



BLEIKINGE INSTITUTE OF TECHNOLOGY

How the modernization process impacts on regional disparity in Vietnam and how the regional policy reacts to reduce the disparity?

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List of acronyms

ASEAN	Association of Southeast Asian Nations
CIA	Central Intelligence Agency
DPI	Department of Planning and Investment
FDI	Foreign Direct Investment
IMF	International Monetary Fund
MOLISA	Ministry of Labour-Invalids and Social Affair
MDEC	Mekong Delta Economic Cooperation
MPI	Ministry of Planning and Investment
KER	Key Economic Region
GDP	Gross Domestic Product
GSO	General Statistic Office
PSO	Statistics Office in Hochiminh City
USD	United States Dollar

List of figures, maps and tables

Figure 1- Modernization Stage, Hoover and Fisher 1949

Figure 2- The movement of Capital and Labour, Neoclassical Theory

Graph 1- Vietnam's GDP per capita from 1990-2013

Map 1- Vietnam political map

Map 2- Eight Regions

Map 3- Six Regions

Map 4- Map of Southeast region

Table 1-Vietnam's GDP per capita from 1990-2013

Table 2- Development Stage by Region in 2013

Table 3a - The ratio of population allocation by region (million)

Table 3b - The ratio of population allocation by industrial group and agricultural group (%)

Table 4 -The ratio of labour working in enterprises allocation by industrial group and agricultural group (%)

Table 5 - Registered capital each year by region from Foreign Direct Investment licensed projects

Table 6- The number of enterprises by region

Table 7- Monthly average income per capita at current prices - Unit: Thousand Dongs

Table 8- Number of Professional Secondary Student per 1000 residents by region

Table 9- Number of students per 1000 residents studying in College and University by region

Table 10- Number of bed at hospital per 1000 people by region

Table 11- The modernization stage by provinces in Southeast region 2013

Table of Contents

ABSTRACT	6
ACKNOWLEDGEMENT	2
LIST OF ACRONYMS	2
LIST OF FIGURES, MAPS AND TABLES	2
I. INTRODUCTION	6
1. GOVERNMENT AND POLITICS	7
2. REGIONS/ADMINISTRATIVE STRUCTURE	7
3. ECONOMIC DEVELOPMENT/HISTORY	9
4. MODERNIZATION PROCESS /HISTORY	10
5. OBJECTIVES/RESEARCH QUESTIONS	13
6. STRUCTURE OF RESEARCH/REPORT	13
II. THEORETICAL FRAMEWORK	13
III. RESEARCH METHODOLOGY	19
1. DATA ANALYSIS	19
2. REGIONAL PROBLEM	21
3. SCALE PROBLEM	22
4. ANALYSIS GROUPS FOR REGIONS	23
5. STRUCTURE OF ANALYSIS	24
IV. ANALYSIS BASED ON DATA	24
1. ASSIGNING REGIONS TO HE'S DEVELOPMENT STAGES	24
2. INTER-REGIONAL VARIATION: EXAMINING EACH INDICATOR FOR DIFFERENCES BETWEEN REGIONS	26
2.1. LABOUR FLOWS FROM AGRICULTURAL TO INDUSTRIAL REGIONS	26
2.2. CAPITAL FLOWS FROM MORE MODERNISED TO LESS MODERNISED	31
2.3. MONTHLY MEAN INCOME PER CAPITA	37
2.4. PROFESSIONAL SECONDARY/COLLEGE/UNIVERSITY ENROLMENT	39
2.5. NUMBER OF HOSPITAL BEDS	43
2.6. SUMMARY AND DISCUSSION	44
3. INTRA-REGIONAL VARIATION/ CASE STUDY: THE SOUTH EAST	45
3.2. DEVELOPMENT STAGE	46
3.3. INTRA-REGIONAL VARIETY	47
3.4. SUMMARY AND DISCUSSION	51
V. REGIONAL POLICY	52
THE REACTION FROM LOCAL GOVERNMENT	54
POLICY ANALYSIS	54
VI. CONCLUSION	56

Abstract

Vietnam is a medium-sized country, located in the Southeast Asia. Modernization began in 1986 when Vietnam opened the market and implemented a renovation policy named “DoiMoi”. Since then the structure of the economy has shifted towards a reduced agricultural sector, and larger industrial and service sectors. As the result, overall living standards in Vietnam have improved significantly. However development is not equally distributed. Some regions are now moving from industrial to service/knowledge economy, while other regions are still in the agricultural economies. Over time this inequality in rate of development between different areas led to dramatic gaps. Recognizing the increasing development gap between regions, between urban and countryside, and among social classes, the purpose of this study is to assess the role of modernization process.

Using fundamental development theories to build up the theoretical framework comprising modernization theory as the main theory, neoclassical theory and circular cumulative causation theory, the study will find reasons for the trends/differences or where the data does not behave as theory expects. Based on Chuanqi He’s Modernization theory (He, 2010), the regions are grouped into agricultural, industrial, service development stages. The study has find out that the gap between industrial region group and agricultural group has become larger year by year and though there are many catch-up efforts from Central Coast and Mountainous North, the gap seems not much reduced. It is very difficult for agricultural regions to break the “backwash effects” circle and escape from poverty. The study also uses the case study of provinces within Southeast region to see the variation *within* the region, at the province level.

I. Introduction

Vietnam is a medium-sized country, located in the Southeast Asia. Crossing the country from the North to the South, from the West to the East, the country has many different geographies, climates and tribes. Due to those differences, different areas of Vietnam has assumption that they would have different development level.

Modernization began in 1986 when Vietnam opened the market and implemented a renovation policy named “DoiMoi”. Twenty eight years later, Vietnam has achieved some recognizable successes. The economic development rate has been remained

consistently high and the structure of the economy has shifted towards a reduced agricultural sector, and larger industrial and service sectors. As a result, living standards in Vietnam have been improved significantly and Vietnam's economic has gradually integrated into the world's economy.

However, despite those achievements, the development process in Vietnam is quite slow, and Vietnam has still not fully transformed from an agricultural to an industrial economy. Moreover, the uneven development rates between different areas led to dramatic gaps. While some areas are now moving from industrial to service/knowledge economy, other areas are still agricultural economies. Vietnam is facing a serious problem of widening development gaps between regions, between cities and countryside, and between social classes.

1. Government and politics

The Socialist Republic of Vietnam (Vietnam in short) is a country located in Southeastern Asia, bordering the Gulf of Thailand, the Gulf of Tonkin, and South China Sea, as well as China, Laos, and Cambodia (CIA, 2014). Vietnam is ranked the 66th largest country in the world with 310,070 square km of land, and 21,140 square km of water (CIA, 2014). In 2013, the population in Vietnam was 93.4 million, spread between 54 nationalities (ethnicities?) of which 90% of population were the Kinh people (CIA, 2014).

Vietnam is single-party state, with only the Communist Party in government. The capital is Hanoi located in the North; Hanoi is also the second biggest city in Vietnam. Hochiminh city located in the South is the biggest city as well as the most developed and the economic capital of Vietnam (CIA, 2014). The head of the state is the president and head of the government is prime minister. The National Assembly elects the president from among its members for the term of five years. The president then appoints the prime minister from among members of the National Assembly (CIA, 2014).

2. Regions/administrative structure

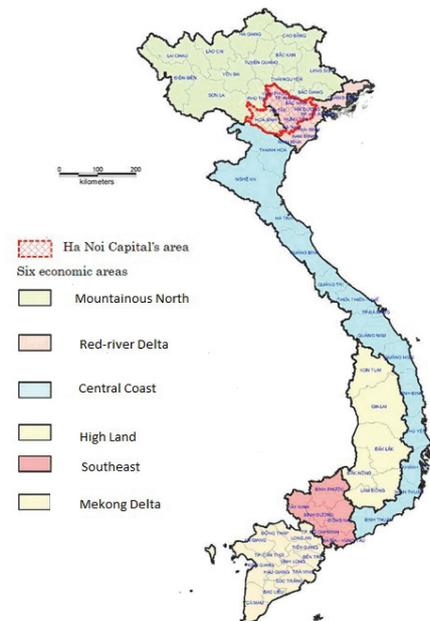
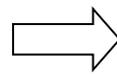
The country is subdivided into 63 administrative areas: 58 provinces and 5 municipalities

In Vietnam, the definition of region has changed several times due to the changes of national planning or national economic targets. In the late 1980s and early 1990s,

after the renovation policy, the Prime Ministry tasked the Ministry of Planning and Investment with drafting national spatial plans indicating the socio-economic regions in Vietnam. The national spatial planning until 2010 divided Vietnam into eight regions: the Northeast, Northwest, Red River Delta, North Central Coast, South Central Coast, Central Highlands, Southeast and the Mekong River Delta.



Map 2- Eight regions



Map 3- Six regions

However, in 2001 the National Assembly decided to again re-divide the regions of Vietnam. Currently, Vietnam has six official regions:

- **Mountainous North** comprises thirteen provinces in which Thai Nguyen and Lao Cai and Lang Son are three biggest and most developed cities. The region is the home of more than 35 ethnic minorities in Vietnam and 80% area of region is mountainous. The urbanization rate was about 10.5% in 2013 (MPI, 2013). The main source of employment is agriculture, with more than 70% population are working in this sector.
- **The Red River Delta** located in the north next to Mountainous North region, includes seven provinces and two municipalities -Hanoi (the capital) and Haiphong, a port 100km from Hanoi. These two cities are ranked the second and third largest economies in Vietnam. The metropolitan area including Hanoi, BacNinh city and Haiphong has a population of 8 million. The region's urbanization rate is 45.5% (MPI, 2013)

- **The Central Coast** region, located in the centre of Vietnam, comprises eleven provinces and the municipality of Danang. Danang is one of the major cities, and has the fourth biggest economy in Vietnam. The metropolitan area surrounding Danang has a population of 3 million. The overall urbanization rate is 35.5% (MPI, 2013)
- **The High Land** is located in the south adjoining the Central Coast region, and comprises four provinces, within which Buon Me Thuat and Gia Rai are two biggest cities. The urbanization rate is 20.5% (MPI, 2013)
- **The South East region** located in the south, next to High Land, includes seven provinces and the municipality of Hochiminh City. Hochiminh City is the largest and the most developed city and the economic capital of Vietnam. The South East metropolitan area covering Hochiminh City, Bien Hoa industrial city (Dong Nai province), Thu Dau Mot industrial city, Di An town (Binh Duong province) has a population of 12 million, making it become the largest metropolitan area in Vietnam. The urbanization rate is 65.5% (MPI, 2013)
- **The Mekong Delta** is the last region in the south neighbouring the South East region, and comprises eleven provinces and one municipality, Can Tho, which has a population of 1.3 million. This region is specialised in agriculture and aquaculture and has an urbanization rate of 35.5% (MPI, 2013)

These regions are used for planning, but do not have powers or governments - the Central Government still manages all regions. Until now, there is no official administrative division at regional level.

