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**RESEARCH ON EFFECTS FROM FDI TO ECONOMIC
GROWTH IN CENTRAL VIETNAM KEY ECONOMIC
REGION**

**MAJOR: DEVELOPMENT ECONOMICS
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SUMMARY OF DISSERTATION IN ECONOMICS

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INTRODUCTION

1. RATIONALE

In the globalization and integration context, FDI plays important roles in economic growths of many countries around the world. FDI is crucial for the development of developing countries after 1960s.

Research on the effects of FDI to economic growth both in Vietnam and other countries are plentiful. These effects were classified into two types: effects through the investment channels and spill-over effects. The positive effects of FDI to growth through investment channels have been confirmed by many researchers, such as Wang (1990), Balasubramanyam (1996), Zhang (2001), Hoa and Hemmer (2002), Vu, Noy and Gangnes (2006), Agrawal et al. (2011), Soltani Hassen and Ochi Anis (2012), Naveed Iqbal Chaudhry; Asidf Mehmood and Mian Saqib Mehmood (2013), Vũ Hoàng Dương (2015), and Nguyễn Minh Tiến (2015). FDI also has effects on growth through domestic investment. There are two ways FDI may impacts domestic investment: (i) Crowding-in effects or stimulating domestic investment or ii) Crowding- out effects or hindering domestic investment. These results have been shown in research such as Hayami (2001), Braunstein and Epstein (2002), Hoa and Hemmer (2002), Blomstrom and Kokko (1996), Yilmaz Bayar (2014).

On the other hand, FDI also has the spill-over effects or the indirect effects on economic growth. These effects include technology transfer and increasing productivity, jobs creation and workers' skills improvement, poverty reduction, etc. and have been shown in the following research: Roemer and Gugerty (1997), Chudnovsky and Lopez (1999), Dollar and Kraay (2000), Hayami (2001), Jalilian, Hossein; Weiss, John (2002), Nguyễn Thị Phương Hoa (2002), Trần Trọng Hùng (2002), Karim, Noor Al-Huda Abdul; Ahmad, Shabbir (2009), Ahmad Walid Afzali (2010), Đào Quang Thu (2013), Vietnam Social Science Institution (2011), Nguyễn Thị Tuệ Anh et al. (2006), United Nations Industrial Development

Organization (2011), Nguyễn Minh Tuấn (2010) and Nguyễn Hoàng Dương (2011), Nguyễn Minh Tiến (2015).

Most research in Vietnam and other countries focused on the effects of FDI on growth of a national or territorial economy.

Effects of FDI on economic growth could be positive or negative. A research on this topic for a central economic region with 5 provinces and the positive effects to the region's economic growth has not been conducted even in Vietnam. Such a deep analysis at regional level is expected to contribute evidences that will prove the available theories on the roles of FDI in economic growth.

The Central Vietnam Key Economic Region (CVKER) consists of 4 provinces and municipalities: Thua Thien Hue, Danang, Quang Nam, Quang Ngai, Binh Dinh. CVKER's economic growth since 2000 have been relatively high and remained at this high level during the years. Total region's GDP has increased significantly over the years: 15,800 billion VND in 2001, 24,000 billion VND in 2005, 43,600 billion VND in 2010, and 67,800 billion VND in 2014 in 1994 dollars (these numbers were 46,000 billion VND, 73,000 billion VND, and 199,000 billion VND in 2010 price). After 14 years, CVKER's economy size has increased by 4 times.

The region's growth significantly depends on capital, which currently accounts for 50% of growth. FDI is an important source of capital but it only accounts for a small share in total capital: 3.8% (2001), 9.8%(2006), 8.9%(2010) and 6.5%(2014). Innovative ways of growth and restructuring requires multiple sources of capital both in the short-term and long-term. Although FDI's share in total capital is relatively small, its positive effects to economic growth has remained unexplored. Thus, a research on this topic will not only answer these questions but also provide evidences for policy recommendations for promoting FDI's roles to economic growth in this region.

