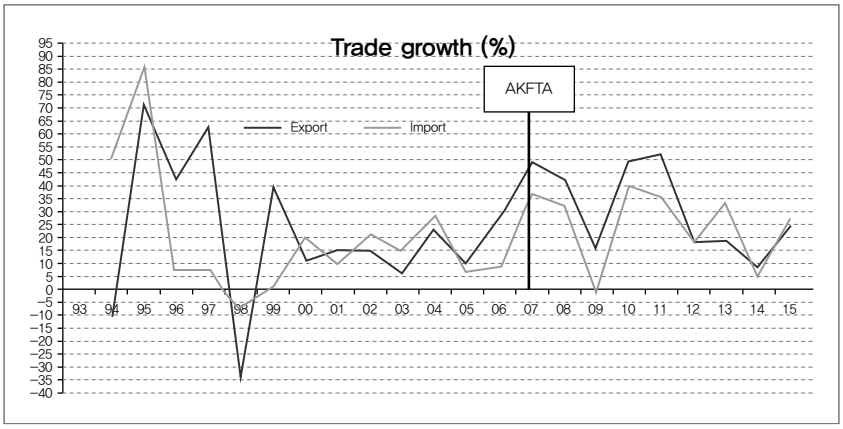
Rapid bilateral trade growth rate

Statistics show that the possibility of increasing trade dependence of Vietnam on Korea is visible. Though the dependence is not as significant as that with China, it takes the upward trend. Total trade value (imports and exports) between the two countries grew by more than 73 times, from US$ 500

million (in 1992) to about US$28 billion (in 2014) and US$36 billion (in 2015). In 2015, Korea was Vietnam's 3rd biggest trading partner (*after China and the US)*, 4th largest export destination and 2nd largest import market. In general, the bilateral trade relations between Vietnam and Korea have the following main characteristics:

Bilateral trade between Vietnam and Korea almost attained 2-digit growth rates during more than 20 years of the establishment of the official relations. In particular, after Vietnam's accession to the WTO in 2007, bilateral trade between the two countries even grew at the rate of more than 40% per annum in several years.[37)]

Figure 19. Growth Rate of Imports and Exports of Vietnam with Korea



Source: General Statistics Office of Vietnam.

Vietnam − Korea bilateral trade can be divided into two periods.

The period of 1993-2006: Bilateral trade value increased by 8.2 times in the period of 1993-2006, from US$581.7 million to US$4.75 billion, attaining the growth rate of 17.53% per annum, thus Korea became Vietnam's 7th largest trading partner (after China, Japan, the US, Singapore, Taiwan and Australia).

37) http://cks.inas.gov.vn/index.php?newsid=510.

The differentiating feature in the bilateral trade relations between Vietnam and Korea during this period was that the average annual growth rate of exports was slightly higher than that of imports (17.8% vs. 17.4%), resulting in trade deficit of Vietnam with Korea. The trade deficit grew rapidly, from US$ 0.38 billion in 1993 to nearly US$ 1.2 billion in 1998 and more than US$ 3 billion in 2006.

From 2007-present: The period from 2007-present witnesses the signing of the AKFTA within the cooperation framework of ASEAN-Korea (took effect on 1 July 2007) and the VKFTA (took effect on 20 December 2015). Vietnam also became WTO member during this period and has participated in various multilateral and bilateral FTAs.

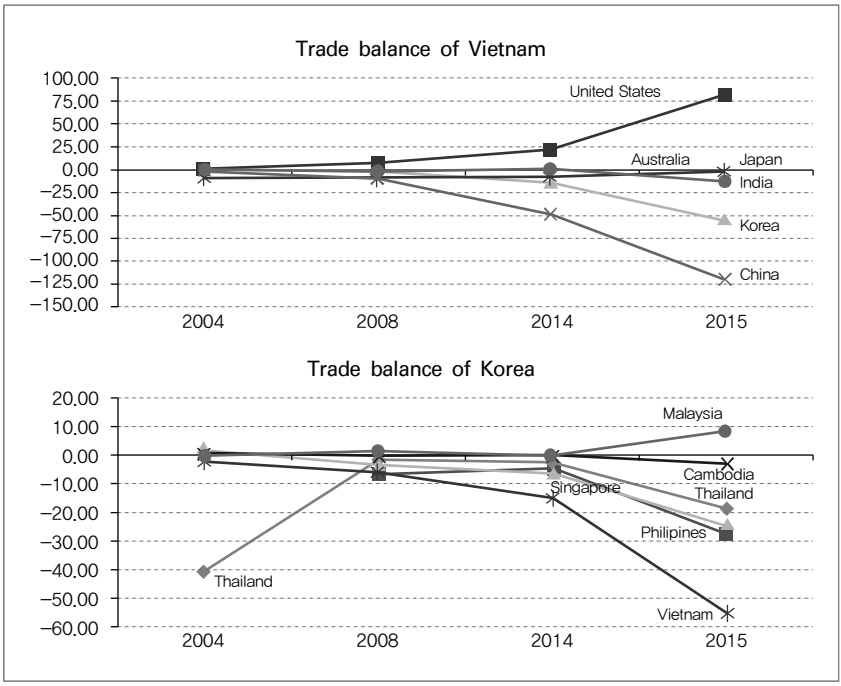
Vietnam's participation into the above mentioned FTAs can be attributed to the remarkable expansion of bilateral trade between the two countries. Both exports and imports grew rapidly compared to previous period. The growth rate of exports was higher than that of imports (29.9% vs. 24.2%) in the period of 2007-2012, but the situation changed in the following period. For instance, in 2013, imports attained the growth rate of 33%, which was double that of exports.

Vietnam always has trade deficit with Korea

As mentioned, the critical characteristics of Vietnam-Korea trade relations is the permanent trade deficit of Vietnam, which always took the upward trend, from US$382.4 million in 1993 to US$3 billion in 2006 and jumped to US$18.7 billion in 2015 (increased by 28% in relative to that in 2014). However, the trade deficit with Korea is considered to be relatively positive because the imported goods from Korea are complementary and indirectly competitive with Vietnamese goods. Import structure from Korea mainly composes of equipment and facilties to serve investment and manufacturing activities as well as input materials for export-oriented industries, which accounted for nearly 90% of total imports from Korea.

Figure 20. Trade Deficit

(Unit: US$ bill.)



Note: Data from UNCOMTRADE can be different with that reported by Vietnam.
Source: UNCOMTRADE (2016) (Unit: Billion US$).

Vietnam's trade deficit with China was the biggest, followed by that with Korea. However, the Vietnamese situation is not an exception in ASEAN. Most ASEAN countries are net importers. Except Malaysia, such countries as Thailand, Singapore, the Phillipines and Cambodia all have trade deficit with Korea though the value is insignificant. Vietnam and Singapore have the biggest trade deficit with Korea. Trade deficit of the former was double that of the latter in 2015. Singapore has trade deficit with Korea mainly because the country is the transit point for goods, while Vietnam's trade deficit was mainly attributed to sizable and rapidly growing imports for production purposes. This is the difference among countries in the region.

Gradual improvement in export and import pattern

Korea contributed to significant share in total exports of key exported goods of Vietnam such as apparel, crude oil, seafood, and mobile phones and spare parts produced by large Korean corporations based in Vietnam, namely Samsung and LG (since 2015). Similarly, Vietnam's imported goods from Korea concentrated in some products such as components of garment and textile industry, electrical and electronic industries, manufacturing engineering (Table 13 and 14).

Table 13. Vietnam's Export Structure of Key Products to Korea

(Unit: Million US$; %)

Commodity	2006		2011		2015	
	Value	Share	Value	Share	Value	Share
Garment and textile	82.9	9.8	899.9	19.1	2.127.8	23.8
Mobile phones of all kinds and spare parts	-	-	77.2	0.02	1.465.8	16.4
Computers, electronics and spare parts	-	-	117.4	2.5	776.2	8.7
Seafood	210.7	25	490.2	10.4	571.9	6.4
Wood and wood products	65.7	7.8	183.5	3.9	495.5	5.6
Equipment and components	80.0	9.5	162.6	3.4	476.7	5.3
Footwear	37.1	4.4	151.5	3.2	302.3	3.4
Transport vehicles and components	0.7	0.08	214.1	4.5	263.6	3.0
Fibers	-	-	289.5	6.1	195.6	2.2
Crude oil	-	-	808.4	17.1	148.7	1.7
Steel and steel products	-	-	142.4	3	124.8	1.4
Bags, wallets, suitcases, hats, umbrellas	-	-	43.7	0.9	112.8	1.3
Total exports	843.5		4,715.4		8,921.1	

Source: General Department of Customs of Vietnam.

Table 14. Vietnam's Import Structure of Key Products from Korea

(Unit: Million US$; %)

Commodity	2006		2011		2015	
	Value	Share	Value	Share	Value	Share
Computers, electronics and spare parts	103.8	2.7	1,928.5	14.6	6,732.6	24.4
Equipment, facilities and components	456.6	11.7	1,243.9	9.4	5,113.2	18.5
Phones of all kinds and spare parts	-	-	806.2	6.1	3,023.3	10.9
Rubber and rubber products	254.1	6.5	1,063.5	8.1	2,211.6	8.0
Steel and steel products	213.7	5.5	1,848.4	14	2,073.7	7.5
Cloth	-	-	1,348.9	10.2	1,846.6	6.7
Other metals	-	-	470.9	3.3	1,036.6	3.8
Auxiliary materials for garment and textiles, leather and footwear	384.9	9.8	2,111.0	16	793.9	2.9
Assembled automobile vehicles	-	-	260.1	2.0	612.7	2.2
Components for automobiles	-	-	425.3	3.2	578.5	2.1
Total imports	3,908.3		13,175.9		27,614.4	

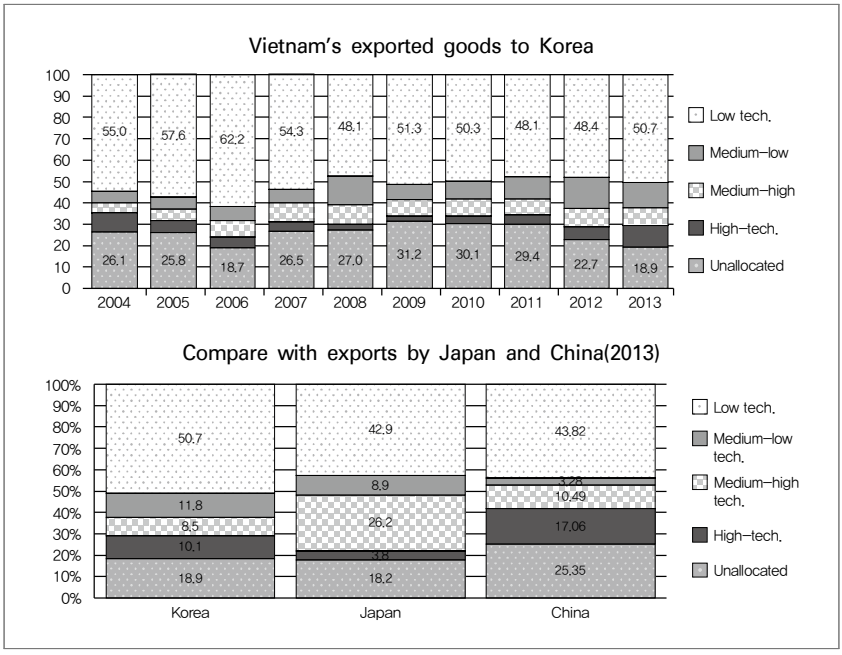
Source: General Department of Customs of Vietnam.

Vietnam's export structure has gradually improved. In the period of 2000-2006, Vietnam's main products for exportation to Korea included garment and textiles, seafood and preliminarily-treated products. By 2011, exported products were more diversified. The share of such products as components of telephones and electronics was doubled while export value increased by 7 times within 5 years. This was the period that FDI from Korea poured into Vietnam went up dramatically. The majority of Vietnam's exported goods to Korea were produced by Korean FDI enterprises in Vietnam, namely Samsung and LG. Thus, FDI is an important factor for the change of the structure of Vietnam's exports to Korea.

Due to the current change of Vietnam's structure of exportation to Korea, the share of low and medium technology commodities in total exports of

Vietnam to Korea has gradually reduced though technology level of exported goods remained modest. Figure 21 indicates that technology content in Vietnam's exported goods to Korea has improved, but the proportion of low technology commodities in Vietnam's export structure to Korea is significant (more than 50%). In general, Vietnam's export structure to Korea lag behind China's and Japan's export to Korea.

Figure 21. Trade by Technological Classification



Note: The technological classification of export was developed by OECD. The classification is based on the importance of expenditures on research and development relative to the gross output and value added of different types of industries that produce goods for export. There are four-way classification of exports: high, medium-high, medium-low and low-technology. Examples of high-technology industries are aircraft, computers, and pharmaceuticals; medium-high-technology includes motor vehicles, electrical equipment and most chemicals; medium-low-technology includes rubber, plastics, basic metals and ship construction; low-technology industries include food processing, textiles, clothing and footwear.

Source: Authors' calculation using UNTAC data, 2015.

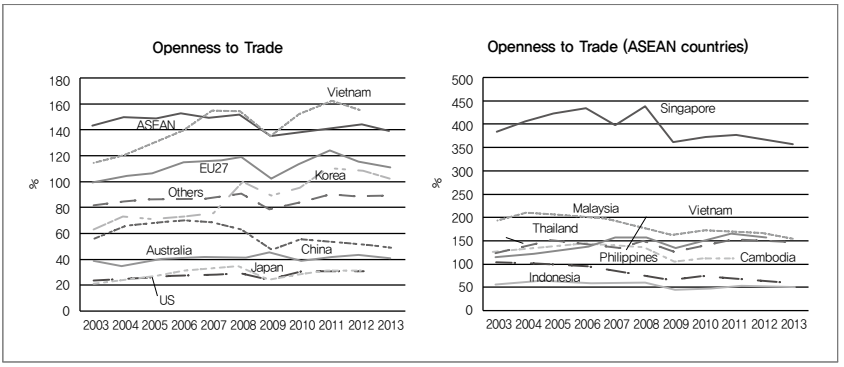
C. Trade Dependence: Some Conventional Indicators

Trade dependence is calculated for and compared between Vietnam and 15 major trading partners of both Vietnam and Korea, including China, ASEAN, Russia, the US, Japan, the EU and India. These countries/groups of countries have close geopolitical, trade and investment relations with Vietnam and Korea. The implicit implications of such comparison is the arguement that regarding risks caused by trade dependence, the level of risks will be intensified if trading partners of Vietnam depends on Korea.

The World Bank (2013) examined four indicators related to various aspects of trade, including growth, diversification, complexity and the length of trade relations. Most trade dependence indices to be studied in recent researches are under the groups of trade growth and trade diversification, such as trade openness, concentration by products and by market. These indices are analyzed simultaneously to identify whether a country depends on another one in terms of trade or not. In fact, the selection of certain indices to examine relies on the intepretation of dependence. The common understanding is that the bigger share of imports from or exports to a trading partner is, the more significant trade dependence on that partner is.

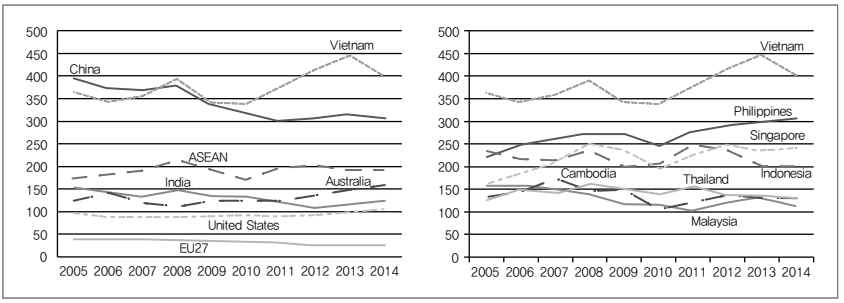
Openness to trade: Vietnam's trade openness to the region and the world is relatively high (Figure 22). In principle, high openness implies significant dependence of economic growth on trade. However, reality shows that there is no clear evidence that high openness will lead to rapid economic growth rate. In fact, high openness is purely the result of trade policy and can not guarantee high economic growth rate (Baldwind 2013). In the case of Vietnam, Vietnam's openness to trade took the rapid upward trend, from 115% of GDP in 2003 to nearly 160% of GDP in 2013. In the ASEAN, excluding Singapore with the exceptional openness to trade of more than 300% of GDP, Vietnam's openness to trade was just behind that of Malaysia (however, Malaysia's openness to trade tended to decrease).

Figure 22. Openness to Trade of Selected Economies



Source: Authors' calculation using WITS, 2015.

Figure 23. Korea's Trade Intensity Index



Source: Authors' calculation using WITS, 2015.

Korea's openness to trade, though less than that of Vietnam, is relatively high (more than 100% of GDP) and grew considerably. Specifically, the Korea's openness to trade was 63.3% in 2003, and jumped to 102% in 2013. As the result, the significant openness to trade of both Vietnam and Korea implies that the two countries may be exposed to more risks related to international trade in relative to other countries with less openness.

*Trade intensity index (*TI index): The TI index is the comparison between two ratios: trade by country *i* to country j and; the ratio of trade of the world

to country j.[38] If the index takes the value of 0 or close to 0, it implies a marginal export of *i* to *j*; and if it is close to 100, it implies that the efficiency is relatively significant – equals to the average trade value of the world which that country j. And if the value is more than 100, country *i* exports to country *j* more than to others and implying a more dependence of *i* on *j*.

The calculation of the TI index of Korea with selected countries/groups of countries (Figure 23) reveals that except EU27, TI index of Korea with selected trading partners is more than 100%, indicating relatively intensified trade relations of Korea. TI index of Korea with Vietnam, China, ASEAN and Australia are the highest, suggesting the importance of trade relations with these countries to Korea. However, TI index of Korea with China was balanced or even decreased since 2005, while that with Australia increased rapidly in recent years, from 124.2% in 2005 to 159.6% in 2014, reflecting higher trade dependence of Korea on Australia.

TI index of Korea with such countries as the Philippines, Singapore, and Indonesia took the upward trend while that with the remaining took the opposite direction though having stood at the value of more than 100. This demonstrates that the AKFTA has positively promoted trade between Korea and ASEAN. However, this characteristic is not witnessed in the agreement between Korea and the EU as the TI index of Korea with the EU remains low, and has even tended to reduce since 2009.

The analysis of the TI index between Vietnam and Korea by sector during this period reveals that export intensity of such industries as garment and textile and wood were relatively high (Table 15). These are key exported goods of Vietnam to other markets, namely the EU and the US. According to Korea's statistics, export value of garment and textile of Vietnam to Korea attained US$ 2.2 billion in 2015, which increased by 3.1% in relative

38) Equation to calculate the TII: Tij = 100*(xij/Xit)/(xwj/Xwt), where xij and xwj are the value of exports of country i and the world w to country j; Xit and Xwt are total exports of country i and the world w.

to that in 2014 and accounted for 27.5% of total imports of this product of Korea. Under the VKFTA's commitments, Korea committed to add more 24 tariff lines of garment and textile commodities in compared with the AKFTA, which attained the import value of US$60 million in 2012. Consequently, in terms of import duty, Vietnam's garment and textile products to be exported to Korea are subjected to low export tariff (mostly equal to 0%) and are more advantageous in relative to other competitors, including China, Indonesia, Myanmar, Bangladesh.

Similarly, Vietnam's TI index of wood products exported to Korea was high and increased considerably over time, reflecting high dependence of Vietnam on Korea. Currently, the wood industry in Vietnam depends heavily on imported materials, which was up to the average volume of about 4-4.5 million m^3 (equivalent to 70-80% demand of the industry). The conclusion and signing of the TPP may open an opportunity for Vietnam to improve this dependence. Nevertheless, requirements on the local content of the TPP may restrict Vietnam's exportation of wood to more potential markets such as the US. A positive point was that Vietnam's TI index of transport vehicles decreased drastically in 2014 though being very high in the period of 2012-2013.

Table 15. TI Index of Vietnam with Korea by Product

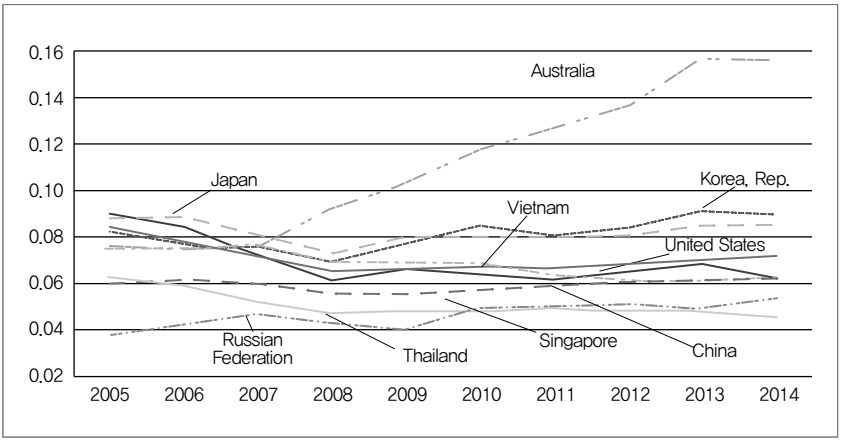
Products	2005	2007	2008	2009	2010	2011	2012	2013	2014
Animal	251.02	322.1	345.39	330.74	327.93	293.15	320.24	341.09	328.4
Vegetable	83.67	85.98	110.76	91.31	69.24	84.39	117.71	134.32	145.75
FoodProd	424.68	417.05	413.41	588.36	428.66	439.66	461.91	341.97	349.76
Minerals	106.32	61.68	88.28	76.21	101.01	79.72	63.46	41.14	32.8
Fuels	24.68	96.78	118.49	291.96	372.7	411.39	325.86	392.17	116.4
Chemicals	113.77	111.61	173.77	196.55	149.22	177.85	206.68	183.21	181.07
PlastiRub	243.17	235.65	199.15	142.04	164.69	180.54	175.23	177.83	195.36
HidesSkin	113.56	82.68	88.41	91.74	106.76	96.28	101.65	111.97	111.57
Wood	243.17	307.38	372.04	416.7	413.82	438.96	473	533.82	778.09
TextCloth	179.92	176.13	233.29	366.25	394.44	476.35	507.98	546.63	513.02
Footwear	103.13	131.55	143.46	162.1	161.61	184.92	198.37	210.58	188.98
StoneGlas	291.3	148.77	94.98	53.12	34.17	71.93	192.64	215.9	269.4
Metals	37.58	87.62	118.18	139.91	177.86	168.3	140.97	169.51	196.34
MachElec	86.68	112.27	98.2	78.87	90.95	85.29	64.1	80.5	101.11
Transport	20.03	58.13	372.93	421.64	133.63	889.17	2101.83	1725.99	320.29
Miscellan	129.87	126.7	150.89	155.56	134.51	181.21	153.5	178.46	195.24
General	96.67	126.35	137.43	170.72	181.66	212.25	217.44	219.93	200.25

Source: Authors' calculation using WITS, 2015.

The Concentration index (HHCI) demonstrates the concentration by product or export market. This index takes the value from 0 to 1. If export of a country concentrates on few markets, the index is closer to 1. Previous studies argued that the higher export concentration of a country is, the more vulnerable that country due to shocks from its partners.[39)]

Figure 24 presents the concentration by market of selected countries in the period of 2005-2014. As such expect Australia with upward HHCI, the indices of other countries decreased slightly. The differentiating characteristic of Vietnam was that its concentration was modest and almost unchanged as the HHCI fluctuated between the ranges 0.06-0.08 and took the downward trend in recent years. This implies that Vietnam's export structure is diversified and the country can maintain its export markets. In contrast, the market concentration of Korea and Japan was high and took the upward trend.

Figure 24. HHCI of Selected Countries



Source: Authors' calculation using UNCOMTRADE data.

39) Formula: $\frac{\left(\sum_{j=1}^{n_i}\left(\frac{x_{ij}}{x_i}\right)^2-\frac{i}{n_i}\right)}{\left(1-\frac{i}{n_i}\right)}$ of which: - n is the quantity of export markets of country i; - x is export value of country i to market j; - X is total export value of country i.

The following table presents the trade matrix among countries, in which information on export and import concentration was incorporated. Korea is the export and import markets of various countries, but the highest concentration of export and import of Korea focuses on 4 markets, including ASEAN, China, the US and Japan. In fact, China, Japan and the US are key trading partners of Korea, while Korea has been promoting its trade relations with ASEAN in recent years in line with its trade policy. In comparison with other partners in ASEAN region, imports of Vietnam from Korea was relatively significant, attaining the total value of US$80.86 billion in 2015, just less than that of China with the total imports of US$178.31 billion.

Table 16. Trade Matrix among Selected Countries

(Unit: billion US$)

	AUS	KHM	CHN	IND	JPN	KOR	MYS	MMR	PHL	RUS	SGP	THA	USA	VNM	WLD
AUS	-	0.21	369.40	81.93	271.26	119.52	26.07	0.45	8.96	5.00	36.21	33.46	61.14	10.97	1464.27
KHM	0.19	-	0.72	0.05	0.92	0.27	0.31	0.00	0.03	0.17	3.08	0.73	13.63	0.83	42.26
CHN	197.31	12.67	-	272.86	887.18	514.57	192.98	27.25	87.64	241.28	246.82	150.33	2037.60	178.31	11586.34
IND	12.62	0.54	95.26	-	34.24	26.76	25.05	2.61	6.42	10.83	74.51	17.95	196.30	20.48	1652.59
JPN	112.77	1.22	928.99	59.69	-	407.69	113.74	3.64	71.50	73.98	165.93	228.63	904.22	59.05	5183.08
KOR	48.72	2.84	791.29	70.98	217.71	-	44.52	4.12	44.17	62.34	123.12	45.98	357.73	80.86	3286.07
MYS	53.27	1.39	167.96	51.50	151.71	53.30	-	3.08	20.47	5.00	194.66	73.72	145.58	22.47	1413.41
MMR	0.01	-	0.48	0.96	0.22	0.13	0.16	-	0.02	0.01	0.28	3.18	0.00	0.06	7.63
PHL	3.22	0.07	38.72	2.05	59.23	16.56	10.63	0.09	-	0.32	28.70	12.22	53.53	3.59	343.49
RUS	0.48	0.05	178.85	38.82	87.17	72.04	3.28	0.63	5.26	-	11.33	8.32	82.11	6.83	3088.15
SGP	97.01	6.88	257.62	80.64	113.85	98.49	302.57	8.91	45.44	3.11	-	93.19	160.44	61.03	2487.32
THA	59.71	18.24	150.00	29.68	143.94	27.00	73.68	15.66	28.85	6.15	69.67	-	144.11	40.37	1364.07
USA	155.72	1.17	593.77	118.23	408.01	250.32	77.07	0.26	50.36	54.40	177.39	61.28	-	24.21	8297.47
VNM	22.54	13.69	59.27	7.67	66.32	25.34	19.71	0.57	11.10	7.20	16.35	12.66	108.20	-	584.05

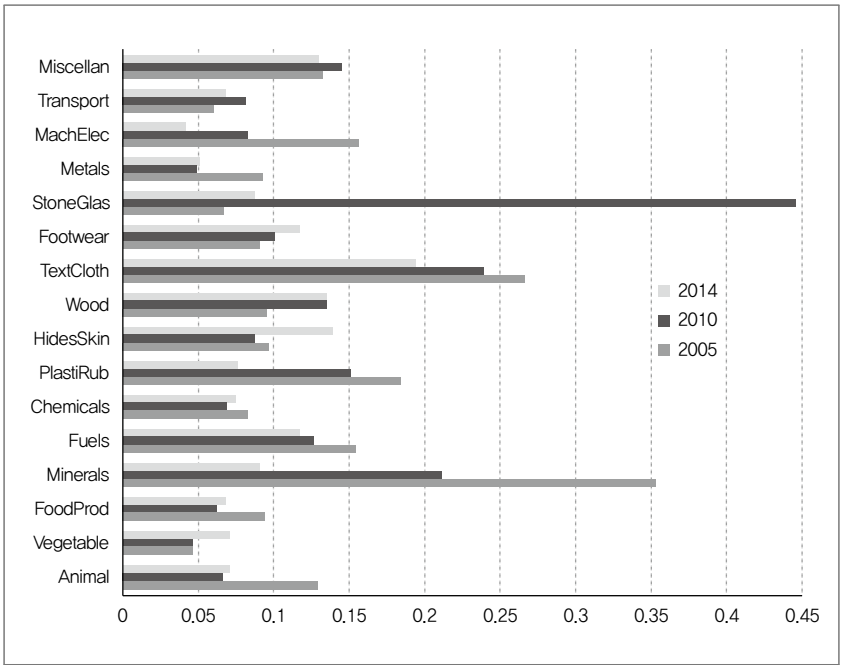
Note: AUS – Australia, KHM – Cambodia, CHN – China, IND - India, JPN – Japan, KOR – Korea, MYS – Malaysia, MMR – Myanmar, PHL – Philippines, RUS – Russia, SGP- Singapore, THA – Thailand, USA – the US, VNM – Vietnam, WLD – World. Exporters are indicated in row, while importers are presented in column.

