VIETNAM NATIONAL UNIVERSITY, HANOI

**UNIVERSITY OF ECONOMICS AND BUSINESS**

**SHASHI KANT PRASAD CHAUDHARY**

**EXPORT DYNAMICS OF VIETNAM: TRADE IN VALUE ADDED APPROACH**

**Major: International Economics**

**Code: 9310106**

**SUMMARY**

**DISSERTATION IN INTERNATIONAL ECONOMICS**

**Hanoi - 2019**

**Luận án được hoàn thành tại:**

**Trường Đại học Kinh tế - ĐHQGHN**

**Supervisor: Associate Professor Dr Nguyen Viet Khoi**

**Reviewer 1: Ass. Prof. Dr Nguyen Cam Nhung**

**Reviewer 2: Ass. Prof. Dr Nguyen Thi Kim Anh**

**Reviewer 3: Lecturer Dr. Nguyen Tien Minh**

**Luận án sẽ được bảo vệ cấp ĐHQGH**

**Vào hồi: ...**

**Có thể tìm hiểu luận án tại:**

**Thư viện Quốc gia**

**Luận án được hoàn thành tại:**

**Trường Đại học Kinh tế - ĐHQGHN**

**Supervisor: Associate Professor Dr Nguyen Viet Khoi**

**Reviewer 1: Ass. Prof. Dr Nguyen Cam Nhung**

**Reviewer 2: Ass. Prof. Dr Nguyen Thi Kim Anh**

**Reviewer 3: Lecturer Dr. Nguyen Tien Minh**

**Luận án sẽ được bảo vệ cấp ĐHQGH**

**Vào hồi: ...**

**Có thể tìm hiểu luận án tại:**

**Thư viện Quốc gia**

**Synopsis of dissertation**

In this study, the researcher has examined the ‘export dynamics of Vietnam’ in specific to a) industries’ contribution in value added exports, b) export’s contribution on economic growth, c) industries’ export competitiveness, and d) industries’ participation in global value chains, from the perspective of ‘domestic value added embodied in gross exports[[1]](#footnote-1)’ applying ‘trade in value added approach[[2]](#footnote-2)’.

The main motivation for employing this approach is to identify presence of exaggerations in the conventional export values, exports’ contributions, and competitiveness of exporting industries of Vietnam. For instance, Vietnam’s gross exports value was recorded US$147 billion in 2014 in conventional way; however in terms of domestic value added exports, this value came to be only US$94 billion. In terms of its shares in GDP, number drops from 79.3 percent to 50.5 percent, thus revealing an exaggeration of almost 29 percentage points in the contribution of gross exports in GDP.

The study uses secondary data extracted from OECD TiVA database (2016 edition), World Bank Indicators, UNCTAD Data Centre, and GSO, Vietnam. Of which, a huge chunk of data comes from OECD TiVA database.

After extraction of data, the researcher has analysed the sources and destinations of the value added embodied in gross exports of Vietnam in descriptive manner. On the other hand, to examine the contribution of the exports on economic growth of Vietnam, ARDL bounds test has been applied. The industries’ export competitiveness have been assessed in six major trading markets viz. the World, East Asia, the European Union, NAFTA, ASEAN and BRIS (BRICS less China) using Balassa’s index; while the GVC participation of Vietnam and its industries have been examined using Koopman et al. (2010) GVC participation index and Fally’s (2012) the distance to final demand index.

Of the five regional markets, the first four are the major trade destinations for Vietnamese products. However, in case of BRIS, despite its low trade share with Vietnam at recent, researcher got interested to examine its pattern over time because of involvement of Russia and India, the two larger economies in the world, in this bloc and also because both have special economic interest in Vietnam. Until the fall of Soviet-Union bloc, Vietnam was also a member of ‘Comecon’ and traded about 57 percent of its total exports with this bloc alone (GSO, 2006). Likewise, India has given a lot of importance to its ‘look east policy’ with special emphasis to Vietnam.