The rationales mentioned above are my motivations to choose the topic: "Research on effects of FDI to economic growth in Central Vietnam Key Economic region "for my dissertation.

2. RESEARCH OBJECTIVES

The dissertation's research problems rise the following research questions:

What are the positive effects of FDI on the economic growth in CVKER?

What are the possible policies to promote the roles of FDI to CVKER's economic growth in the future?

The purposes of the dissertation are to achieve the following research's goals:

- *First*, to evaluate current situation of economic growth in CVKER;

- *Second*, to evaluate the current situation of FDI growth in CVKER.

- *Third*, to evaluate effects of FDI to economic growth in CVKER

- *Fourth*, to suggest policies aimed at promoting the roles of FDI sector in economic growth in CVKER.

3. SUBJECT AND RESEARCH SCOPE

- **Research subject:** the dissertation focuses on researching the positive effects of FDI on economic growth in CVKER.

- **Research scope:**

+ *Content:* The direct effects and spill-over effects of FDI

+*Geographic area:* CVKER including 5 provinces and municipalities: Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai, and Binh Dinh.

+*Period:* The data used were from 2000-2014, the policy implications effects projecting for 2025.

4. RESEARCH METHODOLOGY

With the research subjects and research geographic's area that includes 5 provinces and municipalities, the dissertation used a combination of different research methods:

Qualitative method is applied to subjects related to FDI attracting activities in CVKER. The purpose is to collect information for evaluating effects of FDI firms in the region to its economic growth. Subjects for interview included Committees and Councils Leaders, Department of Planning and Investment, Department of

Industry and Trade, Agriculture and Rural Development Department, Labor, War Invalids and Social Affairs Department, Investment Promotion Centre, Management boards of Industrial zones, economic zones and high-tech zones in 5 cities and provinces in CVKER. These officials 'work include managing or cooperating with FDI firms. The total number of subjects was 85 persons.

The current research made use of quantitative methods include REM and FEM estimations methods with panel data. Least squares method is often applied for this type of data. Least square method neglects time matter and focus purely on the data. Rough estimate is the least squares estimation on the data set obtained by the object in space. Therefore, the least square method will consider all the coefficients do not changed between different objects and do not change over time. This is the limitation of the least square method. Therefore, the current research will apply estimation method for REM and FEM model with panel data. The collected data have both space and time elements, therefore using panel data has several advantages such as: increasing sample size and can be used for complicated behavioral models.

5. SCIENTIFIC SIGNIFICANCE

The dissertation has several contributions:

5.1. Contributions on theoretical and practical theories:

Firstly, there are many research on the effects of FDI on economic growth both in Vietnam and other countries. Majority of research has been done at the national or cross-country level. Therefore, the results only pointed out general trends and provided evidences to design economic policies at national level. Results of the current dissertation for CVKER will verify previously published results, and pointed out the disparities due to characteristics of this region. These are the contributions of the dissertation.

Secondly, the current dissertation combines qualitative and quantitative research to analyze effects of FDI to CVKER's

economic growth. The dissertation is one of few research in Vietnam that combined these two methods for a specific region in a developing country like Vietnam

Thirdly, other research in Vietnam and in other countries has pointed out the positive effects of FDI on economic growth through investment channel. However, few has mentioned the complimentary effects of FDI on other economic resources. The dissertation's results shown FDI not only has positive effects on economic growth and did not crowd-out, but also had the complimentary effects on other resource factors such as domestic investment and labor to generate growth in CVKER. These results are practical and theoretical contributions of the dissertation;

Fourth, FDI's spill-over effects on economic growth have been mentioned in many research but not with the specific case such as CVKER, a region with 5 provinces and municipalities and possesses huge potentials and other advantages. Our results showed FDI had positive effects on: (i) poverty reduction; (ii) business environment, infrastructure, commerce and integration; (iii) job, labor skills and production productivity in CVKER. These results are contributions of the dissertation to development economics research.

Fifth, the dissertation applied economic growth theories but focused on analyzing structure and ways that generate GDP, which made this research different from other research on regional growth only analyzed growth's. Therefore, the dissertation will contribute to theoretical and practical understanding of economic growth.