Source: UNCOMTRADE 2016.

Regarding bilateral import and export in the period of 2004-2014, except in the case of Myanmar and Cambodia, most other countries considered Korea as one of potential export markets, especially in recent years. For instance, nearly 9% of Australia's exports or nearly 8% of Japan's exports was to Korea. Korea and Australia signed the FTA in April 2014, thus exports

from Australia to Korea is expected to increase more rapidly. Total exports between ASEAN and Korea took the upward trend, from US$13.72 billion in 2014 to US$26.63 billion in 2008, one year after the date of validity of the AKFTA. ASEAN's export value to Korea continued to expand to US$43.05 billion in 2014.

Figure 25. Vietnam's Export Concentration of Selected Products



Source: Authors' calculation using WITS 2016.

Figure 25 presents export concentration index of selected products of Vietnam. The index is different across groups of commodities and took the downward trend, except fruits and vegetables, chemicals, wood and footwear. Fuel remains the major goods for exportation, accounting for 20-35% of total exports to 15 studied countries and for 35-40% of total exports to Korea. Since 2010, the share of fuel in total exports plunged to near-

ly 10%. In another aspect, industrial products such as equipment, components and spare parts of electricity and electronics contributed more significantly to total exports of Vietnam to 15 studied markets as well as to Korea, in which its share increased from less than 10% in 2015 to more than 20% in 2015. Key exported goods of Vietnam such as footwear and apparels accounted for considerable proportion of exports to 15 countries (20%) and to Korea. Moreover, vegetables and fruits also are strategic products to be exported to Korea with the share of around 35-40% export to Korea.

In 2014, export of such industry as materials, rubber and plastics, tanned leather, wood and garment and textiles focused on few markets. In terms of share, except Korea, Australia, Japan, China and Malaysia also accounted for significant shares in total exports of Vietnam. In the case of the US, Vietnam's exports of tanned leather, garment and textiles, footwear to this market contributed to at least 30% in total exports of Vietnam.

D. Trade Dependence Index: a Single Index

The assessment of Vietnam's dependence on Korea using different indicators as discussed above is complicated. A single index cannot fully capture the dependence between two countries in terms of import or export. The export dependence index calculated in this report is based on the formula developed by Carlot *et al.* (2015). The assumption is that the bilateral dependence on Korea is not purely the dependence of certain country on Korea but in relative to the world as well.

$$D_{ij} = \sqrt[a]{\frac{EXP_{ij}}{EXP_j}\frac{EXP_{ij_{toKR}}}{EXP_{i,j}}\,avg\left[\frac{IMP_{i,KR}}{IMP_i}, \left(1 - \frac{EXP_{i,j}}{EXP_i}\right)\right]}$$

The dependence index of country *j* with product *i* on Korea takes the value from 0 to 1, in which 0 is not dependent; 1 is totally dependent. The for-

mula has three components as the following:

$\frac{EXP_{ij}}{EXP_j}$	Is share of exports of product i in total exports of country j, demonstrating export concentration of product i for country j. The higher the export concentration, the larger dependence index is.
$\frac{EXP_{ij_{toKR}}}{EXP_{i,j}}$	Exports of product i of country j to Korea, divided by total exports of product i of country j, indicating the concentration to Korean market for exported product i.
$\frac{IMP_{i,KR}}{IMP_i}$	The share of Korea's import value of product i in the world market.
$1-\frac{EXP_{i,j}}{EXP_i}$	Share of exports of product i of other countries. The two dependence indices demonstrate Korea's ability to control price in the international market. If Korea is a large importer, the dependence of country j on Korea will be more significant. In contrast, if exports of country j accounts for smaller share in the world market, the possibility that country j is dependent will be bigger. It is noted that the third component avg[.] is the average is the average of elements inside [.]

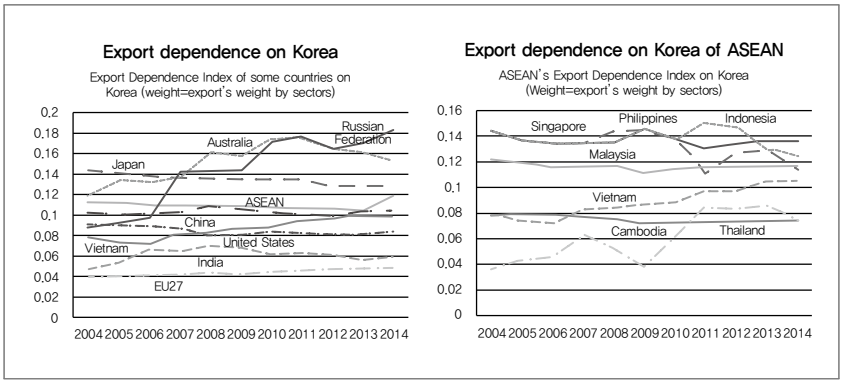
1) Export Dependence

Based on the above formula and the weighted average using export structure, the export dependence index of selected countries on Korea were computed. The diagram on the right of Figure 26 is the import dependence index on Korea of selected major trading partners of Vietnam, and on the left diagram indicates comparison among ASEAN member countries.

The results show that except the EU and India, major trade and investment partners of Vietnam are heavily dependent on Korea in terms of export. The dependence tended to increase in recent times, especially Australia and ASEAN members. Among ASEAN nations, the dependence of Vietnam took the upward trend over the years and attained the average level of ASEAN in 2014. From the aspect of reducing risks, Vietnam is more advantageous in relative to other ASEAN countries to avoid potential risks

in the relations with Korea. However, it remains questionable as Vietnam has not taken advantage of Korean market despite of its participation in both AKFTA and bilateral VKFTA, in particular in the context of the country suffering from trade deficit.

Figure 26. Export Dependence

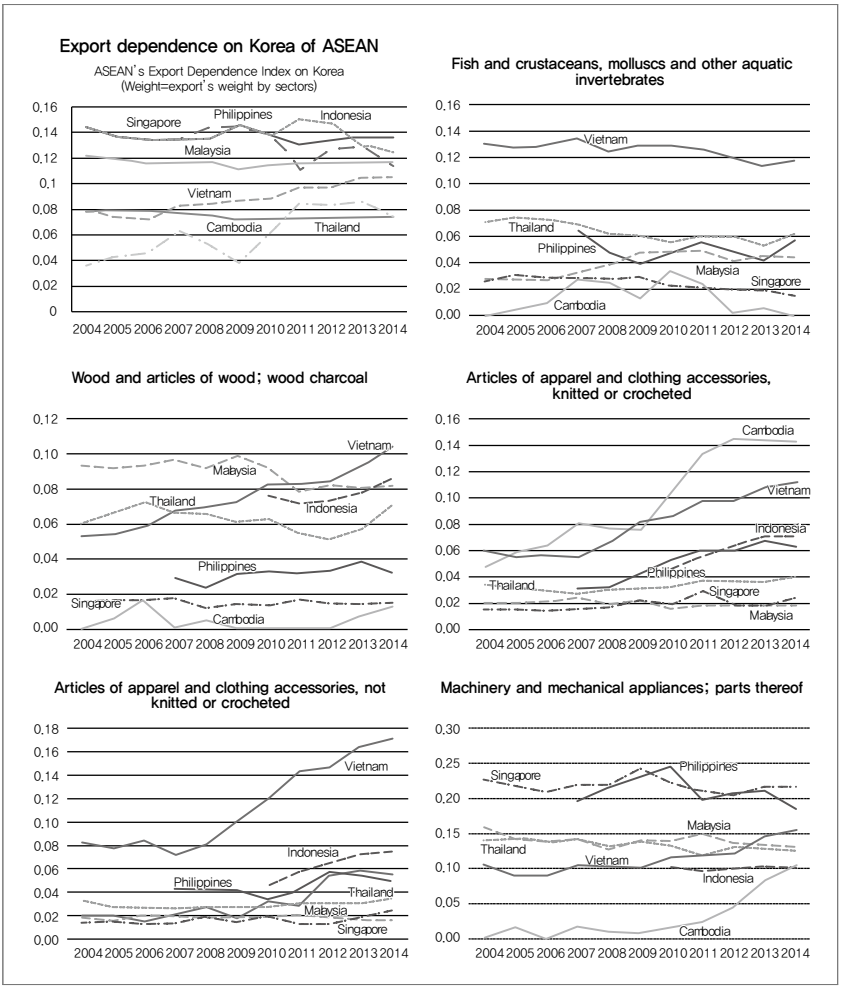


Source: Authors' calculation using WITS 2015.

Figure 26 also reveals that export dependence of the US and the EU is less than that of Asian partners. The dependence index of Russia was double within 10 years; while that of Australia and India was high and tended to increase. Most ASEAN4 are more dependent on Korea in compared with Vietnam. The dependence of Indonesia took the downward trend, but that of others was up slightly. Vietnam's dependence changed modestly prior to 2004, but has tended to increase since 2007.

The comparison of major goods for exportation of Vietnam to Korea also reveals similar results. Figure 27 shows that such products as seafood, apparel and auxiliary materials (excluding knit wear) and wood from Vietnam are highly dependent on Korea, and the dependence indices of those products are among the highest in ASEAN.

Figure 27. Dependence Index of Some Products



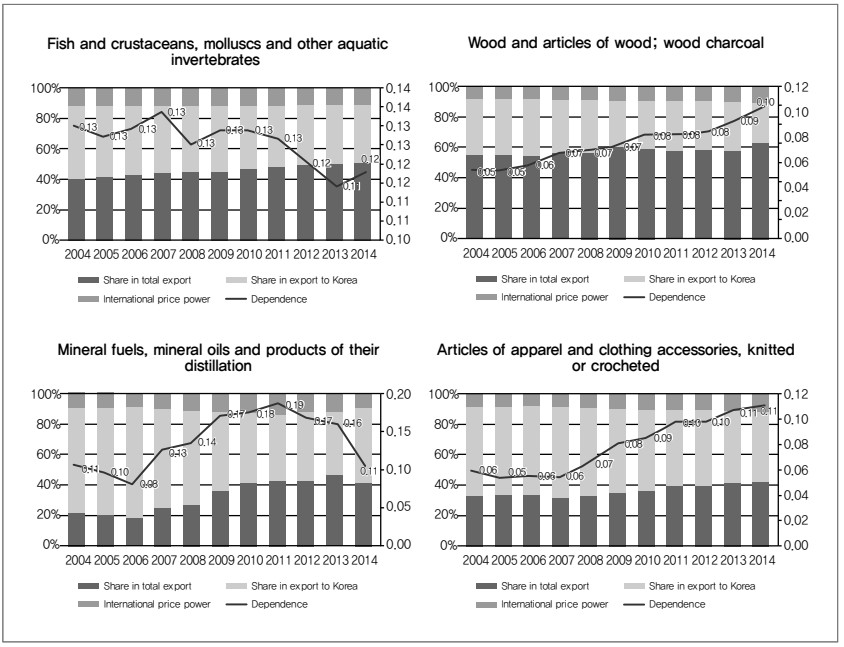
Source: Authors' calculation using WITS 2015.

What are key factors that affect Vietnam's export dependence on Korea? As discussed above, the dependence is identified by 3 factors: export structure of Vietnam, share of exports to Korea and Korea's ability to influence international price of certain products, taking into consideration exports of the similar product by other countries. Out of the three factors, Vietnam

could manage the first two. The decomposition of dependence index into three components is presented in Figure 28.

The red and green parts of the bars in the figure demonstrate factors that Vietnam can manage. These parts accounted for significant share in the case of four selected groups of commodities. For instance, in case of the seafood and wood industries, the proportion of dependence index that Vietnam can control is very high (nearly 90%), mainly because these products accounted for major share in total exports of Vietnam (the red part), while the contribution of exports to Korea (the green part) gradually reduced. The opposite situation was witnessed in the other two groups – apparels and accessories and minerals. Higher dependence was mainly attributed to the ratio of exports to Korea in total exports of that product.

Figure 28. Export Dependence Decomposition



Source: Authors' calculation using WITS 2015.

The decomposition of the dependence index reveals an important conclusion that basically Vietnam can proactively reduce the dependence through diversifying export markets. The component reflecting the Korea's ability to control international price is limited, because it is a small market in relative to other partners such as the EU, the US and China. Though this decomposition of the dependence index tended to increase, the change is very modest, and fluctuated in the range of about 10%. If there is market shock or non-economic upheavals, Vietnam's diversion of export market will be with ease.

2) Import Dependence

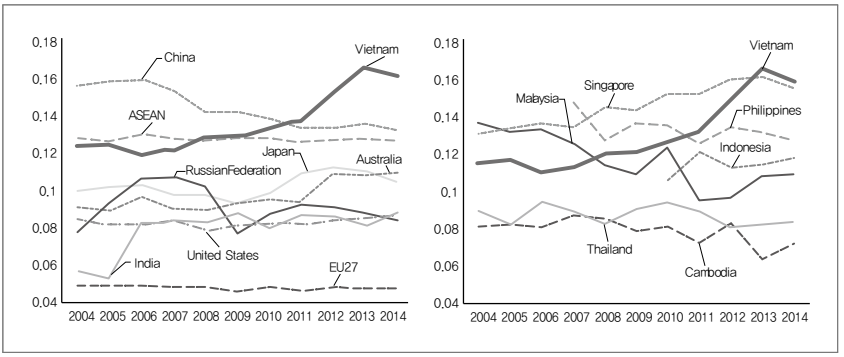
Unlike export, Vietnam took the 1st position among 15 selected partners in terms of import dependence on Korea. Within 10 years, the import dependence index of Vietnam on Korea increased from 0.13 to 0.16, which was considerably higher than the average level of ASEAN. Since 2011, Vietnam's import dependence index on Korea rocketed, exceeded that of China – whose import dependence index was the highest in relative to selected countries in this research. The indices of the EU, India, Australia, Russia, Japan and the US, in generally, have not changed much in the last 10 years. Overall, FTAs between Korea with some partners such as the US, ASEAN and China have not affected import dependence index on Korea. This can be attributed to the stability of import structure and the share of imported goods from Korea (given an assumption that the ability to control international price of Korea is unchanged). After the signing of the AKFTA, the import dependence index of ASEAN was stable at 0.12. The agreement with China has not affected the import dependence of China on Korea, which even plunged from 0.16 in 2006 to 0.125 in 2014.

Among ASEAN nations, Vietnam and Singapore tend to be more dependent on imports from Korea. Singapore is an exceptional case because the country has the transit location and focal point of trade activities of

ASEAN, thus it is reasonable that the dependence of Singapore is significant and higher than that of other ASEAN countries. The highly increasing dependence of Vietnam on imports from Korea can be attributed to the impacts of FDI flows from Korea. Korean MNEs imported machinery and mechanical appliance and parts, as well as other inputs from Korea. The AKFTA creates more advantageous condition for importation of Vietnamese companies. Consequently, the share of Korea in total imports in general and in imports of specific products increased significantly, leading to the change of import dependence index of Vietnam.

The comparison of import dependence index in the period of 2004-2009 and that in the period of 2009-2014 (the year 2009 was selected as Vietnam and Korea upgraded the relation to "strategic partnership") shows that Vietnam's import dependence index increased to 24% in the latter period instead of only 4% in the former one. In contrast, the import dependence on Korea of other major partners such as the EU, China, India and even some ASEAN nations took the downward trend.

Figure 29. Import Dependence

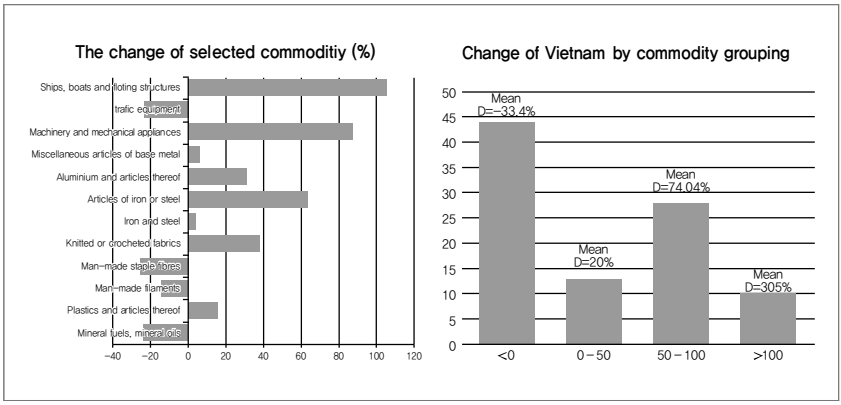


Source: Authors' calculation using WITS 2015.

To analyze the Vietnam case in more details, the import dependence index was calculated for groups of commodities (95 groups of HS-2-digit classi-

fication). The diagram on the right of Figure 30 presents the change of import dependence index by product group of Vietnam. The dependence index of 44 out of 95 groups of commodity decreased in the period of 2004-2014 while that of 28 groups increased by 0-50%. The change of 13 groups ranged between 50-100% and of 10 groups was up by more than 100%. Though the number of groups with the increasing dependence index is almost equal to that with decreasing dependence index, the change of increased index of each group was significantly outpaced that of decreased index, thus the average dependence index of Vietnam grew rapidly as discussed above. The import dependence index of such groups as knitted or crocheted fabrics, sea transport vehicles expanded considerably (increased by more than 100%). Intensification of import dependence index is a positive signal for Vietnam to reduce its dependence on China, as well as to take advantage of other agreements that Vietnam and Korea are members, namely FTAs with the EU or the pending RCEP.

Figure 30. The Changes in Import Dependence

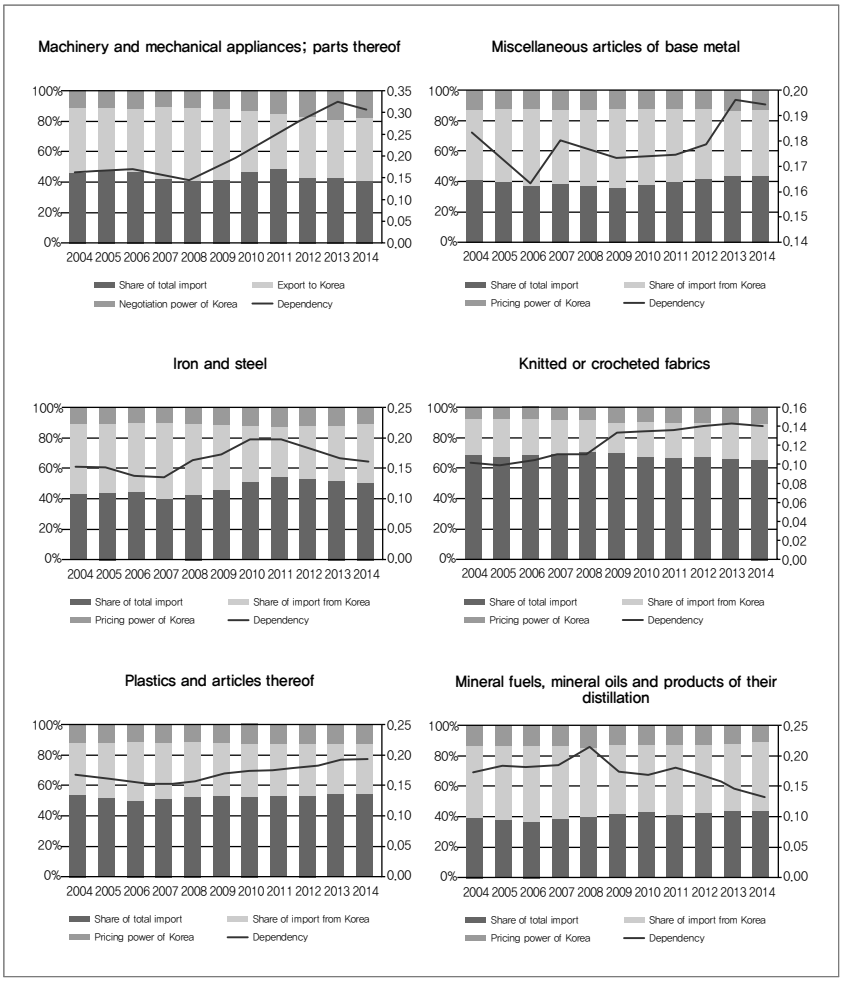


Source: Authors' calculation using WITS 2015.

Similar to the section on export, the decomposition of import dependence by sub-components reveals more details and implications to adjust import

dependence (Figure 31). For instance, the import dependence index of such groups as kitted or crocheted fabrics, metals, engineering equipment was high. In particular, the index of kitted or crocheted fabrics was up by more than 1.4 times in the 10-year (2004-2014). However, the dependence of this group accounted for significant share in total import value, partly because of

Figure 31. Import Dependence Decomposition



Source: Authors' calculation using WITS 2015.

the proportion of imports of this group from Korea (for instance, in 2013, Korea supplied about 20%), and Korea has a modest capacity of controlling international price of this product. Its capacity was almost unchanged. In other words, Vietnam can proactively control its dependence on kitted or crocheted fabrics. The situation was opposite in the case of machinery and mechanical appliance. Korea's capacity to control international price of these products has been improved considerably in the last 10 years. Vietnam may reduce its dependence by diversifying import markets of this group, but the contribution of this way is limited. In other words, Vietnam will be more passive in order to adjust the level of the dependence on the machinery and mechanical appliances.

E. Conclusion Remarks on Trade Dependence

Analytical results reveal the rapid but unbalanced expansion of the export and import in Vietnam-Korea trade, leading to a large trade deficit to Vietnam. Such sizable trade deficit with Korea is the distinct characteristic of Vietnam in the trade with other countries in the region.

Though structure and technology content of Vietnam's products exported to Korea have been improved, creating more added values for Vietnam, Vietnam's export concentration by product and market were relatively high. On one hand, this indicates improved competitiveness in some key markets. On the other hand, this implies more potential risks because of higher dependence.

The dependence index shows that in overall, Vietnam's export dependence on Korea is less than other countries are, but it inclines to increase since 2009. In terms of import, the dependence index is among the highest and is also increasing. This tendency will continue because the VKFTA has taken into effect and the expansion of FDI from Korea flowing to Vietnam will trigger a booming of import, particularly spare parts.

As mentioned, assessing the trade dependence index with Korea does not mean the dependence index is good or bad because of the friendly and supportive relations between Korea and Vietnam in both economic and political aspects in recent years. Thus, the policy implication of dependence is different from the dependence of Vietnam on China as there remain conflicts of sovereignty between China and Vietnam, and trade dependence may risk to be used as an instrument for politics and sovereignty disputes which already has happened over the sea and islands. Increasing dependence on Korea (both import and export) since 2009 which are mainly explained by the increasing share of trade with Korea may indicate that the two countries have well taken advantage of signed FTAs. However, the dependence also demonstrates the tightened relation between the two and any changes in political, economic and trade situation of Korea may notiably significantly affect Vietnam. This is the common trend of integration because of increasing inter-dependence among economies.

So, the dependence to some extents is good. Even for some hypothetically unforeseen cases in which Vietnam would like to reduce the dependence, the analysis in this section pointed out that the capacity to control international price of Korea is small, thus, Vietnam can proactively reduce the dependence either by diversifying commodities structure exported to Korea as well as diversifying export markets. From this perspective, in a context that Vietnam and Korea are accelerating the negotiation and signing new FTAs with other partners, in the near future, the export dependence of Vietnam on Korea is not a concern.

Import dependence is different from export dependence. The dependence of Vietnam is the highest among other countries in the region as well as other major partners of both Vietnam and Korea. The dependence index also took the rapid upward trend, in particular for such groups of commodities as auxiliary of garment and textiles, sea transport vehicles, machinery and mechanical appliances. However, those commodities are also which Vietnam

has weak production capacity. In other words, trade between Vietnam and Korea is complementary rather than competition. The cooperation between the two, therefore, benefits both countries.

The dependence is intensified over time in line with the expansion of FDI flows from Korea to Vietnam, especially from large corporations because of the shift of investment from China. This led to the argument that FDI is one of factors that make trade dependence increase. More thorough examination of Korea's FDI flows to Vietnam in below section, thus, will contribute to better understanding of the dependence between the two countries in the coming time.

2. Vietnam-Korea Investment Relations

A. Korea's FDI inflows to ASEAN

In 2013 and 2014, Korea ranked 13th among the 20 economies with the largest FDI outflow in the world (UNCTAD 2015). The data from Korea Exim Bank indicates that Korea's total FDI outflows in 2013 and 2014 were US$35.59 billion and US$35.04 billion respectively. At the end of the second quarter, 2015, Korea's total FDI mounted to about US$417.5 billion with more than 61 trillion projects, including US$291.9 billion of disbursed investment (accounting for 70%). Korea has its investment projects in 188 countries and territories.

Along with major economic and geopolitical changes in Asia, Korea's FDI outflow has shifted from China to ASEAN countries. Previously, China had always been Korea's priority investment destination due to its economic favorable conditions for instant advantaged geographical location and good infrastructure. However, China's rising labor costs, exchange rate and eco-

nomic slowdown have been the reasons for Korean businesses to shift their investment to other countries, particularly ASEAN that have been endowed with a large pool of human resources and high domestic demand. However, until now, Korea's FDI in ASEAN has still accounted for a relatively low proportion (4.7%) as compared to FDI by Japan (14.5%), the United States (11.3%) and the EU (16.7%) in this region (Table 17).

Table 17. FDI in ASEAN (Net Flow)

	2013		2014		2015	
Country/region	Mill.US$	%	Mill.US$	%	Mill.US$	%
Intra-ASEAN	19,562.2	15.7	22,134.5	17.0	22,232.2	18.4
EU	24,511.3	19.6	24,989.9	19.2	20,127.6	16.7
Japan	24,750.2	19.8	15,705.4	12.1	17,559.4	14.5
USA	7,157.2	5.7	14,748.5	11.3	13,646.0	11.3
China	6,426.2	5.1	6,990.1	5.4	8,256.5	6.8
Korea	**4,303.3**	**3.4**	**5,750.7**	**4.4**	**5,710.4**	**4.7**
Australia	2,587.7	2.1	6,281.5	4.8	5,246.7	4.3
Hong Kong	5,251.2	4.2	9,813.2	7.5	4,542.9	3.8
Taiwan	1,381.8	1.1	3,253.9	2.5	2,807.0	2.3
New Zealand	335.9	0.3	550.0	0.4	2,241.2	1.9
Others	28,597.4	22.9	19,777.4	15.2	18,448.8	15.3
Total to ASEAN	124,864.5	100.0	129,995.1	100.0	120,818.8	100.0

Source: ASEAN Foreign Direct Investment Statistics Database, 2016.

According to EXIMBANK, as of March 2016, ASEAN has attracted more than 10 thousand projects from Korea with a total registered capital of US$71 billion and disbursed capital of US$45 billion,[40] equivalent to Korea's total investment in China, a country with the population of more than 2 times, and GDP of more than four times of those of ASEAN.[41] Korea's

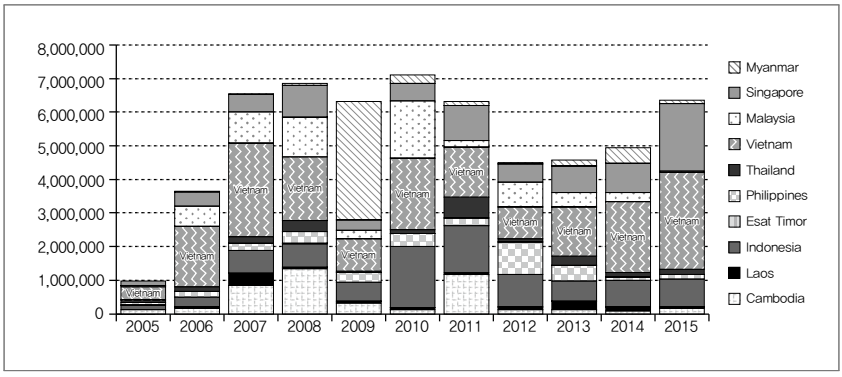
40) Korea Eximbank (March 2016).
41) CIA Factbook.