The dissertation comprises of EIGHT chapters, reference lists and appendix lists which have been discussed briefly in the subsequent sections. The key findings of the study are as below:

1. A long-run relationship exists between exports and GDP of Vietnam and shows a substantial long-run contribution of exports in the real GDP. A short-run relationship also exists between them.
2. Agriculture, mining, foods and beverages, textile and footwear, computer and electronics, electrical machinery, manufacturing not elsewhere classified, wholesale and retail trade, hotels and restaurants, and transport and storage have contributed significantly in the domestic value added export of Vietnam.
3. Except agriculture, mining, and hotels and restaurant, the remaining industries do also have significant contributions in foreign value added exports of Vietnam. Most active industries in importing for exporting (I2E) activities are computer and electronics, textile and footwear, foods and beverages, and electrical machinery.
4. China, Japan and South Korea are key suppliers of inputs as well as buyers of Vietnamese intermediate products.
5. Agriculture, foods and beverage, and textile and footwear have shown comparative advantages across all six markets in consideration (the World, East Asia, ASEAN, EU, NAFTA, and BRIS) consistently through 1995-2011.
6. Mining is competitive in East Asia, European Union and NAFTA; wood products in the World, East Asia, EU and NAFTA; non-metallic minerals in NAFTA only; computers and electronics in BRIS only; wholesale and retail trade in other than ASEAN market; and hotels and restaurants in the World, East Asia, EU, and BRIS. Apart from these, furniture that falls into manufacturing n.e.c. also has shown greater potential in recent period in terms of domestic value added exports.
7. Exaggeration is found the in the gross export values of the ‘human capital and technology intensive industries’ (e.g. machinery and equipment, computer and electronics, electrical machinery, transportation etc.). However the gross exports are found consistent with the domestic value added exports for low skilled labour intensive (e.g. foods and beverage, textile and footwear), and services industries (e.g. trade, hotels and restaurants).
8. Vietnam’s participation in GVC has increased significantly, mainly because of backward participation[[3]](#footnote-3) in computer and electronics, textile and footwear, foods and beverages, electrical machinery, basic metals, wholesale and retail trade, and transport and storage industries.
9. Among the four models of export-led growth strategies viz. Germany and Japan model, Asian Tigers model, Mexico model, and Chinese model, Vietnam is found close to resemble the Mexico model, whereby it has turned itself into export production platforms for foreign multi-nationals by suppressing the wages, rather than developing own indigenous industrial capacity.
10. Therefore, Vietnam requires collaborating domestic firms with the MNCs in order to densify domestic firms into global value chains and also to acquire foreign technologies in the prioritised industries. Hence, moving up the value chain into higher value added functions by enhancing the current level of global participation and in the meantime also developing own indigenous industrial base seems a better option for the sustainable economic growth of Vietnam. It also gives opportunity to drive the country toward long-term success with own ‘invented in Vietnam’ products.

**Chapter I**

**Introduction**

This chapter starts with discussion on the background of the study followed by statement of the problem. These give rise of four research questions as below which are the bases for the objectives of the study.

* Where is the ‘domestic value added embodied in gross exports’ originated in domestic economy?
* Which industries are contributing in the increasing ‘foreign value added embodied in gross exports’?
* Which industries are contributing in the economic growth and the export competitiveness of Vietnam?
* Where is Vietnam in global value chains?

In the following part of the text, researcher has discussed motivation, significances and delimitations of the study. The significances and delimitations have been presented briefly as below:

**Significances of the study:**

Researcher considers the following THREE points special about this study:

1. Researcher has not come across yet any thorough study on the aspect of export dynamics of Vietnam, and very specifically based on trade in value added statistics. Though there are a couple of rigorous quantitative works, but they have adopted many restrictive assumptions. Moreover, the aspect of GVC participation is also missing in those papers.
2. Researcher suspects that revealed comparative advantages list for Vietnam which is based on conventional gross exports is subject to be noisy and misleading, and may not reveal the true picture of Vietnam’s export competitiveness. Hence, this study is expected to give a better picture of it.
3. This study would serve as literature for anyone who wishes to examine the export dynamics of Vietnam and/or use of trade in value added approach for trade analysis.