5.2. Implications and recommendations

Recommendation 1: Developing the role of FDI in promoting economic growth via the channel of investment, specifying as follows:

Firstly, recognize the important roles of FDI to economic growth in CVKER;

Secondly, adopt new approach in planning and implementing foreign investment policies in coming years;

Thirdly, make progress in improving local business environment, and create favorable conditions for firms' operation, especially FDI firms;

Fourth, improve and expand infrastructure in the region following the direction: (i) maintain and improve current conditions;(ii)integrate traffic planning and logistics; (iii) improve road quality and logistics; (iv) advance capability and quality of urban traffic services ;

Fifth, effectively mobilize domestic sources of capital and utilize the harmonization of FDI and these sources for economic growth.

Sixth, mobilize the labor resource to its greatest extent and give priority for vocational training and human capital.

Recommendation 2: Developing the indirect impacts of FDI on improving economic growth. More specifically,

First, recognize FDI as the most important factor for innovation and technological transfer;

Secondly, improve firm capability to absorb technology;

Thirdly, build a mechanism for cooperation and development of CVKER so FDI can perform its roles in the total economic growth of the region instead of the local cities

6. PREVIOUS RESEARCH ON THE EFFECTS OF FDI ON ECONOMIC GROWTH

6.1. Research in other countries

Research on FDI and economic growth in developing countries confirmed that FDI is the capital source that help solving the insufficiency of capital in developing countries' economies. FDI not only effects economic growth through investment but also has spill-over effects or

indirect effects to labor, jobs, commerce, integration, and technological improvement.

6.2. Research in Vietnam

Research on FDI and economic growth in Vietnam by domestic and foreign researchers are abundant. Their results showed direct positive effects of FDI on economic growth through investment channel and other indirect effects.

7. CONTENT

Chapter 1. Theoretical background on effects of FDI to economic growth.

Chapter 2. Characteristics of research areas and research methodology

Chapter 3. The situation of foreign direct investment and economic growth in CVKER.

Chapter 4. Effects of FDI on economic growth in CVKER.

Chapter 5. Conclusions and policy recommendations.

CHAPTER 1: THEORETICAL BACKGROUND ON EFFECTS OF FDI ON ECONOMIC GROWTH

1.1. Theoretical background on FDI and economic growth

1.1.1. Theoretical background on FDI

1.1.1.1. FDI definition

“Foreign direct investment is the movement of capital when investors in a country invest in another country to create physical capital or capital for production and directly manage or operate the business to make profit.”

1.1.1.2. Characteristics of FDI

1.1.1.3. Forms of foreign direct investment.

1.1.2. Theoretical background in economic growth

1.1.2.1 Notion of economic growth

Economic growth is the improved performance of the economy over time, indicated by the growth of increasing production volume such

as GDP or GNP. This increasing production should be maintained at high level and stable in the long term matching the potentials of the economy.

1.1.2.2. Ways to generate economic growth

To achieve economic growth, countries must assure changing economic structure and change the ways they mobilize and use resources not just in breadth but also in depth and associate with opening and integration. This will lead to high and stable economic growth in the long-term.

1.1.2.3. Resources and economic growth

Different research not only affirmed the roles of resources in economic growth but more importantly, has showed how to use them. According to these research, countries must change the way they mobilize and use resources not just in breadth but also in depth and associate with opening and integration. Besides, they need to expand the scope of resource mobilization and allocation beyond national borders and integrate with international markets.