FDI has mainly flowed into ASEAN in the period of 2005 - 2016 with a value of over US$59 billion, accounting for nearly 83% of Korea's total accumulated FDI in ASEAN. Korea's investment in China was US$52.7 billion in the same period, representing 74.4% of its total FDI in China.

The disbursement rate of Korean FDI projects in the ASEAN is 63% (*US$44.97 billion actually disbursed comparing to US$71.3 billion committed or registered investment)* that is lower than Korea's average FDI disbursement rate of 69.85%. The FDI disbursement rate by more developed country group (ASEAN-6) is higher than that by the remaining groups of countries, with an average rate of 70.2% as compared to 46.7%. Among them, Singapore-the most developed countries in ASEAN-has the highest disbursement rate of 80%, while the rate of Vietnam is 58.9% (MPI, report 2005)

Korea's FDI mainly concentrates in some of the ASEAN countries, including Vietnam, Indonesia, Singapore, and Myanmar. In particular, Vietnam, Singapore and Indonesia are Korea's biggest FDI recipients during the period 2005-2016.[42)]

Figure 32. Korea's FDI Inflows to ASEAN in the Period 2005–2016



Source: Korea Exim Bank (March 2016).

42) Korea's FDI in Vietnam in comparison with ASEAN countries using data from Korea Exim Bank to ensure consistency and objectivity.

Korea's FDI to ASEAN region has been driven by many different motivations, changed over time (Table 18) and varied by countries. In the early stage of its development when the Korean government strongly embarked on its economic industrialization strategy (before 1987), the main motivation of its FDI outflows was resource seeking. In the pre-crisis period, there were three more including market seeking, resource seeking and efficient seeking. They are still the main motivations for Korea's FDI flows to ASEAN. Since 2006, Korean companies have started making investments based on its comparative advantages for more intensively and deeply participating in global economy, seeking for the connections in ASEAN in order to optimize its global value chain

Figure 33 describe the trend in Korean businesses' investment motivations. In the early stage (1980s), most FDI from Korea to ASEAN was resource-seeking. It reduced sharply to 24% in 2006. By contrast, the share of FDI with the purpose of taking advantage of low labor cost more or less unchanged. And, the ASEAN has witnessed with the larger flow of the FDI with market penetration and global value chain integration purposes.

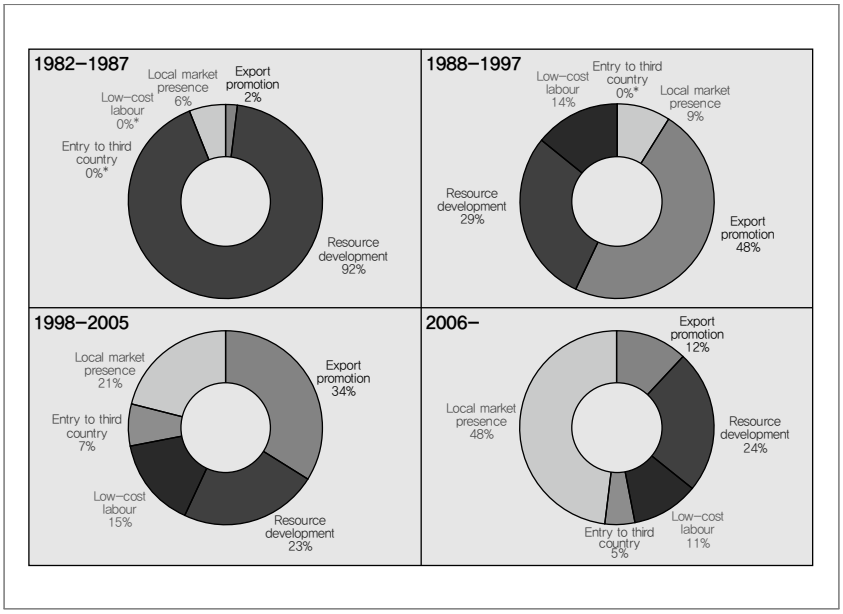
Table 18. Korea's FDI Strategy in ASEAN

Stage	Characteristics	Cumulative FDI flows in ASEAN	Drivers/motives	Share of large or small firms[a]
Stage 1 (1982–1987)	Initial stage (government-led industrialization)	109	Resource-seeking	LF: 64% SME: 35%
Stage 2 (1988–1997)	Growing stage (pre-crisis liberalization)	3,225	Resource-seeking, market-seeking (i.e., export promotion)	LF: 26% SME: 66%
Stage 3 (1998–2005)	Restructuring stage (post-crisis liberalization)	4,387	Resource-seeking, market-seeking (i.e., export promotion, local market penetration), cost reduction	LF: 12% SME: 56%
Stage 4 (2006–)	Proactive stage (acceleration of globalization)	36,422	GVC integration	LF: 13% SME: 54%

Source: Korean Eximbank FDI database.
Notes: GVC = global value chain, LF = large firm, SME = small and medium-sized enterprise.
[a] The shares of investment by individuals, sole proprietors and other entities (e.g. non-profit organizations) are not included in the last column of table. Therefore the percentages in the table do not add up to 100 percent.

Source: Investment report 2016.

Figure 33. FDI from Korea



Source: Investment Report 2016.

A fairly clear trend in Korean businesses' motivation in recent years is a combination of efficiency seeking through low labor costs and search for more advantaged locations in order to optimize its GVC integration. A typical example is LG or Samsung Electronics whose motivation has been efficiency seeking by making good use of the provinces with low labor costs in Vietnam for their assembly activities. At the same time, it has started investing in high-tech research and manufacturing segment in the provinces with more advantages in human resource quality (Hanoi and Ho Chi Minh City).

In addition to the above-mentioned trends, Korean businesses have also pursued the strategies for exploiting domestic market. Typical examples are shown in Vietnam and Indonesia that are the two most populous countries in ASEAN. Korea's trading companies like LOTTE, or steel companies such as POSCO or Hyundai automobiles have been accelerating their invest-

ment in these two markets.

However, Korean companies have employed different strategies for each ASEAN country. For example, their FDI outflows for efficiency seeking and labor-intensive industries are often targeted at the countries with low labor costs and labor surplus (Vietnam and Indonesia). Their FDI outflows for market seeking and capital intensive industries are targeted at middle income countries with a high level of competitiveness and developed infrastructure (e.g. Singapore). In Myanmar and Indonesia, Korea's businesses also focus on the natural resources based industries such as those related to forests, mining, energy. In ASEAN, Vietnam and Indonesia are quite diverse in structures with the income level ranging from low to high, industries ranging labor-intensive to capital intensive and developed infrastructure and good business environment, meeting quite well the investment requirements by Korea's different strategies. This explains a rapid flow of FDI from Korea to both countries recently.

Another important factor explaining Korea's FDI growth in ASEAN is a shift from that in China. China's advantages in market size, low labor costs, preferential policies, availability of raw materials and other inputs supply system, and loosen environment management have created its enormous attractiveness for FDI. This has also had a great influence on ASEAN countries' FDI attraction from Korea. China's recent deceleration, industrial restructuring, tightened environmental policies and rising labor costs have also contributed to the development of China + 1 strategy by Korean companies, leading to FDI relocation to ASEAN.

From other perspectives, Korea's FDI inflows to ASEAN also face competition from Japanese firms, and goods imported from China, or Chinese enterprises' FDI. For the investment projects with an aim of accessing domestic market, the direct and fiercest competition has been shown in the commodity group of electronics, automotive and consumer goods Korea has advantages in electrical and electronic products (*mobile phones, electrical ap-*

pliances), Japan has gradually lost its advantage in this sector and China has been emerging as a Korea's number one competitor with a prospect of catching up with Korea in about 10-15 years (*in terms of brand, design, quality*...).

For the field of automotive and motorcycle, Japan has virtually remained dominant in terms of a system of large-scale plants located in Thailand, Indonesia, Vietnam, while Korea has not yet had its significant production base existed in the region. In this regard, Chinese enterprises have still far lagged behind in terms of quality and brand value so that it should not show its direct competition at least in the next 10 years. For other sectors like finance - insurance; real estate; construction; mining..., total investment in the ASEAN region by Korea, Japan and China has been insignificant, if any, it has only focused on a number of markets (e.g., distribution, finance - insurance, real estate... in Vietnam), which is not of representativeness and accounts for a small share of the regional market.

It is noted that not only China, Japan and Korea are in competition in investment in ASEAN, most ASEAN countries are striking to attract FDI due to their export oriented strategies and labor surplus. Amending the legal framework for FDI and improving business environment is preferably conducted by ASEAN. Vietnam becomes one of rather active countries in this type of job.

B. Vietnam's Policies on FDI Attraction

Vietnam does not have a separate strategy for attracting FDI from Korea. As a signatory of FTAs and under the framework of WTO, Vietnam must ensure a fair investment environment for all FDI enterprises and has been working on advancing toward a more equitable environment for both domestic and foreign enterprises. An outstanding feature of Vietnam's FDI policy is that it has been improved in a fast manner and quite open as compared to several countries.

Since its opening up, especially after joining WTO, and participating in trade agreement negotiations and conclusions, Vietnam has made adjustments to its policies on FDI towards more transparency and flexibility for enterprises, opening up its goods and services markets, as well as taking compatible measures for domestic reforms in order to take advantage of opportunities and overcome challenges in the process of its deeper international integration. This has encouraged foreign investors to pour more investment into Vietnam and increase capital and expand the scope of their investment projects. The policy framework for FDI attraction to Vietnam has been continuously amended and updated since the 1990s (1992, 1996, 2000, 2005, 2014) toward the direction of being more flexible and equitable for foreign investors in various aspects, ranging from investment promotion, investment attraction to the use of this capital flow.

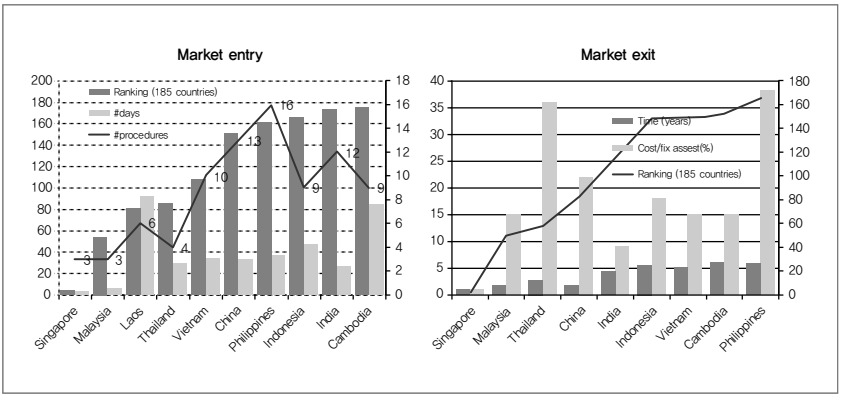
With regard to investment guarantees: This policy and measures have been institutionalized in the Law on Investment in Vietnam (2005, 2014). Generally, the policies relating to investment guarantees have adjusted toward the direction of being more flexible and securing the ownership for investors' lawful property that shall not be confiscated and nationalized or allowing the investors to select preferences with the most favorable conditions if there is a change in policy or law. Vietnam's laws apply the principle of "non-retroactivity" in accordance with international practice, granting the investors the right to defend themselves before a change in policies by the government in host countries. In case of newly issued law or policy that provides more benefits and preferences than the benefits and incentives that investors have enjoyed before, the investors are entitled to enjoy the benefits and preferences as provided by the new regulation from its effectiveness, and vice versa.

Ownership and forms of investment: Investment forms have gradually expanded, from allowing only three forms of joint ventures, business coopera-

tion contracts (BCC), and 100% foreign capital with the encouragement of making a joint venture with SOEs (1990), to quite diverse forms of investment (BOT, BTO, M&A) and no discrimination between investment forms. Likewise, Vietnam has allowed FDI in the form of joint stock companies (2003) rather than of just limited companies. Diversifying forms of investment and business organization as well as cooperative partners with foreign investors has created opportunities for rising funding for development and for investors to select their right investment partners, reducing the monopoly of state-owned sector in cooperation with foreign enterprises.

Market entry and market exit: Over the course of FDI policy adjustments, investment procedures have been provided in a specific detailed manner, shortening the time for investment license application. The investment licensing and business registration have been decentralized to localities (Investment Law 2005). Procedures and duration for investment preparation have been reduced (90 days to 15 days). Since 2000, the government of Vietnam has been simplified and reduced unnecessary sub-licenses. The general trend is that investment management has shifted from "ex-ante evaluation" to "post-ante evaluation", reducing time and costs for businesses' market

Figure 34. Doing Business Index in ASEAN



Source: World Bank, Ease of Doing Business (2013).

entry. However, as compared to other countries in the world and the region, Vietnam's starting a business ranks 108/185, at the average level, and ranks 5/10 among 10 developing countries and emerging South East Asian countries (Figure 34). To start a business, a business in Vietnam must go through 10 procedures, taking 34 days, while ASEAN4 has only 3-6 procedures, and an average respective figures are seven procedures and 36 days in East Asia and the Pacific, and five procedures and 12 days in the OECD countries.

Market exit: Although Vietnam has made various adjustments, such modifications have not really been quite clear. The reason is the complexity and overlapping among the legal documents (e.g. Bankruptcy Law, Investment Law, and Enterprise Law).[43] As ranked by Doing Business, Vietnam ranks 149/185 in "business termination", and ranks seventh in this indicator among ten Southeast Asian countries. It takes five years for a business in Vietnam to deal with business termination, at a cost equal to 15% of the fixed assets value while the respective figures in Malaysia are 1.5 years and 15% and in Thailand are 2.7 years and 36%. Except for Indonesia, 5 countries with higher rankings than Vietnam have shorter time for business termination than Vietnam (Figure 34).

Areas and localities for investment encouragement: Vietnam has updated numerous investment incentives towards better clarifying, specifying, or extending preferential coverage: (1) Law on Foreign Investment 1987 stipulated very general investment incentives, making it difficult for investors to apply for li-

43) Investment Law stipulates: businesses are only allowed to be dissolved after completing the procedures of liquidation, debt repayment and fulfilled other obligations.
Enterprise Law stipulates: enterprises must implement the dissolution and liquidation by themselves.
Bankruptcy Law: The Court shall only resolve the case with the presence of legal representative of businesses and shall not process an application if there are no audited financial statements.

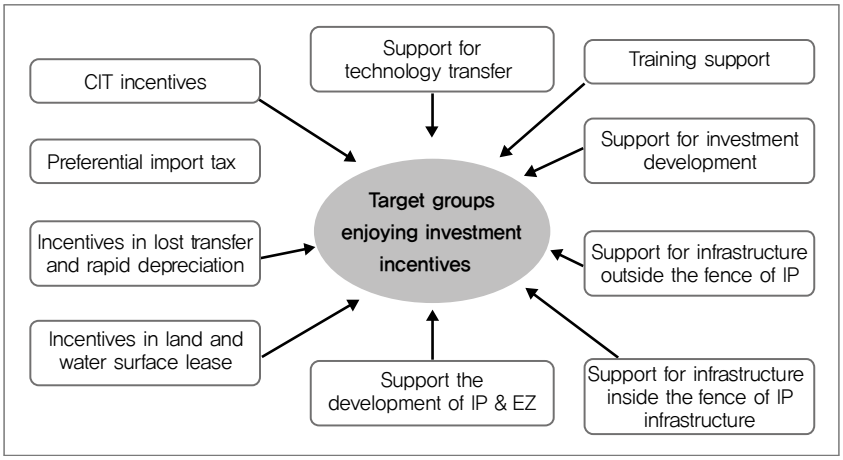
cense application and determine the level of incentives; (2) The revised law in 1996 specified the list of areas for investment encouragement, investment restrictions, types of projects that are not allowed to be granted with investment permits, and investment with conditions; (3) This list was supplemented ad amended in 2000, 2005 and 2014, further clarifying the scope of priority to avoid scattered priority. Investment incentives have so far been identified for some specific areas such as investment in agriculture, R & D, high-tech, labor-intensive industries, environment. Localities for investment encouragement are disadvantaged regions, particularly disadvantaged regions, mountainous areas, enterprises in export processing zones, economic zones... There have been various preferences (Figure 35), and especially important ones are land rent exemption and reduction, exemption of corporate income tax, import-export tax.

Financial incentives: Vietnam's financial incentives have been consistent since the enactment of Investment Law in 2005, and its amendment in 2014. As a result, there have no differences existed in financial incentives applied to domestic and foreign investment accordingly. Types of financial incentives consist of: tax incentives, preferential credit, and credit insurance. However, most of the financial incentives have been provided through the first one, including concessional import and export taxes applied to raw materials and equipment; reduction or exemption of corporate income tax applied to investments in priority sectors and areas (tax rates commonly decrease from 25% to 22% and the most preferential tax rate is 10%; in addition, 50% or 100% tax reduction is also applied depending on the duration and types of projects).

As compared to some neighboring countries that record a higher ranking in the ease of doing business, Vietnam has a lower ranking in corporate income tax rate (except for Thailand). In particular, Malaysia, Brunei and China have reduced their tax rates since 2010. Especially, before conducting

tax rate reduction, China also applied a tax rate of 25% lije Vietnam. As such with its downward tax rate adjustment to 22% in 2014, Vietnam has still been slower than the other three countries.

Figure 35. Vietnam's FDI Encouragement



Source: Tue Anh N.T. and T.T.Thang 2014.

Table 19. Corporate Income Tax Rates of Selected Countries in 2013

Country	Corporate income tax	Ranking in the ease of doing business
Vietnam	25%	99
Thailand	30%	18
Malaysia	20% (25%)*	12
Brunei	22%	79
China	20%	91
Indonesia	25%	128
Cambodia	20% (1%)**	133
Philippines	30%	136
Laos	35%	163

Note: * 20% of 500.000RM, 25% of the remaining profit.
** 20% of profits or 1% of sales (tax paid at the higher rate).
Source: World Bank, Doing business 2013.

Infrastructure policy: Around 2005, Vietnam basically abolished the application of dual price policy applied to Vietnamese and foreigner users of facilities like fees for telephone installment, water, air-ticket etc. Its telecommunications costs and marine freight charges are now approaching the level of many countries in the region. As an example, cost per container by exporters in Vietnam in 2011 is lower than that in some other countries such as Hong Kong, Thailand, Indonesia, Korea, India, but higher than Malaysia and China.

Foreign exchange and regulations on transfer of capital and transfer of profits abroad: According to Vietnam's legislation, investors are allowed to purchase foreign currency from the credit institutions that are entitled to trade foreign currencies for current transactions, capital transaction and other transactions. For a number of important projects in the field of energy, transport infrastructure and waste disposal, investors are guaranteed or supported in terms of foreign currency balance. Similarly, investors have the right to concede and adjust their capital or investment projects. Investors are allowed to transfer capital and profits abroad legally without paying tax after fulfilling their financial obligations to Vietnam.

Policies on technology and technology transfer: Investment in technology transfer has been encouraged (Investment Law 2005 and 2014, Technology Transfer Law 2006). In particular, transfer of advanced technologies has been included in the list of investment encouragement areas, such as production of new materials, energy, high technology, biotechnology, information technology, pharmaceuticals, robotics, engineering mechanism, high-tech research, education and training, health care and sports. The Law on High Technology was enacted in 2008, provided for the policies and incentives for promoting high-tech activities. High-tech enterprises and high-tech application projects enjoy the highest preferences accordingly. At the same time, the Government also ensures protection of intellectual property rights (IPR) as committed in recent FTAs.

Policies on competition: Law on Competition came into effect in July 1, 2005, providing regulations on controlling anti-competition behaviors or the behaviors that can lead to anti-competition, especially protecting legitimate rights of doing business by enterprises, fighting against unfair competition behaviors. From the perspective of competition, Vietnam's policy allows M & A, but it must ensure that after M & A the companies shall not dominate the market, restricting competition (accounting for more than 50% market share in relevant market).

Supporting the establishment of production linkages: An important component of FDI utilization policies is to support domestic enterprises to develop production linkages with FDI enterprises, including four types: (1) encouraging domestic enterprises to create linkages with FDI enterprises; (2) supporting for enhancement of domestic enterprises' R&D capacity; (3) supporting human resources development, and (4) supporting in providing domestic enterprises with information about MNEs and vice versa. Of the four mentioned policies, Vietnam has mainly given attention to the policies on supporting the enhancement of domestic enterprises' R&D capacity and development of human resources, while the two remaining policies although being touched upon in policy discussions, not any legal document has been developed, especially not any legal document refers to encouragement of domestic enterprises to create linkages in production with FDI enterprises.

Implementation arrangement model for FDI management decentralization policy and mechanism: In Vietnam, Foreign Investment Agency (FIA) under MPI is a governmental body, established to perform the function of FDI state management in Vietnam and Vietnam's direct investment abroad. The Agency also performs the function of national investment promotion with three investment promotion centers located in the North, the Centre and the South. These three centers operate independently, but under the governance and coordination by FIA, thus characterized by decentral-

ization and centralization. However, state management of foreign investment has vertically been decentralized since 2005; whereby at provincial and centrally managed city level, this function has been jointly performed by two agencies; namely: Department of Planning and Investment and Management Board of the local economic zones. Basically, Vietnam's FDI policy framework can be summarized as follows

Table 20. Framework of FDI Policy in Vietnam

Achievements	Restrictions
FDI sector has been recognized as a part of the economy. Foreign Investment Law was acted in an early manner that has been continuously improved and more flexible	Attention has been paid to FDI attraction without appropriate attention given to its utilization Insufficient binding between FDI and its performance, and insufficient linkages with local sector.
FDI attraction policies have been amended and supplemented for being in line with integration commitments	The principle of non-retroactivity in the law has not yet been specified and has been understood in an inconsistent manner in consideration of incentives Policies on market entry and exit have been inconsistent and irrational
Liberalization of investment forms creates more attractiveness and enhances FDI attraction	Policies on encouraging technology transfer associated with investment forms have not yet been in place
Diversification of investment support and encouragement mechanism	Priority coverage still remain so broad with many unclear regulations, for example, "high-tech". Investment incentive policies have been heavily based on financial incentives There are many loopholes, leading to trade fraud, and transfer pricing that results in serious losses of tax that should have been collected from FDI enterprises
Encourage investment in industrial parks, export processing zones, economic zones	Failing to set out the criteria on production linkages between domestic enterprises results in scattered development of industrial parks, export processing zones and economic zones, insufficient linkages between companies, industries, regions and insufficient connections with the outside regions.

Table 20. Continued

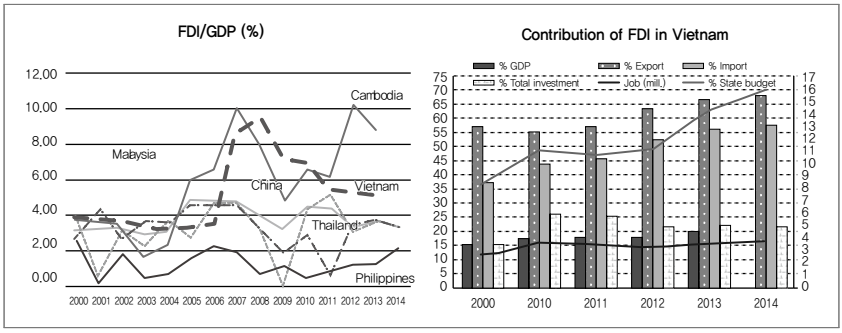
Achievements	Restrictions
Reforming tax, customs and land policies and procedures as well as administrative procedures, decentralization... that are related to investment activities towards eliminating inequality and creating favorable conditions for investors.	The reforms have been conducted in a slow manner with low effectiveness of legal documents that have been continuously subject to changes and inconsistence in enforcement Decentralization, to a certain extent, has caused difficulties for managing information on capital flows, monitoring and handling the issues of post-investment licensing, investment promotion and establishment of industry clusters and production linkages.

Source: Tue Anh N.T, and T.T.Thang 2015.

C. Korea's FDI Inflows to Vietnam

Vietnam is one of the countries with a high share of FDI in GDP in the region. Although this has been in a downward tendency, the high share of FDI in GDP combined its share in export and in total investment indicates that Vietnam's growth tends to heavily rely on external capital flows (Figure 36).

Figure 36. FDI in Vietnam

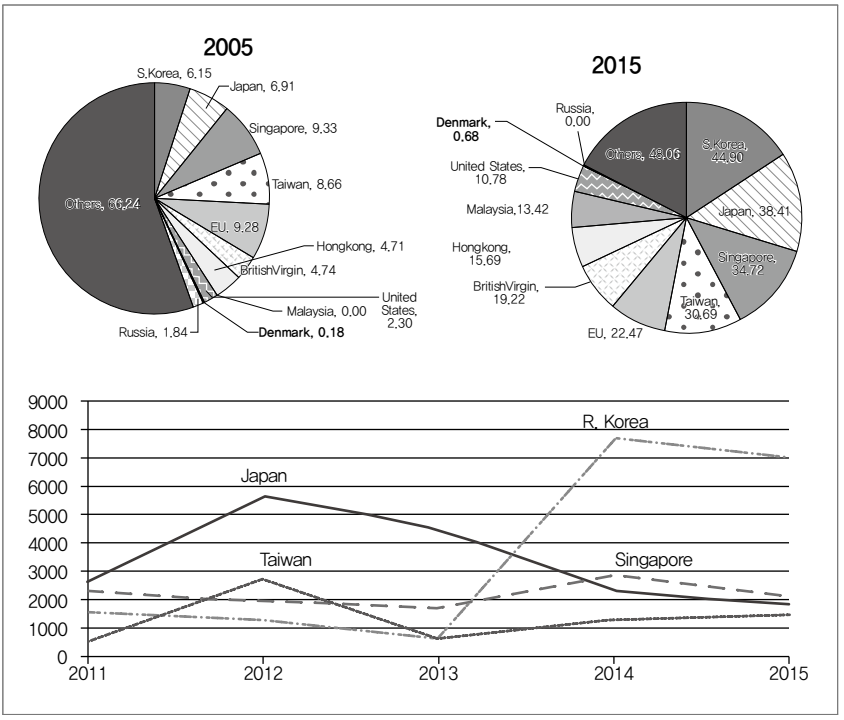


Source: UNCTAD 2015; MPI report 2015.

Just having received FDI from Korea since the early 1990s, Vietnam has become Korea's fourth largest FDI recipient after the US, China and Hong Kong with 3899 projects, US$22.3 billion of registered capital and US$13.12 billion of accumulated disbursed capital as of 2016).[44] Vietnam is Korea's largest FDI recipient in ASEAN, accounting for 31% of total Korea's FDI inflows to this region, 1.65 times and 2.33 times higher than Korea's FDI inflows to Indonesia and Singapore respectively. Since 2014, Korea has surpassed Japan to become the largest FDI investor in Vietnam with a total registered capital of US$48.5 billion and 5.364 ongoing investment projects. As

Figure 37. FDI Providers in Vietnam

(Unit: %, million US$)



Source: Ministry of Planning and Investment of Vietnam, June 2016.

44) Korea Eximbank (March 2016).

reported by FIA if some projects of Samsung Electronics, Hyosung and other Korean conglomerates that have invested in Vietnam through legal entities in Singapore and Turkey are included, Korea's total FDI in Vietnam will mount to more than US$55 billion.