**Delimitations of the study:**

1. This study is based on the OECD TiVA database (2016 edition) in which the TiVA indicators’ series are available for a period from 1995 to 2011 only, which has constrained the study period as well. The study also uses data series on national accounts from the World Bank. However equivalence of none of these data has been confirmed with the data of GSO (General Statistics Office), Hanoi.
2. This study does not analyse the export dynamics of Vietnam in comparison with the other ASEAN countries or any other comparative economies.
3. Some broader aspects of export dynamics such as assessing the relationship of value added exports with trade balances, foreign exchange rates and the environmental consequences of trade have been skipped in this study.

**Chapter II**

**Literature review**

This chapter discusses about the conceptual arguments, development of framework, and the importance of ‘Trade in Value Added’ approach. Discussion on other aspects of Literature Review such as research methods, analytical techniques, policy comments, and other relevant concepts have been presented in the relevant chapters of the dissertation.

One of the important components of this chapter to mention is the issues below with the conventional trade statistics since these issues have significant implications to look for an alternative measure of trade statistics that would overcome these flaws in the conventional trade statistics.

* 1. presence of multiple counting,
  2. unable to recognise the real contribution of a given sector’s export in terms of income or employment creation to an economy, also unable to demonstrate sectors where value added actually originates, and
  3. unable to reflect the real contribution of trade to an economy’s growth.

Moving further looking for an alternate approach, researcher came across the approaches developed in specific by Hummels et al. (2001), Koopman et al. (2008, 2010, 2012), Daudin et al. (2009), Johnson and Noguera (2011), Foster et al (2011) etc.

Among these approaches, Koopman et al.’s (2008, 2010, 2012) work provides a full decomposition of the value added embodied in exports in a single conceptual framework. This framework encompasses all the previous measures of vertical specialization and value-added trade in the literature, and decomposes a country’s gross exports into value added components by source.

The gross exports are disaggregated into four components of domestic value added-

1. domestic value added embodied in exports of final goods and services consumed by the importing country,
2. domestic value-added embodied in exports of intermediate inputs used by the importing country to produce its domestically needed products,
3. domestic value-added embodied in intermediate exports used by the importing country to produce goods for exports to third countries, and
4. domestic value-added embodied in intermediate exports used by the importing country to produce goods shipped back to source country, and the one component of foreign value added.

The work on literature review goes further to answer the importance of developing ‘trade in value added’ statistics on international trade. Apart from the fact that fragmented production process and trade in intermediate goods being the dominant features of global economic integration that has challenged the conventional wisdom on how we look at and interpret trade and, in particular, the policies that we develop around it, few other areas where measuring trade in value added brings a new perspective and is likely to impact policy choices have been discussed. These points are listed as below:

* A better understanding of bilateral trade imbalances
* An effective measure of the efficacy of trade barriers and trade measures
* A better way to analyse job contribution of trade
* A better measure of trade competitiveness
* Measuring backward and forward linkages of an economy
* Fair assessment of the environmental impact of trade

This chapter also reviews the previous relevant works on this aspect of exports in the context of Vietnam. In particular to the Vietnam’s participation in global value chains and domestic value added exports, researcher found limited numbers of studies available including Nadvi and Thoburn (2003), Bui et al. (2008), World Bank (2011), Tran et al. (2011), Ha (2012), Tran (2012), Dao and Nguyen (2013), Thanh et al. (2015), and Hoang and Pham (2016). Moreover, these works have focused on a particular sector, rather than the overall economy of Vietnam.

For instance, Nadvi and Thoburn (2003), Tran (2012) and Ha (2012) have used the global value chain framework to analyse Vietnam’s textiles and garments sector. World Bank (2011) has concentrated on the value chain of rice products in the Mekong River Delta. Likewise Hoang and Pham (2016) have analysed the global value chains of footwear industry, and Dao and Nguyen (2013) have examined the relationship between FTAs in the Asian region and the agricultural value chain. Only Tran et al. (2011) and Thanh et al. (2015) have attempted to analyse the overall picture of Vietnam in terms of breaking the gross exports into imported and domestic values. However, these works are based on ‘vertical specialisation’ approach bearing some assumptive limitations on its input-output coefficients and homogeneous products causing significant under-estimation of foreign added value in gross exports.