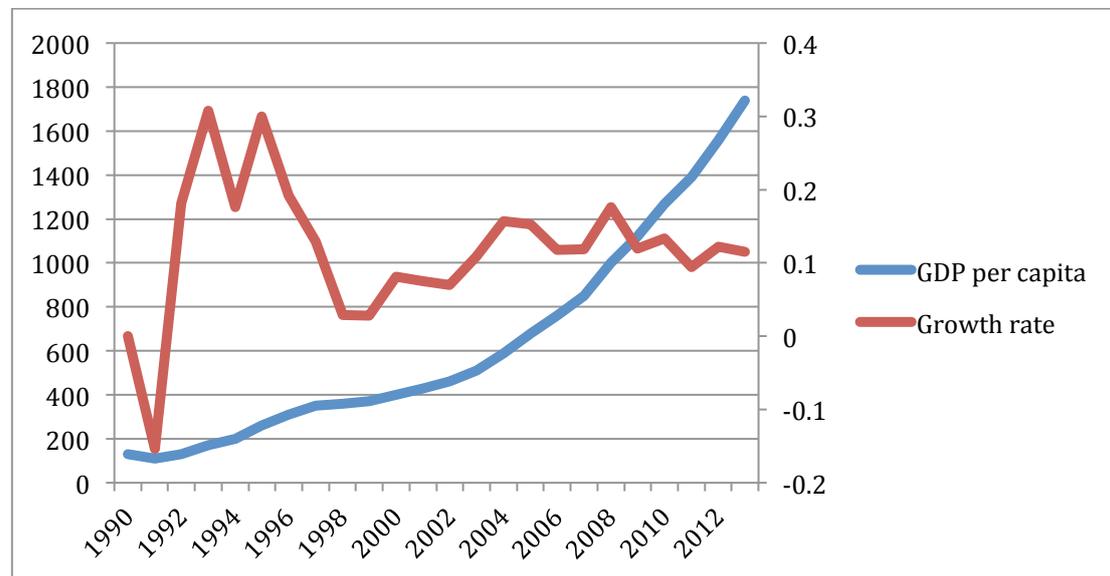
3. Economic development/history

Vietnam officially opened her market to the world in 1986. From this milestone, Vietnam has continually integrated to the world economy. Vietnam became the member of Association of Southeast Asian Nations (ASEAN) in 1995, joined World Trade Organization in 2007 and become an official negotiating partner in the Trans-Pacific Partnership trade agreement in 2010.

Over time Vietnam has been changed from a predominantly agricultural economy toward an industrial economy. The share of agricultural economic output shifted from 25% in 2000 to less than 20% in 2013, while the industrial sector increased from 36% to more than 42%. Moreover, Vietnam also has sustained an impressive GDP growth rate. Fast and stable growth has resulted in an increase in GDP from 6.46 billion USD only in 1990 to reach 171.39 billion USD in 2013 (see graph-1). After 13 years from

1990 to 2013, the GDP has increased dramatically. The average growth rate was 7.37% in this period (CIA, 1999-2013)

Graph 1- GDP per capita in Vietnam (USD) from 1990-2013



Source: World Bank (2013)

4. Modernization process /history

As mentioned above the modernization process in Vietnam began in the late 1980s - however, the potential for modernization was apparent as early as the 1960s. The process of transforming outdated agriculture to modern agricultural practises began in both side of divided country at that time. The involved increased hydraulic engineering, mechanization and the use of modern seed varieties and agrochemicals in agricultural sector.

In the South under both French colonial and USA's intervention flourished the most. At the time of American involvement, USA had made efforts to bring modernization to the South. For example, a large-scale hydraulic engineering project modelled on the Tennessee Valley was designed for the Mekong Delta. However, after reunification in 1975, the whole economy of Vietnam was collectivized economy under various form of new government. As the result, the early potential for modernization in Vietnam was totally stopped (Francois & Tran, 2013).

Following the new economic policy under the reunified Socialist Republic of Vietnam, Vladimir (2013) describes the new modernization process in Vietnam,

which began from the late 1980s. This followed the socialist model of industrialization by heavy industries in public sector as the core component, and only applied the command method without consideration of cost-effectiveness or financial resource. As the result of this model failing, the country was forced to look for other reforms in 1986.

The launch of “renovation policy” in 1986 was a signal of a new modernization policy combining both Government intervention and market forces. The modernization has actually been started in 1986 when Vietnamese economy became more market oriented and started becoming integrated in the global economy.

The new modernization policy has three objectives: technical modernization, formation of a large-scale industrial manufacturing and integration into the world economy (Vladimir, 2013). In this process, the Government concentrated on building hard infrastructure, training local personnel, technological innovation, attracting FDI and multinationals, and increasing the competitiveness of domestic products. After more than twenty years of this policy, the proportion of industry and construction in GDP has rose from 23% to 42%, transforming the structure of Vietnam’s economy from an agrarian to industrial agrarian one and on-course to become a fully industrial society (Vladimir, 2013).

The new modernization policy had created an impressive performance for Vietnam, however, until 1996 Vietnam was till one of the poorest countries in the world, with a GNI estimated at about USD 250-300 per capita (Liu, 2001). Even though a poor country, the inequality of living standards between urban and rural, and between regions in Vietnam was noticed. Liu (2001) compared the living-standard in Vietnam in the period 1992-1993 and 1997-1998, finding that per capita real expenditure was increased by 1.4 times while average real per capita expenditure in urban was twice as high as those in rural areas. Liu also identified the South East region as the wealthiest as well as most economically unequal region, while Mountainous North and Highland were evaluated as the poorest regions in Vietnam.

The World Bank report 2003 also again indicated Highland as the poorest region, followed by Mountainous North and the Northern part of the Central Coast with the poverty rate were 62.5%, 51.8% and 43.9% in 2003 respectively. Moreover, the report applied the Gini index to measure inequality in Vietnam - a measurement which ranges from zero when income distribution is perfect egalitarian, to one in extreme case all income is concentrated among a few. In nine years, from 1993 to 2002, the

Gini index increased from 0.34 to 0.37 and the Southeast had the highest Gini index among six regions with 0.38. The report has concluded that the inequality was gradually increasing in Vietnam.

Considering a quite similar development model to Vietnam, China is a successful story of a country now having a credible development process, having transformed from an agricultural to an industrial country with a very high growth rate for the last fifteen years. China Modernization Report Outlook 2001-2010 by He (2010) gives an overview of the modernization development process in China as well as how the development gap among regions changed during modernization.

He (2010) used the Yangtze River as a case study of development and as the representation for the development of Chinese society as a whole. He (2010) described the different level of development among regions of the Yangtze River ranging from the upper reach to the estuary. While the regions in the upper reaches and middle reaches are in agricultural economy, the lower reach is in industrial economy and the estuary is now in a knowledge economy. From the case study, He (2010) concluded that the process of social evolution was highly uneven and asynchronous.

With similar development model as China and sharing the similar characteristic of culture and economic history, this paper makes a hypothesis that in the process of modernization, Vietnam will also have to deal with the gradually widening of development gap between regions and within region.

Together with the modernization process, Vietnam is now facing the problem of a gradually widening of development gap between regions and within regions. These significant disparities create problems for the management of economic policy.

For example, the Vietnamese Government has pursued economic development policies for a long time which has given a lot of capital to fund poverty reduction program in poor areas, programs to attract investment to less developed regions, and a lot of special incentive policies. With a medium-low income country like Vietnam, the ability to continually support those programs and policies is a big question; especially with the Government recently facing serious public debt issues.

The other problem of the disparity is insufficient employment opportunities and low incomes in poor area which can cause movement of population from poor areas to rich areas. As the result, this can lead to an overload of public service, welfare, and increasing pollution in better-off areas. Moreover, the movement of labour will cause

the shortage of labour in poor area, so that when a development opportunity arrives, these will no longer have enough manpower to exploit the opportunity.

Violence is also one of the problems. The disparity will cause inequality in public service provision such as education, infrastructure, health care, between areas. The wider the disparity is the more social pressure would occur. When the poor area reaches their limitation, the violence has high potential to occur. China is an example of wide disparity causing the violence in remote rural area. Despite statements from the Chinese government about terrorist activities, the main factor behind Xinjiang violence in 1999 in China was analysed as socioeconomic inequality (Hasmath, 2014).

In the last decade, Vietnam the trend of increasing disparity among regions, and within region has been raised as concerns in public and the Government Assembly meetings. However, there is not much research in Vietnam about this issue. The study will try to analyse the effect of modernization process on the disparity among regions in both economic and social aspects and how the Vietnamese Government reacts to the disparity.

5. Objectives/research questions

How the modernization process impacts on regional disparity in Vietnam and how the regional policy reacts to reduce the disparity?

6. Structure of research/report

- Introduction
- Theoretical Framework
- Research Methodology
- Analysis based on data
- Regional Policy
- Conclusion

II. Theoretical Framework

This study uses the Modernization, Neoclassical and Circular Cumulative Causation theories as the theoretical framework to explain the regional development and modernization process in Vietnam. Based on the Modernization theory and classification of regions by development stages the study will evaluate and analyse the

regional development in Vietnam and how the government has reacted to the regional consequence of modernization.

Modernization began in the eighteenth century and the modernization theory was studied and developed in the twentieth century. Modernization is a historical process following the Industrial Revolution in the 18th century, which has affected changes in the activity, behaviour, process, content, structure, system and idea of human civilization (He, 2010, p.27). Modernization theories can be subdivided into four periods of development: classical modernization theory, the post-modernization theory, the multiple modernities and the second modernization theory (He, 2010, p.28).

In general, modernization theories explain the process of modernization within societies; the idea of modernization can be derived from the Idea of Progress (Peres, 1970, p 481). According to Hoover and Fisher (1949), the development stages are: the primitive stage, the agricultural stage, the industrial stage, and service stage. Societies progress from the primitive to service stage. Modernization theories have also identified the most important driving force of modernization as transport infrastructure (Kim and Jung, 2014; Waltz, 2015).

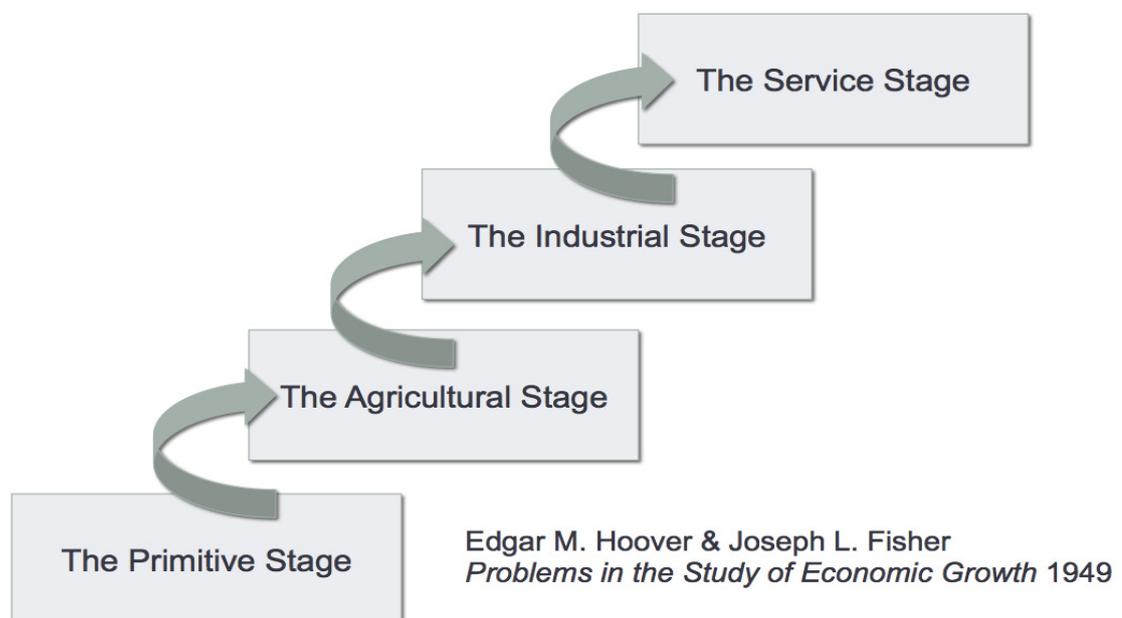


Figure 1- Modernization Stage, Hoover and Fisher 1949

During the 1980s-1990s many new ideas of modernization studies were produced, of which the second modernization theory by Chuanqi He, 1998 is an example. “The

second modernization theory is the theory of civilization development and can be called the civilization periodic acceleration theory” (He, 2010, p.20). According to this theory, the stages of development include: primitive society, agricultural society, industrial society and knowledge society. The theory divided the modernization process into two major stages: the first modernization and the second modernization (He, 2010, p.24). The first modernization refers to the transformation from agricultural civilization to industrial civilization and the second stage refers to the transformation from industrial civilization to knowledge civilization. The first modernization involves crystallization and diffusion of the first modernity, featuring industrial economy, marketization, standardization, automation and de-agriculturalization. The second modernization involves knowledge economy, large information and service sectors, globalization and de-industrialization (He, 2010, p.24).