The Figure 37 comparing Vietnam's 4 biggest FDI partners (*with a total accumulated FDI of over US$30 billion each*), including Korea, Japan, Singapore, and Taiwan since 2011, indicates that Korea's FDI inflows to Vietnam have recorded an impressive spurt since 2014 with an annual investment value of over US$6 billion, three times of the value invested in the period 2011 - 2013, while the remaining three partners' tend to fall sharply (Japan) or remain the same (*Singapore, Taiwan*). Korea's total registered FDI in Vietnam for period 2011 - 2016 is US$22.15 billion, higher than that of Japan (US$18 billion), Singapore (US$12 billion), and Taiwan (US$7.63 billion). If major projects of Samsung (US$14.84 billion, including US$6.5 billion invested through its legal entity in Singapore) and LG (US$3 billion) with a total investment value of US$11.34 billion) are excluded, Korea's FDI inflows to Vietnam in this period reaches US$10.8 billion, nearly equal to that of Singapore (the 3rd largest), and approximately accounting for 60% of Japan's total FDI inflows to Vietnam.[45] This indicates that the spectacular spurt of Korea's FDI is mainly attributed to large corporations. This is also consistent with Vietnam's current FDI attraction strategy, which targets at large corporations with good potential of capital and technology resources for creating spillover effects.

In the current period, Korea's large corporations as Samsung, LG, Posco, Lotte, CJ, Doosan, Shinhan, Hanwha... have played a role in guiding Korea's investment inflows to Vietnam via large projects in the manufacturing sector (*electronic products*); real estate; finance - insurance; energy; steel; construction; food and accommodations services - distribution - entertainment... In addition, some other large scale companies such as Hyosung, Taekwang, and

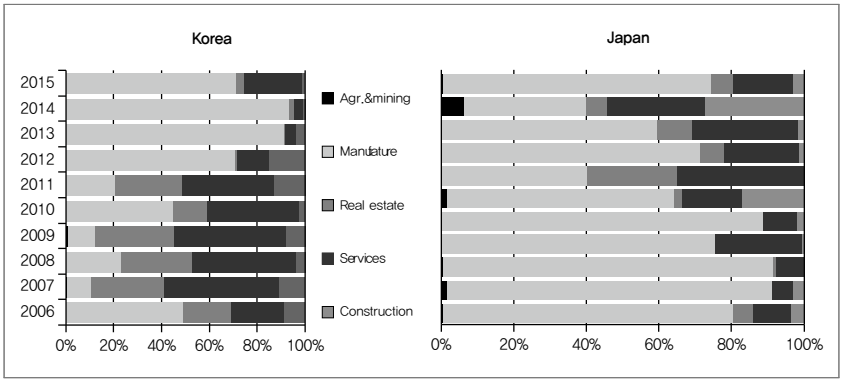
45) *Statistics of Foreign Investment Agency* (June 2016).

Panko have focused on projects in the field of textile. Korea's SMEs focused on processing and manufacturing industries, especially the sub-contract projects in light industries, such as garments, shoes, slippers.

1) Investment by Sector

Figure 38 shows the shift in Korea's FDI by sector as compared to Japan's FDI in Vietnam. While Japan's FDI in manufacturing sector always accounts for over 60% within recent 10 years, Korea's FDI varies from about 20% to over 80% during the same period. This suggests that Korea's FDI motivation and strategy strongly shift from investment in service sector, particularly trade sector, and real estate with market seeking strategy to efficiency seeking for taking advantage of cheap labor costs in Vietnam.

Figure 38. Sectoral FDI: A Comparison



Source: Ministry of Planning and Investment of Vietnam 2016.

Table 21 and 22 to this chapter provides more detailed shifted percentage in each sub-sector. This shows that Korea's investment has been relatively focused and in a more diverse trend. In 2006, only four out of about 21 sectors have over 5% of Korea's investment; namely steel and related products (over 50%); textile, construction, real estates. Overall, there is a clear differ-

ence among investors in investment portfolio in Vietnam. For example, Korea focuses on electronics, metal manufacturing, Japan concentrates in transport sector, electronics and chemicals; US focuses on hotels, restaurants, real estate, furniture; China focuses on mining, power equipment; EU focuses on oil, real estate, power-water supply; Taiwan concentrates in non-metal mineral, metal products and textile.

Table 21. Sectoral FDI from Korea in Vietnam

Sectors	2006	2010	2014	2015	Total	Sectors	2006	2010	2014	2015	Total
Agriculture	0.14	0.23	0.18	0.05	0.13	Maintain,install	0.00	0.02	0.08	0.26	0.09
Mining	0.00	0.08	0.00	0.00	0.08	Elec.gas.water supp.	0.00	0.02	0.15	11.32	0.93
Food processing	0.13	3.94	0.21	0.68	0.94	Waste management	0.00	0.00	0.00	0.02	0.09
Textile	6.89	10.55	6.03	9.68	8.41	Construction	8.42	2.30	0.36	0.74	4.99
Wood process	0.13	0.28	0.39	1.29	0.74	Comercial act.	1.30	4.39	0.99	2.98	1.58
Coke, oil refinery	0.00	0.00	0.02	0.05	0.02	Trans., logistics	0.10	13.90	0.10	0.18	2.01
Chem.phama,plastic	2.21	1.66	3.83	13.75	6.79	Hotell&restaurant.	0.11	3.88	1.17	1.88	1.90
Non-metal mineral	0.69	0.66	0.04	0.07	0.32	Telecom.&inform.	0.10	0.05	0.01	0.14	0.09
Metal & products	52.69	31.49	3.33	4.93	12.34	Finance	0.00	0.00	0.00	0.01	0.02
Eletronics	1.16	7.72	79.04	33.24	35.12	Real estate	19.54	14.81	1.33	3.50	13.94
Elec.equipment	1.35	0.05	0.67	4.82	1.47	Business support	0.38	0.94	0.19	1.01	0.46
Machinaries	0.11	0.14	0.01	0.09	0.16	Research &develop.	0.02	0.04	0.01	0.03	0.09
Vehicles	0.52	0.35	0.17	1.95	2.19	Tourist	0.02	0.00	0.00	0.00	0.00
Furniture	0.37	0.18	0.05	0.01	0.50	Education	0.08	0.13	0.02	0.05	0.04
Other manuf.	2.30	2.13	1.42	4.28	1.87	Healthcare	0.10	0.03	0.00	0.02	0.04
						Other Services	1.11	0.02	0.20	2.99	2.65
						Total	**100**	**100**	**100**	**100**	**100**

Source: Source: Ministry of Planning and Investment of Vietnam 2016.

Table 22. FDI by Some Major Investors in Vietnam

	ASEAN	Other Asia	European	Taipei	Hongkong	China	Japan	US	S.Korea	American
Agriculture	328.22	57.71	104.63	40.45	179.88	9.57	156.82	11.51	48.02	14.4
Mining	80.45	140.6	677.25	42.18	0	1032.28	51.23	31.6	30.01	44.38
Food processing	2179.79	166.86	1999	380.23	195.01	314.39	588.12	175.01	360.56	121.11
Textile	720.21	616.93	2359.24	1793.09	2262.25	844.34	427.88	151.17	3214.06	493.54
Wood process	140.59	1094.08	874.43	235.95	266.75	397.19	239.32	558.87	282.95	7.5
Coke, oil refinery	2.98		3826.67	2	1.68	3.79	9080.36	2.23	8.36	
Chem.phama,plastic	4800.3	343.87	532.59	882.52	1101.65	1129.22	3035.23	160	2593.76	87.87
Non-metal mineral	530.47	115.77	1525.65	11189.44	99.74	51.81	615.18	126.34	123.65	0.71
Metal & products	660.08	440.65	1009.64	1995.22	179.03	1306.55	3145.26	205.95	4718.66	3063.88
Eletronics	4898.65	1187.4	2206.27	210.57	664.47	165.01	2972.69	87.6	13424.19	41
Elec.equipment	151.86	123.1	257.81	211.59	158.43	151.21	833.85	28.31	561.99	4.16
Machinaries	174.6	81.78	196.29	69.54	36.37	42.06	736.9	5.51	61.06	7.61
Vehicles	931.64	37.9	1766.14	184.12	29.75	183.73	1081.65	27.35	836.59	73.28
Furniture	91.74	112.67	46.45	164.36	10	38.97	46.47	24.21	192.98	10
Other manuf.	2986.73	186.46	255.27	208.25	57.4	124.22	834.05	153.07	713.85	22.75
Maintain,install	53.33		6.94	12.03	305.45	1.56	87.26	112.6	33.42	3

Table 22. Continued

	ASEAN	Other Asia	European	Taipei	Hongkong	China	Japan	US	S.Korea	American	Total
Maintain,install	53.33		6.94	12.03	305.45	1.56	87.26	112.6	33.42	3	615.61
Elec.gas.water supp.	2438.05	17	2738.74	19.35	2524.71	2085.14	107.93	799.6	353.81	74.4	11160.73
Waste management	1176.26	5.35	64.63	7.5		1.2	35	63.94	35		1388.87
Construction	2550.92	117.66	1760.24	995.7	494.65	160.7	996.91	38.96	1905.96	167.37	9189.05
Comercial act.	986.1	146.55	657.59	179.26	358.86	111.72	1071.52	61.45	602.69	7.07	4184.91
Trans., logistics	1354.44	49.52	859.31	45.61	54.99	43.29	274.56	189.73	769.98	279.09	3920.52
Hotell&restaurant.	1999.27	62.8	898.3	102.36	741.7	32.25	232.63	4585.87	725.68	165.85	9546.76
Telecom.&inform.	507.58	22.49	158.4	16.45	6.26	6.65	751.33	54.01	35.89	378.33	1937.62
Finance	123.22		10.59	38.25	0.07	1.5	38.87	4.22	7.74		224.46
Real estate	14473.48	2005.8	8641.37	953.46	1772.33	552.13	1817.1	1188.23	5328.17	6077.75	42809.82
Business support	314.21	25.09	282.27	11.38	83.99	72.06	241.17	20.89	177.51	291.82	1523.05
Research &develop.	12.55	0.42	24.6	2.06	1.81	1.5	32.32	102	36.03	3.69	217.87
Tourist	264.46	0.88	6.36	25	1.1	1.19	0.07		1	137	437.06
Education	76.82	35.24	92.13	54.3	51.32		94.89	157.32	14.04	18.76	594.82
Healthcare	790.61	5.55	4.83	202.21		3.17	8.34	3.32	14.17	280.4	1312.59
Other Services	71.33	68.97	138.28	59.41	17.21	25.12	48.39	15.37	1013.21	4.59	1461.9

Source: Source: Ministry of Planning and Investment of Vietnam 2016.

2) Korean FDI in Selected Sectors

Light industry: From the mid-90s to the early 21th century, a lot of Korea's investment focused on garment subcontract projects for export (*Export - Platform*) in Southern provinces. During this period, the South with Ho Chi Minh City as a logistics - finance - trade center that serves as the foundation with a system a relatively developed infrastructure, convenient transportation connections, plentiful human resources (the majority of them are migrant workers from Northern provinces) has attracted the majority of Korea's garment subcontract projects.

Since the mid-2000s, with the establishment of concentrated industrial parks, improved infrastructure and abundant human resources, the provinces around Hanoi have attracted a certain amount of Korea's textile projects. With improved connection of highways and sea ports, it is expected that in the coming time the provinces that have advantages of abundant local labor force, competitive infrastructure lease costs and relatively open policies on investment attraction such as Thanh Hoa, Nghe An, Quang Ngai provinces will attract more Korea's textile - apparel projects. However, with the current increase rate of minimum wage, garments sub-sector in Vietnam will become less competitive after 2025.

Electric and electronics manufacturing: Since the 90s, Korean electronics groups such as Daewoo, Samsung and LG have invested in building medium size factories producing consumer electronics products (TVs, refrigerators, washing machines...) in Hanoi (Daewoo), Ho Chi Minh City (Samsung), Hai Duong province (LG) for meeting domestic demands and partly for export. However, Asian economic crisis has led to the restructuring of these groups that has had significant impacts on their factories in Vietnam, so that they (Daewoo - Hanel) had to dissolved, or downsized their production scale (LG, Samsung). So far, Korea has been the largest electronics foreign investor in Vietnam with a total investment of about US$15 billion (excluding about US$6 billion by Samsung via its legal entity in Singapore), in which Samsung is the largest investor with US$9 billion of investment through its subsidiaries like Samsung Electronics, Samsung Display, Samsung SDI, Samsung Electro − Mechanics (Box 1); LG is the 2nd largest investor with over US$3 billion from the projects by LG Electronics and LG Display, and their more than 100 satellites enterprises manufacturing components in Vietnam. In 2015, the total export value by Korea's enterprises in the field of electronics mounts to about US$40 billion, accounting for about 25% of Vietnam's total export value, with increased local content and added value. Particularly, after 8 years of investment, SEV has increased its local content to about 40% (the high local content has been mainly attributed to Samsung's FDI satellite companies). To date, there are 190 Vietnam's satellite enterprises engaged in Samsung's production chain, consisting of 12 businesses who are 1st vendors and 178 businesses who are 2nd vendors. However, most of Vietnam's enterprises have still confined to the stage of producing packages, plastic covers and printing with a low production value and simple technology. Thus, their contribution in terms of absolute value is very low.

Box 1. Samsung's investment in Vietnam

Having been present in Vietnam for nearly 20 years since 1996, as of the end of 2014, Samsung totally invested 12.6 billion US$ in Vietnam. In particular, investment by Samsung Electronics alone accounts for US$8.9 billion, including mobile phone manufacturing project in Thai Nguyen province (US$5 billion), in Bac Ninh province (US$2.5 billion). In 2014 alone, Samsung made an additional investment of US$ 5.4 billion, accounting for 31% of total registered FDI in Vietnam as of the end November 2014.

Samsung's factories in Vietnam are located in two Complexes; namely: Samsung Electronics Vietnam (SEV) with an area of 110ha in Bac Ninh province, and Samsung Electronics Vietnam - Thai Nguyen with an area of 170 hectares in Thai Nguyen province

Both SEV and SEVT are manufacturing and assembling of mobile phones, tablets and telephone components, mainly for exporting to over 50 countries and territories worldwide. Totally, Samsung's factories in Vietnam provide 30% of total Samsung's phones sold globally. Samsung has achieved initial success in Vietnam that has been proved by continuously increased investment by Samsung Electronics in 2 factories in Bac Ninh and Thai Nguyen (SEV and SEVT), originally from 670 million US$ to 7.5 billion US$ at present, thus resulting in a series of other supporting projects. Increase in investment for not only expanding the size of plants and installing additional modern technological lines, but also creating direct jobs for over 80,000 people and indirect jobs for more than 100 thousand employees working in Samsung's company partners in Vietnam.

Not only investing billions of US$ in electronics and high technology, Samsung Group has also been investing in many key projects in such fields as transport, electricity, infrastructure, real estate...; Namely: Vung Ang Thermal power 3, shipyard in Khanh Hoa, Long Thanh Airport, Long Son oil refinery. As reported by Foreign Investment Agency, MPI, in 2014 Korea invested in 54/63 cities and provinces across the country, in which Samsung Group accounts for a significant part

With a series of investment projects valued billions of US$ in a relatively short time, Samsung contributed up to 30 billion US$ to Vietnam's export turnovers (2014). As planned, Samsung's total investment in Vietnam will amount to a "giant" figure of 20 billion US$ by 2017. And in the future, with a large export volume, Samsung's factories in Vietnam has succeeded in "turning" Vietnam to be the largest global "production base" of telephones.

Source: Report by Ministry of Planning and Investment of Vietnam 2016.

Real estate & construction: In the stage when Vietnam had just accessed to the WTO and subjected to over development with lots of expectations about economic growth potential, while local enterprises had still been very weak in financial capacity and lacked experience in project development, Korea businesses had heavily invested in the real estate during the period 2006 - 2009 with short-term speculative objectives. However, since many of these projects had been carried out by financially incompetent developers and Vietnam's economy had met with various difficulties, especially a crisis in real estate market during the period 2011-2014, only a certain parts of the projects had been deployed and come into operation by such big construction companies as GS E&C, Hyundai E&C, Kumho E&C, Byucksan E&C, Keangnam, Daewoo E&C... Since FDI projects in real estate have been invested by Korean construction companies that follow the model of SPC established in Vietnam by a holding company in Korea, which provides financial guarantee for the projects and acts as a construction contractor and then hires Korean enterprises to work as subcontractors, and therefore Vietnam's construction companies mainly work as the second order or lower subcontractors in simple stages. This differs from investment model by enterprises from Singapore, Malaysia, Hong Kong, and Taiwan (developers mainly do not perform the function of construction) that tend to hire Vietnam's contractors including main contractors. Out of the above projects, some of which have been recently transferred under the form of M&A such as Keangnam Landmark Hanoi, Kumho Asia Plaza, Blooming Park, Lotte Hanoi Center or have been partly sold like GS E&C, Hanoi West Lake... At present, local enterprises have been strongly developed with potential to acquire prime locations, the real estate market has been gradually taking shape, and land prices has been at a very high level that is difficult to create profit for secondary investors. Whereby in the coming time, Korean enterprises will mainly implement their licensed projects (Daewoo E&C, GS E&C, POSCO E&C, Booyoung, Daewoon E&C ...), acquire ongoing projects and

will have a small amount of newly licensed large-scale projects.

Heavy industry: Korea has not so far had many investment projects in this field, except for Vinashin - Hyundai Mipo Dockyard Corp's ship repair joint venture project (HVS) established since 1996, Doosan Heavy Industries' project for producing electric and desalination equipment in Quang Ngai province, and Posco steel production projects in Ba Ria - Vung Tau, Dong Nai, Hai Phong provinces. Due to small size of domestic automotive market, instable policies and weak supporting industries, Hyundai Motor Group, the 4th largest automaker that owns two world brands of Hyundai and Kia has engaged in doing business in Vietnam's market by the model of technology transfer and exclusive distribution of Kia vehicle and Hyundai trucks brands to the local partners of Truong Hai Auto; and passenger cars to Thanh Cong Auto in their factories in Quang Nam and Ninh Binh provinces. The joint ventures for assembling Daewoo and Kia automobiles established in the 90s were dissolved or renamed (GM acquired Daewoo motor).

Transportation infrastructure: Korea's construction groups and financial institutions always express their interests in investing in large-scale transportation infrastructure projects (highways, sea ports, airports, urban railways) in Vietnam under the forms of BOT in the past and PPP at present. However, due to the issues of legislation, policies, government guarantee, and actual traffic flow..., to date there have not yet had any large-scale transportation infrastructure development projects, in which Korea's enterprises are major investor Korea's funding for road transportation infrastructure projects has been mainly from Korean Government's preferential loans (EDCF) with Korea's construction companies as the main contractors.

Energy sector: Power plant projects, especially thermal power, have been given great attention by Korea's enterprises. Among them, some projects

have been put into operation, such as Mong Duong II thermal power plant with a capacity of 1,120 MW in Quang Ninh (Posco Energy accounts for 30% of shares). In addition, at least 5 thermal power plant projects as specified in Vietnam's General Power Map VII have been in the process of promotion and deployment at different levels with Taekwang Group, Doosan, Samsung C&T, Kepco, Posco... as leaders of the joint ventures.

These projects are expected to be licensed in the period 2016 - 2018 and will contribute another US$10 billion to Korea's total FDI in Vietnam, and nearly 8,000 megawatts of electricity when they are put into operation sometime after 2020. In addition, a number of Korean enterprises, including Hanwha and others, have been actively promoting investment in solar power plant projects in recent time.

Research (R&D), high technology: Since local high quality human resource and science and technology infrastructure have still been small in quantity and poor in quality, Korean enterprises' projects in R&D have still been negligible. Samsung Electronics' largest scale ongoing project is R&D Center in Hanoi with an investment value of 300 million US$. However, the implementation of the project is partly due to the conditions for requesting the highest incentives for high-tech projects for the SEV, rather than actual needs of Samsung.

Banking sector: Starting with establishment of branches in Vietnam in the early 90's, to date some Korean banks have had their representative offices, branches or 100% Korean invested banks in Vietnam (Shinhan Vina bank was established in 2008 and Woori Bank could be the next). Korea is currently a partner with the largest number foreign banks operating in Vietnam (10 banks that not only provide financial services to Korea's FDI enterprises but also gradually penetrate into Vietnam's retail market. (ii) In the field of insurance: Korea has 2 major projects implemented by Samsung Fire & Marine Insurance (non-life insurance), Hanwha Life (life insurance) that

have been successfully implemented, bringing about profits and ranked in the top insurance companies in Vietnam. In the coming time, some Korea's large insurance companies such as Shinhan Life, Kyobo Life, will establish their legal entities in Vietnam. (iii) Securities: Investment in stock exchange in Vietnam boomed in period 2007 - 2009 with the establishment of investment funds, subsidiaries or joint ventures in Vietnam. However, under the impact of economic crisis and a decline of Vietnam's stock market, such investment sources have quietly been shrinking.

Entertainment, Culture, Sports, Tourism & distribution: With the relaxation of conditions for investment - doing business in these field in accordance with the commitments made to the WTO and other agreements, continuous increase in purchasing power of the middle class, rising demand for entertainment and enjoyment by the youth as well as by expats living in Vietnam and stable increase in international tourists, Korea's three largest companies of Lotte, CJ and Shinsega in this field have had 100% invested projects in Vietnam for developing the system of distribution, dining, home shopping and entertainment in Vietnam.

D. FDI from Korea by Province

Korea's investment activities have been implemented in 52/64 cities and provinces of Vietnam (Figure 39, 40). However, Korea's FDI concentration by location is quite high. This pattern is similar with Japan but abid different from that of China and Taiwan territories. Out of 10 provinces attracting most Korea's FDI, there are five Northern provinces (Bac Ninh, Ha Noi, Thai Nguyen, Hai Phong, Vinh Phuc province), four Southern provinces (Dong Nai, Ho. Ho Chi Minh City, Ba Ria - Vung Tau, Binh Duong) and one central province (Da Nang). These provinces and cities are commonly characterized by the fact that they are economic driving forces in Vietnam

and respective the regions with the advantages in transport connections (relatively good seaport, airport and road network); abundant human resources (on-site trained human resources and migrant workers); largest consumer market in terms of size and purchasing power (nearly 30% of the population, almost 50% of GDP and national purchasing power); developed industrial infrastructure (water and electricity, industrial zones, enterprises ecosystem linking from manufacturing to services...).

The provinces attracting more Korean FDI have also induced Korea's large corporations. Bac Ninh ranks first with US$6.02 billion and Thai Nguyen ranks the 4th with US$4.94 billion as the effects from the projects by Samsung Group and supporting enterprises that have just emerged since 2012; Hanoi and Ho Chi Minh City ranks the 2nd and 5th with US$5.82 billion and US$4.86 billion respectively with LOTTE's large projects in manufacturing, services, finance - banking, real estate.

Figure 39. Spatial Distribution of FDI in Vietnam by Selected Investors

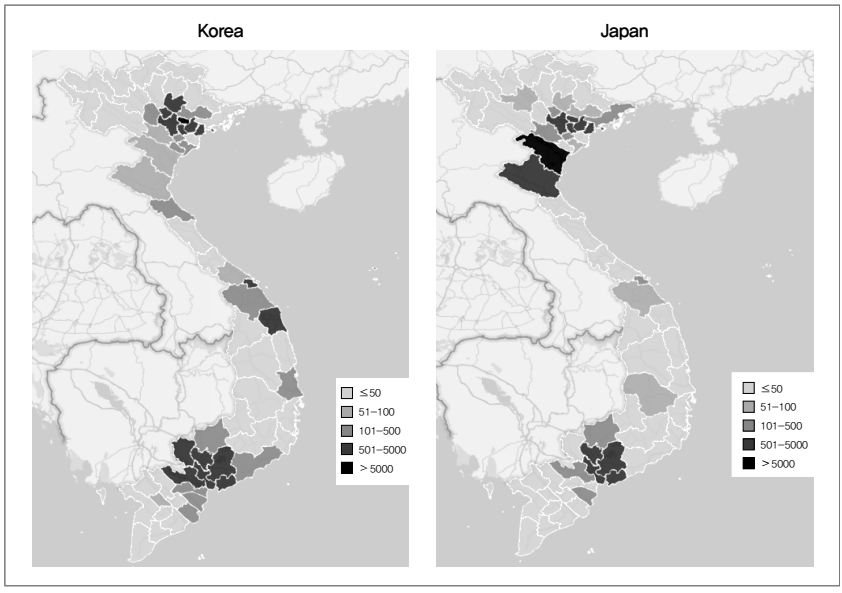
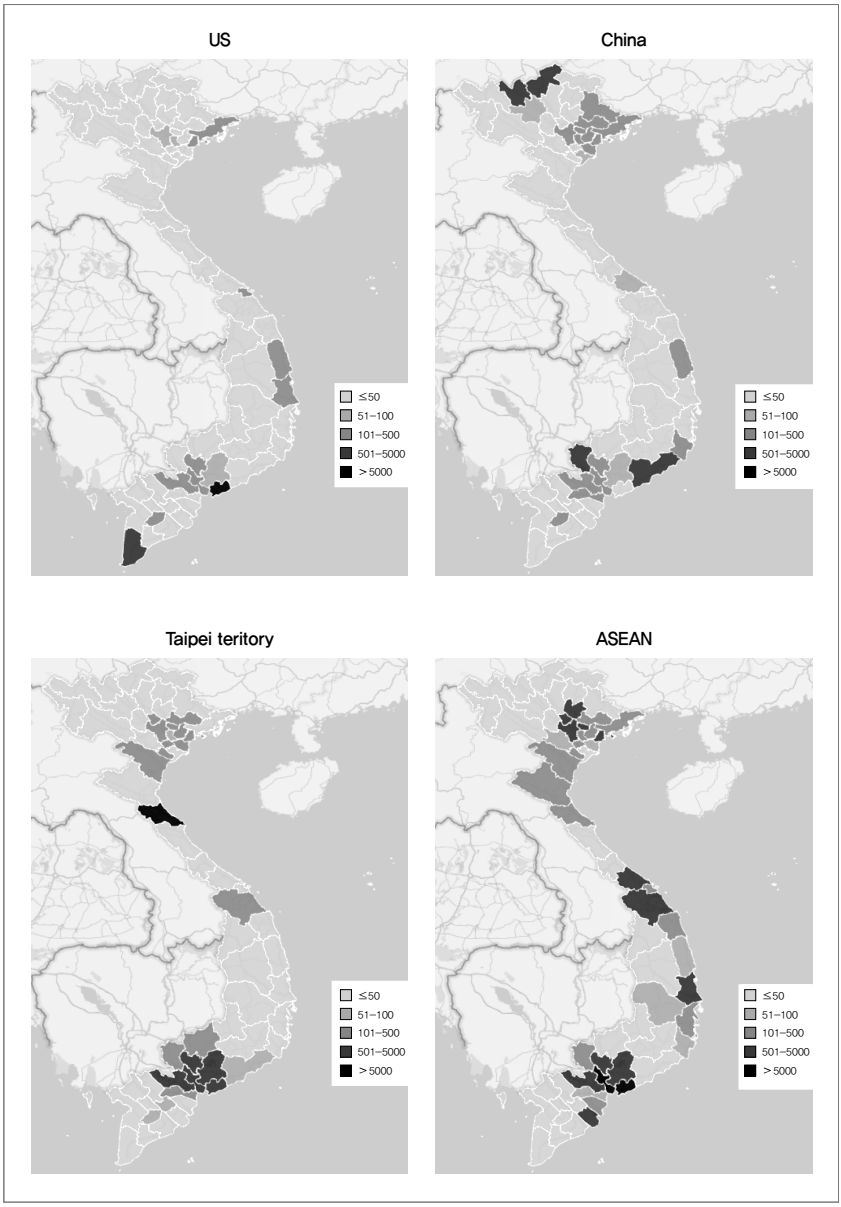
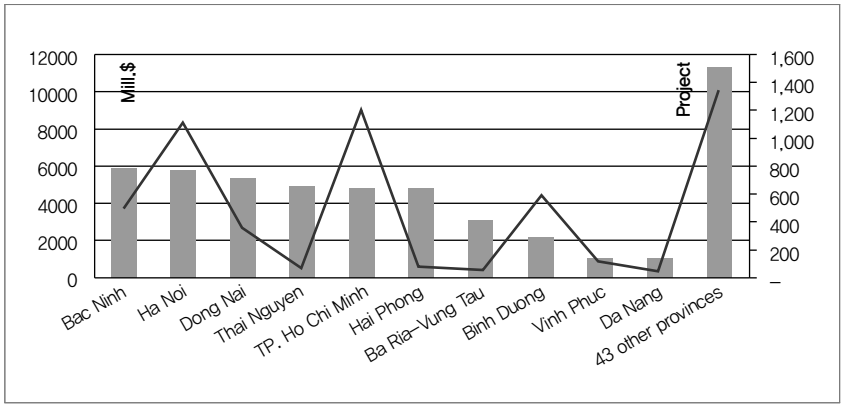


Figure 39. Continued



Source: Prepared from MPI data 2016, Legend is in US$ mill.