**Chapter III**

**Research methodology**

The research design applied in this study has been based on description and analysis of secondary data. The explanation of the research procedure being followed in this study has been given in appropriate places in the text. A bulk of data has been extracted from OECD TiVA database (2016 edition) for the purpose of analysis.

There are a couple of things about the OECD TiVA database that are important to notice:

* Firstly, the database includes TiVA exports series for 50 industries according to ISIC3.1 (International Standard Industrial Classification of All Economic Activities version 3.1) nomenclature, at division level (i.e. two-digit level) covering a period of 1995 to 2011 at the time of writing this paper, and
* Secondly, it has disintegrated the gross exports values into domestic value added (DVA) and foreign value added (FVA) contents, by country and by industry. Because of this, researcher has not put effort in computing these variables by him. Instead he has focussed more on the use of those data for analytical aspects of export dynamics of Vietnam.

The empirical analyses of dissertation have focused on the following assessments. Chapter IV presents the sources and destinations of the value added exports of Vietnam.

* + validation of the export-led growth of Vietnam (Chapter V),
  + reassessing the export competitive of Vietnam (Chapter VI), and
  + assessing Vietnam’s participation in Global value chain (Chapter VII)

The research methodology used for assessing these tasks has been discussed in the relevant chapters.

There is detail discussion on how to estimate the TiVA values including a simple model of single country and N industries (1xN) case and the two stages involved in it as below:

Stage1: Construction of an inter-country input output (ICIO) table; and

Stage2: Computation of trade in value added (domestic value added and foreign value added).

**Chapter IV**

**Sources and destinations of value added embodied in gross exports of Vietnam**

This chapter attempts to identify the exporting industries that have significant contributions in the domestic value added (DVA) and foreign value added (FVA) exports of Vietnam. It takes pictorial approach to present the contributions of industries in DVA and FVA, as well as in identifying the origin and destinations of those sorts of value addition.

**Major findings:**

1. There are 7 merchandised industries that have contributed at least one percentage points in the domestic value added export of Vietnam including (i) agriculture (ISIC01T05), (ii) mining (ISIC10T14), (iii) foods and beverages (ISIC15T16), (iv) textile and footwear (ISIC17T19), (v) computer and electronics (ISIC30T33X), (vi) electrical machinery (ISIC31), and (vii) manufacturing not elsewhere classified (ISIC36T37). There are 3 service industries including (i) wholesale and retail trade (ISIC50T52), (ii) hotels and restaurants (ISIC55), and (iii) transport and storage (ISIC60T63) that have contributed at least one percentage points in the domestic value added export of Vietnam.
2. In terms of destinations of domestic value added by regions, East Asia has been the largest market for the domestic value added exports of Vietnam since 1995 followed by NAFTA, EU, and ASEAN. In terms of destinations of domestic value added by country, China, Japan and South Korea are the major markets in East Asia; the United States in NAFTA; Germany and France in European Union; and Malaysia, Thailand and Indonesia in ASEAN region. Each country has own specific demand for specific products.
3. Major part of the foreign value added come from East Asian countries viz. China, Japan, South Korea, and Taiwan. ASEAN (excluding Vietnam) stood second after East Asia notably Thailand, Malaysia and Indonesia. European Union and NAFTA occupy third and fourth position respectively.
4. Computer and electronics, textile and footwear, foods and beverages, and electrical machinery are the most active sectors in importing foreign inputs to process and produce goods for further exports by employing locally available inputs, thus creating domestically value addition.
5. China, Japan and South Korea play important role as suppliers of inputs as well as purchasers of Vietnamese products.
6. The processing activities have been taking place in the industries, mostly led by Chinese, Japanese and Korean firms located in Vietnam.

**Chapter V**

**An empirical analysis of export-led growth of Vietnam**

This chapter examines the long-run relationship between domestic value added exports and economic growth of Vietnam using ARDL bounds test of cointegration on annual data. The bounds test establishes existence of both short-run and long-run relationship between exports and GDP of Vietnam and shows a substantial contribution of exports in the real GDP. The exports pattern of Vietnam portrays it following the footsteps of export-led growth model of Mexico, whereby it has turned itself into export production platforms for MNCs by suppressing the wages, rather than developing own indigenous industrial capacity.