According to second modernization theory by Chuanqi He (He, 2010, p4-24) the development of a region can be divided into two stages of modernization, equivalent to the four form stages of society:

- Primitive society: most labour is engaged in gathering or hunting (more than 95% of labour)
- Agricultural society: most labour is engaged in agricultural production (agriculture production > 30%, urbanization rate < 50%)
- Industrial society: most labour is engaged in non-agricultural production (agriculture production < 30%, urbanization > 50%)
- Service society: most is labour engaged by the service sectors (service production > 60%, gross enrolment ratio of tertiary education > 60%)

As a consequence, we can conclude that the modernization of region is the process of

- Economic integration with other regions by trade, and investment (capital flow) and immigration (the movement of labour)
- Specialization and changed specialization
- Transformation from an economy based on natural resources to an economy based on human resources
- Transformation from manufacturing of goods to delivery of services

During these processes, there will be many factors involved, which may help the

region develop to the next stage or capture the development of regions. Based on the modernization theory, Williamson (1965) stated that early stages of modernization, are characterised by rising regional income disparities and increasing North-South dualism. Meanwhile regional convergence and a disappearance of severe North-South problems are typical of the more mature stages of national growth and development.

The disparity between regions is created by the different development states of regions within a country. However, as Williamson said, convergence occurs when the nation reaches the mature development. It is a process of the economic integration between rich and poor region by trading and investment activities.

According to neoclassical theory (Hall and Ludwig, 2009, p.346-347), there is a movement of capital from developed regions to less developed regions, where the return on capital is expected to be greater. Consequently, over time inequalities in development (which can be measured crudely via real GDP per capita) between regions should dissipate as capital flows from the developed (high GDP per capita) regions to the less developed (low GDP per capita) regions. The inflows of capital to the less developed regions increase the marginal productivity of labour, thereby freeing up labour from the agricultural sector and allowing it to move into manufacturing.

Gradually, society will transform from agricultural to industrial society. This in turn boosts growth rates of less developed regions so that they exceed that of developed regions. The less developed regions will continue to grow at a faster rate up until the point where their GDP per capita converges at a similar level to that of other developed regions. Consequently, over time disparity in development between regions should disappear. The less developed region will incrementally begin to develop through the stages of modernization. As a result, the less-developed regions will catch-up with the developed regions; at the end all regions will be in last stage of modernization “service stage” or knowledge society.

Furthermore, neoclassical theory states that labour will migrate from less developed regions to more developed regions (where real wages are higher). In theory this should lead to a convergence in average real incomes (GDP per capita) across regions (Hall and Ludwig, 2009, p.346-347).

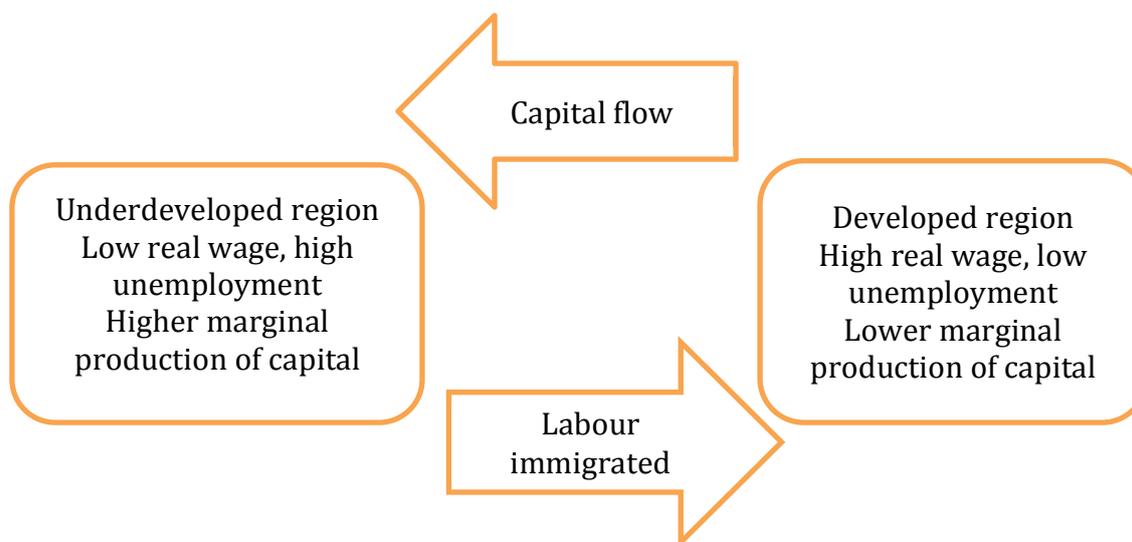


Figure 2- The movement of Capital and Labour, Neoclassical Theory

However in many cases, convergence does not happen, the poor regions become stagnant, and are not be able to transition to a new stage of development, while the rich regions become richer and reach a new development level. Thus, the gap development between them is not reduced but becomes wider. To explain this phenomenon, the circular cumulative causation theory by Gunnar Myrdal was introduced in 1957.

The circular cumulative causation theory defined by Gunnar Myrdal in 1957 is theory for development combining institutional and political factors besides the demand and supply (Nanako, 2014, p.12). In his theory, Myrdal (1957) uses “backwash effects” (Myrdal, 1957, p.27-29) and “spread effects” (Myrdal, 1957, p.31-33) to critique and explain the incorrect assumptions of neoclassical theory and explain the unequal development of regions.

According to neoclassical theory, labour flows from less developed regions to more developed regions, enticed by higher real wages in the developed regions. When labour flows away from the less developed regions the supply in is reduced, and real wages will rise. The inverse will occur in developed regions; labour floods the market, increasing the supply and pushing real wages down (Hall and Ludwig, 2009, p.346). However, based on Myrdal (1957, p.18-20), when labour immigrates to developed regions, it brings its own demand for consumer goods with it. The increase in population creates new demand and new jobs, and consequently, little real change in wages in the developed region.

The theory of circular cumulative causation also proposes explanations for why capital does not flow from more developed regions to less developed regions, as neoclassical theory predicts, even if there are no barriers to capital movement (Myrdal, 1957; Nanako, 2014; North, 2005; Hall and Ludwig, 2009).

- Firstly, the movement of fixed capital from prosperous regions to less prosperous has a cost in terms of physical transportation, logistics and administrative processes.
- Secondly, underdeveloped regions often have poorer infrastructure, poorer transportation and poorer labour skill – and cannot accommodate the capital immediately.
- Thirdly, if labour flows from less developed regions to developed regions and reduces real wages; the labour cost disparity is smaller and there is less incentive to shift capital to the less developed regions.
- Lastly, Myrdal critiques neoclassical theory's assumption of diminishing returns on investment. Due to the diminishing returns of the production function, less developed regions will exhibit a higher marginal product of capital and thus grow faster, leading them to catch up with more developed countries. However, if the production function is not diminishing and instead exhibits constant or increasing returns, the marginal product of capital will not necessarily be lower in developed regions.

(Hall and Ludwig, 2009, p.346).

The circular cumulative causation theory (Myrdal, 1957) has explained how development in reality is subject to many factors in the development process– social, political, environmental etc.

Synthesising these three theories, the development of regions will not go directly from primitive to agriculture stage, from agriculture stage to industrial stage, and from industrial stage to service stage smoothly like modernization theory suggests. In the development process, there are regions benefiting from “spread effects” and developing very fast, moving from non-developed to well-developed states. Meanwhile, there are a lot of regions left behind because of “backwash effects”, those regions cannot develop, become stagnant and stay in at a low level of development. The less-developed regions do not always get the capital from more developed region to develop and catch-up with their development. Moreover, there will be regions already developed to higher level which return to a lower level.

As a developing country with a significant North-South differences, Vietnam is expected to be a country with many different development levels.

Based on the combination of these three theories, the study will evaluate and analyse the gap development between regions in Vietnam.

III. Research Methodology

As a quantitative study, in order to analyse the trends and reasons for regional disparities in development, this study uses secondary data. In Vietnam, Vietnam's General Statistic Office (GSO) is the most reliable source of national data about the development.

To determine the validity of the modernisation theory we must test the predictions of the model. The key patterns we expect to see are:

1. Movement of people between less modernized and more modernized areas
2. Movements of capital
3. Increase or decreases regional income disparities
4. Improvements in public service provision such as education and health
5. Improved transport infrastructure correlating to modernization of a region

The aim of this study is to use quantitative published data to assess these claims, using GSO statistics. The next section examines these statistics to see what data can be used and how it can be used in relation to validating the predictions of modernization theory.

1. Data analysis

We expect to find a flow of labour between regions in Vietnam representing neoclassical theory's prediction about the labour movement from less-developed to more developed regions. However, the GSO does not produce statistics on intra-regional labour flows so the paper uses two measures: change in relative population and changes in the number people working in enterprises as a proxies.

According to the national birth policy, each family is allowed to have 1-2 children; therefore we can assume natural population growth is relatively homogenous in all regions. Actually population change could be made up of several factors: birth rate, death rate and international flows. However, according to the report from Ministry of Planning and Investment report (MPI, 2013), the amount of in-migration and out-

migration in Vietnam is quite low relative to the population, so that this paper excludes this factor as a confounding factor. Depending on age structure there can be a lag between the growths of two regions with the same birth rate. However, because of the limitation of data, the paper will make the assumption that all the natural growth rates are homogenous and all relative change of population are from the movements of population between regions

The number of people working in the enterprises (including all people working in state-owned enterprises, institutes and private enterprises) is only one part of the labour force; especially in Vietnam, there are many independent workers. However, because of limitation in data there are no statistics on the total number of workers in each region, and this study will use this statistics on enterprise workers as a proxy for the workforce of each region, and for the trend of the labour flows between regions.

To measure capital flows this study uses two measures: FDI and the number of enterprises set up. Similar to the labour flows, the data does not record movement between regions, so this paper assumes that there is a fixed amount of investment coming into the country. If less goes to one region, more goes to another region over time, and changes in FDI represents changes in capital. FDI does not capture investment from within the country; it presents the foreign capital from overseas to Vietnam.

Unlike FDI, the number of enterprise can be used as a proxy for investment not only from overseas but also for investment from within the country. If more enterprises are being set up in one region and fewer to another region over time, this is a sign of change in capital (and should capture internal as well as external investment). However, the data is not broken down by size of enterprise and the sizes enterprises are not equal. Moreover the number of the enterprises may be affected by the government's investment, for example public corporations may invest in some regions for political reasons, increasing number of enterprises. Given the data limitations, this paper assumes that there is no significant effect of enterprises' size or from government policies to raise number of enterprises in certain regions.

To analyse general provision of social services, this paper uses the number of students enrolled and the number of hospital beds by region as proxies. This paper predicts that the in more-developed regions, these indicators of public service will be better than in

less-developed regions. Differences in numbers of hospital beds, the number of students enrolled may not represent the healthcare and educational capacities of a region (for example, a region specialise in taking on additional students or patients from other regions). However, the paper uses these numbers to evaluate the ability of the region to invest in public service. No matter who benefits from them, these measures indicate whether the local government is rich enough to fund public services.

Because of the data available, indicators have different start and end times, some overlap and some do not. However, because the paper does not compare the indicators to each other, and only looks at them one at a time and the time frame for all data is roughly similar (post-2000s until present), these differences will not impact on the quality of the paper. In order to look at the development process, this paper will only looks at the start and end years, not at intervening years or mid-points. Only changes over the whole period not potential changes within the period are in the scope of this analysis.

2. Regional problem

In order to answer the research questions, the study will analyse the stages of modernization for each region in Vietnam. As mentioned above (I-section 2), until now there is still discussion about the definition of regions. In old documents before 2005, Vietnam was divided into eight regions even though after the National Assembly meeting in 2001, an official decision was made to have six regions comprised of the Mountainous North, Red River Delta, Central Coast, Central Highlands, Southeast, and Mekong River Delta. With the new division, there were mainly the changes in the grouping of provinces and cities in the Mountainous North and Central Coast. Therefore, in the process of collecting data, there are some mismatches of statistic in those two regions.

The study has two options, the first one is to use data based on old eight regions, and the second one is based on the official six regions. Both options have advantages and disadvantages.