Figure 40. Korea's FDI by Province



Source: Foreign Investment Agency-MPI, 2016.

Hai Phong jumps the 6th with 4.81 billion US$ as a result of the effects from the projects of LG Electronics, LG Display and supporting firms in recent times with a total value of over US$3 billion. The neighboring provinces of Ho Chi Minh city that have tradition in attracting Korea's FDI such as Dong Nai, Ba Ria - Vung Tau, Binh Duong province rank the 3rd, 7th and 8th with a value of US$5.37 billion, US$3.16 billion and US$2.15 billion respectively and tend to lag behind because of their failures in attracting large projects in electronics. The remaining provinces (44 provinces) have attracted US$11.35 billion, accounting for about 23% of Korea's total FDI inflows to Vietnam. Since 2006, there has been a significant shift in Korea's FDI inflows to Vietnam, shifting from the South to the North, and spilling over to the central provinces. It is expected that this trend will continue in the future.

E. Production Linkages

There is a wide consensus on the fact that Korea has played a very im-

portant role in Vietnam's process of economic development, growth model transformation and export promotion. However, due to various reasons the spill-overs and linkages between FDI sector and Vietnam in general have still rather limited. Vietnamese enterprises have been able to involve only in some simple stages and products that are in the lowest position of the production chain. This is reflected in the relatively high share of imports by FDI enterprises in Vietnam. Despite its contribution of 70% to total export value and over US$17 billion to surplus value in 2015,[46] FDI sector has accounted for 59% of total import and this trend will continue in a stable manner or increase in the coming time. For Vietnam, out of a total import value of more than US$165.6 billion in 2015, the group of capital goods (including machines, equipment, tools, vehicles, spare parts, raw materials) accounts for US$ 151.2 billion, occupying 91.3%. This is a very high share as compared with other countries in the region. As shown on Table 23, among import partners, Korea and China are the two major partners, for example for telephones and components (25.1% and 41.4%); and transport means and machines spare parts for transport... In many industries, imports have been mainly carried out by FDI enterprises. For example, in 2014, they imported telephone and spare parts with a value of over US$24 billion, and other electronic components of US$1.2 billion, accounting for 71% to 86% of total imports of these two commodities. Of which over 30% are provided by Korea. Similarly, FDI enterprises account for over 60% of imports of iron and steel and metal commodities. These commodities imported from Korea also represent very high proportion (above 18%).

According to data from General Administration of Customs of Vietnam, in 2015, the growth rate of imports that are machineries and spare parts by Korean FDI enterprises went up by 34.8%. In fact, Korean FDI enterprises have developed a closely linked network for purchasing inputs from Korean enterprises. At the same time, they also imported the majority of the equip-

46) GSO (2016).

ment from Korea, leading to large trade deficit. This may also be one causes the rising trade deficit with Korea in recent years.

One reason for the large import by FDI enterprises is the local production itself failing to meet the demand. In production value chain, the position and role of local businesses still remain very low. Vietnam's enterprises have very rarely engaged in high added value segments, such as development of ideas, design, component manufacturing, marketing, sales, warranty - A / S ...), but mainly engaged in the stages of simple production for taking advantage of abundant human resources and low cost like product finishing and assembly; provision of some simple spare parts, mainly in packaging, plastics, local logistics... or provision of IP infrastructure with the advantages in accessing to land, preferential policies.

Table 23. Proportion of Imports by Partner

(Unit: %)

	Import from									Import by	
	ASEAN	EU	Japan	Others	Korea	Russia	Taiwan	China	US	FDI	Domestic
Eletronic and parts	43.79	1.61	6.22	0.00	6.59	0.14	3.47	37.63	0.56	70.90	29.10
Phone and parts	14.02	0.68	7.11	1.88	25.04	0.00	6.73	41.43	3.10	86.06	13.94
Pharmaceutical products	6.14	45.51	1.20	24.04	7.31	0.15	0.78	11.21	3.67	0.00	100.00
Chemical products	20.64	8.80	8.81	5.39	11.74	0.19	13.11	25.72	5.59	59.52	40.48
Paper, wood and its products	47.66	4.64	4.26	5.08	5.71	0.54	6.02	18.51	7.58	43.87	56.13
Car parts	32.49	6.81	22.25	1.48	19.47	0.13	0.00	16.93	0.44	63.79	36.21
Machinaries and spare parts	7.15	12.98	16.87	3.26	14.03	0.33	6.22	34.80	4.36	59.50	40.50
Trasport vehicals	17.13	7.79	9.51	4.62	20.87	0.48	0.00	35.25	4.35	0.00	100.00
Textile, garment materials	5.09	2.58	5.00	7.90	17.19	0.00	13.70	43.92	4.62	65.89	34.11
Fertilizer, pesticide	9.00	5.29	3.60	13.36	5.07	7.19	1.18	54.42	0.89	0.00	100.00
Steel, and other metals	7.15	2.47	16.46	9.88	18.25	0.38	7.59	36.18	1.64	60.64	39.36
Other materials	20.25	2.72	10.06	15.58	18.76	0.50	11.85	16.90	3.37	51.46	48.54
Agro, fishery products	20.43	8.22	4.38	38.89	5.24	1.52	3.48	6.00	11.85	20.73	79.27
Animal foods	6.14	5.64	0.07	64.39	0.64	0.00	1.41	5.28	16.42	37.67	62.33
Fuel	42.48	0.00	1.20	10.61	5.94	3.83	13.07	22.87		0.00	100.00
Other consumption goods	54.89	7.25	2.66	13.34	3.31	0.00	1.03	7.77	9.75	4.34	95.66
Total	15.84	6.23	8.91	10.60	15.01	0.57	7.64	30.86	4.34	58.07	41.93

Source: Data from the Vietnam Customs 2016.

With regard to vertical linkages, Vietnam's manufacturing has generally still confined to labor-intensive sector, resource-based growth and capital investment rather than taking a role in high-tech sectors. Specifically, domestic enterprises mainly engage in providing raw products in agriculture - forestry

- fisheries (primary); manufacturing light industrial products, simple mechanics (secondary); internationally uncompetitive services for domestic needs (tertiary).

Although Korea has mainly invested in manufacturing that accounts for 69% of total FDI in Vietnam, domestic enterprises' engagement in Korean FDI production chain still remains limited. As reported by MPI (2016), this is mainly attributed to the followings:

- The majority of Korean enterprises investing in Vietnam own its own supply chains, mainly in the factories supplying spare parts and materials located in Korea, China and ASEAN countries, which are more advanced development than Vietnam, and the system of supporting industries has been established. These businesses can provide raw materials and spare parts in bulk with good quality and delivery on time and their products are constantly updated and upgraded to keep up with the trend of the world.
- Most Korean firms have had complicated relationship or the relation of relatives and friends, or have had a long-term business relationship with each other, and therefore it is difficult for an outside enterprise to step in or replace if it does not possess superior competitiveness. At the same time, in order to become a suppliers for a Korean enterprise, the contractors must fully meet the strictly required criteria (sales, technology, environment, experience, labor force, commitments...) that take time for development, and having been included into the list of suppliers, they have to participated in bidding for each specific lot of products so that they will be able to sign supply contracts.
- Average labor productivity in Vietnam is lower than other countries in the region, just a bit higher than Cambodia, Myanmar and Laos; it accounts for a half of Indonesia, and the Philippines; 1/3 to 1/6 of Thailand, China and Malaysia.[47] While its engineers, basic and practical

scientific researchers can work in international environment, Vietnam's corporate governance from middle level upward have still remained weak,

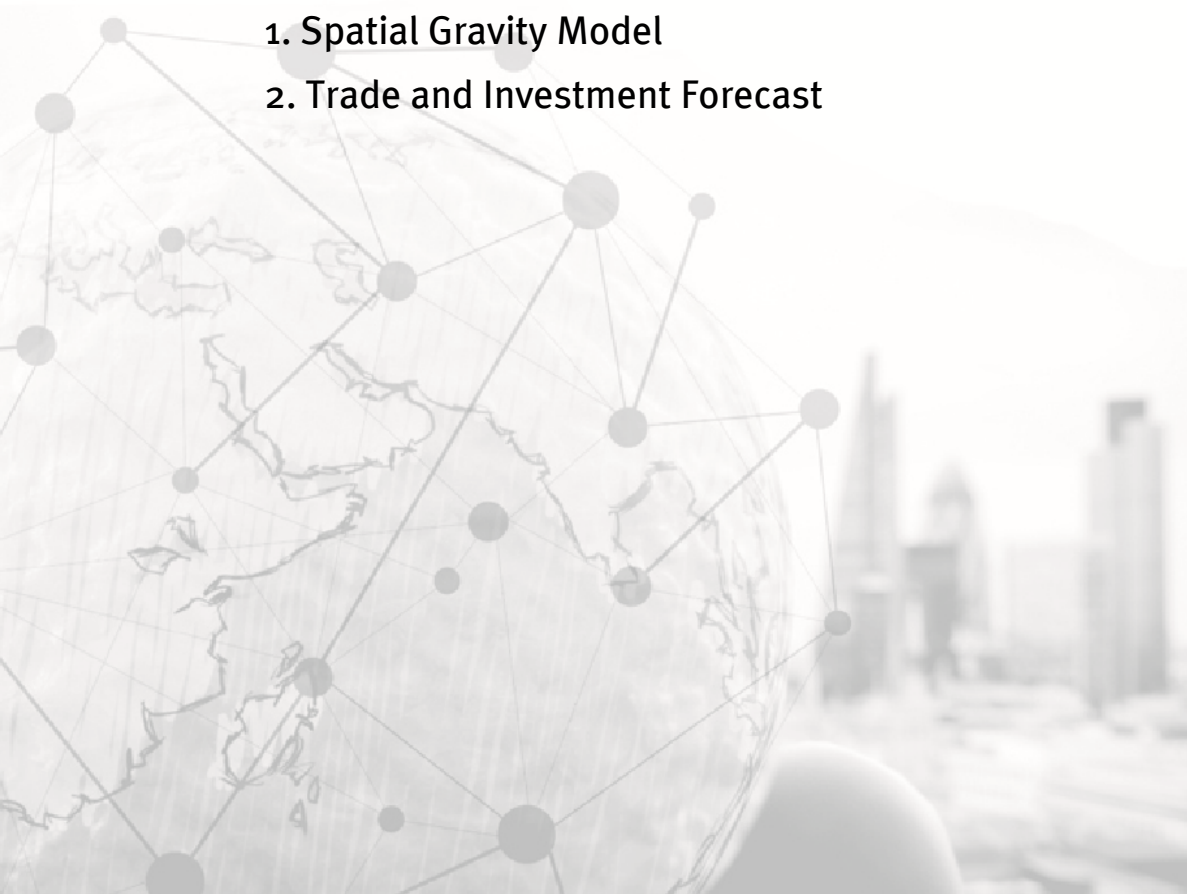
- On the other hand, local enterprises have been also quite cautious in accessing to FDI enterprises, just considering them as competitors rather than proactively seeking cooperation opportunities from them. For FDI enterprises, they have no or have very few commitments to create production linkages with local enterprises.

This chapter provides insights about the trade dependence and investment of Korea in Vietnam. A clear observation is the increasing dependence of trade of Vietnam on Korea, particularly the import. It raises several meanings, however, most important one is both Vietnam and Korea have been well taking advantages of the signed FTAs both in term of trade diversion and the side-effect of increasing FDI inflow. The FDI from Korea inflow in Vietnam has been also on the rise, largely contributed by the entry of very large firms in electronics and phone. Korea has become the biggest FDI investor in Vietnam that in turn implying upward tendency of more investment dependence. The further question is that with critical improvement in institution and deeper integration and wider FTA participation of Vietnam in coming years as well as the changes in regional geopolitics, particularly the emergence of China and increasing interdependence among ASEAN members, what is the tendency of such trade and investment dependence of Vietnam on Korea. This question will be discussed in the next chapter.

47) ILO, World Bank.

Ⅴ. Trade and Investment from Gravity Model

1. Spatial Gravity Model
2. Trade and Investment Forecast



As analyzed in Chapter Four, a very large component of the trade dependence of Vietnam on Korea for a given commodity is its share in total export of Vietnam well as its share in trade of that commodity with Korea. The component reflects in the influence of Korea on international market is not substantial. So, the trade dependence, in fact is largely determined by the trade volume. And, forecast of the trade dependence is, therefore, the forecast of trade flow which facilitated by the gravity model. There are two questions to be answered in this chapter. The first is how the trade and investment and among other regional countries affect the trade relation between Vietnam and Korea. Secondly, what is the role of economic and geopolitics in determining the trade and investment? In the first section we are going to discuss about the spatial gravity model and its estimation for trade. Admiring advantages of that will be emphasized. Due to lack of pair data on FDI inflow, the investment model is based on spatial econometric model.

1. Spatial Gravity Model

A. The Model Specification

Gravity model is rather popular in empirical international economics. It was developed by Tenbergen (1962) and is commonly applicable to empirical research to quantify and forecast the international trade flows. The accuracy of this model has been proved in a number of studies.[48] The model assumes that trade flow between two countries depend on the economic scale (e.g. GDP), wealth (e.g. GDP per capita) and geographic distance of the two. In other words, the gravity model of trade is based on driving forces or factors driving the country's export capacity (push factors e.g. production scale)

48) A review of gravity model can be referred from Andeson (2011).

and gravity forces or market-related attractiveness of the partners (pull factors e.g. market size, consumer preferences). The two forces are the inversely related to geographic distance between the two countries. The traditional gravity model for a crossectional data takes the general form of:

$$Y_{ij} = X_i X_j / d_{ij}^2,$$

and the estimable model can take the form of:

$$Y_{ij} = \beta_0 + \beta_1 X_i + \beta_2 X_j + \beta_3 X_s + \varepsilon_i$$

Of which the error term ε_i is assumed *iid;* Y_{ij} is trade or other flows of resources such as capital and labors; X_i, X_j are pull and push factor of trade. In additional Xs is a set of other factors determining trade; also include geographic distance *d* between countries;

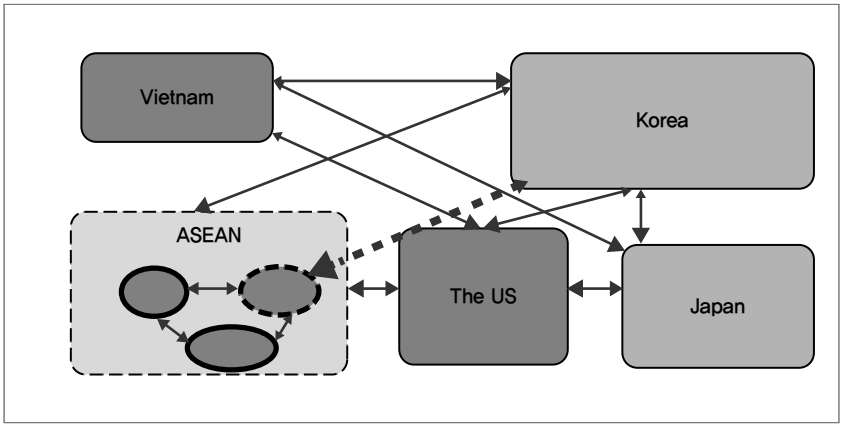
A notable limitation of most trade analysis using conventional gravity model is the assumption about the independence of trade flows between any pair countries (Figure 41). For example, the trade flow between country A and country B will be assumedly independent distribution with that of between country C and country D or that of between A and C or so on. For instance, export between Vietnam and China is independently distributed with that between China and Korea, or between Vietnam and Japan, or between Japan and Korea.

Such assumption is believed not realistic because of two reasons. First, exports between Vietnam and Korea and other trading partners are substitution (instead of exporting to Korea, Vietnam may export to Japan or the US; or in the case of Korea, instead of importing from Vietnam, this country can import from China or any others). Second, trade flow between other pairs (for instance the US and Japan) are not completely independent with that of between Vietnam and Korea, unless the formers completely do not

have any linkages with Vietnam and/or Korea. Any factor which influences the pull or push factors of the pair of country will influence the trade among other pairs due to trade diversion effect.

The estimation of above equation which ignores the trade among others partners may lead to biased coefficients and inaccuracy of its t-value (inefficiency). More importantly, using such a conventional gravity model, technically there is no room to integrate and to examine the influences of geopolitical factors in the region to the trade relationship of any pair countries in such region.

Figure 41. Hypothetical Interactions among Countries



To overcome the above mentioned shortcoming, the spatial gravity model is employed in this chapter. The literature for this type of model can be referred from (Metulini, 2012). The spatial gravity model has three characteristics being attractive enough. First, it is able to deal with the influence of the third party in the bilateral trade relation between Vietnam and Korea such as the role of China, US's trade. Second, by using weighting matrix, the model allows to include non-trade factors (such as geopolitics relation, geographic distance) and other trade-related factors (such as bilateral and multilateral

FTAs among countries) in the analytical framework. Third, we will not only able to obtain estimated coefficients which presents the change of trade among two given parties when there is a change in the pull and push factors of those parties themselves (direct effect), but also useful to analyze effect of that of the third parties. Such indirect effect is appeal to our research question about interdependence among countries in the region, particular how the change in China (GDP growth, exchange rate) will affect the trade flow between Vietnam and Korea or between Vietnam with other countries

The spatial gravity model (in the matrix form) takes the form of:

$$Y = \rho WY + WX\beta + X\beta + \mu + \varepsilon$$

Of which μ is constant term, $\varepsilon = \rho W\varepsilon + u$; ρ is scalar parameter and the term u has one way error component structure $u = \alpha + \upsilon$ of which υ is *iid* and α is individual effect which is assumed either fixed or random.

Y is the vector of $Y_{ij}t$, including such variables of interest as exports, imports from country *i* to/from country *j* at time *t*, or FDI of country *i* (depending on whether the model is trade or investment). In the export, import model, Y includes 15x15x7=1575 observation (15 countries in the period of 2006-2012).[49] Similarly, in the investment model, Y includes 15x7=105 observation.[50] X is the vector of independent variables, including various variables. In the gravity model, the two groups of variables are usually pull and push forces, depending on whether the model is export, import or investment (Table 24).

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49) Data for 2014 is available for some but not all countries selected. Thus, data of the period of 2005-2012 is used we use time lag to eliminate the endogeneity, so in fact the data is from 2006-2012.

50) The pair data for investment is not available, preventing us from using the gravity approach.

Table 24. Variables for Estimation

No.	Variables	Description, Unit	Mean	Std.
1	EXPORT	Exports of country i to country j, US$ million	719.9	1294.15
2	IMPORT	Imports of country i from country j, US$ million	757.48	1366.16
3	FDI	(net) FDI inflow of country i	37.81	56.08
4	GDPo	GDP of export country (US$, representing scale of production, export capacity)	3297.71	5360.37
5	GDPd	GDP of import country(US$, representing market size)	3297.71	5360.37
6	GDPCo	Average income of export country, proxied for domestic purchasing power of export country (GDP per capita)	18.25	19.22
7	GDPCd	Average income of export and import country (GDP per capital, proxied for purchasing power in the export market)	18.25	19.22
8	Exchange	Change of exchange rate (%) of domestic currencies of two countries. In case the two domestic currencies are not major ones of international payments, the exchange rates against the US$ will be used.	-0.000	4.662
9	Inflation	Inflation rate, presenting the soundness of the economy and macroeconomic stability	4.78	4.4
10	POP	Population, presenting quantity of human resource	270.74	404.04
11	SCHOOL	Average school year, presenting quality of human resource	9.46	3.31
12	INFRAS	Infrastructure index, sub-index of the global competitiveness index; taking the value from 1 to 7, of which 7 is the best.	4.51	1.2
13	INSTITUTE	Institutional index, sub-index of the global competitiveness index; taking the value from 1 to 7, of which 7 is the best	4.35	0.82
14	TECH	Technological readiness index, sub-index of the global competitiveness index; taking the value from 1 to 7, of which 7 is the best	4.13	1.05
15	REQUAL	Quality of regulations, sub-index of the global competitiveness index; taking the value from 1 to 7, of which 7 is the best	0.44	0.85

Table 24. Continued

No.	Variables	Description, Unit	Mean	Std.
16	STABPOL	Political stability index, sub-index of the global competitiveness index; taking the value from 1 to 7, of which 7 is the best	2.38	0.89
17	WAGE	Average growth rate of wage	1.09	0.15

B. Dependence Matrix (W)

Weighting matrix in spatial approach is conceptualized as dependence matrix, proxy for the relation between countries. It also is used to calculate multiplier effects. The inclusion of the dependence matrix W in the spatial gravity model allows incorporating non-economic factors such as geopolitical relation, geographical distance into a pure trade model like the gravity model. In our analytical framework, the dependence matrix W includes the following matrices (see the Appendix 2 for details):

- Agreement matrix (A15x15), including FTAs, and other trade and investment agreements. The element a_{ij} of this matrix capture the number of signed agreements between country *i* and country *j* (including those that are not yet being in effect in order to cover the expectation about such agreements). As an example in the cell as a cross of column Korea and Vietnam, the value is 2, implying that there are two FTAs signed between the two country, including VKFTA and AKFTA. Similarly, for China and Vietnam, the value is 1, denoting for ACFTA). Due to the long serial data from 2006 to 2012, the matrix of agreements may change across time dimension.
- Distance matrix (D15x15): in which d_{ij} reflects the geographical distance between country *i* and country *j*. Based on definition of distance of CEPTII,[51] D is a 15x15 matrix, of which distance between countries

is the distance between the most popular cities of a country with that of the other.[52] In case of a group of countries such as the EU, the default is the distance to the biggest port of the group (Amsterdam Port, Netherlands). Theoretically, the distance matrix is the main matrix of the gravity model with the assumption that the farther the distance between the two countries, the less trade and investment inflow between them. Therefore, element D_{ij} is set as $1/d_{ij}$, of which d_{ij} is the geographical distance, representing such an inverse relation.

- Geopolitics matrix (G15x15) is developed based on the examination of geopolitics among countries. Scoring approach is used to develop the geopolitics matrix. Regarding this method, Pranay Kotasthane (2014)[53] reviewed indicators to measure geopolitics powers, mainly hard power, for instance the Comprehensive Index of National Capability (CINC). This include such factors as population, natural resources, military expenditure, sources of fuels; the National Power Index (NPI), covering such items as GDP, military expenditure, population and technology. Those indicators, however, only reflect the power of each country itself but not the relation between two or more than two countries, thus, unable to reflect the depending power in international relation and geographic location of that country. Taking into consideration of the definition of geopolitics that implies the relation between geographic and political elements, international relation and a country's influence over political and military issues, the geopolitics matrix consist of various sub-matrixes (Table 25).

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51) Research and Expertise on the World Economy, http://www.cepii.fr/CEPII/en/welcome. asp.

52) CEPII includes 2 other indicators. One is the distance between two capital cities, and the other is the weighted distance based on trade volume between the two countries. In this research, we use the distance between the biggest city due to the focus on economic aspects.

53) http://logos.nationalinterest.in/2014/03/a-survey-of-indices-measuring-geopolitical-power/.

Table 25. Component Matrices of Geopolitics Matrix G

Types of matrix	Value of elements in the matrix
1. **Conflict (W_1)**: Conflicts of ethnic and religious matters, military, territorial sovereignty, foreign issues in the last 10 years.	From 1-10, of which the value of 1 implies there are no conflicts, the value of 10 implies there are severe conflicts, wars or potential of wars between the two countries
2. **Cooperation, military alliance (W_2)**: Signed and pending agreements of weapon aid, mutual defence, military allies; a country has military influence on another.	From 1-10, of which 1 implies no military relation; 10 implies allied relation or in the common military zone.
3. **Foreign relation (W_3)**: Head-of- government visits within five years; statements, declarations of diplomatic relation between two countries.	From 1-10, of which 1 implies no diplomatic relation, 10 implies diplomatic relation as alliance.
4. **Year of diplomatic relation establishment (W_4)**: Starting from the date of signing official relation	Calculated using the formula s=10*aij/ max(aij), relative length of relation.
5. **Others (W_5)**: relations, depending on geographic location	Depending on remaining factors, expertise on such issues as historical relation, religion, migrant, among countries.

Five component matrices mentioned above are weighted sum up to a single matrix (G) reflecting the geopolitical relation among countries. By construction, an element gij of matrix G takes value from 1 to 10, which is inversely proportional to the element of the conflict matrix (W1) and proportionally to remaining sub-matrix. In other words, in the G matrix, the bigger value of g_{ij}, the better geopolitical relation among countries is and is assumed facilitate better environment for trade flow.

- Language matrix: this matrix is used for investment model. The hypothesis is that if two countries have the same language, or similar to some extent they will enrich their investment relation more. If countries speak the same language (for instance the US and Australia), element l_{ij}

in the language matrix L will takes the value of 10. To the contrary, if two countries speak the same second language, l_{ij}= 7 (for instance the US and the Philippines, or Malaysia, or Singapore). If there is significant proportion to speak the same language (based on the ratio of Chinese population, or countries to speak a similar language (for instance Thailand and Cambodia), l_{ij}=5. In other cases, l_{ij} will take the value of zero.

C. Estimate the Model

There are some points to note here. *First,* the term ρWY in the model implies an assumption that the bilateral trade of pair countries depends on not only variables that present pull and push factors between the two countries but also interactive trade relation among remaining countries. Given assumption about exogenous weighting matrix, the interactive trade relation is reflected via geopolitics or geographic relation or simply economic, investment relation (such as FTAs or other similar agreements). *Second,* in terms of estimation technique, this term is an endogenous component because the variable Y in the left hand side of the model is reflected in ρWY in the right hand side. Hence, the estimation using traditional approach such as ordinary least square (OLS) will result in the biased coefficients and inaccurate statistical test as well. *Third*, the $WX\beta$ indicates the changes of pull or push factors in a given country (country A) may affect not only the trade flows between A and other countries (A and B or A and C), but also the other two countries (for instance B and C or B and D) that may not necessarily have direct trade relation with the country A because there remains resource interaction and trade movements among countries in reality. This term, therefore, reflect more realistic trading relation among countries.

For example, the increase in the capacity of agricultural production of Thailand may affect overall agricultural market in the whole region, leading

to the impacts on agro-trade relation between Vietnam and Korea while Vietnam does not necessarily have direct agro-business activity with Thailand. This implies that the coefficient estimated directly from the model does not fully capture the relation between pull and push factor of trade and trade volume of that country. Instead, it is necessary to take further step after estimation and obtain the multiplier effects between countries as will be discussed in the result section.

Fourth: When specifying the model, we simplified multilaterally geopolitical relations that may influence bilateral relations. In other words, in reality there might be an existence of the relation of $g_{ij}=f(g_{js}, Z)$; $j \neq s$ and Z is other factor influence g_{ij}. For instance, the geopolitical relation between Vietnam and Cambodia may be affected by the relation between Cambodia and China. In case, there are multilateral agreements of diplomatic relation, military alliance, multilateral political relations which also influence the bilateral relation. For example, the relation between two members within ASEAN will be influenced by the overall commitment of ASEAN. Despite of the likely existence of such relation, in reality it is unable to fully fix it because of the complexity when constructing matrix G. Within the analytical framework of this research, we resort to assume that there is no such correlation among elements of the matrix G. Also for simplification, the matrix G only captures the geopolitical relation within recent years.