The method used in this chapter follows a three steps procedure:

STEP1: Use ‘unit root test with structural break’ based on Perron’s work (1989) to determine the order of GDP and exports series, both measured in real terms.

STEP2: Use ‘ARDL Bound test of cointegration’ to test existence of long-run relationship between GDP and exports series.

(Whilst ARDL approach does not require testing the order of integration of variables beforehand, researcher has preferred to do it beforehand because ARDL approach would require at later steps to confirm that none of the variables are integrated of order 2.)

STEP3: Examine whether a short-run causality exists between them.

**Major findings:**

1. One percent change in domestic value added exports in real terms results into a long-run increase in real GDP of Vietnam by 0.73 percent.
2. The coefficient of the error correction term (ECT) is 0.331.

**Conclusions:**

* Both long-run and short run relationship exists between exports and GDP of Vietnam.
* The disequilibrium between exports and GDP is corrected by 33.1 percent per year in order to maintain the long-run equilibrium relation with domestic value added exports, ceteris paribus. With this speed, the economy would take 3 years (i.e. one divided by absolute value of coefficient of ECT) to absorb the full effect of value added exports’ shock on GDP.

**Policy discussions:**

The policy discussion in this chapter revolves around the question that whether Vietnam can sustain its remarkable growth it has achieved so far. The discussions have been made from two perspectives:

1. **Inherent bottleneck in the export-led growth model:** This part highlights the footsteps of Mexico that Vietnam has followed in terms of developing export-led growth model, whereby it has turned itself into export production platforms for foreign multi-nationals by suppressing the wages, rather than developing own indigenous industrial capacity. Researcher has shown his concern on this model as this model has been less successful so far, and Mexico itself has been struggling to recover its strong performance as in the period 1960–1980. Since 1980, GDP growth has been sluggish, labor productivity has been unchanged, and total factor productivity growth has been negative.

Considering the prerequisites for the Mexico model to work, researcher views the situation ahead challenging for Vietnam to sustain its export-led growth which it has achieved so far. Researcher argues that with the rising living standards, ultimately the comparative advantages of cheap labour force would vanish in the future, which means a wave of assembly jobs would flow out of Vietnam leaving masses of workers without jobs, creating dark days in the country. In addition, two other low-cost countries in the region, Cambodia and Myanmar are likely to rise as close competitors of Vietnam in the low cost assembly works in the near future. By that time, in case Vietnam fails to enter into higher value added tasks due to lack of adequate skills or technologies or both, it will drag itself into ‘middle income trap’ (a situation when a country cannot compete in low value added stages due to rising labour costs, and also cannot compete in higher value added stages due to lack of adequate skills and technologies).

1. **Changing political and macroeconomic situations:** Another challenge in the existing model is to manage risks that would originate from ‘supply shocks’ and ‘demand shocks’. Though Government of Vietnam has initiated to get into deeper international integration by signing new generation of deep preferential trade agreements (PTAs) with major trading partners such as Japan, Korea, EU and CPTPP apart from ASEAN-China FTA (2002), ASEAN-Japan Comprehensive Economic Partnership (2003), and ASEAN-South Korea FTA (2005, the changing macroeconomic situations that has developed across major trading partners of Vietnam in past few years has led to believe that the export-led growth strategy will fray for Vietnam. For instance, US consumers are debt saturated, and the US government is now more concerned about imports from outside. Europe is constrained by fiscal austerity. Japan continues to suffer from weak internal demand, and is also still hooked on export-oriented growth. That means if these macroeconomic conditions sustain the foreign demand for Vietnam’s exports would weaken for sure that might have catastrophic impact on its economic growth.

Therefore, it is suggested that the ‘assembling platform’ strategy of Vietnam shall be bonded with the strategy to develop own indigenous industrial capacity, and national technological base. These will help Vietnam to upgrade its activities along value chains in forms of (i) product upgrading, (ii) process upgrading, (iii) functional upgrading, and/or (iv) sectoral upgrading so that it can switch its role of ‘assembling agent’ to ‘indigenous producer’.