How the regions are defined may have consequences for the result, as with fewer and larger regions there is a higher risk that intraregional variation is large. Therefore, the first option choosing eight regions set may give provide better measurements for the

analyst. Moreover, the first option provides data from the beginning of the modernization process in the 1980s. However, many old documents did not provide consistent statistic or lacked of reliable sources, therefore, they may be difficult to use. Furthermore, during Vietnam's early modernization period, there were relatively few changes in economic and social aspects of regions. The more significant developments only became apparent from 1999 onward.

Alternatively, if the study chooses the second option, of basing analysis on the six official current regions, the paper will be able to use more up-to-date and better quality data. However, this option also has some negative sides. In the old documents, statistics were aggregated at a whole region level, not broken down for each province; therefore, it is impossible to recalculate the data from eight regions to six regions. Therefore, the studying only can use the secondary data produced from 2001 until 2013. Even though there are some documents from the 2001-2005 period, which are calculated in the old in six regions format, those data are possible recalculated . As mentioned above, the more significant developments in the modernization process happened after 1999; therefore, the lack of documents from the beginning of modernization would not have a large impact on the quality of this paper. Hence, the availability of useful data is better for this option than the first one.

After considering both options, this study decided to choose the second option using the newer official six regions comprising the Mountainous North, Red River Delta, Central Coast, Central Highlands, Southeast, and Mekong River Delta. As a consequence this paper will only focus on the period 1999-2013, which has most available data to analyse.

Finally this study will also try to assess the amount of the intraregional variations by making a special study of the South East region.

3. Scale problem

The paper will look at both economic and social indicators in six regions in Vietnam including Mountainous North, Red River Delta, Central Coast, High Lands, South East and Mekong Delta. Due to data availability, this paper will use at the data from the period starting in 1999 until 2013.

By performing analysis on region level we are assuming that localities (provinces, districts, etc.) within regions are quite homogenous .In order to justify this assumption

we must also investigate intra-regional variation. However, because of data availability issues this is not possible for all regions; a case study only is done for the South East region in order to get some evidence of the scale of intraregional variations for the whole country.

The South East region was chosen for several reasons:

- The quality accessibility of data aggregated at the province level within the region
- The South East is the richest region in Vietnam where the most developed metropolitan area, Hochiminh city is located,
- The provinces of the Southeast region has are highly diverse geographically, culturally, historically and economically.

Therefore, this study concluded that it would be a good example of intra-regional variations, which can be generalised to the whole country

4. Analysis groups for regions

The paper has two options to group the regions. The first option is to divide six regions into two groups based on their development: economic centre regions comprised of the Red River Delta region and South East region in one group, and the rest including Mountainous North, Central Coast, High Land and Mekong Delta in the other. By choosing this option, this study could compare the development level within each group and inter-group. Therefore, the disparity between the more-developed group and the less-developed group as well as the disparity between regions in similar modernization stages could both be analysed.

However, if considering the economic regimes in Vietnam, the paper has the second option by dividing the country into three groups: the North, the South and the Central Coast. The North would consist of the Hanoi metropolitan area, backed up by Mountainous North. Meanwhile, the South would consist of the metropolitan is Hochiminh city metropolitan area, backed up by High Lands and Mekong Delta regions. Finally the Central Coast, which geographically separated from both the North and the South, has own regime to develop its modernization process.

However for this option, for the analysis and comparison purposes, the number of regions in each group is too small. In the North, there are only two regions, one region is the economic pole and the other is a supporting region. Moreover, in the centre, the Central Coast is also a single region; there is no other region in the same group to compare it with.

Secondly, one of the indicators to examine is population movement; actually, people can move from High Land to Central Coast from Red River to Central Coast, and Central Coast to South East. If we group the regions into the Northern, Centre and Southern, the movement of population will be adjusted inside the group, which will limit the usefulness of the indicator. For example, in looking at Northern group and finding there was only movement between Mountains and Red River, it would be difficult to measure labour flows from Northern group to other groups.

After considering the suitability of two options with this study's objectives and the availability of data, this study decided to choose the first option.

5. Structure of analysis

This study classifies each region using Chuanqi He's Modernization theory (He, 2010) into agricultural, industrial and service development stages.

To examine inter-regional patterns the study will look at each indicator in the context of the analysis groups and will use the theoretical framework to find reasons for the trends or differences where the data does not behave as theory expects.

To examine intra-regional patterns, the study will do a case study of provinces within the South East region.

IV. Analysis based on data

1. Assigning regions to He's development stages

As mentioned above, Vietnam has 58 provinces or cities, divided into six regions from the North to the South. Due to the difference in geography, culture and climate each region has also progressed to a different development level. According to second the modernization theory by Chuanqi He (He, 2010, p4-24)

- Primitive society: most labour is engaged in gathering and hunting (more than 95% of labour)
- Agricultural society: most labour is engaged in agricultural production (agriculture production > 30%, urbanization rate<50%)
- Industrial society: most labour is engaged in non-agricultural production (agriculture production<30%, urbanization>50%)
- Service society: most labour is engaged in the service sectors (service production >60%, gross enrolment ratio of tertiary education>60%)

According to these definition the development of regions in Vietnam can be categorized as follows:

Table 2- Development Stage by Region in 2013

	<i>Industry production</i>	<i>Agriculture production</i>	<i>Service production</i>	<i>Urbanizatio n</i>	<i>Developmen t level</i>
<i>Mountainous North</i>	41.4%	38.1%	20.5%	10.5%	<i>Agricultural Stage</i>
<i>Red-river Delta</i>	55.5%	7.5%	37.0%	45.5%	<i>Agricultural Stage</i>
<i>Central Coast</i>	36.5%	33.0%	30.5%	35.3%	<i>Agricultural Stage</i>
<i>High Land</i>	37.7%	33.3%	29.0%	20.5%	<i>Agricultural Stage</i>
<i>Southeast</i>	50.9%	5.3%	43.8%	65.5%	<i>Industrial Stage</i>
<i>Mekong Delta</i>	30.5%	43.5%	26.0%	35.5%	<i>Agricultural Stage</i>
<i>Whole country</i>	60.6%	15.5%	23.9%	33.4%	<i>Agricultural Stage</i>

Source: GSO (2013)

According to this definition, five regions in Vietnam are still in agricultural stage; the Red River Delta can be evaluated as being in the last process of the agricultural and in the beginning of the industrial stage, and only South East is now in the industrial stage. The study will consider the Red River Delta as a pre-industrial stage region and group it together with the South East region into the industrial group. From the table, the two regions in industrial group also contain the two biggest metropolitan areas: the Hanoi and Hochiminh metropolitan areas. The other group comprising of four regions are all the in agricultural stage: these are the Mountainous North, Central Coast, High Land and Mekong Delta. This group is labelled the agricultural group.

2. Inter-regional variation: Examining each indicator for differences between regions

2.1. Labour flows from agricultural to industrial regions

2.1.1. Population change of regions

Table 3a- The population by region (million)

Area	2001	2013	Change
VIETNAM	78.70	93.40	+18.68%
Industrial	29.19	37.36	+27,99%
South East	10.93	16.06	+46,94%
Red River Delta	18.26	21.29	+16.59%
Agricultural	49.51	56.04	+13.19%
Mountainous North	10.31	11.96	+16,00%
Central Coast	18.34	20.17	+9.98%

High Lands	4.41	5.70	+29.25%
Mekong Delta	16.45	18.21	+10.10%

Table 3b- The ratio of population allocation by industrial group and agricultural group (%)

Area	2001	2013	Change
Industrial	37.09%	40.00%	+7.85%
Agricultural	62.91%	60.00%	-4.63%

As shown in table 3a, only one region in industrial group, Southeast has a higher rate of population growth than the average and in the agricultural group there is also only one region growing faster than average, the High Lands region. According to assumptions outlined in methodology (whole nation having similar natural population birth rate, death rate and foreign immigration rate) , in the last 12 years all other regions including the Red River Delta (industrial group), Mountainous North, Central Coast and Mekong Delta (agricultural group) have lost population to the South East and High Lands.

The South East gets the most immigration from other regions. The population increased significantly 46.94% in Southeast. This growth also again confirms that the South East is the most developed and attractive region in Vietnam. The much higher growth rate of population comparing to the other industrial group region Red River Delta shows that the South East not only attracts the population from its neighbour regions but also from the North where the Red River Delta and Mountainous North are located. As mentioned above, the geography of Vietnam is quite unique as the country is quite long from the North to the South (more than 2,000km length), therefore, the movement of population between North and South used to be quite difficult. However, together with the modernization process, transportation within the country became much easier. People now can travel by bus, train or airplane within the country quite easily. Therefore, we are able to see significant movement of

population from all regions to the South East. As the centre of the North where the second largest city, Hanoi, is located, the Red River Delta is still has a lower population growth rate than the average. That means the Red River delta is not as attractive as the South East, or that Hanoi city is not as attractive to immigration as Hochiminh city. Even between two industrial regions, we still see significant movement of population from the less developed region to the more developed region.

Surprisingly, there is a significant increase of population in the High Land region. The increase of population in High Lands region, the poorest region of Vietnam is considered as an exception, not following the neoclassical theory. Explaining this circumstance, there was a Government policy during the 1990s to encourage people living in the Mountainous North and rural areas of the Red River Delta to emigrate to the High Lands region. People immigrated to High Land region could get free land, and received support from Government to invest in planting industrial trees such as rubber tree or coffee. As the result, there was a movement of population from the Red River Delta and the Mountainous North to the High Lands region during the last two decades.

This exception has shown that the economic development does not always comply with the theory; there could be many factors involved such as Government policy in specific processes. However, in the long term if the region does not develop or the local government does not have good policies to keep the population in place, there shall be another population movement from this region to more developed regions in the future. Even though the growth rate is quite high, the population increase was only of 1.3 million people in the High Lands during the 12 year period. Therefore, in gross rather than relative terms most of the population movement still involved the South East region.

Table 3b tells us that the share of the total population of the industrial group increased by 7.85% during the period 2001-2014, while the share of population of the agricultural group decreased by 4.63% in the same period. This movement follows the circular accumulation causation theory of backwash effects to poor regions - which people tend to move to more-developed regions to enjoy better job opportunities, higher salaries, better infrastructure and social services.

2.1.2. Labour force change of regions

Table 4-The number of employees working in enterprises allocation by region

Area	2001	2013	Change
Vietnam	4,690,889	8,451,952	78.05%
Industrial	3,170, 245	6,007,967	89,5 %
Southeast	1,845,745	3,342,308	81.08%
Red River Delta	1,324,500	2,665,659	101.26%
Agricultural	1,520,644	2,343,985	54,1%
Mountainous North	434,675	478,526	10.09%
Central Coast	545,890	1,071,787	96.34%
High Lands	164,546	226,326	37.54%
Mekong Delta	375,533	567,346	51.08%

Source: GSO (2013)

One of the most important indicators to evaluate the development of region is the labour movement. According to the neoclassical theory, the movement of labour tends to move from less-developed regions to more-developed regions to obtain better salaries. Indeed, table 4 shows the movement of labour from less developed regions to more developed regions. The movement is not only from the agricultural group to the industrial group but also from members of the agricultural group to the Central Coast (within the agricultural group). It is easy to notice that the South East, Red River Delta and Central Coast are the three regions having the highest concentrations of labour working in enterprises. They are also regions witness the higher rates of labour growth than the national average. Those three regions have a higher potential to attract the labour from the other regions.