Also relating to this matrix, a further point to note is the possible mutual relationship between geopolitical factors and trade/investment. Unlike the matrix of geographic distance (matrix D), which is exogenous[54] there is an-

54) In quantitative analysis, the relation between two variables of X and Y is estimated based on the assumption that X is exogenous, which implies on-way relation from X to Y and no reverse relation from Y to X. For instance, from geographic distance (X) to trade (Y), or there is an unknown factor to affect the changes of both X and Y.
$Y_{ij}t=0$ in both export and import equation when i=j

other factor makes the geopolitical matrix G endogenous. In reality, trade volume may affect political behaviour or response of each country to another. A country may find solutions to delay, or reach a concession, or heat the conflicts with other country depending on actual trade and investment between them. The evidence can be refer to the case of China and US in 2001 when there was an air clash between surveillance plane of US and fighters from China in 2001. The case was soon cool down due to a huge investment and trade relation between the two countries. Besides, unobservable factors may simultaneously affect both geopolitics and trade relation (e.g. ODA or historical factors). As the result, in the long run, the matrix G is endogenous.

Given assumption on the exogeneity W, the endogeneity of ρWY was fixed by the estimation procedure introduced by Kelejian and Pruch (2007) and Beer and Riedl (2010) which based on spatial ML for panel data model developed by Eldhost (2003). This estimation approach takes into account the autoregressive AR(1) process of error term (the time dimension) and heteroscedasticity of cross-section units. That also the method we used in this research.

For the case W is no longer exogenous, it is a problematic, there has been yet algorithm computation for this issue in recent software though some attempts to theoretically discuss about it. Keleijan and Piras (2012) in the first attempt to address this issue for a spatial lagged model (SAM) suggested that the endogeneity of weighting matrix can be fixed by using instrument variables approach. However, they also advised that their suggestion had yet have tested with Monte Carlo Simulation. Xi Qu and Lee (2012) attempted to investigate this issue for spatial autoregressive model (SAR) using Two-stage Spatial Instrument Variable approach (2SIV), Maximum Likelihood (ML) and General Method of Moment (GMM). However, their work is based on a rather strong assumption which is the well-known source of endogeneity. Both research is not applicable for our research not only because the differ-

ence in the model specification (we used Spatial Durbin Model-SDM which is the combination of both SAR and SAM) but also no clear algorithm guidance from those theoretical papers available or integrated in recent software. Furthermore, they also do not have properly tests for a finite sample. It can be said that there still substantial amount of theoretical work to do which spatial approach, and it is out of scope of this research, the assumptions behind of weighting matrix is one of shortcomings that needs further work in the future.

We tried to eliminate this assumption in the way we construct the geopolitics matrix. As can be seen in the previous section on geopolitics matrix construction, not all the component of this matrix is endogenous, for instance, the matrix of history of diplomatic relation, or the matrix of military alliance. So, the value of the matrix element was taken lagged for one year to avoid the simultaneity between W and Y. For other variable in the model we also used time lag (1).

D. Trade Model Results

Based on the above description and assumptions, the model is estimated for overall export between countries and of some specific products. The results are presented in Table 26. The Wald test for spatial lag is 13.661 (p=0.001) and for spatial error is 7.310 (p=0.021) suggests the appropriateness of the SDM model. In overall, the ρD coefficient of the distance matrix D is statistically significant and has negative sign, indicating the consistency of the model to gravity theory. More importantly, ρG of the matrix WG is statistically significant and consistent to assumption (taking the positive value), which implies that the spatial gravity model is sufficient.

Similarly, other variables related to gravity forces (GDP, GDPC) took proper signs, going in line with trade theory. Inflation and exchange rate variables are included in the model to examine the impacts of macroeconomic

changes in the short run on trade. The exchange rate variable is statistically insignificant. On the contrary, variable *Inflation* is highly statistically significant, showing that influential factors of trade in the region does not fully depends on exchange rate because it is adjusted rather quickly; consequently, in general, advantages of devaluation to promote export is insignificant in export and import strategy. The sign of *Inflation* variable exhibits positive correlation between inflation and export. This relation was discussed thoroughly in the research by Borodin (2014) in both theoretical and experimental aspects. Accordingly, inflation may foster circulating cycle of production factors and trade.

Table 26. Coefficient Estimate of the Gravity Model

	Total exports		Total imports	
	Traditional	Spatial	Traditional	Spatial
ρ_{FTA}		0.00		0.01
		(0.951)		(0.855)
ρ_{G}		0.11*		0.30*
		(0.082)		(0.091)
ρ_{D}		-0.01**		-0.07*
		(0.016)		(0.075)
GDPo	0.00	0.00	0.50***	0.63***
	(0.934)	(0.996)	(0.009)	(0.006)
GDPCo	0.01**	0.01*	0.57**	0.52*
	(0.044)	(0.089)	(0.029)	(0.066)
GDPd	0.00	-0.01	0.08	0.16
	(0.872)	(0.168)	(0.682)	(0.426)
GDPCd	0.00	0.00	0.11	0.01
	(0.576)	(0.754)	(0.673)	(0.960)
Exchange rate	-0.00	-0.00	-0.10	-0.08
	(0.936)	(0.501)	(0.206)	(0.332)

Table 26. Continued

	Total exports		Total imports	
	Traditional	Spatial	Traditional	Spatial
Inflation	0.05***	0.06***	0.08	0.07
	(0.000)	(0.000)	(0.584)	(0.652)
W_gX		Yes		Yes
W_dX		Yes		Yes
$W_{FTA}X$		Yes		Yes
Constant	-226.28***	-231.59***	392.87***	446.41***
	(0.000)	(0.000)	(0.000)	(0.000)
Variance				
lgt_theta		-2.079		-2.500
sigma2_e		.0011		.00214
Sigma_a		4.00e-8		4.37e-11

Note: W_gX, W_dX, W_{fta}X stand for the group of variables βWX, of which X= (GDPo, GDPCo, GDPd, GDPCd, exchange rate, inflation) is multiplied with matrix W= (W_g, W_D, W_{fta})
All variable was estimated in ln form. Moran's I, Geary's c was recorded at 0.41 and 0.363 respectively and significant at 5% suggesting spatial association of trade. Wald spatial lag=13.661 (p=0.001); Wald spatial error= 7.310 (p=0.021).

The spatial dependent coefficient ρ implies that exports of a country depend on exports of other countries to a certain extent. Table 27 present the coefficient ρ estimated for several commodity groups and using different dependent matrices. To a certain extent, the absolute value and statistical significance of this coefficient indicates the dependent sensitivity to changes of geopolitics, FTA, or geographic distance. A notable point of the results is that the dependent coefficient is statistically significant to some groups of commodity, focusing on labour-intensive commodities such as garment, footwear, food processing products.

Table 27. ρs by Commodity Group

	Export			Import		
	ρ_{FTA}	ρ_G	ρ_D	ρ_{FTA}	ρ_G	ρ_D
Live animals	0.03	0.34	0.19	-0.02	0.57*	0.09
Veg. and fruits	0.11*	0.37***	-0.07	-0.13	0.90*	-0.11
Food	0.01**	0.24	-0.23***	0.00	1.07***	-0.07
Mining	0.09	0.59	0.40	-0.07	0.11	0.10 **
Leather	0.16**	0.01	0.04**	-0.00	0.01	0.02**
Wood	0.09	0.52*	0.09**	-0.08**	0.55**	0.04**
Garment	0.06**	0.27	-0.24**	-0.00	0.11	0.01**
Footwear	0.08**	0.25	0.19	0.00*	0.01*	0.01*
Metals	0.02	0.22	-0.13	-0.02	0.21	0.15
Machin&elec.	-0.10**	0.65**	0.15	-0.02	0.37	0.03
Transport	0.01	0.45	0.03	-0.01	0.56*	-0.22**
Fuels	0.15	0.32	-0.17	0.09	1.63***	0.15
Chemicals	0.01	0.23	-0.09**	-0.03	0.40	-0.08
Plas.& rubber	0.03	1.44***	0.13	-0.05	0.24	0.07
Stone, glass	0.00	0.31	0.17	0.05	0.61	-0.18*
Others	0.22***	0.68**	0.09	-0.02	0.31	-0.11*

Note: Estimate coefficient of other variables is not presented in this table.

The estimation results in Table 27 indicate the evidence that FTAs intensify export dependence among countries, particularly for necessary products such as agricultural products, garment and textile, footwear. ρFTA is statistically significant for at least seven out of 16 commodity groups, suggesting that promoting FTAs will amplify export dependence among countries. In the other words, the increase/decrease of export volume of any country in association with FTA (out of 15 groups of countries covered in this research) will affect export volume of remaining countries.

To the contrary, geopolitical changes lead to insignificant impacts on export dependence of quite many commodities (the t-test for ρG is not insig-

nificant). Groups of commodity to be affected by geopolitical factor include vegetables and fruits, wood, electronic equipment, plastics, rubber; of which the last two groups are exposed to the most severe impacts. In addition, at least there are two groups of commodity to be subjected to impacts of both FTA and geopolitical factors, including vegetables and fruits and electronics equipment.

E. The Results for FDI Model

FDI model is substantially modified from the trade model in terms of both explanatory variables and data arrangement. The dependent variable Y in this model is net FDI flows into each country, while the set of explanatory variables are adjusted substantially from the trade model. The data was also re-arranged and no longer the pair data any more. Besides GDP and population (POP) variables which are to proxy for economic scale and labour force, other variables reflect the competitiveness and business environment of each country, including the average years of schooling, infrastructure, quality of legal regulations, institutional quality, political stability, or changes of wage. Except the last one, most of those variables are extracted from Global Competitiveness Report. The specification of those variables is based on the reviewing recent studies on determinants of FDI inflow.

The model is estimated using two alternative approaches. The first is to use the traditional econometrics, of which weighting matrix is removed from the model and estimated basing on random effect approach. This is the profound method to estimate influential factors of FDI attraction currently. The second approach is to use the spatial model with dependent weighting matrices. For this, besides the inclusion of Wfta and Wg, matrices, due to the different determinants of trade and investment, the geographic distance matrix is not used; instead, a common language matrix (matrix L) is employed to capture the similarity of language across countries. Estimated re-

sults using the above mentioned approach is presented in column (1), (2) of Table 28, respectively.

The results show that most ρ coefficients are highly statistically significant. This implies that FDI attraction of countries is closely related, thus traditional estimate will be biased if this dependent relation is ignored in the model. Size of the economy plays an important role in attracting FDI; For instance, if the population increased by 1%, FDI attraction may be higher by 1.49%; a similar sign is for the case of the variable *GDP*.

Table 28. Gravity Model of FDI Attraction

	Random effect	Spatial estimation
	(1)	(2)
GDP	0.81**	1.08***
	(0.040)	(0.001)
Population	-0.54	1.05***
	(0.211)	(0.006)
Years of schooling	-0.96	0.19
	(0.451)	(0.869)
Infrastructure	0.68	1.27*
	(0.529)	(0.09)
Institution	0.02	4.95**
	(0.984)	(0.024)
Quality of legal regulations	0.25	2.77***
	(0.645)	(0.004)
Political stability	-0.18	-0.60
	(0.741)	(0.239)
Changes of wage	-0.31	-2.39*
	(0.622)	(0.058)
ρ_{fta}		0.16*
		(0.069)
ρ_{L}		0.79*
		(0.08)

Table 28. Continued

	Random effect (1)	Spatial estimation (2)
ρ_g		5.21***
		(0.000)
$W_{fta}X$	No	Yes
$W_{lan}X$	No	Yes
WgX	No	Yes
Constant	-6.46	-471.75***
	(0.289)	(0.000)
Number of observations	105	105

Note: WgX, WdX, WftaX stand for the group of variables βWX, of which X= (GDPo, GDPCo, GDPd, GDPCd, exchange rate, inflation) is multiplied with matrix W= (Wg, WD, Wfta); Moran's I= 0.52 significant at 5%. Wald-test1 =17.11 (p=0.000); Wald-test2 = 9.3 (p=0.0013).

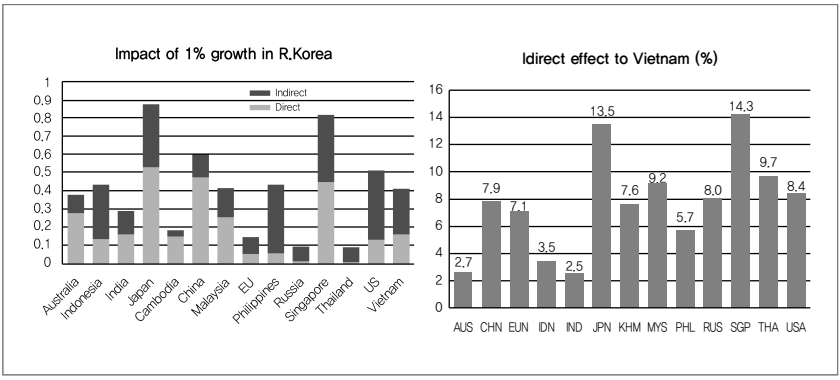
F. Spatial Multiplier Effects

As mention in the introduction of this chapter, there is a question of how the changes of a given country affect trade relation between Vietnam and Korea. Country specific changed (for instance changes of GDP of Korea) will lead to direct impacts on trade and investment between Vietnam and Korea as indicated in the model. However, there also remain the indirect impacts from changes of trade with other countries. For example, trade flows between Korea and the US, or that between the US – Japan will change accordingly. The changes in the trade flows among countries, in turn, affect the trade flow between Vietnam and Korea. The estimated coefficients in the model are unable to capture those indirect effects because the model is nonlinear. The spatial multiplier effects which are calculated by differentiate the estimation model with respect to the independent variables are, therefore, play a role. There are two terms in this context, the direct effect takes

the form of differentiate of Yi with respect to Xi or $\left(\frac{\partial Y_i}{\partial X_j}\right)$ and the indirect effect takes the form of spatial differential of Yi with respect to Xj or $\frac{\partial Y_i}{\partial X_j}$ (of which $i \neq j$). They are driven from first order differentiating the estimation equation.

Results are presented in Figure 42 indicating the modest changes of exports to Korea from other countries given a 1% increase in the growth of Korean economy. For example, the export from Australia to Korea may increase by 0.38%, while that from India is around 0.3%. Most remarkable export increase is for Japan, Singapore, US and China. Vietnam and some ASEAN countries can obtain a modest export growth to Korea at around 0.4%.

Figure 42. Effects of Korea's Growth



Another point to note is that the share of the indirect effect is a substantial in the total effect. As illustrated, US export to Korea can increase by 0.5% which largely contributed by the indirect effect (more than 0.35 per cent point). This can be explained by a large number of trading partners of US. A similar situation is found for Philippines, the indirect accounts for around 79.5%. The figure for Vietnam is smaller but still relatively high (60.2%). Go

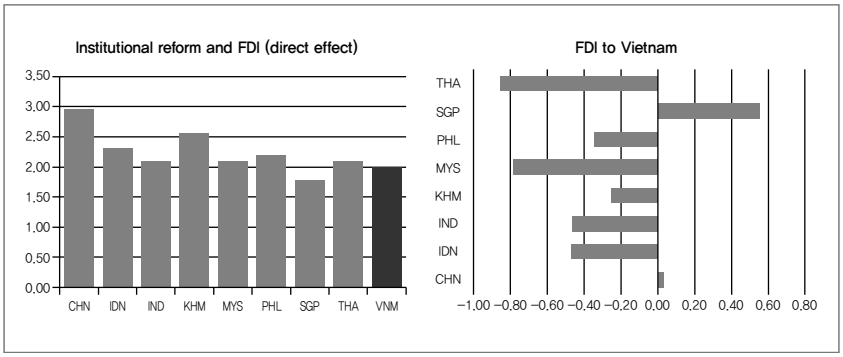
further with the indirect effect for the case of Vietnam, the left graph present the contribution (in percent) of selected countries in the indirect effect to the export from Vietnam to Korea. It shows that most indirect effects come from Singapore Japan, ASEAN and China. This result suggests the inter-dependence among countries. Hypothetically if one country tries to avoid the risk from trade with another they still have to cope with indirect effect from all others.

Regarding the multipliers of FDI attraction, as indicated in the FDI equation, there are a number of factors affecting FDI attraction of a country, including institutions, wages, quality of legal regulations, infrastructure, economic size, population. FDI flows in a specific country also are conditional on geopolitics and FTAs as most FTA now has investment as well as the linkages between trade and investment. Figure 43 provides effects of institution improvement and increase in wage on FDI flows to countries. The left panel exhibits the positive effects of institution improvement to FDI flows in all 15 countries. 1% improvement of the institutional score will directly result in 3% increase of FDI flows to China. The figure is a little smaller in the case of ASEAN (approximately 2%). The impact is lowest for Singapore, which can be attributed to relatively good institutional framework of the country and thus, marginal effect of institutional reform is modest. Except Singapore, the marginal effect of Vietnam is lower than most ASEAN members. This can be explained by a fact that the legal framework for FDI attraction is rather good for the case of Vietnam and Singapore. The FDI attraction to Vietnam will hardly improve significantly if factors other than institutional reform are not taken into consideration (for instance external changes and wage). However, this does not imply that Vietnam should not take further institutional reform because the model only captures total FDI volume, and ignores FDI quality as well as how FDI supports growth and development targets. The results also show that China has most significant variation, implying that if institutional reform is implemented drasti-

cally in China, FDI attraction to Vietnam and other countries will be affected severely in the coming time.

To give the answer for the impacts of institutional improvement (by 1%) in other countries on Vietnam, from competitiveness perspective, FDI to a country may lead to the reduction of FDI to others given assumption that ASEAN countries is competing to attract FDI. However, this is not totally true if other interactive factors are taken into consideration. Results presented in the right panel of the indicate that in most cases, institutional improvement of other countries will result in smaller volume of FDI to Vietnam, except China and Singapore. The institutional improvement in China may positively affect FDI attraction to Vietnam, which can be attributed to interactions between FDI enterprises to China and FDI to Vietnam. However, the impact is insignificant (Figure 43).

Figure 43. Impacts of Institutional Reforms on FDI

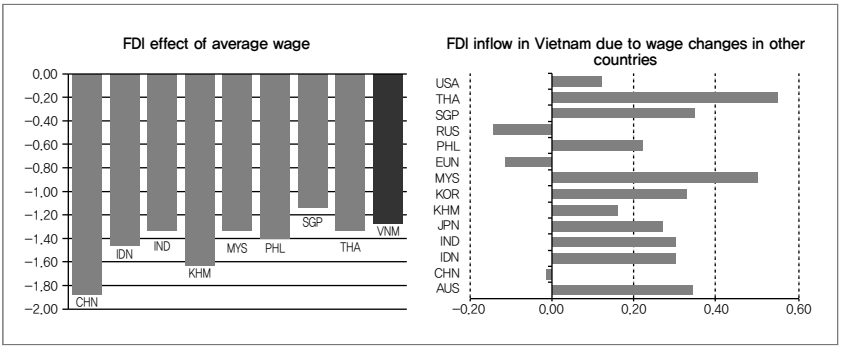


The institutional improvement in Singapore affects FDI inflow to Vietnam most significantly. 1% improvement of institutional score of Singapore may result in 0.55% increase of FDI to Vietnam. This is might due to Singapore is FDI hub in the region. MNEs can register in Singapore as a base to reach to other regional countries including Vietnam.

Average wage is an important factor affecting investment flows due to its direct influence on the production costs of FDI firms. Figure 44 shows that 1% increase in the average wage in China makes FDI flows to China decrease by nearly 2%, which is the most significant marginal effect comparing to others. For other countries, the impacts are relatively significant. For ASEAN countries it exceeds that for Vietnam. This implies a room for Vietnam to increase wage, because the increase in the wage in Vietnam induce to less negative impacts to FDI inflow to its countries than if ASEAN countries do (Figure 44).

Similar to analysis for the institutional improvement, the increase in wage in most other countries may affect FDI inflow to Vietnam, of which wage changes in Thailand and Malaysia will create the most significant impacts. In comparison with Japan, 1% increase in wage in Korea can lead to a smaller increase FDI in Vietnam. But in this aspect, Korea is still one of four countries mostly sensitive to FDI attraction in Vietnam.

Figure 44. Impacts of Raising Wages on FDI



The multipliers in this model obviously give more insights about the interdependence of countries. Its advantage is attributable to the role of dependence matrix, including the geopolitics matrix. We will use this feature for the last question in this research-forecasting the trade and investment flows

among the countries in the region, given the fluctuation of both macro-economic environment and regional geopolitics

2. Trade and Investment Forecast

The trade and investment forecast were conducted from above spatial gravity model. Using this type of model for forecasting the potential trade and investment is rather common in literature. SEER (2003), Zarzoso *et al.* (2003), Papazoglou (2006) used this model to forecast the trade flow for the enlargement of EU; Pareja *et al.* (2013) used it to investigate the potential investment flow for several countries. Fung (2009) also employed it to examine and forecast the FDI outflow of China, Korea and Taipei-China. More recently, spatial gravity approach for trade and investment can be refer to Rodolfo (2013), Sardor (2016).

A. Scenarios

In order to conduct the forecast, the scenarios were constructed. We constructed three scenarios: baseline, modest and ambitious scenarios. Each scenario includes economic and geopolitical aspects (see the Appendix 3 for more details). Regarding economic aspect, information related to the model's variables, including GDP growth rate, exchange rate against the US$, interest rate, variables of business-investment environmental improvements, changes of wage in the manufacturing industry (in case of investment model). Regarding geopolitics aspect, each geopolitical issues in accordance with sub-matrix mentioned in Section 1.2 will be considered, but focus on the matrix *"potential regional conflicts and other matters"*.

The baseline scenario is constructed relying on information and forecasted

data from various sources and which were assumed to be most likely. Modest scenario is in more pessimistic view, in which regional economies are assumed slowdown substantially, and more unstable geopolitics situation. In the optimistic scenario, all indicators are assumed brighter compared to baseline scenario.

Most economic parameters of the baseline scenario are taken from the forecast from IMF's World Economic Outlook for 2015 and 2016 and WB's Global Economic Prospect.[55] Wage level is taken from the database of Trading Economics.[56] The following is a brief summary about the outlook of some macro indicators which was used as input in the base scenario. Details information for each scenario can be seen in Appendix 3.

1) Economic Aspects

Economic growth: IMF estimated that economic growth of developing countries in Asia decreased to 6.4% in 2016 from the rate of 6.5% in 2015. Meanwhile, economic growth rate of China will shrink from 6.8% to 6.3% and will be in the same trend in 2017. The growth of China is believed have substantial influence on the growth of ASSEAN and North East Asia economies. Korea's economy is forecasted keep the growth rate at 2.7% in 2016 and 3.0% for 2017 and sequence years. Japan will have been continued the positive growth, however with marginal rate at 0.5%. The figure for US is 1.6-2.2%. Vietnam and most ASEAN members enjoyed relatively high growth from 4.5 to 7% except for Thailand are forecasted at 2.3%.

Exchange rate: CNY remains the strongest currency out of 24 currencies of newly-emerging countries in terms of trade proportion and inflation. This negatively affects competitiveness of Chinese's exported products. Competitiveness

55) Most estimated input of the baseline scenario is taken from IMF's forecast, http://www.imf.org/external/pubs/ft/gfsr/index.htm.

56) http://www.tradingeconomics.com/forecast/wage-growth.

of Chinese exported goods has improved due to the depreciation of the CNY. The possibility of interest rate hike by the FED is fully reflected in exchange rate, and Asian currencies will be more sensitive to the fluctuation of CNY exchange rate in the coming time.

The immediate devaluation of a number of currencies beyond China's adjustment of the CNY exchange rate exhibits sensitive responses to CNY's exchange rate adjustment of other countries due to concerns of the competitiveness of Chinese products in the market. This implies that though the CNY may be further depreciated in the coming time, it is unlikely that the devaluation will be significant because of the potential devaluation in other trading partners.

There remains a possibility of further devaluation of the CNY, depending on the FED's decision on interest rate hike in 2017. PBoC introduced a new indicator composed of 13 currencies to measure the CNY exchange rate, which is considered the milestone for further depreciation of Chinese' domestic currency.

JPY: Beyond the recent the economic recession and the termination of the depreciation of 40% against the $US in the last 4 years, the JPY is estimated to be appreciated against other currencies. The monetary stimulus package and the growth rate of the current account's surplus will restrain the potential depreciation of the JPY exchange rate. Besides, the Government of Japan pays more attention to expenditure and reforms in order to promote economic development. Though the JPY was closed to the lowest level in the last 13 years, many experts believe the exchange rate will be 120 JPY/ 1 US$ at the end of 2016. The BoJ is expected to launch the unprecedented monetary stimulus package in 2016, and the JPY will be stable after being depreciated for three consecutive years against 16 global major currencies.

Other currencies: Bloomberg believes 10 major currencies in the Asian region

will be depreciated against the US$ continually. The Indonesian Rupiah, Korean Won, Singaporean dollar are forecasted to be depreciated most severely in Asia. The Indian Rupee is believed to be depreciated at the smallest level out of the 10 major currencies. According to Trading Economics,[57] the KRW will continue to be depreciated against US$ in coming years due to most currencies in the region will be depreciated due to that is from China., however, the pace is rather smoothly from 1128.3 to 1137 (depreciated at 0.7%), up to 2020, the exchange rate would be 1325. In the meantime, VND is expected to be depreciated 3.9% and accumulatively 19% up to 2020. EUR may be depreciated accordingly because of the pressure to promote export as well as the consequence of BREXIT which make this zone weaken.

Interest rate

FED raised US$-denominated interest rate (from 0.25% to 0.5%) in December 2015, and has kept no change until Oct.2016 thought there is speculations that FED will increase it slightly at the end of this year. Other countries have similar responses. Taiwan cut down interest rate immediately while Japan applied a negative interest rate. Analysts believe a number of countries in the region, namely China, Korea, Thailand, India and Indonesia will reduce interest rate to promote economic growth. However, in the beginning of 2016, FED lowered the expectation of interest rate hike as well as economic development prospect of the US down from 2.4% to 2.2% in 2016.[58] Expected interest rate is 0.9% by the end of 2016 and 1.9% in 2017.

In terms of the EUR, the European Central Bank (ECB) implemented a series of measures to promote economic growth of the Eurozone, including reducing interest rate, increasing the purchase of bonds up to EUR 80 billion per month and offering low-interest loans to banks. However, there is re-

57) http://www.tradingeconomics.com/south-korea/currency.

58) http://vietstock.vn/2016/03/fed-giam-dang-ke-so-lan-nang-lai-suat-trong-nam-2016-772-462821.htm.

stricted room for implementing those measures. Current deposit interest rate imposed by the ECB is -0.4%. Expectation of further reduction of interest rate will make the EUR weaker, which will benefit exporters from the EU and simultaneously give an impulse to a currency war because several countries have implemented negative interest rates.

2) Geopolitical Changes

The Institute for International Strategy of Japan (IISJ 2015) forecasted that in 2016 and beyond, orders in the East Asia region will be unstable due to the emergence of China and responses of the US and Japan.

The foreign policy of the US regarding the tension of East Sea become clearer after the President election when Trump is going to take the power. The US and Japan exerted restrained responses in relative to the emergence of China. It is the opportunity for China to intensify its actions in the East Sea, which the new foreign policy of US, the role of US and Japan in East Asia could be eroded.[59] A clearer trend will be in shaped beyond the in 2017.

China intensifies tensions regarding the East Sea: As China promotes the construction of military bases in the East Sea, the tension in the region has been intensified, potentially leading to unexpected conflicts unless a diplomatic solution will be reached between China and the ASEAN. Diplomatic actions of China makes ASEAN become divided instead of being convergent. Until now, China keeps insisting on the non-internalization of the East Sea issue and considers the conflict over the East Sea is the matter between China and individual related countries instead of with the ASEAN as a whole. The response of Philippine since new government which moving closer to China and farther from US will leads to unpredictable situation on the security of

59) In September 2015, Indonesia selected Chinese contractor instead of Japanese one to carry out the Jakarta-Bangdung high-way project. This case implies that the economic status of Japan or the US in the region is threatened.

the region.

Prospect of the TPP: [60] As China exerted efforts to promote AIIB in order to support the "One belt, one road" initiative and foster RCEP with the ASEAN and 6 other countries, the TPP plays an important role in the US's strategic pivot to the Asia region. The TPP's playing field sets out a number of "behavioural norms" of trade and other related areas, expecting to impose high standards on countries with significant gap of development level. TPP also establishes a standard for future agreements. However, the possibility of TPP cancelation from US would make the situation become more complicated. A new trade negotiation may be form with the initiative from China.