1.2. Theoretical background on effects of FDI to economic growth

1.2.1. Theories on effects of FDI to economic growth

Theoretically, FDI could promote economic growth through different channels (Herzer et al., 2008). According to other research 's results, there are two main channels (De Mello (1999); Kim and Seo (2003)) (i) *FDI may affect economic growth through investment channels or it increases capital accumulation. This idea stems from exogenous growth theories.* (ii) *FDI can create spill-over effects that promote economic growth through technology transfer, labor skills improvement, commercial development and integration. The latter stems from endogenous growth theories*

1.2.2. Summary of empirical research on effects of FDI to economic growth through investment channels

Research in other countries

Majority of previous research are conducted in developing countries. Effects of FDI to growth through investment channels are often considered within its relation to domestic sources of capital, export, human capital, etc. This allows us to evaluate whether FDI crowd out domestic investment or the reverse, its effects to export, and the economy's ability to absorb the technology from FDI. The methods applied in research are mainly from neoclassical growth model, endogenous growth model with some modifications to suit different cases. The yielded results are also different. Some research showed positive effects, other showed negative or unclear effects.

Research in Vietnam

Research of Hoa and Hemmer (2002); Vu, Noy and Gangnes (2006); Le Xuân Bá et al. (2006); Thu Thi Hoang, Paitoon Wiboonchutikula, Bangorn Tubtimtong (2010) confirmed strong effects of FDI to Vietnam's stock market through investment channel.

1.2.3. Summary of empirical research results on spill-over effects of FDI on economic growth

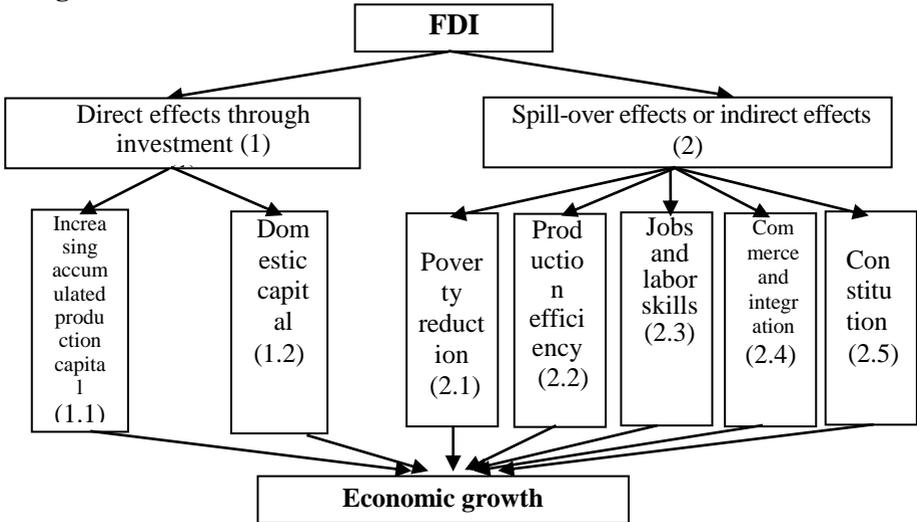
1.2.3.1. Previous research in other countries

Different research has supported the hypothesis that FDI has spill-over effects to poverty reduction, labor skill improvement, job creation, and productivity improvement. There are different approaches, some research focused on the direct effects of FDI to poverty reduction, meanwhile other research considered these effects through positive spill-over effects of FDI on economic growth, improving human capital, jobs, improving labor skills, productivity.

1.2.3.2. Previous research in Vietnam

Effects of FDI on poverty have received attention from many researchers. Therefore, many research in Vietnam has been conducted with different contributions to policy planning process in Vietnam.

1.2.4 Summary of impacting channels of FDI on economic growth



*Figure 1.1. Channels of FDI effects to economic growth
(Source: author)*

CHAPTER 2 : CHARACTERISTICS OF RESEARCH AREAS AND RESEARCH METHODOLOGY

2.1. Characteristics on natural conditions and social-economic conditions in CVKER.

CVKER is one in three Key Economic regions of Vietnam. CVKER include: Thừa Thiên Huế, Đà Nẵng, Quảng Nam, Quảng Ngãi và Bình Định.