Within the industrial group, the South East has the highest concentration of labour. In 2013, Red River delta was home of 2.7 million enterprise workers, while the Southeast had more than 3.3 million which means Southeast has a 20% larger workforce than the Red River Delta. Again, despite being in the same group, those

two regions have a quite clear disparity. While the Red River Delta has much more population located in the region, it has much lower workforce than the South East. Within twelve years from 2001 until 2013, the South East's workforce grew by 1.7 million while the Red River Delta grew by about 1.3million. However, in percentage terms, the growth rate was higher in the Red River Delta than in the South East because of the higher concentration of population in this area and also because starting number was much lower in the Red River Delta in 2001 compared with the South East. Therefore, even though in relative terms the change is small for a big economic centre like South East, it still counts as a significant growth for the Red River Delta. While the Red River Delta mostly attracts the labour forces from its neighbouring regions, the Mountainous North and Central Coast, it has probably has lost some of their labour in turn to the Southeast as well. According to neo-classical theory, the trend of labour flows is inevitable, and labour only stops moving when the regions converge at an equal development level. Therefore, as long as the South East still has the higher development level than the Red River Delta, labour shall still be concentrated in the South East rather than the Red River Delta. This also applies to other regions in agricultural group.

Turning to the agricultural group, it mostly lost labour to the industrial group, during the 2001-2013 period, as the number has increased 6.44% in industrial group and decrease 13.42% in agricultural group. Within the agricultural group, there are three regions with a lower labour growth rate than the national average rate: the Mountainous North, High Lands and Mekong Delta. That indicates that those regions are facing the problem of significant labour losses to more-developed regions. Losing the labour is also one of backwash effects of circular cumulative causation theory that make the poorer regions lose the opportunity to develop when the opportunity is there. Quite different than the rest of the agricultural group, the Central Coast is the only region growing faster than the average. This gives a signal that the Central Coast has developed to better level than the rest of its group. Central Coast is also only the region of the agricultural group, with a large city, the metropolitan area surrounding Danang municipality.

2.2. Capital flows from more modernised to less modernised

2.2.1. Foreign Direct Investment

Table 5- Registered capital from Foreign Direct Investment licensed projects by region

Area	2004 (million USD)	of Vietnam	of group	2013 (million USD)	of Vietnam	of group
Industrial	3,296.8	78.3%	100%	11,445.1	51.2%	100%
South East	2,491.5	59.2%	75.6%	4,713.9	21.1%	41.2%
Red River Delta	805.3	19.1%	24.4%	6731.2	30.1%	58.8%
Agricultur al	913.9	21.7%	100%	10,892.1	48.9%	100%
Mountaino us North	390.6	9.3%	42.7%	3712.0	16.6%	34.0%
Central Coast	386	9.2%	42.3%	6,465.0	29.0%	59.2%
High Lands	19.2	0.5%	2.1%	6.3	0.0%	0.1%
Mekong Delta	118.1	2.8%	12.9%	708.8	3.2%	6.5%

Source: GSO (2013)

In 2004, the industrial group accounted for 78.3% of capital from FDI, while the agricultural group only had 21.7%. In 2013, the proportion has significantly changed, as the industrial group and agricultural group accounted for 51.0% and 49.0%, respectively. The movement of FDI has changed from being concentrated in the industrial group to more going to the agricultural group. FDI is now moving from more-developed regions to less-developed regions in order to obtain better investment returns from cheaper labour and enjoy the incentive policies of those regions. At the

beginning of modernization, FDI only went to the more-developed regions that had better infrastructure, more skilled labour and many support policies from both regions and government. However, when the country reached a particular development level, with more-developed regions becoming richer, the wages increasing and the gap of the infrastructure decreasing, FDI moved to more peripheral regions.

A similar phenomenon happened within the industrial group. In 2004 FDI was mostly concentrated in the South East, however by 2013, there was a significant decline in FDI in this region and a moderate increase in the Red River Delta region. The movement of FDI between two more developed regions is the result of different development between them. As the South East moves from the industrial stage to the beginning of the service stage, there was a clear development gap between the South East and the Red River delta. FDI is now turning toward regions that offer similar conditions to the South East but at a lower cost which makes the Red River Delta the obvious alternative.

Among agricultural regions, on the one hand, Mekong Delta and High Land region can be considered as the regions without much FDI, while on the other hand, there was a significant increase in FDI to the Central Coast. From a region having quite low FDI in 2004, the Central Coast is now experiencing much higher FDI. Explaining this circumstance, in last few years, the Central Coast has successfully attracted numerous large-scale FDI projects, with capital investment much higher than normal FDI projects in Vietnam. This includes industrial factories, real estate and luxury hospitality projects thanks to many good local policies, the efforts from local government and local enterprises.

For example, out of general policies from central government to promote the development in less-developed regions, the local government also has own a lot of high priority policies for infrastructure investment, incentive policies such as reduction of corporate tax, free-land rental for limited periods, free labor training support for business activities and many promotion programs to attract domestic and foreign investors. In general, large public infrastructure projects are almost all funded from the Central Government budget, therefore to maximize the benefit of this investment, the Central Coast local government has successfully lobbied and get more of that investment to their region.

Especially, in order to improve the transportation between Central Coast and other regions, three new commercial airports have been built in the last few years. Moreover, the presence of large-scale industrial zones are another reason which helped the Central Coast attract big projects that other industrial zones in the Red River Delta and South East region could not accommodate. For example, the industrial zone area in Nhon Hoi and Chu Lai is two or three times larger than normal industrial zone in Vietnam.

Incentive policies to attract investment are quite common in many regions in Vietnam; however, the strength of Central Coast region has been transparency of its policies, the fast procedure and the support from local government's staff to investors working in their region.

In addition, local leaders also have paid more attention to promote the investment and reform local competitiveness. Many local government leaders in the Central Coast are active participants in investment promotion activities in Hanoi, Hochiminh, Thailand, Japan, and Europe to look for investors. According to Dr. Ngo Dang Doanh, the former director of the Central Institute for Economic Management, among all the strategies the Central Coast has tried so far, its attractive investment policies are the strongest weapon the region used to obtain investment.

However the FDI movement to the Central Coast is not only because of the local investment policies, but also because of the development of the South East and Red River Delta had also moved to a higher level.

In the case of the Central Coast, the movement of FDI has followed neoclassical theory, with capital flowing moves from richer to poorer regions to get higher returns on investment. While the South East no longer has incentive policies to attract FDI, and the Red River Delta only attracts green and high-tech investment projects, Central Coast is emerging as the place for heavy industry investment. According to neoclassical theory, the Central Coast will gradually catch up with the richer industrial group regions until they have an equal development. If the prediction is right, in the coming time, Central Coast will join the industrial region group and the movement of FDI will instead move to the remaining agricultural group regions. The Central Coast is now establishing a new metropolitan economic centre in Danang city, which is considered the third most developed city in Vietnam after Hanoi and

Hochiminh city. As Central Coast is still in the process of transforming from the agricultural stage to the industrial stage, therefore, most of development is happening in Danang and its surrounding area.

Among the other agricultural regions, the Mountainous North is also remarkable with quite high growth rate of FDI, increasing from 9.3% in 2004 to 16.6% of the country in 2013, which is almost equal to the national average. Good FDI attraction policies from local government are again a key to this high growth. Apart from incentive policies for FDI investment such as tax and land-rental, the local government has developed policies to give cheap accommodation to attract skilled workers to the region. Moreover, the investment in transport infrastructure by the Central Government to this region has made connections between the Mountainous North and the Red River Delta much easier and shorter. The highway from Hanoi to the main cities of this region only takes 3 hours. Taking advantage of location, next to the Red River Delta, many Mountainous North provinces have positioned themselves as factories for the Red River Delta. Local leaders are active in identifying, meeting and inviting investors who had already invested in the Red River Delta to expand their investment to their region. As a result, this region has succeeded in attracting many investment projects of which the highlight is the huge FDI project by Samsung Korea valued two billion USD to build its biggest factory in the world in 2012. However, the development in this region is not equally spread, as there are only some parts of Mountainous North sharing the border with the Red River Delta including Thai Nguyen, Lang Son, and Lao Cai who benefit from spill-over of the development in the Red River Delta. In other far northern parts of the region, there is mostly no investment or factories and people are still predominantly agrarian.

2.2.2. The number of enterprises

Table 6- The number of enterprises by region

Area	2004	of Vietnam	of group	2009	of Vietnam	of group	Change
Industrial group	57,044	62.3%	100%	169,929	69.2%	100%	197.89%
Red River Delta	25,178	27.5%	44.1%	72,676	29.6%	42.8%	188.6%
South East	31,866	34.8%	55.9%	97,253	39.6%	57.2%	205.2%
Agricultural group	34,512	37.7%	100%	75,749	30.8%	100%	119.4%
Mountains North	7,240	7.9%	21.0%	11,627	4.7%	15.3%	60.6%
Central Coast	11,635	12.7%	33.7%	36,608	14.9%	48.3%	214.7%
High Lands	2,880	3.1%	8.3%	4,294	1.7%	5.7%	49.1%
Mekong Delta	12,757	13.9%	37.0%	23,220	9.5%	30.7%	82.0%

Source: GSO, 2010, p.188

Table 6 shows that enterprises including both domestic enterprise and FDI enterprise are still concentrated in industrial regions where the growth rate is about 78.49% higher than the agricultural regions. In industrial group, the number of enterprises increased in both the South East and Red River between 2004 and 2009. However, while the South East still had the highest concentration of enterprises the growth was slightly higher in the Red-river Delta. In the agricultural group, there is the less number of enterprises located in those areas.

Distinct from other agricultural group regions, the Central Coast has a quite high number of enterprises located. From 2004 to 2009, the number of enterprise has increased significantly by 214.7%. As discussed above, the Central Coast has already

established a metropolitan centre for its region in Danang city, which is evaluated as the third most developed city in Vietnam after Hanoi and Hochiminh city. Therefore, the growth in enterprises in this region is quite easy to understand. Together with FDI, enterprises have started choosing Central Coast as a place to invest and locate. With the advantage of good regional investment policy, rapid improvements in infrastructure, the presence of an already developed city Danang and cheaper labour compared with the South East and Red River, the Central Coast will soon become a new economic centre of Vietnam.

As discussed there was a rapid growth in FDI in Mountainous North and Central Coast (table-5), however, in the terms of numbers of enterprises, the share of enterprise in Mountainous North decreased slightly. Quite different from the Central Coast, the Mountainous North does not have any metropolitan area or big cities. Moreover, the Mountainous North is quite near to the Hanoi metropolitan area of the Red River Delta. Therefore, even though it has been successful in attracting big FDI projects, it is still hard for the Mountainous North to attract the enterprise to physically move to the region. The Mountainous North is too close to Hanoi, so that FDI projects still easily be headquartered and managed from offices in Hanoi while being conducted in the region.

Among agricultural regions, in both FDI and number of enterprises, High Land and Mekong Delta stand out as regions without either significant FDI or enterprises. This reality is evidence of how neo-classical theory has failed to explain the capital flow between regions in Vietnam. Investment does not flow to regions with rich natural resources and cheap labour like High Land and Mekong Delta but to more developed-regions. In addition to wage levels they also take infrastructure and other factors into considerations. This fact not only applies to FDI but also domestic enterprises. Investment still goes to the places where there is more skilled labour, infrastructure, and good investment policies, but not to areas which only provide cheap labour.

According to the IMF World Economic Outlook 2011, in 2010 the annual labour cost in Vietnam is 1,002 USD; in Indonesia it is 1,027 USD, in China 1,500 USD, the Philippines 2,053 USD, in Thailand 2,293 USD, and in Malaysia is 4,723 USD (IMF, 2011). Compared with other neighbour countries, the labour cost in Vietnam is quite low; therefore, the exchange of more skilful labour and good infrastructure to cheaper labour is not sufficient for enterprises to move. The capital movement of neoclassical

predictions only occur when the labour cost in less-developed region much lower than in more-developed areas and the infrastructure in less-developed region is ready to accommodate investment projects.