**Chapter VI**

**Reassessing the export competitiveness of Vietnam**

This chapter presents methods and outcomes towards identifying the competitive industries of Vietnam from the perspective of domestic value added exports. This also tends to identify presence of exaggeration in the gross exports measures of competitiveness. To do these, Balassa’s (1965) index has been used to measure the revealed comparative advantage of various industries of Vietnam across SIX markets viz. the World, ASEAN, East Asia, the European Union, NAFTA and BRIS in a comparative manner between TiVA and gross exports. Once Balassa’s index was computed, Galtonian regression equation has been used to observe the pattern of specialisation based on Dalum et al.’s (1998) ‘revealed symmetric comparative advantages (RSCA)’ index.

**Major findings**:

1. There are three manufacturing industries viz. agriculture, foods and beverage, and textile and footwear that have revealed comparative advantages across all six markets in consideration (the World, East Asia, ASEAN, EU, NAFTA, and BRIS) consistently through 1995-2011.
2. There are four manufacturing industries and two services industries that are ‘regionally competitive’ only:
   1. Mining products are competitive in East Asia, European Union and NAFTA.
   2. Wood products are competitive in the World, East Asia, EU and NAFTA.
   3. Non-metallic minerals are competitive in NAFTA only.
   4. Computers and electronics are competitive in BRIS only.
   5. Wholesale and retail trade in other than ASEAN market; and
   6. Hotels and restaurants in the World, East Asia, EU, and BRIS.
3. Apart from these, furniture that falls into manufacturing n.e.c. also has shown greater potential in recent period in terms of domestic value added exports.
4. Gross exports have underestimated the comparative advantages of natural resources intensive industries (e.g. mining, wood products, petroleum products). On the other hand, it has exaggerated the comparative advantages of human capital and technology intensive industries (e.g. computers and electronics, electrical machinery). However, conclusions based on gross exports align with that of domestic value added exports in case of low skilled labour intensive (e.g. foods and beverage, textile and footwear), and services industries (e.g. trade, hotels and restaurants).
5. While the natural resource intensive industries add high domestic value in their exports, the assembly activities in the human capital and technology intensive industries has contributed more in ballooning up their shares in gross exports, while their contributions in the domestic value added exports is comparatively lower (for instance 17 percent shares in gross exports while only 5 percent shares in value added terms in 2011).

**Conclusions:**

* + - Vietnam has revealed comparative advantages in ‘natural resources intensive and low-skilled labour intensive’ industries.
    - The revealed comparative advantage based on domestic value added, and the same index based on gross exports have yielded consistent results on competitiveness of those industries despite evidences of exaggeration or underestimation in the values of gross exports based indices.
    - Overall, three patterns have been observed: firstly, gross exports have underestimated the comparative advantages of natural resources intensive industries (mining, wood products, petroleum products); secondly, gross exports have exaggerated the comparative advantages of human capital and technology intensive industries (computers and electronics, electrical machinery); and thirdly, gross exports are aligned with the domestic value added exports for low skilled labour intensive (e.g. foods and beverage, textile and footwear), and services industries (trade, hotels and restaurants).

**Policy discussions**:

The researcher identifies that the natural resource intensive industries’ products add high domestic value in their exports, which is well suited to shift the country’s position up in the value chains in order to bring in bigger chunks of benefits from exports. This means these industries can play pivotal role in the export-led growth strategy of Vietnam, however, it requires adoption of ‘product upgrading’ and ‘densification of domestic firms’ as in present time, these industries export products that are either in raw form or as intermediate products.

The researcher also identifies that the assembly activities in the human capital and technology intensive industries has contributed more in ballooning up their shares in gross exports, while their contributions in the domestic value added exports is comparatively lower. That’s why; there is big gap between gross exports values and the domestic value added exports in this sector. As already established players in the region like China, Indonesia, Thailand and Malaysia have established their dominance in exports of technology intensive products, researcher suggests to focus more on serving the domestic market, and regional market such as BRIS where these industries have comparative advantages in the short run. In the long run, researcher views that through updating mandatory product standards, encouraging technological innovation and promoting competition and consumer’s protection, it is possible to achieve competencies in few more regional markets such as NAFTA and EU with which Vietnam has initiated to sign PTAs (Preferential Trade Agreements).