Japan and Russia: Japan and Russia also play important geopolitics roles in Asia. According to several analyses', there is modest chance to warm up/tighten the relation between Japan and Russia in the short run regardless of positive impacts of the cooperation between the two on controlling the emergence of China. Since Putin took the office in 2012, Russian and Japan have expressed their strong determination to solve the dispute over the northern territory (referred to as Southern Kuril Islands by Russia), which is an "obstacle" to efforts on normalizing the relation between the two countries after the WWII. However, the schedule to negotiate over the Southern Kuril Island was temporarily cancelled beyond the merging of Crimea peninsula to Russia in March 2014. Besides, Japan stuck in international responsibilities with alliances concerning implementation of punitive measures against Russia. Consequently, there is little chance to improve the relation between Russia and Japan.

The US and Japan: Despite of the allied relation, there remains difference of

60) http://www.thesaigontimes.vn/136675/TPP-duoi-goc-nhin-dia-chien-luoc.html.

opinions from Japan internally on the relation with the US, particularly concerning military bases of the US in the territory of Japan. "The conflict" between the government of Okinawa province and the central Government of Japan regarding the removal of the air force bases of the US is at a standstill. The US and Japan could undertake serious discussions about this matter. If the sensitive issue is unsolved, protest against the emergence of the US in Japan's territory will remain a "thorn" in the allied relation of the US-Japan, particularly after Trump become the President in US.

According to political experts, in 2015, Japan and the US modified common security cooperation between the two, which clearly identify the roles of the US military forces and of Japan's Self-Defence Forces (JSDF) in order to strengthen security cooperation between the two countries outside of Japan territory? In fact, on 10 February 2015, Japan promulgated its Official Development Assistance Charter, allowing providing ODA for foreign military forces serving non-military campaigns. With this decision, Japan has shared the burden of rebalancing the relation with ASEAN countries with the US.

The relations between the ASEAN and the US: In fronting with a weaker ASEAN due to the dividend policy of China, strategic pivot of the US become more difficult. Unless there is some critical signal from US, some ASEAN member still continuously lean on China. The role of ASEAN in US strategy becomes less important. However, more the trend will be clearer till 2017.

China and Korea: The relations between China and Korea has been continuously warmed up in parallel with the "balance strategy" of Korea; the bilateral between the two countries will tighten up their cooperation. The potential for trilateral FTA between them and Japan has yet clear thought in negotiation process Korea changed its approach to China. Korea is the found-

ing member of AIIB regardless of responses from US. Korea also made decision on participating to the Terminal High Altitude Area Defence (THAAD). Economic and trade benefits of Korea with China are stable and tends to be expanded due to China and Korea FTA. China is the biggest and increasing trading partner of Korea, and the bilateral trade between Korea and China exceeds that between the former and both the US and Japan. The issue related to North Korea intensifies closer relation between Korea and China. The support from China regarding nuclear weapon in the Korea peninsula has been a decisive factor to Korea behaviour.

EU and China: Regardless of trade-related issues, the relation between the EU and China remains normal without any critical conflicts, at least recently. The concern is whether the EU agrees to grant a full market economy status to China under the WTO rules. This will restrain lawsuits imposed by the EU on imported goods; especially in the context China promote exports of surplus commodities to the EU, namely steel products. Recent study by the Washington Institute for Economic Policy (of the US) believes that all EU's member countries and industries, which create from 1.7 million to 3.5 million jobs in the EU, will face with risks if the market economy status is granted to China.[61] Pressure from protest related to this issue has been intensified. China has been keen on its opinion that the market economy status should be granted to China under the WTO rules by the end of this year, and requested the EU respect the agreement.

B. Key Findings from the Forecast

Given the scenarios construction which combines both economic and geopolitics, the Figure 45-47 below exhibits forecast results of Vietnam exports

61) http://tapchitaichinh.vn/tai-chinh-quoc-te/nhan-dinh-du-bao/trao-quy-che-kinh-te-thi-truong-cho-trung-quoc-bai-toan-kho-cho-chau-au-79228.html.

to major trading partners with three scenarios S1 S2 and S3 corresponding to "base", "modest" and "optimistic". The export to US and EU and is rather sensitive to different scenario. In the scenario that is most likely to occur (S1), the exports growth to Korea may slower at 1.5%. For the best optimistic scenario (S3) Vietnam can increase the export to this country at 1.2%. It implies that the KVFTA are likely does not results into higher export to Korea market unless supported by some favourable environment factor such as the stable geopolitics and sound macroeconomic of in the region.

In contrary, Vietnam also find it hard to reduce its export dependence on China due to it is forecasted that for S1 and S2 the export growth still rather high. In the less optimistic scenario (S2), the opportunity to diversify export markets is modest because export from Vietnam takes the downward trend, especially to the EU.

The import growth is illustrated in Figure 46, which presents exports of other trading partners to Vietnam. Vietnam hardly reduces imports from China as imports from this country decreases marginally even in the optimistic scenario. In all scenarios, export from China to Vietnam grows at relatively high rates. Vietnam also imports more from Thailand and the US with the growth rate of more than 1% higher relative to the base scenario (S1).

Figure 45. Estimated Results of Exports

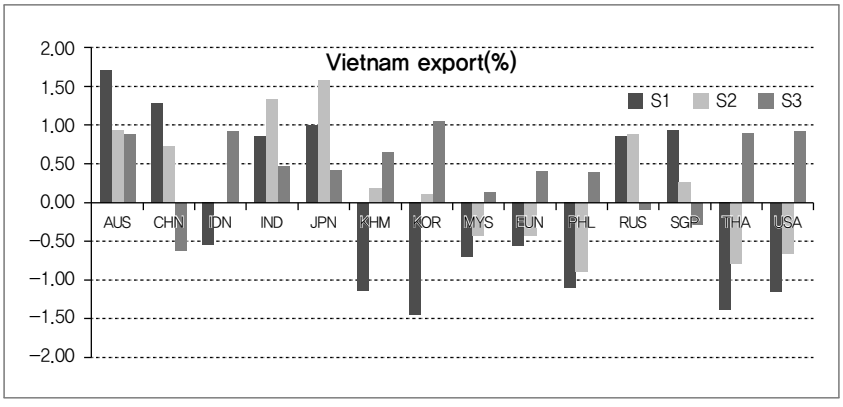


Figure 46. Estimated Results of Imports

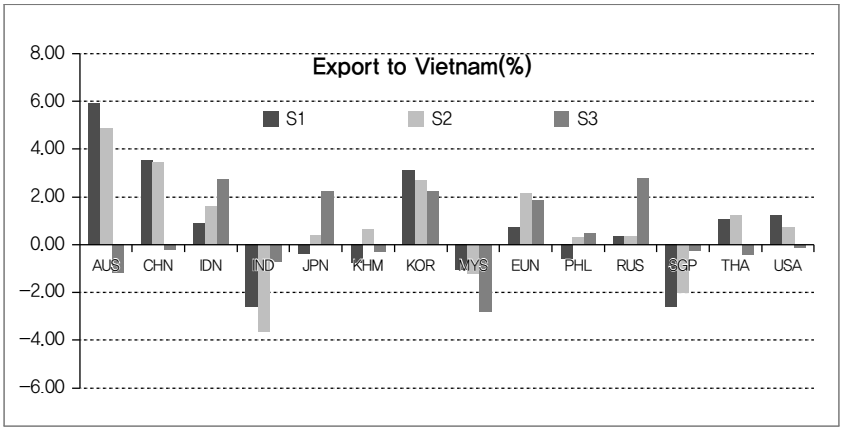


Figure 47. Exports of Korea

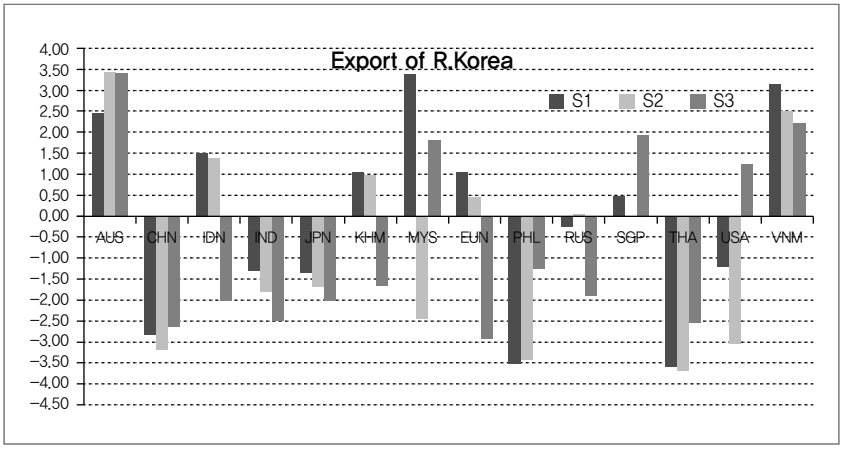


Table 29 below shows the forecast on FDI inflow of 3 scenarios. In general, in all three scenarios, Vietnam enjoys positive growth rate of FDI attraction. Similarly, FDI to China, Korea, Singapore and the Philippines grows at high rates. FDI to Malaysia takes the downward trend. This can be attributed to the substantial increase in wage in Malaysia in relative to that in several ASEAN countries. Expectation of higher FDI to China is considered

a positive signal to Vietnam because FDI attraction to China and Vietnam is correlated at certain extent and is non-competitive to each other as mentioned in previous sections. This also implies that FDI to China is relatively sensitive to wage. As China is undertaking the adjustment of wage at lower rate compared to other countries, FDI to China will recover. Thus, despite of information on the withdrawal of FDI enterprises from China, China remains an attractive destination to foreign investors.

Table 29. Forecast on FDI

	S1	*S2*	*S3*
Australi	-9.55	-8.63	-5.65
China	1.04	1.16	3.04
EU	-1.59	-13.49	-10.91
Indonesia	-6.51	2.52	3.42
India	1.14	-3.30	-3.37
Japan	7.98	10.82	-1.99
Cambodia	-5.80	-12.94	-8.23
Korea	1.67	2.12	2.20
Malaysia	-3.75	-11.37	-16.02
Philipines	9.14	12.13	16.22
Russia	-4.35	-3.71	-1.43
Singapore	3.99	8.00	9.48
Thailand	-5.75	-5.90	-5.12
US	-4.90	-3.99	-0.16
Vietnam	7.40	8.86	6.25

This chapter intensively discussed the trade and investment picture in the region from spatial gravity approach. This unconventional method helps us to have some new findings about the trade and investment pattern as well as the trend of interdependence between regional countries. It suggests that besides the role of push and pull factors, FTAs signed between countries, and

particularly the geopolitical situation share the trade and investment pattern, more is emphasized on the geographic. Trade and investment relations between Vietnam and Korea are depending not only on their own moves, but also the moves of other partners. This may undermine the effects of some attempts from both countries in order to accelerate the trade and investment relations.

Conclusions

1. Critical Findings
2. Some Policy Remarks
3. Shortcomings and Further Studies

1. Critical Findings

The world is changing, more changes are found in East Asia countries with the emergence of China that shaping the economic and geopolitics pattern in the region and making regional countries become more inter-dependence. Under that context, the bilateral trade and investment of any pair countries is also influenced by the relations of third countries. This research is designed to investigate the trade and investment dependence of Vietnam on Korea given the increasing trend of economic integration, more unstable geopolitics in the region.

As pointed out in the first chapter, the rise of China is not only reflected in its remarkable growth records during two decades but also the recent changes in their strategies to go to the world. In economic sense, that is the expansion of investment flow through ambiguous strategies such as one belt one road or the AIIB; in geopolitical sense is the increase in the defend budget, proactively participate international issues, raising the tension with territories disputes. In other words, the emergence of China is both appealing and threatening. Under that context, the response from other regional countries is mixed, some have tried to keep "balanced" between US (with pivotal to Asia strategy) and China (with "peace emergence") to gain optimum political and economic benefits, some attempted to reinforce their alliance and economic capacity to cope with more unstable regional geopolitics. However, a common trend for most countries in economic side is the booming of regional and bilateral FTAs, with help them to diversify their trade and investment partners. The situation leads to a more inter-dependence in the region.

Korea and Vietnam have a short time in touch with a more than 20 years of diplomatic relations but a remarkable progress in improving and upgrading their ties. They signed strategic partnership in 2009 and also FTA under framework of ASEAN Korea agreement. Trade and investment between

Vietnam and Korea increased remarkably. Korea soon becomes the biggest investors in Vietnam and the bilateral trade growth is recorded around more than 25% per year. Besides other cooperation agreements, the assignation of VKFTA in 2015 set a landmark in the bilateral relation which expected potentially and fruitfully bring about benefit to both countries. As pointed in Chapter 3, the VKFTA is more open than previous AKFTA which both countries took a part. It is good for Vietnamese firms, indeed, both in term of exporting more agro-products to Korea but also import a better quality input and restructuring the import market of Vietnam, avoiding heavily dependence on some other market. The FTA also facilitates the FDI from Korea because it contains some more open commitments in service and investment. However, such benefit is a conditional one for Vietnam. Poor preparation and readiness of both the institution and enterprise will hinder them from the trade with Korea.

Vietnam is more and more dependent on trade and investment with Korea. The dependence index shows that in overall, Vietnam's export dependence on Korea is less than other countries is on Korea, but the dependence of Vietnam inclines to increase since 2009. In terms of import, the dependence index is among the highest and is also increasing. This tendency will continue because the VKFTA has taken into effect and the expansion of FDI from Korea flowing to Vietnam will trigger a booming of import, particularly spare parts.

Import dependence is different from export dependence. The dependence of Vietnam is the highest among other countries in the region as well as other major partners of both Vietnam and Korea. The dependence index also took the rapid upward trend, in particular for such groups of commodities as auxiliary of garment and textiles, sea transport vehicles, machinery and mechanical appliances. However, those commodities are also which Vietnam has weak production capacity. In other words, trade between Vietnam and Korea is complementary rather than competition. The cooperation between

the two, therefore, benefits both countries.

The trade dependence is intensified over time in line with the expansion of FDI flows from Korea to Vietnam, especially from large corporations because of the shift of investment from China. This led to the argument that FDI is one of factors that make trade dependence increase.

The FDI from Korea inflow in Vietnam has been also on the rise, largely contributed by the entry of very large firms in electronics and phone. Korea has become the biggest FDI investor in Vietnam that in turn implying an upward tendency of more investment dependence.

Assessing the trade dependence index with Korea does not mean the dependence is good or bad because of the relation between Korea and Vietnam in both economic and political aspects is worm and supportive recent years as well as there is no territorial issue interrupting such relation. The policy implication of dependence is different from the dependence of Vietnam on China since there remain the conflicts of sovereignty between China and Vietnam, and trade dependence may be used as an instrument for politics and sovereignty negotiations. Increasing dependence on Korea in terms of both import and export indicates that the two countries have taken advantage of signed FTAs in recent time. However, the dependence also demonstrates the tightened relations between the two and changes of political, economic and trade situation of Korea may significantly affect Vietnam. This is the common trend of integration because of increasing inter-dependence among economies.

Also pointed out from the Chapter Four, even for some hypothetically unforeseen cases in which Vietnam would like to reduce such dependence, that the capacity to control international price of Korea is small, hence, Vietnam can proactively optimum the dependence either by diversifying commodities structure exported to Korea as well as diversifying export markets. From this perspective, in a context that Vietnam and Korea are accelerating the negotiation and signing new FTAs with other partners, in the near future, the ex-

port dependence of Vietnam on Korea is not a very concern.

The findings on the trade pattern using the spatial gravity approach suggested very intuitive evidence on the interdependence among countries. Besides other factors, FTA and geopolitics change both determined the trade. In addition, trade and investment flow of other countries also affect the trade and investment between any pair countries like Korea and Vietnam. The dependent relation of Vietnam and Korea is no longer only determined by the two countries themselves, but also the involvement of other partners.

As examples about the advantages of spatial approach, the analysis about trade and investment multipliers indicates that Korea growth affect the trade between Vietnam and Korea, but besides the direct effect, a large part is through the interaction with other trade partners, among that the influence from Japan, China and Singapore is substantial. Similarly, the institutional improvement and wage improvement of China may have critical impact on the trade and investment between Vietnam and Koreas as well as other countries in the region. This comes to the forecast that the trade and investment dependence of Vietnam to Korea will be continued, however, changeable to the regional geopolitics and macro-economic issues. It implies that the KVFTA are likely does not results into higher export to Korea market unless supported by some favourable environment factor such as the stable geopolitics and sound macroeconomic of Vietnam or in the region.

2. Some Policy Remarks

The warming relationship between Vietnam and Korea is a very good environment for the trade and investment ties between the two with in turn bring about fruitful benefits for both sides. The stable regional geopolitics also plays a role for that. It, therefore, implies that keeping a stable environ-

ment in the region is not a duty of a single or group of countries but also any countries those have trade and investment relation with. Both Vietnam and Korea government necessitate being awareness about stability of the regional geopolitics.

From Korea side, the relations with Vietnam bridges the relations to ASEAN. With cheap labour, large consumption market, this area should not be ignored by Korean investors. However, the role of China in this area also should never been fidgeted. Influence of China economy in ASEAN is huge, given more and more interdependence among countries and AEC implementation, Korean investment to this region is likely still slower than from Japan or China. This issue should receive a noticeable consideration.

Vietnam is becoming more dependent on Korea in investment and trade. The trend for that is increasing. Vietnamese government should take advantage of this factor for their re-structuring economy, particularly improving the manufacture sector toward export oriented strategy. Korea may become a good source of materials import for exporting to other destinations, particularly EU markets. EVFTA and VKFTA have generated great opportunities for Vietnam to eliminating the dependence from some traditional market. In the context that TPP may be re-negotiated or cancellation, the critical improvement the readiness of both Vietnamese and Korean firm for VKFTA is very necessary and need to be done as soon as possible.

3. Shortcomings and Further Studies

A shortcoming of this research remains in three issues. The first is an arbitrary factor when constructing the weighting matrix. The matrices constructed in this studies are expected to proxy for the dependent relation among spatial units in the model. Most of those are simplifying proxies and attributed with some arbitraries rather than a precise measurement. For ex-

ample, by using scoring method, the geopolitical matrix is relatively arbitrary, we tried to use qualitative information to makes it a closer proxy, however, it should have been more appropriate if there were availability of some theoretical framework addressing the quantitative connection among geopolitics and trade and investment.

The second shortcoming which need a further investigation is the pair data for investment. Most of database provides inflow or outflow of investment but not origin-to-destination form. It prevented us from using gravity approach for investment question, and obviously not producing more insights about the FDI relation/interdependence from country to country.

The third shortcoming is the limitation in the estimation method. Spatial econometrics is a powerful but have yet fully developed, reflecting by some arbitrary assumptions. Autoregressive of error term can happened both in term of time and space dimensions whereas most studies so far focused on modelling the spatial dimension which is more relevant for cross-sectional data but not panel one. Furthermore, the exogeneity of the weighting matrices as well as the unsystematic correlation of the elements in a matrix is a notable assumption in this research. It necessitates further theoretical investigation as well the development of estimation algorithm to address it in empirical research.

While there is an increase in the global integration, countries are likely more dependent from one to others. The bilateral dependence in turn is affected by the dependence from third parties. Furthermore, the anecdotal evidence has pointed out the close relation of geopolitics to trade and investment flows. Those issues merit further studies in the future.

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Appendix

1. The Content of VKFTA
2. Weighting Matrix
3. Summary of the Forecast Scenarios

1. The Content of VKFTA

Chapter 1: General Provisions	Scope, Objectives, General Definitions
Chapter 2: National Treatment and Market access for goods	Provisions on National Treatment; tariff cut, annexes on tariff schedule; special mechanism; non-tariff measures
Chapter 3: Rules of Origin and Origin Procedures	Rules for origin calculation, C/O application, annexes on products specific rules and treatment for certain goods
Chapter 4: Custom Administration and Trade Facilitation	Release of goods, customs automation, information confidentiality, appeal solution, customs cooperation
Chapter 5: Sanitary and Phytosanitary Measures	Enhance the implementation of the SPS Agreement under WTO framework
Chapter 6: Technical Barriers to Trade	Enhance trade facilitation through promoting the implementation of WTO's TBT Agreement; standards and technical regulations and mutual recognition
Chapter 7: Trade Remedies	Safeguards measures, anti-dumping tax and countervailing duties; establishment of the committee trade remedies
Chapter 8: Trade in Services	General provisions and annexes on commitments on telecommunications, finance, movement of natural persons, annexes on specific service commitment
Chapter 9: Investment	Investors and investments protection commitment; specific schedule of commitment of each Party (on-going negotiation); Investor-State dispute settlement
Chapter 10: Electronic Commerce	Recognition of e-commerce importance; enhance mutual cooperation; specific provision on data certification and protection, cooperation in e-commerce
Chapter 11: Competition	Promoting the enforcement of laws on competition; Cooperation in enforcement of laws on competition
Chapter 12: Intellectual Property	Promoting activities in intellectual property possession; principles on enforcement of intellectual property possession; ensured enforcement of TRIPS
Chapter 13: Economic Cooperation	Areas of cooperation; forms of cooperation; promoting cooperation for the suitable development of each party

Chapter 14: Transparency	Promoting transparency, provision of information about the Agreement, review and appeal within the scope of the Agreement
Chapter 15: Dispute Settlement	Procedure for settlement of disputes arising upon implementation of the Agreement, such as choice of Forum, consultations, conciliation
Chapter 16: Exceptions	Exceptions on public security, taxation, information publication
Chapter 17: Institutional and Final Provisions	Provisions on establishment of committees, working groups, and other provisions

2. Weighting Matrix

Geopolitics Matrix

	VNM	CHN	USA	KOR	JPN	THA	SIN	MYS	IND	PHL	KHM	EUN	AUN	IDN	RUS
VNM	0.00	3.26	4.49	4.98	5.41	3.71	3.91	3.91	4.08	3.84	5.36	4.40	4.81	4.72	6.09
CHN	3.26	0.00	3.90	3.54	3.00	4.99	4.44	4.65	4.44	2.76	5.93	3.55	4.26	2.76	8.34
USA	4.49	3.90	0.00	6.49	6.34	5.93	5.41	4.94	4.44	5.34	4.03	6.61	6.81	5.23	8.77
KOR	4.98	3.54	6.49	0.00	5.14	4.80	4.39	3.77	4.21	5.50	4.05	4.93	4.04	5.51	10.35
JPN	5.41	3.00	6.34	5.14	0.00	5.69	4.70	4.51	4.90	6.32	4.36	5.18	5.17	5.77	10.78
THA	3.71	4.99	5.93	4.80	5.69	0.00	4.61	4.41	4.79	4.80	4.17	4.43	4.37	5.03	8.81
SIN	3.91	4.44	5.41	4.39	4.70	4.61	0.00	5.24	5.10	4.56	4.61	5.21	4.61	5.01	8.49
MYS	3.91	4.65	4.94	3.77	4.51	4.41	5.24	0.00	4.78	4.72	4.23	4.43	4.85	4.71	8.49
IND	4.08	4.44	4.44	4.21	4.90	4.79	5.10	4.78	0.00	4.80	4.67	4.80	3.96	4.99	8.91
PHL	3.84	2.76	5.34	5.50	6.32	4.80	4.56	4.72	4.80	0.00	4.72	4.48	4.84	4.80	7.55
KHM	5.36	5.93	4.03	4.05	4.36	4.17	4.61	4.23	4.67	4.72	0.00	4.15	4.47	3.51	9.58
EUN	4.40	3.55	6.61	4.93	5.18	4.43	5.21	4.43	4.80	4.48	4.15	0.00	3.62	3.77	6.86
AUN	4.81	4.26	6.81	4.04	5.17	4.37	4.61	4.85	3.96	4.84	4.47	3.62	0.00	4.73	8.15
IDN	4.72	2.76	5.23	5.51	5.77	5.03	5.01	4.71	4.99	4.80	3.51	3.77	4.73	0.00	8.96
RUS	6.09	5.07	4.27	5.36	5.36	5.10	4.57	4.57	4.83	3.71	4.22	2.46	3.34	4.23	0.00

Normalized Geodistance Matrix

	AUS	CHN	IDN	IND	JPN	KHM	KOR	MYS	EUN	PHL	RUS	SGP	THA	USA	VNM
AUS	0.000000	0.000120	0.000197	0.000105	0.000128	0.000149	0.000123	0.000164	0.000062	0.000170	0.000074	0.000170	0.000140	0.000068	0.000147
CHN	0.000120	0.000000	0.000213	0.000238	0.000506	0.000336	0.000856	0.000258	0.000121	0.000383	0.000182	0.000244	0.000335	0.000089	0.000375
IDN	0.000197	0.000213	0.000000	0.000219	0.000182	0.000500	0.000197	0.000765	0.000088	0.000383	0.000115	0.000987	0.000434	0.000064	0.000449
IND	0.000105	0.000238	0.000219	0.000000	0.000167	0.000314	0.000196	0.000277	0.000145	0.000206	0.000216	0.000267	0.000368	0.000076	0.000300
JPN	0.000128	0.000506	0.000182	0.000167	0.000000	0.000236	0.001051	0.000201	0.000108	0.000338	0.000150	0.000194	0.000226	0.000097	0.000256
KHM	0.000149	0.000336	0.000500	0.000314	0.000236	0.000000	0.000278	0.000936	0.000104	0.000529	0.000145	0.000844	0.001921	0.000071	0.001873
KOR	0.000123	0.000856	0.000197	0.000196	0.001051	0.000278	0.000000	0.000226	0.000115	0.000375	0.000166	0.000216	0.000270	0.000094	0.000307
MYS	0.000164	0.000258	0.000765	0.000277	0.000201	0.000936	0.000226	0.000000	0.000097	0.000439	0.000131	0.001978	0.000779	0.000067	0.000735
EUN	0.000062	0.000121	0.000088	0.000145	0.000108	0.000104	0.000115	0.000097	0.000000	0.000095	0.000345	0.000095	0.000109	0.000137	0.000105
PHL	0.000170	0.000383	0.000383	0.000206	0.000338	0.000529	0.000375	0.000439	0.000095	0.000000	0.000129	0.000416	0.000434	0.000076	0.000586
RUS	0.000074	0.000182	0.000115	0.000216	0.000150	0.000145	0.000166	0.000131	0.000345	0.000129	0.000000	0.000127	0.000154	0.000112	0.000147
SGP	0.000170	0.000244	0.000987	0.000267	0.000194	0.000844	0.000216	0.001978	0.000095	0.000416	0.000127	0.000000	0.000697	0.000066	0.000675
THA	0.000140	0.000335	0.000434	0.000368	0.000226	0.001921	0.000270	0.000779	0.000109	0.000434	0.000154	0.000697	0.000000	0.000072	0.001173
USA	0.000068	0.000089	0.000064	0.000076	0.000097	0.000071	0.000094	0.000067	0.000137	0.000076	0.000112	0.000066	0.000072	0.000000	0.000073
VNM	0.000147	0.000375	0.000449	0.000300	0.000256	0.001873	0.000307	0.000735	0.000105	0.000586	0.000147	0.000675	0.001173	0.000073	0.000000