We have seen the change in FDI and enterprises from being only concentrated in the Red River Delta and the South East to spreading to the new developed Central Coast region. This movement complies with neoclassical theory. Capital has actually moved from more-developed regions to a less-developed region to benefit from cheaper labour. For a long time, the Vietnamese Government has made a wrong assessment of their regional development policy by considering that investment will mostly run to regions with cheap labour and rich natural resources. However, there is very little investment going to the Mekong Delta and High Lands. These two regions are being left behind other regions and falling into the “backwash effects” of circular cumulative causation theory. For more than a decade, while other regions reached new levels of development, the High Lands and Mekong Delta have stagnated and not developed more. Gradually, they will continue losing development opportunities to other regions and be totally left behind unless policies change

2.3. Monthly mean income per capita

Table 7-Monthly average income per capita at current prices - Unit: Thousand Dongs

Area	1999	2012	Change
Industrial	382	2,696	605,8%
South East	571	3,173	455.7%
Red River Delta	282	2,351	733.7%
Agricultural	270	1,568	480,7%
Mountainous North	199	1,258	532.2%
Central Coast	229	1,505	557.2%
High Lands	345	1,643	376.2%

Mekong Delta	342	1,797	425.4%
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Source: GSO, 2013, p.257

Table 7- shows the gaps in income per capita distribution between regions in Vietnam. Even though both being the two members of the industrial group, the gap income between Southeast and Red-river Delta is quite large. In 1999, the South East had an income per capita double that of the Red River Delta. After 13 years, while the gap has been reduced dramatically, the South East still has an income per capita 35% higher. The income gap reflects the difference in modernization levels between the two regions. While the South East is transforming to a service economy, the Red River Delta is still in the industrial economy stage. According to neoclassical theory, the income difference has led to movement of labour within the group. As a consequence, the people from the Red River Delta moved to the South East (table 3) to enjoy the higher incomes, leading to a relative loss of population in the Red River Delta.

Income per capita in the agricultural group is quite similar among all regions. It is easy to notice the improvement in incomes in the Mountainous North and Central Coast compared with the rest. In 1999, the income per capita was much lower in the Mountainous North and Central Coast compared with the High Lands and Mekong Delta. However, 13 years later, the two poorer regions have almost caught up with the High Lands and Mekong Delta.

The improvement in income is the result of economic development in those regions, particularly the Central Coast, which has the highest income growth in the group at 557%. However, the incomes per capita of Highs Land and Mekong regions are still higher than the income per capita in the Mountainous North and Central Coast even though the former are being left behind in attracting investment to their regions. This shows how improving the income of whole region is quite difficult and takes a lot of time. Even though the economic development of the Central Coast is quite impressive, the income per capita of people living in this region is still quite low.

The concentration of population in the Central Coast region is one reason making it difficult to have homogenous income in all provinces within the region when most of the economic development is currently occurring around the metropolitan area of Danang city. Central Coast is very heterogeneous region. A lower income is also one

element which made the Central Coast and Mountainous North more attractive to investors than the High Lands and Mekong Delta. Both the High Lands and Mekong Delta are regions having the most exported agricultural products in Vietnam including coffee and rubber in the High Lands, rice and aquaculture products in the Mekong Delta. Therefore, the people living in these regions still have higher and more stable incomes than people living in Mountainous North and Central Coast.

Comparing the income per capita between the industrial group and the agricultural group, the difference of income is quite significant. The income per capita of the Red River Delta is about two times higher and South East is about 3 times higher than the agricultural group. By calculating the average income per capita of industrial group and agricultural group and dividing the total income per capita in one group by the number of regions in this group, we can see the trend of income gap between the two groups. In 1999, the average income per capita of industrial group was 426.5 USD and the agricultural group was 278.75 USD. In 2012, the average of income per capital in two groups was 2,762USD and 1,550.75USD respectively. After 13 years, the gap in monthly average incomes between industrial regions and agricultural regions increased from 41% in 1999 to 72% in 2012. Consequently, the gap in income between industrial and agricultural groups has widened.

The difference of income between regions has provided evidence explaining why the population has flowed from the agricultural group to the industrial group, following the neoclassical theory. This flow in labour and people from less-developed regions to more-developed regions has been driven by the ability to obtain higher incomes. It also correctly explains movements within agricultural group where people are moving from poor area to the new metropolitan area of Danang metropolitan area.

2.4. Professional secondary/college/university enrolment

Table 8-Number of Professional Secondary Student per 1000 residents by region

Area	2001	2010	Change
Industrial	3.5	12.9	268,6%
South East	3.3	14.7	345.45%

Red River Delta	3.5	11.1	217.14%
Agricultural	1.7	4.5	164,7%
Mountainous North	2.3	5.6	143.4783
Central Coast	1.8	6.3	250.00%
High Lands	1.2	3.0	150.00%
Mekong Delta	1.5	3.2	113.33%

(Professional secondary school is an educational and training unit at the professional secondary level. For the graduates of the lower secondary schools it applies 3 - 4 year training, and for the graduates of the upper secondary school, it applies 1 - 2 year training. (PSO, 2010))

Table 9- Number of students per 1000 residents studying in College and University by region

Area	2001	2010	Change
Industrial	30.25	42.7	41,2%
South East	29.8	40.4	35.6%
Red River Delta	30.7	45.0	46.6%
Agricultural	7.1	12.5	76,1%
Mountainous North	6.1	13.9	127.9%
Central Coast	12.1	17.9	47.9%
High Lands	5.9	10.0	69.5%
Mekong Delta	4.1	8.1	97.6%

The table-8 and table-9 show the number of students in professional secondary school (training school for labour) and college/university students in each region. The number of students studying in both categories is much higher in the industrial group than in the agricultural group. In Vietnam, except for compulsory primary school and secondary school education, almost all training schools and colleges/university are located in big cities and metropolitan areas. Therefore, regions where there are more big cities are normally the regions to hosting most of the education institutes. In contrast, in regions having only small cities or towns, the people have to go to other regions for further education.

Obviously, this is one reason why the number of students studying in industrial region is much higher than in agricultural region. The power of the economy provides with the potential to provide public services. The regions with higher levels of modernization have more financial resources to invest in public services including educational facilities than less-developed regions. Therefore, industrial regions have much better educational infrastructure to run lectures and accommodate students. The concentration of students in the Red River Delta and South East can be explained by larger and better educational facilities as well as the concentrations of population in those regions. Table-3 indicated that the Red River Delta is the region with the largest population, and the South East had the highest rate population growth during the last 12 years. Hence, the movement of population not only presenting for the movement of labour, but also the movement of students from less-developed regions to industrial regions.

In the agricultural group, the numbers of students also vary a lot. While the Mountainous North and Central Coast have similar numbers, the High Lands and Mekong Delta both have very low numbers of student. The numbers of students studying in these regions indicates how much resource the region investing into the education system. This can include the infrastructure of education and the quality of education in region to meet the demand of local people. If the region does not have enough space or facilities to provide lectures and accommodate students, the locals will have to obtain education in different region or give up studying.

Even though at a similar economic development level, the table shows the significant differences of number students in different types of education within the agricultural group. The Mountainous North and Central Coast both have higher numbers of

student studying in training and at college/university level. This shows that these two regions are making efforts to improve their educational systems. In contrast, the numbers of students in High Land and Mekong Delta are both quite low. With the advantage of exporting agricultural products, and stable income per capita, however, these regions have not paid much attention in improving education.

Even though belonging to the agricultural group, the Central Coast is again quite exceptional. The numbers of students in this region is much higher than the rest of its group. Particularly in 2010, while the number of students studying in college and university was relatively low in the whole group, the numbers were quite high in Central Coast. As mentioned above, in Vietnam, education institutes are mostly located in big cities and metropolitan areas. Therefore, the Central Coast has developed higher education because it already has had the municipality of Danang which is medium-sized and one of the most developed cities in Vietnam along with its metropolitan surroundings. Moreover, Hue city, also part of metropolitan area, used to be the capital of Vietnam before 1945. Therefore, in Hue, there are many big universities/colleges built during the French colony period such as the National Hue University, one of the biggest universities in Vietnam. The region had the infrastructure and has enough potential to support higher education.

Turning to the gap in education between the agricultural and industrial groups, the statistics show that after nine years, the gap is quite large even though there were improvements in the agricultural group. The gap in the category of professional secondary schools seems to have widened. When on average, the ratios of students in the industrial group and agricultural group were 3.5 and 1, 7 respectively in 2001; this became 12.9 and 4.5 respectively in 2010. This means that the gap was 2.06 times in 2001 and became 2.85 in 2010. However, the educational gap in college/university field seems turning in a different direction. In 2001 the gap was 4.29 times and in 2010 the gap was reduced to 3.42 times. The trend shows different patterns in education development orientation in Vietnam: the agricultural group seems to pay more attention to the higher education in college and university than in training schools.

Having a good education system does not only provide good public service for the local people, but is also the way encourage people stay and work in the region after graduation. It is a long-term investment for the development of the region; a region

cannot take advantage of development opportunities without a sufficient supply of skilled labour. Table 4 showed how industrial regions attracted labour from the agricultural group. Therefore, in order to develop and break the backwash effects, investment in education as well as improving the regional labour skill will help in the long-term.

2.5. Number of hospital beds

Another aspect of public services is the health-care system. In Vietnam, the capacity of the health care system is quite even in all regions. All prefectures in the region have their own clinics with at least one general doctor in charge.

Table 10- Number of bed at hospital per 1000 people by region

Area	2005 data	2010 data	Change
Industrial			
South East	1.8	2.3	27.8%
Red River Delta	1.3	1.8	46.15%
Agricultural			
Mountainous North	1.4	1.6	14.3%
Central Coast	1.3	1.7	30.8%
High Lands	1.2	1.7	41.7%
Mekong Delta	1.1	1.6	45.5%

Source: GSO, 2013

In general, the industrial group still has the higher rate of hospital beds than the agricultural group. However, as shown in the table, the numbers of hospital beds are quite even all regions with the exception of the South East. The South East's higher ratio again reflects the economic power of this region. As the most developed region, the South East has the potential to finance a larger scale public infrastructure of in which hospital beds is an aspect. The similar ratio beds in the other five regions including both the agricultural group and industrial group's Red River region shows

that public healthcare is quite equal in Vietnam. While this study has seen disparities in economic fields, and in education, healthcare is only the indicator that does not appear to be affected as much by differences in modernization stage.

As mentioned above, the more-developed regions always have more potential to invest in public service. Indeed, the number of beds has shown that the South East has better health care system than other regions. However, both Red River and Central Coast's relative economic advantage have not made much difference in this field. This phenomenon can be explained by the Government Policy to ensure all people living in Vietnam are able to access public healthcare services. Public healthcare can be considered as the most untypical indicator that the study has used to evaluate the disparity.

2.6. Summary and Discussion

By the dividing regions in Vietnam into two groups based on their modernization stage status, the industrial region group and agricultural group, differences in both social and economic aspects of development have been compared and contrasted.

Vietnam's quite different climate, cultural, people, and demographic characteristics between regions have resulted in differences from the north to the south. During Vietnam's history the Red River region has emerged as the northern development pole; meanwhile, in the south the South East region has become the development pole.

According to the "spread effects" thesis of circular cumulative causation theory, the pole regions with strong economic potential have more resources to invest in infrastructure, social welfare programmes, and public service. As a result, the people living in regions with development poles have better educational, labour skills and social services. The poles also create transparent policies and active investment environments. Therefore, over time, the poles would attract capital and human resources from other neighbouring regions. Consequently, they become more developed and the gap between the poles and the rest becomes wider.

From the different indicators that the paper discussed above including both economic indicators and social indicators, the gap in economic development, income, and social services between the industrial group and agricultural group has become larger year by year. Even though there are many efforts to catch up by the Central Coast and

Mountainous North, economically by improvement the investment environment or in social aspects such as investing in educational systems, the gap seems not to have narrowed much. Even though the figures show a growth in income, numbers of enterprises, FDI and numbers of students in less-developed regions, they also show that people are attracted to the more developed economic centres in Vietnam.

It is very difficult for agricultural regions to break the “backwash effects” cycle and escape from poverty. Indeed, the movement of capital predicted by neoclassical theory has happened occurred in the Central Coast and Mountainous North, leading to great improvement of economic and social aspects in those regions. However, to totally break the “backwash effects” cycle and to benefit more from spill over effects from the poles, the agricultural regions will need much stronger pushes from both Central Government and local government to compete with the poles. This intervention can be through public investment to improve the infrastructure, or financial tools to support the enterprises in less-developed regions develop.