In case of low skilled labour intensive industries, researcher sees a couple of challenges that Vietnam needs to overcome to reap the benefits of exports. For instance, foods and beverages require improvement in the quality, and disprove the reputation for low quality ‘Vietnamese products' both in domestic and international markets. Likewise, Vietnam’s apparel and footwear businesses currently depend on foreign traders mostly from Hong Kong, Taiwan, and South Korea which supply the products to the foreign enterprises, thus Vietnamese domestic enterprises have almost remained unconnected with the end-users. The retail businesses mainly with EU, Japan and the United States, are also through international brands, supermarkets, wholesale stores and retail stores. Researcher concludes that this is a result of weak marketing and distribution activities in this sector. Therefore, its reliance on foreign companies for exports, and also its engagement in low value added process are the primary challenges in textile and footwear industry. Therefore, to remain competitive in those industries in the long term, Vietnam would need upgrading in the service related functions such as sourcing, supply chain management, design, product development, marketing, and branding (i.e. functional upgrading). It also would need shifting the foreign suppliers based backward linkage to the domestic one.

**Chapter VII**

**Where is Vietnam in global value chains?**

This chapter discusses about the participation and position of Vietnam in global value chains (GVC) in detail. Later it identifies the industries that have deeper integration into the global value chains for Vietnam. Researcher finds that the participation of Vietnam in global value chains has increased significantly in recent decades. Its policy of openness to trade and investment has made it integrated very quickly in the world economy. Therefore, this chapter also looks into which way Vietnam has connected to the international production network, and how such connectivity has affected position of industries that have involved in GVCs. Overall analysis suggests that Vietnam is specialising in middle-stream activities that include assembly of computer and electronics, textile and footwear, foods and beverages, electrical machinery, and other processed products.

To conduct these analytical tasks, researcher has applied Koopman et al. (2010) concept of GVC participation index to measure the involvement of Vietnam and its industries in global value chains. Likewise, Fally’s concept of ‘distance to final demand’ (2012); and the ‘GVC position index’ approach of Koopman et al. (2010) have been used to measure where exactly Vietnam and its industries are trading in the production process. Results have been presented by using appropriate graphs.

**Major findings**:

1. Vietnam’s participation in GVC has increased significantly, led by backward participation in computer and electronics, textile and footwear, foods and beverages, electrical machinery.
2. The GVC participation rate has shown positive correlation with the RCA index and shares of domestic value added exports.
3. The distance to final demand has been falling with the increasing GVC participation for all individual industry except textile and footwear, trade and hotels, and financial intermediation.

**Conclusions**:

* + - Vietnam’s participation in GVC has increased significantly led by backward participation.
    - Vietnam is predominantly assembling the intermediate products into final goods and subsequently exporting them.
    - Increase in Vietnam’s GVC participation is more likely to enhance the comparative advantages of exporting industries as well as their contributions in domestic value added exports.

**Policy discussions:**

A strong backward linkage in increasing participation in global value chain do not contribute much in value addition like the forward linkages, which is a concern for Vietnam in harnessing the benefits from increasing GVC participation. On this aspect, researcher discusses and recommend that the ‘assembling platform’ strategy of Vietnam shall be bonded with strategy to develop own indigenous industrial capacity, and national technological base. These will help Vietnam to upgrade its activities along value chains in forms of (i) product upgrading, (ii) process upgrading, (iii) functional upgrading, and (iv) sectoral upgrading so that it can switch its role of ‘assembling agent’ to ‘indigenous producer’. Nonetheless, these will require prompt initiatives in order to bring changes in the existing ‘education and vocational training’ related policies so that knowledge, skills and know-how of young generations can be enhanced.

Another policy discussion is on how to increase the international connectivity of domestic firms since Vietnam lacks ‘Vietnamese brand name’ in international market at present time that has made it relying on foreign companies for marketing abroad. Researcher recommends that the government shall prioritize involvement of domestic firms into global value chains.