Language Matrix

	AUS	CHN	IDN	IND	JPN	KHM	KOR	MYS	EUN	PHL	RUS	SGP	THA	USA	VNM
AUS	0.00	0.05	1.00	0.20	0.10	0.20	0.10	1.00	1.00	1.00	0.10	1.00	0.50	1.00	0.10
CHN	0.05	0.00	0.05	0.50	0.50	0.10	0.50	0.50	0.10	0.10	0.10	0.70	0.50	0.10	0.02
IDN	1.00	0.05	0.00	0.10	0.50	0.10	0.50	0.50	0.10	0.10	0.10	0.10	0.10	0.50	0.05
IND	0.20	0.50	0.10	0.00	0.30	0.30	0.30	0.50	1.00	1.00	0.10	1.00	0.50	1.00	0.10
JPN	0.10	0.50	0.50	0.30	0.00	0.30	0.30	0.40	0.50	0.50	0.10	0.50	0.30	0.50	0.05
KHM	0.20	0.10	0.10	0.30	0.30	0.00	0.10	0.40	0.30	0.30	0.05	0.30	0.40	0.50	0.05
KOR	0.10	0.50	0.50	0.30	0.30	0.10	0.00	0.40	0.40	0.50	0.20	0.50	0.80	0.30	0.05
MYS	1.00	0.50	0.50	0.50	0.40	0.40	0.40	0.00	0.80	0.50	0.30	0.60	0.60	0.50	0.10
EUN	1.00	0.10	0.10	1.00	0.50	0.30	0.40	0.80	0.00	0.50	0.05	1.00	0.50	1.00	0.30
PHL	1.00	0.10	0.10	1.00	0.50	0.30	0.50	0.50	0.50	0.00	0.05	1.00	0.50	1.00	0.30
RUS	0.10	0.10	0.10	0.10	0.10	0.05	0.20	0.30	0.05	0.05	0.00	0.30	0.40	0.50	0.20
SGP	1.00	0.70	0.10	1.00	0.50	0.30	0.50	0.60	1.00	1.00	0.30	0.00	0.50	1.00	0.30
THA	0.50	0.50	0.10	0.50	0.30	0.40	0.80	0.60	0.50	0.50	0.40	0.50	0.00	0.50	0.05
USA	1.00	0.10	0.50	1.00	0.50	0.50	0.30	0.50	1.00	1.00	0.50	1.00	0.50	0.00	0.30
VNM	0.10	0.02	0.05	0.10	0.05	0.05	0.05	0.10	0.30	0.30	0.20	0.30	0.05	0.30	0.00

3. Summary of the Forecast Scenarios

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
CHINA Economics	Economic growth rate is maintained at 6.5% like currently. The exchange rate of CNY/US$ is kept unchanged after the CNY was included in the IMF currency basket.	Economic growth rate is down to 5.5%	Economic growth rate is kept 6.8% as shown in some forecast.
	The CNY is not devaluated or devaluated at modest rate.	The CNY is devaluated by more than 5% in 2017.	The CNY is devaluated by about 7% if the US keeps pursuing interest rate hike in 2017
	Wage in the manufacturing industry grows at the rate of 6% per annum.	The growth rate of wage in the manufacturing industry is 3% per annum	Due to slower economic growth, wage grows at the low rate of 1-2%
Geopolitics	Reform progress in China remains the same as currently.	Reform progress is slower down because of domestic constraints	Reforms is implemented more widely and deeper
	The situation in the East Sea is kept unchanged	The tension over the East Sea is lessened beyond the order of the lawsuit by the Philippines.	Tension over the East Sea is intensified. Military operation is undertaken in islands.
ASEAN Economics	Economic growth rate increases 3-4% due to the impact of AEC and recovery signal of the US	Economic growth of Singapore, Thailand exhibits downward trend signals due to the dependence on deceleration of China.	Expectation from TPP and AEC. Investment continues to expand, promoting economic growth in most economies.
	Exchange rate against the US$ is kept stable in all countries.	Exchange rate is kept unchanged in most economies	Exchange rates are adjusted at higher rates compared to the

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
			devaluation of the CNY to support exports.
	Wage increase at high rates.	Wage grows at slower rates due to the impacts on investment	Wage grows at slower rates due to the impacts on investment
Geopolitics	ASEAN remains hiddenly divided by the East Sea issue	The situation in the ASEAN is worsen, some countries namely Cambodia support China in a more public manner.	ASEAN and the US reach a number of agreements on the free flows of marine and on the East Sea issue.
US Economics	Economic growth rate of the US increase slightly, from 2.1% in 2016 to 2.2% in 2017. However, economic growth rate hardly attains high level. Economic growth is estimated to be about 2% in 2018[1)]The US$ keeps being appreciated against other currencies because of the interest rate hike to 0.5%.	Economic growth rate decreases significantly because of the appreciation of the US$, impeding the growth rate of exports. Pressure on interest rate hike remains existent. Economic growth rate is maintained at 2% The US$ is appreciated and production reduces.	Thanks to the implementation of the TPP, imports to the US increases; opportunity to improve the investment environment in favour of SMEs. The US economy may attain the growth rate of 2.5% The real estate market is strengthened despite of the appreciation of the US$.
Geopolitics	The US promotes strategic pivot to the Asia; strengthen intervention on the East Sea issue.	Operations include announcements; or symbolic actions instead of specific measures	The US may lift embargo on lethal arms to Vietnam. Specific actions are strengthened in the East Sea.
EU Economics	• GDP grows slightly, attaining 1.7% in 2017 and 2% in 2018. • The EUR keeps being devaluated and hardly recover	• GDP attains the growth rate of 1.5% in 2017-2018 • The exchange rate of EUR/US$ is kept unchanged at 1.05	GDP growth rate recovers at 1.8% The exchange rate against US$ increase slightly due to interest rate hike by the ECB in

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
	because of such issues as public debt crisis in the Greece, turmoil in the Ukraine, the quantitative stimulus economic package of the ECB. Economic confidence deteriorates, leading to the reduction of consumption. Wage increase at stable rate of 1.7%.	• Growth rate of wage reduce to 1.5%, and hardly recover till 2018	the end of 2017. Wage increase at stable rate of 1.7%.
Geopolitics	Unstable geopolitics, especially the situation in the border land of the EU because of the migration issue; the Schengen agreement is considered to be removed. The relation between the EU and China hardly change in a negative trend	The UK leaves the EU, which severely worsens the situation. Negative impact from Chinese economy affects expectation of the global economy.	Such issues as public debt crisis in Greece and the turmoil in the Ukraine are solved, which in turn help strengthen the EU economy.
JAPAN Economics and geopolitics	The economy recovers slowly. Economic growth rate attains 1.1% in 2017 and only 0.5% in 2018. Because of economic sluggish, the JPY continues to be depreciated against other major currencies such as the US$ and EUR. The growth rate of wage is estimated to	Forecast prospects are gloomier. Economic growth is estimated to be 1% in 2017 and 0.3% in 2018. The JPY devaluates at slower rates. The president election in the US may affect the relation between the US and Japan. The role of Japan in the Southeast Asia is less	Expectation of the China-Japan-Korea FTA and TPP may improve confidence on economic growth. GDP grows at the rate of 1.1% The JPY devaluates at slower rates because of the slow economic recovery. Wage grows at higher rates due to the

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
	decrease considerably, form 5.13% per annum to 2.4% and 1.1% in coming years. Territorial dispute with China is kept unchanged. The relation with ASEAN is tightened. The role of Japan will be enhanced because of the US's strategic pivot to the Asia as well as the dispute with China and the threat of North Korea.	than expected. The dependence on China remains unchanged as the RCEP is approved.	adjustment of labour policy in order to deal with the aging population. Spending is higher
KOREA Economics	Economic growth rate is expected to decrease due to the reduction of exports (for 14 consecutive months), attaining 2.6% in 2017. Interest rate cut is implemented (4 times in 2014/2015) The Won become weaker. The growth rate of wage reduces to 3.6%	The economic growth rate is 2.5% because of difficulties of business operations. Export value decreases. The Won is depreciated. Interest rate is kept unchanged. The growth rate of wage is stable	Economic growth exhibits positive signals due to the recovery of the US economy and China economy. Economic growth rate is estimated to be 2.8%. The Won is depreciated to promote exports. The growth rate of wage is kept unchanged.
Geopolitics	The relation between China and Korea is warmed up; the relation with North Korea is stable.	North Korea intensifies unstable situation, thus Korea need count on both the US and China.	The relation with ASEAN remains positive with no significant disputes.
RUSSIA Economics	• Russian economy continues to deteriorate because of the lower price of	• Economic growth rate decreases significantly because of economic	• The price of petrol increases. Economic growth rate attains 1%.

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
	petrol and economic embargo, decrease by 1%. Wage decreases by 2.6% in 2017, but shows signal of recovery in 2017 and 2018.	structural issues, the reduction of petrol price, and the shift of investment flows to other markets. GDP goes down by 2%. • The RUB depreciated by 5% against the US$. • Wage decreases by 2%.	• The RUB appreciates slightly thanks to the recovery of the Russian economy. Wage grows slightly at the rate of 1%
Geopolitics	• Clearer support for China regarding the East Sea issue. • Disputes with the US on other issues in other regions are solved in a better manner	• Clearer support for China regarding the East Sea issue. • Disputes with the US on other issues in other regions are solved in a better manner	• Exerts clearer intervention to the Southeast Asian region
OTHER COUNTRIES Economics	Economic growth in the Southeast Asia recovers slowly because of impacts from the downturn in China, attaining 4.7%. Currencies of such Asian countries as Indonesia, Korea, Singapore, depreciate considerably by 5% in 2017 due to economic downturn in China. Wage: Basically, the growth rate will slow down. The Philippines maintain the growth rate of wage at the rate of 1.7% per annum till 2018 while that of	Economic growth recovers slowly because of deeper recession, attaining 4%. India achieves higher economic growth rate of 7.4%. Economic growth rate of countries in the Southeast Asia remains unchanged in relative to that in 2016	Economic growth of Southeast Asia recovers, attaining the average rate of 5%. Currencies maintain stable trends or slightly adjusted depending on the adjustment of the CNY. Wage in such countries as Thailand, Malaysia and Singapore grows at relatively high rates (4-9%). However, in general, the growth rates will decrease gradually.

	Baseline (S1)	Pessimistic (S2)	Optimistic (S3)
	Singapore is stable at 4%.		
Geopolitics	Southeast Asia cannot reach agreement on the East Sea issue. The presence of India is strengthened. Intervention of the US becomes more obvious.	The dispute over the East Sea is intensified by China, impeding instability in the Southeast Asian region.	The lawsuit by the Philippines shows positive signals. Solidarity of the ASEAN is strengthened to realize the AEC. Negotiation of the RCEP is progressed.

1) http://useconomy.about.com/od/criticalssues/a/US-Economic-Outlook.htm

Executive Summary

The world is changing. Remarkable changes have been witnessed in East Asia where China's emergence and the increasing bilateral/multilateral free trade agreements are shaping the economic and geopolitics patterns in the region. The facts have made regional countries become more interdependent. The trade and investment relations between any two countries have been no longer independent but influenced by the relations with the third country. This research is designed to investigate the trade and investment dependence of Vietnam on Korea given the increasing intensity of economic integration and more unstable geopolitics in the region. This research is based on network approach to investigate the bilateral trade and investment of Vietnam and Korea. As such, the relations of Vietnam and Korea are analysed taking into account the trade and investment of 13 other countries/group of countries who are large trade and investment partners of both Vietnam and Korea, including the EU, China, Australia, India, Russia, the United State, Japan, Singapore, Thailand, Indonesia, Malaysia, Cambodia, and the Philippines. The trade dependence index of Vietnam is calculated not only based on the trade structure of Vietnam, but also that of Korea as well as the power of Korea in the international market. The comparison of trade dependence by countries and by time gives critical insights about the relations. In addition, the inclusion of geopolitics into spatial gravity model is one of the innovations of this research. It allows to elaborately investigate the influences of the regional geopolitics, particularly the role of China, on the trade

and investment of Korea and Vietnam as well as other major partners in the region.

Vietnam and Korea have more than 20 years of diplomatic relations and remarkable progress has been made in improving and upgrading their ties. The strategic partnership was signed in 2009 in addition to the free trade commitments under framework of ASEAN Korea agreement (AKFTA). As a result, the trade and investment between Vietnam and Korea has increased remarkably. Korea soon becomes the biggest investor in Vietnam and the bilateral trade growth is recorded around more than 25% per year. The Vietnam-Korea Free Trade Agreement (VKFTA) in 2015 puts a cornerstone in the bilateral relation and is expected to potentially and fruitfully bring about benefits to both countries.

The reason for such expectation is the fact that the VKFTA is more open than the AKFTA which both countries are signatories. It may benefit Vietnamese firms, indeed, both in terms of exporting more agro-products to Korea and importing better quality inputs. It also facilitates restructuring the import market of Vietnam, avoiding heavily dependence on some other markets. From another side, the FTA also facilitates the FDI from Korea because of more open commitments in service and investment. However, for Vietnam, such benefits are conditional. Poor preparation and readiness of both its institution and its domestic enterprises will hinder Vietnam from enjoying
its trade with Korea.

Given a more intensive cooperation, Vietnam is more and more dependent on trade and investment with Korea. The dependence index shows that in overall, Vietnam's export dependence on Korea is less than other countries but inclines to increase since 2009. The same observation with a higher pace is found for import dependence in particular for auxiliary of garment and textiles, sea transport vehicles, machinery and mechanical appliances. This tendency is believed to continue because the VKFTA has taken into ef-

fect since 2015 and the expansion of FDI from Korea flowing to Vietnam will trigger a booming of import by Korean companies in Vietnam particularly the import of spare parts.

Another note is the trade dependence is intensified over time in line with the expansion of FDI flows from Korea to Vietnam, especially from large corporations because of the shift of investment from China. This led to the argument that FDI is one of factors that make trade dependence increase.

The FDI from Korea inflow in Vietnam has been also on the rise, largely contributed by the entry of very large firms in electronics and phones. Korea has become the biggest FDI investor in Vietnam that in turn implying an upward tendency of more investment dependence.

Assessing the trade dependence index with Korea does not mean the dependence is good or bad because the relations between Korea and Vietnam in both economic and political aspects are warm and supportive in recent years as well as there is no territorial issue interrupting such relations. The policy implication of this dependence is different from the dependence of Vietnam on China since there remain the conflicts of sovereignty between China and Vietnam, and trade dependence may be used as an instrument for politics and sovereignty negotiation. Increasing dependence on Korea in terms of both import and export indicates that the two countries have increasingly taken advantage of the signed FTAs. However, the dependence also demonstrates the tightened relations between the two and changes in political, economic and trade situations of Korea may notably affect Vietnam. This is the common trend of integration because of increasing inter-dependence among economies.

Further investigating the dependence suggest that even for some hypothetically unforeseen cases in which Vietnam would like to reduce such dependence, that the capacity to control international price of Korea is small, hence, Vietnam can proactively optimize the dependence either by diversifying commodities structure exported to Korea as well as diversifying export

markets. From this perspective, in the context that Vietnam and Korea are accelerating the negotiation and signing new FTAs with other partners, in the near future, the export dependence of Vietnam on Korea is not a very big concern.

The findings on the trade pattern using the spatial gravity approach suggested very intuitive evidence on the interdependence among countries. Besides other factors, FTA and geopolitical changes both determined the trade and investment. In addition, trade and investment flows of other countries also affect the trade and investment between any pairs of countries like Korea and Vietnam. The dependence of Vietnam on Korea is no longer only determined by the two countries themselves, but also the involvement of other partners.

As an example of the advantages of spatial approach, the analysis about trade and investment multipliers indicates that Korea growth affects the trade between Vietnam and Korea, but besides the direct effect, a large part is through the interaction with other trade partners, among that the influence from Japan, China and Singapore is substantial. Similarly, the institutional improvement and wage improvement of China may have critical impact on the trade and investment between Vietnam and Korea as well as other countries in the region. This comes to the forecast that the trade and investment dependence of Vietnam to Korea will be continued, but sensitive to regional geopolitical and macro-economic issues. It implies that the KVFTA does not result in higher export to the Korean market unless supported by some favourable environmental factors such as the stable geopolitics and sound macroeconomics of Vietnam or in the region.

The warming relationship between Vietnam and Korea is a very good environment for the trade and investment ties between the two which in turn brings about fruitful benefits for both sides. The stable regional geopolitics also plays a role for that. It, therefore, implies that keeping a stable environment in the region is not a duty of a single country or a group of countries

but also of any countries who have trade and investment relations with. Both the Vietnamese and Korean governments are aware of the issue of stability in the regional geopolitics.

From the Korean side, the relations with Vietnam bridges the relations to ASEAN. With cheap labour, large consumption market, this area should not be ignored by Korean investors. However, the role of China in this area also should never been neglected. China's influence in ASEAN is huge, given more and more interdependence among countries and the implementation of AEC, Korean investment in this region is likely to be still slower than that of Japan or China. This issue should receive a noticeable consideration.

With the increasing dependence and inter-dependence, the Vietnamese government should take advantage of this factor for their re-structuring economy, particularly improving the manufacturing sector toward export oriented strategy. Korea may become a good source of importing materials for exporting to other destinations, particularly the EU markets. EVFTA and VKFTA have generated great opportunities for Vietnam to eliminate the dependence on some traditional markets. In the context that TPP may be re-negotiated or cancelled, the critical improvement of the readiness of both Vietnamese and Korean firms for VKFTA is very necessary and needs to be done as soon as possible.

On behalf of the research team
Dr. Tran Toan Thang

국문요약

세계가 변하고 있다. 중국의 부상, 양자·다자 자유무역 협정 체결 증가로 동아시아의 경제적, 지정학적 환경이 눈에 띄게 변화하고 있다. 이러한 변화는 동아시아 국가간 상호 의존을 더욱 심화시키고 있다. 이제 양국의 무역, 투자는 당사국만에 의해 결정되지 않으며 제3국의 영향을 받는다. 이 연구는 동아시아의 지정학적 환경이 불안정하고 경제 통합이 심화되는 현 상황을 배경으로 베트남의 대(對)한국 무역, 투자 의존도를 분석하고자 하였다.

이 연구는 네트워크 방법론을 사용하여 베트남과 한국의 무역, 투자 관계를 살펴보았다. 이 보고서는 베트남과 한국의 13개 주요 무역, 투자 파트너(EU, 중국, 호주, 인도, 러시아, 미국, 일본, 싱가포르, 태국, 인도네시아, 말레이시아, 캄보디아, 필리핀)의 무역과 투자 흐름을 고려하여 베트남과 한국의 무역, 투자 관계를 분석하였다. 베트남의 무역의존지표는 베트남의 무역 구조뿐 아니라 한국의 무역 구조, 한국의 국제시장 내 가격결정력을 고려하여 산출되었다. 또한 국가별·연도별 무역 의존도를 비교함으로써 시사점을 도출하였다. 이에 더하여 공간중력모형에 지정학적 요소를 포함한 것은 본 연구의 성과 중 하나라 할 수 있다. 공간중력모형에 지정학적 요소를 포함함으로써 한국과 베트남의 무역, 투자에 미치는 동아시아의 다른 주요 협력 파트너들의 역할을 살펴볼 수 있었다. 이뿐 아니라 특별히 동아시아의 지정학적 환경 형성에 중국이 미치는 영향을 심도 있게 연구할 수 있었다.

베트남과 한국은 20년 이상 외교 관계를 맺어왔으며, 2009년 전략적 동반자 관계를 맺는 등 괄목할 만한 관계 개선을 보여왔다. 아세안 차원에서의 베트

남과 한국의 협력으로는 한·아세안 자유무역협정 체결이 있다. 한·아세안 자유무역협정 체결로 베트남과 한국 간 교역 및 투자가 상당히 증가하였다. 한국은 한·아세안 자유무역협정 체결 이후 얼마 지나지 않아 베트남의 최대투자국이 되었으며, 양국간 교역 증가율은 연간 25% 이상이었다. 2015년 발효된 베트남·한국 자유무역협정은 양국 관계의 초석이 되었으며, 양국 모두에 유익을 가져올 것으로 기대된다.

베트남·한국 자유무역협정이 이와 같은 효과를 가질 것으로 기대되는 이유는 베트남·한국 자유무역협정이 한·아세안 자유무역협정보다 더욱 개방된 형태의 자유무역협정이기 때문이다. 실제로 베트남·한국 자유무역협정은 베트남이 한국에 더 많은 농산품을 수출할 수 있게 하며, 더 나은 품질의 생산요소를 한국으로부터 수입할 수 있다는 점에서 베트남 기업에 이익이 될 수 있다. 또한 베트남·한국 자유무역협정은 베트남의 수입 시장 구조 조정에 도움이 될 것이다. 한편으로 베트남·한국 자유무역협정으로 인해 한국에 대한 베트남의 서비스, 투자 요건이 더욱 완화됨으로써 한국의 베트남 해외직접투자 유치가 활발해질 것으로 기대된다. 그러나 제도가 개혁되지 않고 베트남 기업이 베트남·한국 자유무역협정에 대하여 준비되어 있지 않다면 베트남은 베트남·한국 자유무역협정의 이익을 향유하기 어려울 것이다.

한편 무역, 투자 부문에서 베트남의 한국 의존도가 높아지고 있다. 의존도를 살펴보면, 전반적으로 베트남의 한국 수출 의존도는 다른 국가들보다 높지 않지만, 2009년 이후로 증가추세를 보이고 있다. 베트남의 한국 수입 의존도는 수출보다 더 높은 증가추세를 보이고 있다. 특히 섬유, 봉제 제품의 원자재, 해

양 운송수단, 기계류의 수입 의존도가 높은 것으로 나타났다. 2015년 12월 베트남·한국 자유무역협정이 발효되고 한국의 대베트남 해외직접투자가 증가함에 따라 베트남 내 한국 기업의 수입, 그중에서도 특별히 부품 수입이 크게 증가하였기 때문에 이러한 경향은 지속될 것으로 보인다.

또 하나 주목할 점은 한국의 대베트남 해외직접투자가 증가함에 따라 베트남의 대한국 무역 의존도 역시 증가하였다는 점이다. 여기에는 한국 대기업들이 투자처를 중국에서 베트남으로 전환한 것이 크게 작용한 것으로 보인다. 이러한 현상은 해외직접투자가 무역 의존도를 증가시키는 요인 중 하나라는 주장을 뒷받침한다.

한국의 대베트남 해외직접투자가 증가한 데는 한국의 전자제품, 휴대폰 생산 대기업들이 베트남에 진출한 것이 상당한 영향력을 미친 것으로 보인다. 한국은 베트남의 최대 투자국이 되었으며, 베트남의 대한국 투자 의존도 역시 상승세에 있다.

한국과의 무역 의존도를 연구한 목적은 좋거나 나쁘다는 가치 평가를 내리기 위함이 아니다. 한국과 베트남 사이에는 영토 분쟁이 없을 뿐 아니라 최근 수년 간 경제적, 정치적으로 우호적인 관계를 유지해왔기 때문이다. 베트남과 한국의 관계는 상호 이익을 주고받는 관계이다. 따라서 한국 의존도에 대한 정책적 함의와 중국 의존도에 대한 정책적 함의는 다르다. 왜냐하면 중국과 베트남은 영유권 분쟁 중이며, 베트남이 높은 중국 의존도를 보일 경우 자칫하면 중국이 영유권 분쟁 협상에서 높은 의존도를 협상도구로 사용할 수 있기 때문이다.

베트남의 한국 의존도가 수입과 수출 모두에서 높아졌다는 것은 두 국가 모

두 베트남·한국 자유무역협정의 이익을 향유하고 있다는 것을 의미한다. 그러나 한편으로 베트남의 높은 한국 의존도는 한국의 정치, 경제, 무역 환경 변화가 베트남에 상당한 영향을 줄 수 있음을 의미한다. 그러나 이러한 현상은 양국 경제의 상호 의존도가 높아지며 나타나는 일반적인 추세이기도 하다.

연구 결과, 베트남 정부가 대한국 의존도를 줄이고자 한다 해도 한국이 국제시장에서 가격을 조정할 수 있는 능력이 제한적이기 때문에 베트남은 수출 시장 다변화, 수출 품목 다변화를 통해 한국 의존도를 최적화할 수 있는 것으로 나타났다. 베트남과 한국이 머지않은 미래에 다른 국가들과도 자유무역협정에 대하여 논의·서명할 것임을 고려할 때, 베트남의 한국 의존도는 그다지 큰 문제가 아니라고 평가된다.

공간중력모형을 사용하여 무역 패턴을 분석한 결과는 국가간 상호의존도에 대한 직관적인 주장들을 뒷받침한다. 다른 요소들과 함께 자유무역협정과 지정학적 요소의 변화는 무역과 투자 모두의 결정 요인이었다. 또한 다른 국가들의 무역, 투자 흐름은 한국과 베트남과 같은 제3국간의 무역, 투자에도 영향을 미친다. 베트남의 한국 의존도는 더 이상 두 국가만에 의해 결정되는 것이 아니라 제3국의 무역, 투자 흐름에 영향을 받아 결정된다.

무역, 투자 승수에 대한 분석 결과 한국의 경제성장은 베트남과 한국 사이의 무역에 영향을 미치는 것으로 나타났다. 그러나 한국 경제성장의 직접적인 효과보다도 일본, 중국, 싱가포르와 같이 다른 무역 상대국들과의 상호작용을 통한 효과가 더 큰 승수효과를 내는 것으로 나타났다. 이와 유사하게 중국의 제도개선과 임금상승은 동아시아 지역의 다른 국가들뿐 아니라 베트남과 한국 사이

의 무역, 투자에도 중요한 영향을 미치는 것으로 나타났다. 이러한 연구결과를 종합해볼 때, 베트남의 한국 의존도는 높게 지속될 것이나 동아시아의 지정학적 변화와 거시 경제 이슈들에 의해 의존도가 변화할 수 있다는 결론에 이르게 된다. 이는 베트남 혹은 동아시아의 안정적인 지정학적 요인들과 베트남의 거시경제 건전성과 같은 우호적인 환경이 뒷받침되지 않는다면 한국·베트남 자유무역협정에도 불구하고 베트남의 한국 수출이 증가하지 않을 수도 있음을 의미한다.

베트남과 한국의 우호적인 관계는 양국간의 무역, 투자에 매우 좋은 환경이다. 이러한 환경은 베트남과 한국 모두에 이익을 가져올 것이다. 특별히 지정학적 안정이 양국간의 긴밀한 경제 관계에 중요한 역할을 할 것으로 보인다. 그러므로 동아시아 지역에 안정적인 환경이 지속되기 위해 노력하는 것은 몇몇 국가의 의무일 뿐 아니라 동아시아 국가들과 무역, 투자 관계를 맺고 있는 모든 국가들에도 의무일 것이다. 따라서 베트남과 한국 정부 모두 지정학적 안정의 중요성에 대해 인식할 필요가 있다.

한국에 있어 베트남은 아세안과 관계를 맺는 통로이다. 아세안이 저렴한 노동력과 거대한 소비시장을 지녔음을 고려할 때 아세안은 한국 투자자들에게 간과할 수 없는 지역일 것이다. 한편 아세안에서 중국의 역할 역시 무시되어서는 안될 것이다. 중국의 아세안 내 막대한 영향력, 국가간 상호의존 심화, 아세안 경제공동체 출범을 고려할 때, 한국의 대아세안 투자는 일본, 중국에 비해 빠르게 증가하지 않았으므로, 이러한 문제에 대한 관심이 요구될 것이다.

베트남 정부는 상호 의존도 심화를 자국 경제 구조 조정에 활용할 필요가 있

다. 특별히 베트남은 수출 지향적인 전략을 가지고 제조업 부문의 경쟁력을 개선할 필요가 있다. 베트남은 한국으로부터 수출 상품 제조를 위한 원부자재를 수입하여 EU와 같은 시장에 수출할 수 있다. 베트남·EU 자유무역협정, 베트남·한국 자유무역협정은 몇몇 전통적인 시장에 대한 베트남의 의존도를 줄이는 데 도움을 주고 있다. 환태평양경제동반자협정(TPP)이 재협상되거나 무산될 가능성이 있는 현 상황에서 베트남과 한국의 기업들은 베트남·한국 자유무역협정의 이득을 충분히 누릴 수 있도록 대비할 필요가 있다.

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Regional Inter-dependence and Vietnam-Korea Economic Relationship

Tran Toan Thang, Nguyen Dinh Cung, Dang Quang Vinh,
Dang Thi Thu Hoai, Truong Minh Huy Vu, Thai Thu Phuong, Hoang Thi Hai Yen,
Tran Thi Thu Ha, and Pham Viet Tuan

The world is changing, and more critical changes have been witnessed in East Asia with the emergence of China, which has shaped the economic and geopolitics patterns and inter-dependence among countries. This book aims at investigating the trade and investment dependence of Vietnam on Korea given the increasing economic integration and the more unstable geopolitics in the region.
It makes clearer the concept of trade bilateral dependence with the presence of the third parties. By using spatial gravity approach, it also points out the importance of geopolitics factor as well as FTAs in determining the trade and investment flows. The role of some major regional economies should not be neglected. Either the improvement in their institution or their economic slowdown significantly influences the trade and investment relation of Korea and Vietnam.

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