3. Intra-regional variation/ Case study: The South East



Map 4 - Map of South East region

The South East region holds a strategic position in Southeast Asia; it is one of the hubs connecting Southeast Asia to the rest of the world.

The South East region includes eight provinces and cities: NinhThuan, BinhThuan, *Hochiminh City*, Dong Nai, Ba Ria-Vung Tau, BinhPhuoc, and TayNinh.

The South East is the most economically developed region in Vietnam. In 2013, the region contributed about 61% to the state budget, and the region is also the most

urbanized in the country with more than 65% people living in an urban area (MPI, 2013).

The South East metropolitan area includes the Hochiminh metropolitan area, Bien Hoa industrial city (Dong Nai province), Thu Dau Mot industrial city, Di An town (Binh Duong province), and other surrounding area, which has a population of 12 million, making it become the biggest metropolitan area in Vietnam.

The South East region has also been noted for its diversity of geographies, climates, and cultures. The region is the homeland of six ethnic groups including the Stieng, Khmer, Chauro, Champa, Ma and Kinh, and each ethnic group has their own culture and core values, which contribute to the cultural diversity of the region. The climate is also quite different between provinces/cities of Southeast. While NinhThuan, BinhThuan, BinhPhuoc and TayNinh have to suffer very hot weather with the shortages of water 6-7months/ year, Hochiminh, Dong Nai, Binh Duong, and Ba Ria-Vung Tau have quite good and stable weather for the whole year.

3.2. Development stage

According to second modernization theory by Chuanqi He (He, 2010, p4-24), the provinces in Southeast can be classified as below:

	<i>Industry production</i>	<i>Agriculture production</i>	<i>Service production</i>	<i>GDP per capita (USD)</i>	<i>Urbanization</i>	<i>Development level</i>
<i>BinhThuan</i>	24.7%	39.1%	36.2%	1,035	35.5%	<i>Agricultural Stage</i>
<i>NinhThuan</i>	31.6%	44.5%	23.9%	1,035	35%	<i>Agricultural Stage</i>
<i>BinhPhuoc</i>	23.3%	37.0%	39.7%	1,035	35%	<i>Agricultural Stage</i>
<i>TayNinh</i>	32.7%	43.3%	23.9%	1,390	45.5%	<i>Agricultural Stage</i>
<i>Dong Nai</i>	56.9%	6.3%	36.8%	2,546	63.0%	<i>Industrial Stage</i>
<i>Ba Ria-Vung Tau</i>	69.7%	5.8%	24.5%	2,872	67.5%	<i>Industrial Stage</i>

Binh Duong	60.8%	3.0%	36.2%	2,635	65%	<i>Industrial Stage</i>
Hochiminh	49.6%	1.0%	49.4%	4,500	89.5%	<i>At the end of Industrial Stage</i>
Vietnam	60.6%	15.5%	23.9%	1,029	33.4%	<i>Agricultural Stage</i>

Table 11- The modernization stage by provinces in Southeast region 2013

POS, 2015, p.2; Binh Duong DPI, 2013; Dong Nai DPI, 2013; TayNinh DPI, 2013; BinhPhuoc DPI, 2013; Ba Ria-Vung Tau DPI, 2013; BinhThuan DPI, 2013; and NinhThuan DPI, 2013

3.3. Intra-regional variety

Hochiminh city is the most developed area in Vietnam and the metropolitan area of the region. According to He's theory (2010), even though Hochiminh city has met the criteria of production and urbanization rate to qualify for the service stage, it has not met the ratio of tertiary education (>60% population). Therefore Hochiminh city is considered to be at the end of the industrial stage and on-course to transform to the service stage.

The city is economically well developed, contributing to 21% of national GDP, 66% of regional GDP. With a GDP per capita of 4,500 USD in 2013 (GSO, 2014; VPU, 2014¹) it is considered the economic driver in Vietnam. Hochiminh city is the largest city in Vietnam, with the registered population of 7,995,000 in 2014, accounting for more than 50% of the South East region's population. Hochiminh City is now in the second modernization stage, currently transforming from the industrial stage to the service stage. In 2013, the share of agriculture was under 1%, industry 49.6%, service 49.4% and the urbanization rate 89.5%. The city has shown strong characteristic of an industrial society on-course to become a service society in the near future.

History can be a crucial reason explaining the factors which contributed to making Hochiminh city the richest area in Vietnam. From the French colonial period until the 1960s, Saigon (the former name of Hochiminh city) was selected to be the capital of Indochina comprising Vietnam, Laos, and Cambodia. From Saigon the French Government expanded their influence over Southeast Asia. Therefore, they built up Saigon to be an economic and political centre and Saigon was considered the Eastern

Pearl or Eastern Paris. At the time of the Vietnam War (1945-1975) under the USA involvement, Saigon was the capital of the South, and continued being the centre of Southeast Asia. Therefore, after the Vietnam War, even though Hochiminh city has lost this status to Singapore, it is still had many advantages for development. Saigon was the first area in Vietnam to modernize, beginning this process during the French colonial period in 1960s, while other cities began modernizing from the 1980s.

Geographically, Binh Duong, Ba Ria-Vung Tau, Dong Nai and Tay Ninh are the four provinces bordering Hochiminh City. It is quite logical to think that those four regions would all benefit from spill-over effects from the development of Hochiminh city. However, as mentioned above, the metropolitan area of the South East only includes Hochiminh city, a part of Binh Duong and a part of Dong Nai. There is no part of Ba Ria-Vung Tau and Tay Ninh within the metropolitan area.

Binh Duong is an industrial province, with a third of the area of Binh Duong, including Thu Dau Mot city and Di An town, belonging to the South East metropolitan area. Both Thu Dau Mot and Di An are the industrial centres of their province. Only 30km distant from the centre of Hochiminh city, Binh Duong is the largest industrial area of the region, as well as the largest in Vietnam. Currently Binh Duong is the home of more than 28 large scales industrial zones including 1,200 enterprises both domestic and foreign. The province has developed very fast from 2007, with an average growth rate of 14.5 % until 2013; the GDP per capita is 2,635 USD (2013). It has transformed from an agricultural economy to an industrial economy with a share of agriculture at only 3%, industry 60.8%, service 36.2% and an urbanization rate of 65%.

Following Binh Duong is Dong Nai province, with a lower average growth rate of 13.32 % between 2007 and 2013. Dong Nai shares a similar development model with Binh Duong. Both regions have been positioned as factory areas for Hochiminh city. The capital of Dong Nai, Bien Hoe is also part of the South East metropolitan area. The GDP per capita is 2,546 USD (2013). With a lot of incentive policies and improvements in infrastructure, Dong Nai is now also the home of many multi-national firms' factories. The province has 18 industrial zones with more than 800 enterprises. After more than 25 years of modernization, from being a poor province in last two decades, Dong Nai is now in the beginning of an industrial economy with the share of agriculture at 6.3%, industry 56.9%, service 36.8% and an urbanization rate of 63%.

The third province bordering Hochiminh city, Ba Ria-Vung Tau is the only maritime province of the South East with a long coastline and having large reserves of oil and gas on its sea shore. This province is the only area having a coastline and oil and gas industries in the region. Hence, since the French colonial period, the province has been fairly developed. The income from maritime industries and oil and gas activities always played an important role in the province's GDP. Moreover, with the advantage of a location quite close to Hochiminh city, the province has been a leisure destination for Hochiminh city for a long time. Until now, maritime, oil gas and tourism are still the key industries in the province. With many advantages, Ba Ria-Vung Tau became an industrial province at the end of 20th century, and has had an average growth rate of 9.5 % from 2007 to 2013. GDP per capita is 2,872 USD excluding oil& gas and 4,872USD with oil and gas included. With the share of agriculture at 5.8%, industry 69.7%, service 24.4% and urbanization rate is 67.5% Ba Ria-Vung Tau is in the industrial stage

Taking these three provinces that are the most developed after Hochiminh city, the GDP per capita of Binh Duong, Dong Nai and Baria-Vung Tau is 1.7, 1.76, and 1.56 times lower than Hochiminh city and 2.6, 2.5, but 2.8 times higher than the GDP per capita of the whole country. Accounting for more than 85% of the population of the Southeast region, those rich areas including Hochiminh city, Binh Duong, Dong Nai and Baria-Vung Tau are drivers of the regional and national economy.

The last province sharing a border with Hochiminh city is TayNinh. The province also borders the Mekong Delta and the neighbour country of Cambodia. Therefore, it is a transportation hub connecting Hochiminh city to Mekong Delta, and to Cambodia as well as Thailand. Even though it is in a strategic location, the province is totally left behind Binh Duong, Dong Nai and Ba Ria-Vung Tau.

Currently, Tay Ninh is still in the agricultural development stage. The main occupation in Tay Ninh is still agrarian with the share of agricultural production at 43.3%. The only industry in the province is processing the agricultural produce. Even though sharing a border with two of Cambodia's provinces, SvayRieng and TbongKhmum, the trade across the border is quite poor and not developed. Tay Ninh seems to be stuck and cannot develop at the same speed as Hochiminh city, but is left behind and receives backwash effects from poor provinces in Cambodia and the Mekong Delta. The GDP per capita in the province was only 1,390 in 2013.

There are many reasons causing the stagnancy of this province, which is apparently located in quite a good location benefit from the development of rich areas. History, culture, and local government are the main reasons. Tay Ninh was totally destroyed after Vietnam War 1975 and suffered during the Cambodian genocide in 1981. As a result, the province still has a lot of the legacies of war such as bombs and mines, which handicap the province in attracting investment. Culture is also another reason, the local people in this province are almost all from ethnic minorities related to Cambodia, and therefore are more affected by neighbouring Cambodia than by Hochiminh city. The low development of province is also the responsibility of local government who were unable to maximize the strategic location of their province.

The remaining provinces including NinhThuan, BinhThuan, and BinhPhuoc are quite far away from the centre of region “Hochiminh city”, and are considered as the peripheral areas of the region. They are probably received little spill-over effects from metropolitan compared with provinces sharing the border with Hochiminh city. Left behind in the development of the region, all of them are agricultural economies, and poor provinces in Vietnam. All have very high the shares of agricultural production around 40%, and average GDP per capita of 1,035 USD which is lower than the Mountainous North.

There are many factors involved which make these provinces less developed, despite being located in the richest region in Vietnam, such as local government policy, climate, culture and history.

The geography is also quite different than other provinces in the South East. Hochiminh city, Binh Duong, Dong Nai, Ba Ria-Vung Tau, and Tay Ninh are quite flat, with a terrain including more than 80% are plains. In contrast, BinhPhuoc, BinhThuan and NinhThuan all have very high percentages of sand, coastal dunes, hills and low mountains. Plains only accounted for 10% of the natural land area.

The element of weather is considered as one of the significant reasons causing poverty. Even though part of the South East, those provinces are nearer to the Central Coast; therefore they share both the weather characteristic of dry weather from the Central Coast and hot weather of the South. Geographically, there are still a lot of documents identifying those provinces as belonging to the Central Coast, not the South East. Therefore, it is difficult for them to get support either from the Central Coast or from the South East.

Moreover, those regions have very hot and dry weather all year around, leading to the shortages of water for 6-7 months each year. With very high shares of agricultural production, the harsh weather affects directly affect the economy. In recent years, people of those provinces consecutively suffered from prolonged droughts and many other natural disasters.

Local government made plans to change the labor structure in this area, encouraging people to move from agricultural job to other jobs in order to reduce dependence on agriculture. However, people used to working in the agricultural sector often lack the skill to work in the factories or other jobs.

In order to improve the irrigation system as well as changing the labour structure, will require huge capital investment from both central government and local government. As poor provinces, it is very difficult for them to fund large public projects and they do not have a strong voice to get attention from central government. As the result, those provinces stuck between the development of the Central Coast and the South East, stagnate and get into the backwash effects cycle. As with TayNinh, it will be very difficult for poor provinces to break the cycle and catch up with other provinces in region.

Furthermore, being in the developed core of the region, Hochiminh city, Dong Nai and Binh Duong attract all the resources of this region and other neighbouring regions such as capita, labour and natural resources, to build up the central development pole of South East. Gradually, the “spread effect” around the pole will make the provinces near the pole richer and richer, while the others will have to suffer from “backwash effects”. One of the effects is the huge movement of labour from less-developed areas to the pole to obtain better jobs and salaries.