Another aspect of policy discussion is the need of Vietnam to enter into deep preferential trade agreements with its trading partners. Researcher views this as a necessary need in order to be able to manage the supply and demand shocks to exports. This also focuses on the need of diversifying its export products and markets; and building up strong domestic demands for its products in order to sustain its economic growth.

**Chapter VIII**

**Summary, findings and suggestions**

This is the final chapter of dissertation that summarizes the overall research process and presents the key findings of the research. It also presents some thoughtful reflections on the research process and future direction of work in this area. At the end, it presents discussion on the policy direction that also includes suggestions.

Some important suggestions are presented below:

1. The ‘assembling platform’ strategy shall be bonded with strategy to develop own indigenous industrial capacity, and national technological base so that it can switch its role of ‘assembling agent’ to ‘indigenous producer’.
2. The natural resource intensive industries’ are well suited to shift the country’s position up in the value chains in order to bring in bigger chunks of benefits from exports. This requires adoption of ‘product upgrading’ and ‘densification of domestic firms’.
3. Vietnam shall enter into more deep preferential trade agreements (PTAs) with its trading partners to be able to manage the supply and demand shocks to exports.
4. Vietnam requires prompt initiatives in order to bring changes in the existing ‘education and vocational training’ related policies so that knowledge, skills and know-how of young generations can be enhanced.
5. Vietnam shall also focus on diversification of its export products and markets; and building up strong domestic demands for its products in order to sustain its economic growth.
6. Vietnamese computer and electronics sector shall focus on serving the domestic market and BRIS market where these industries have comparative advantages in the short run.

**References**

Researcher has cited 93 references, most of them credited to the reputable journals. The structure of the reference is in accordance with the guideline for dissertation as issued by University of Economics and Business VNU Hanoi. Some examples are provided below:

1. Liesner H.H. (1958), “The European Common Market and British Industry”, *Economic Journal* 68, pp. 302-316.
2. Nguyen T.N., Le H.A., Mai D.B. (2017), “The Relationship between Foreign Direct Investment, Trade and Economic Growth in Vietnam”, *Imperial Journal of Interdisciplinary Research* 3(3), pp. 1152-1160.
3. Koopman R., Powers W., Wang Z., Wei S.J. (2010), “Give Credit to Where Credit is Due: Tracing Value Added in Global Production Chains”, *NBER Working Paper* 16426, [National Bureau of Economic Research](http://www.nber.org/nberhistory/sfabricantrev.pdf), Cambridge.
4. Kowalski P., Gonzalez J.L., Ragoussis A., Ugarte C. (2015), “Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade Related Policies”, *OECD Trade Policy Papers*, No. 179, OECD Publishing, Paris.
5. Lafay G. (1992), “The Measurement of Revealed Comparative Advantage”, in Dagenais M.G. and Muet P.A. (eds.), *International Trade Modelling*, pp. 209-234, Chapman & Hall. London.

**Appendices**

There are 18 tables in appendices under 8 separate titles (A-H) that present the data used and the indices estimated in the course of working on the dissertation.

1. The ‘domestic value added embodied in gross exports’ is the value added by domestic industries of a country in the goods and services for exports. The proportion of ‘domestic value added embodied in gross exports’ of a country depends on several factors viz. (a) strong domestic value chains (Japan, and US), (b) significant shares of natural resources in their exports (Russia, and Saudi Arabia), (c) upstream position in global value chains, (d) significant proportion of services in exports (India), (e) entrepot trade sectors (Hong Kong, and Singapore), and (f) processing trade sectors (China, and Vietnam). Importantly, the first four factors (a) - (d) would support in improving the proportion of domestic value added embodied in gross exports; while the last two factors (e) – (f) would cause to capture less domestic value added embodied in gross exports. [↑](#footnote-ref-1)
2. ‘Trade in Value Added (TiVA)’ is a statistical approach that estimates the sources of value added, by country and industry in exported goods and services by disaggregating the value added embodied in gross exports into domestic and foreign contents. Thereby it recognises the ‘domestic value added embodied in gross exports’ as the actual exports of the reference country. [↑](#footnote-ref-2)
3. ‘Backward participation’ shows the extent to which the imports from supplier countries are used in the production of the reference country’s exports. [↑](#footnote-ref-3)