Counting only Hochiminh city, with only 1/13 of the area of the region, it is the home of more than 50% Southeast’s population. As the result, when the poorer areas gets an opportunity to develop, it will be difficult for them to find sufficient labour. Investors do not invest in regions without available labour. The back-wash cycle affecting a less-developed area in a region having many developed provinces may be much more difficult to break, than an equivalent province in a less developed region.

3.4. Summary and Discussion

The South East region is the most developed and the economic centre of Vietnam. It is the only region now in the industrial stage. The region has seven provinces and

cities divided into three levels of modernization development stage. The first group comprised of Binh Thuan, Ninh Thuan, Binh Phuoc and Tay Ninh are still in the agricultural group. The second group including Dong Nai, Binh Duong and Ba Ria-Vung Tau are now in industrial level. The last group comprising a single city, Hochiminh city, is now the most developed area in the region as well as in Vietnam and is currently transforming from the industrial stage to service the stage.

The intra-regional analysis on a specific case study showed the limitation of using region-level data to judge modernization progress. From looking at the case study we can see that in fact, there is a lot of variation *within* the region, at the province level. This shows that trends in modernization do not affect the entire region. Within the South East region, out of seven provinces, there are three provinces which have not modernized along with the other provinces.

We chose the most developed / region with the longest history / momentum of modernization and found this. This region should be quite homogenous compared with other regions of Vietnam. The evidence instead suggests that a lot of the problems occur between provinces within the same region, especially in larger regions with more differences of geography, climate and culture. A similar region might be the Central Coast, but other regions will have the same intra-regional disparities to different degrees.

V. Regional Policy

For long time, Vietnam concentrated on national growth without taking into consideration regional development policy to reduce the development gap. However, recently, the Government has made some movements to focus more attention on regional issues. During the last decade, the Government has implemented a number of tools in order to reduce the development gap between regions. The kinds of tools the Government has used to reduce regional disparities include economic tools, technical tools, administrative tools, and education/training tools.

- Developing the socio-economic regional development plans including land-use planning, building control, transportation planning, infrastructure planning and health-care planning.

- Issuing incentive Decrees, and Decisions to encourage investment in poor regions. These involve reduction or exemptions from corporate tax and land rental for 5-10 years for big investment projects in poor regions.

- Issuing Regulations coordination between Ministries, branches and localities for key economic regions-KER (Decision No. 159/2007 / dated 10/10/2007) including the Northern KER, Central KER and South East KER. The Northern KER comprises Hanoi, Haiphong city and 5 provinces of the Red River Delta, the Central KER comprises Danang city and 4 provinces of the Central Coast, while the Southeast KER comprises Hochiminh city, 5 provinces of the South East and 1 province of the Mekong Delta.

- The Prime Minister has approved an economic development program named Project 135 (Phase 1 and 2) in order to support extremely deprived communes in the mountainous and remote areas of the Mountainous North, High Lands and some localities in the Mekong Delta and Central Coast regions. In the first phase 1999-2004, the program targeted the 1,000 poorest communes, which later expanded to the 2,362 poorest communes. The program funds: (1) construction of infrastructure at the village and commune level such as roads, health centres, schools and irrigation systems. (2) construction of infrastructure at commune-cluster level such as the inter-communal roads (3) settlement and sedentarisation of ethnic minorities (4) agricultural and forestry extension [don't know what this means] (5) training of commune-level cadres for management and supervision of work. Of the funds, 95% of the budget went towards components (1) and (2). (Chung, 2006, p 156-172)

- Prioritising development and improvement of the infrastructure in less developed regions

- Establishing Steering Committees for the three regions of the Mountainous North, High Lands and Mekong Delta. These organizations are established and managed by the Party not by the Government with a main objective of building a strong grassroots-level political system, settling issues related to spontaneous [don't understand spontaneous migration] migration, ensuring religious security and fostering greater national solidarity (Vietnam Plus, 2014). The committees were founded not to promote the socio-economic development of the regions but more for

the political reasons. Therefore, it can be said that Vietnam still does not have independent organizations responsible for regional policy.

The reaction from Local Government

Vietnam still does not have consistent and official legal document to conduct the regional development in Vietnam. Therefore, locally, the province or city governments have made many efforts to promote the development of their region, especially the poor regions like the Mountainous North, High Lands, Mekong Delta or the Central Coast.

Some regions have established their own efforts to create connections between cities/provinces within their regions or between regions in order to promote the economy development. Example includes, forums to promote cooperation between provinces in the Mekong Delta region (named MDEC), or cooperation to promote tourism industry between seven provinces in the Central Coast. In the High Lands as a region exporting 98% of the coffee/cocoa and rubber production of Vietnam, the demand for organizations to connect all the farmers, factories and trading companies has been an incentive for this region to establish the Vietnam Coffee and Cocoa Association and the Vietnam Rubber Association. These associations, transfer technology and eventually bring people working in the same industry in the region together to sit down and find the way to cooperate.

Policy Analysis

However, because of the influence of the old mechanisms of policies bearing the imprint of centrally planned thinking, regional development policy's content still mainly in the direction of force distribution (bottom down system). That means that public resources or the State budget are divided by the Central Government and distributed to regions not based on the need of the region or the requirement to develop a particular component in a region but by the plans of Central Government.

As the result, region which need more public funds from State budget, may not receive enough resources and other regions may not know how to spend their capital received from the State budget. Obviously, this is not compatible with the market mechanisms that Vietnam is now pursuing. The economic mechanism in Vietnam is trying to replace the centrally planned economy by a market-based economy, to decentralize power, and spread more power at the local level. However, in regional

policy, all the decisions are made by the Central Government not by regional government.

Obviously, there is no clear principle on regional development policy in Vietnam. The Central Government plays a central role in the development, implementation and funding of development policies through a master plan for socio-economic development at national, regional, provincial, district and sector levels. Until now, despite having regional development policy, there are still neither regional level administrative structures nor organizations dedicated to implementing regional policy in Vietnam.

The effectiveness and efficiency of regional policy are called into question because policies are either too general or unbinding. When a policy is not binding, the region always has the choice of whether to follow it or not. One of regional policy's principles is the cooperation between members of regions and connections between regions. However, it seems like the connections are very weak. The local authorities still do not recognize the importance of cooperation linkage or do not know how to use cooperation to promote the socio-economic development in their regions, which leads to wasted resources and missed opportunities.

For example, investment in infrastructure of airports and seaports in many provinces recently has raised a big alarm and showed up the weakness in connections between regions and regional spatial planning in Vietnam. The policy to encourage provincial governments to work together in order to maximize the regional potential and avoid wasting of investment is not binding. As the result, members within the same region still work separately and compete against other to obtain more benefits for their individual province, but not for the benefit of the whole region. Though being in the same region, each province/city still builds their own airport/seaport to use for themselves. For example, in the Central Coast region, there are nine airports with the distances between airports less than 100km. As the result, many airports/seaports do not operate well or operate with low productivity. The members within a region still think they are unrelated to each other, and do need to support each other in order to develop. The scale of investment in building a lot of seaports and airports recently has showed the weak and inefficient regional policy and planning in Vietnam.

In order to conduct regional policy more effectively and efficiently, it is necessary to have a regional coordinating committee responsible for distributing the resources of

the region. The Central Government could support regional development through Regional Coordinating Committees rather than through specific provinces and cities. Then, the Committee will have responsibility for distributing the State Budget based on their own regional development master plan to ensure the provinces inside the region are well connected, contributing to the socio-economic development of the whole region (all the investment decisions will be made by the Committee).

While the links between members in a region is weak; it is even weaker between different regions. For example, in implementing the policy to improve infrastructure in poor regions, Mekong Delta obtained funding from Central Government to develop its transportation system. However, the capacities of transportation connections between the South East and Mekong Delta through highways/local roads and inland waterways are not consistent – for example a road might have a capacity of 30 tons while the bridges on the road only have a capacity of 10 tons. This has made investors are afraid to build factories in the Mekong Delta, and as the result Mekong Delta has not received much economic diffusion from the neighbouring South East region. Only when implementation of regional development policies are fully stated by the law or if powerful financial tools are used for punishments, will regional policy will become more effective and efficient.

At the Central Government level, regulations and decisions are legal binding; however, they are all too general and are not focussed at the regional level. Even though recently, there has been attention to regional policy, most policies in Vietnam are still focussed on the provincial level. For example, the policy to build new schools or hospitals, policies to improve the healthcare system, policies to attract investment, and so on are all written with province as the key word. While the idea of regional level is still very weak in the Central Government's policies, it is hard to ask regional and provincial level governments to follow.

VI. Conclusion

Modernization has the potential to bring a lot of great opportunities along with numerous challenges. Since the time Vietnam began implementing the modernization process, it is easy to recognize the significant changes in the Vietnamese economy and society. Vietnam has moved from being a low-income country to a middle-income country, from a purely agricultural country it is now transforming to an

industrial country. However, modernization process also brings challenges of which disparities in development is one of the most significant.

These disparities have been analysed both at regional and at provincial level. By dividing regions in Vietnam into two groups based on their modernization stage status, an industrial region group and an agricultural one, the differences in both economic and social development have been seen and evaluated much more clearly. The Red River region has emerged as the Northern development pole while in the South, the Southeast region has become the development pole.

According to the “spread effects” thesis of circular cumulative causation theory, the pole regions with strong economic potential have more resources to invest in infrastructure, social welfare policies, and public service. Therefore, over time, the poles would attract capital and human resources from other regions around and become more developed and the gap between the poles and the rest would become wider.

Using the different indicators which this paper examined, both economic and social, the gap in economic development, income, and social services between industrial region group and agricultural group was found to have become larger year by year. It is very difficult for agricultural regions to break the “backwash effects” cycle and escape from poverty. Indeed, movement of capital following the neoclassical theory recently occurred in Central Coast and Mountainous North, which as a result, have shown great improvements in economic and social aspects. However, to totally break the “backwash effects” circle and fully benefit from the spill over effects of the poles, agricultural regions will need much stronger pushes from both Central Government and local government to compete with the poles. The push can be through public investment to improve the infrastructures, or financial tools to support the enterprises in less-developed regions develop.

By performing an intra-regional analysis on the specific case of the South East region, the limitations of using only region-level data to judge modernization has been shown. In the case study, we can see that in reality, there is a lot of variation within the region, at the province level. This showed that trends in modernization do not always affect the entire region. Within the South East region, out of seven provinces, three provinces have not modernized along with other provinces. This suggests that a lot of the problems occur between provinces within the same region.

The issue of development gaps has been taken more seriously recently with more reports from both private and state-owned institutes discussing the topic. Therefore, regional policy has been created in order to reduce the gaps as well as promote development of the regions. However, up until now, although there were many efforts to promote the regional development in Vietnam, it is hard to find any efficient solutions issue from Central Government provided to Local authorities. Vietnam still does not have consistent and official legal documents to conduct the regional development.

Formally, Vietnam has a regional development policy, however, because of the influence of old mechanisms of policies bearing the imprint of central planning thinking, regional development's policy content still mainly in the direction of distribution force.

Moreover, there are no clear principles for regional development policy in Vietnam. The Central Government plays a central role in the development, implementation and funding of development policies through a master plan for socio-economic policies at national, regional, provincial, district and sector levels. Until now, despite of having a regional development policy, there are still neither any regional administrative structures or organizations dedicated to implement regional policy.

The effectiveness and efficiency of regional policy can be questioned because the policies are either unbinding or are not focussed at the regional level. As the result, regions have no obligations or legal responsibilities to comply with regional policy leading to the weak or no connections within region and between different regions. The weak connection not only weakens the regional power but wastes of investment for the whole nation. In general, it will capture the development of the region and the country. Unless member of regions sit down and find the way to work together, regional policy will remain only a piece of paper and Vietnam will have to deal with a widening development gap, with the economic poles getting richer and the rest continuing to stagnate.

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