2.2. Research hypothesis

- **Hypothesis 1: FDI has positive effects on economic growth**

- **Hypothesis 2:** (FDI has positive effects on on (i) poverty reduction; (ii) business environment, infrastructure, commerce and integration, (iii) jobs, working skills and productivity in CVKER)

2.3. Research Design

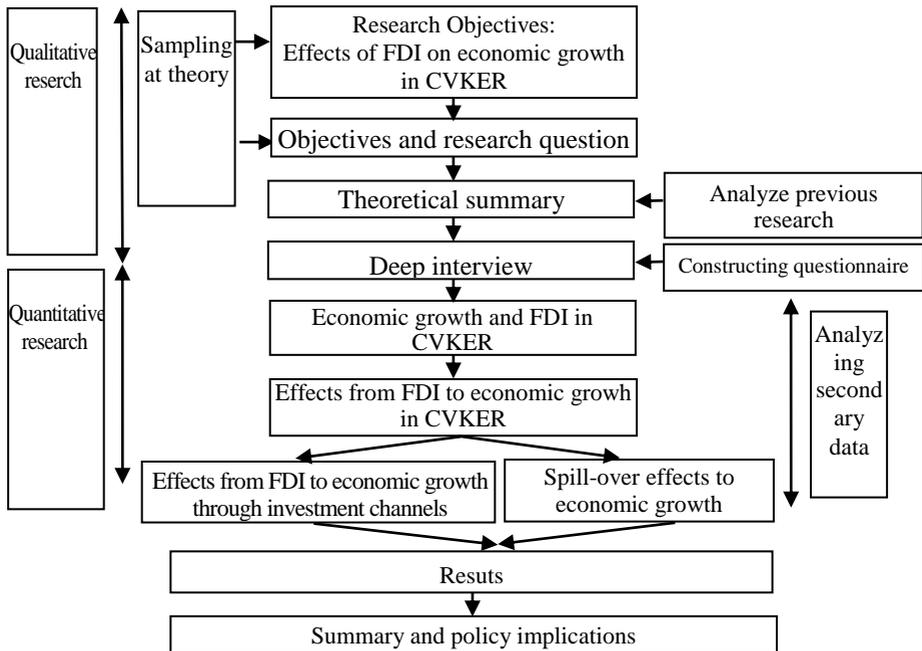


Figure 2.1: Research procedure
(Source: author)

CHAPTER 3 : THE SITUATION ò FOREIGN DIRECT INVESTMENT(FDI) AND ECONOMIC GROWTH IN CENTRAL VIETNAM KEY ECONOMIC REGION (CVKER)

3.1. FDI situation in CVKER

3.1.1. General situation of FDI

Current FDI situation in CGKER is still humble. The volume of FDI attracted is not high and plays humble roles. The FDI mainly allocated in a few provinces. Scales of FDI firms are not large

3.1.2. Current situation on performance of FDI firms

The quantity and scale of FDI firms in CVKER in general are still small and increase very timidly. In 2006, the region had 79 FDI firms and in 2014, there were 303 firms. Quang Ngai province has only 1 firm in 2006 and 15 firms in 2014. Quang Nam has 16 firms and Binh Dinh has 20 firms in 2014. Da Nang is leading in attract FDI with 38 firms in 2006 and 171 in 2014.

3.1.3. FDI promotion activities in CVKER

The coordination and connection between the provinces in investment promotion activities have brought many positive results. However, there are still limitations such as implementation of these content primarily focused on organizing conferences to exchange information, sharing solution and experiences instead of detailed and in-depth programs or activities.

3.2.1. Trends in economic growth

Economic growth situation was showed on Scale and GDP growth rate in CVKER. GDP of the region has been increasing steadily, in 1994 price: 15.8 thousand billion in 2001, 43.6 thousand billion in 2010, and 67.8 thousand billion in 2014 (increased by 4 times compared to 2001).

3.2.2. Current situation on mobilizing and utilizing resources for economic growth in CVKER

3.2.2.1. Mobilize and use of capital

Investment efficiency in CVKER is increasing, but is still low. Investment costs are still high compared to standard and required better management. Imbalanced and unfocused investment will not drive growth.

3.2.2.2. Mobilize and use labor

The number of labor entering the economy is large. Labor productivity growth is above average, but the region's potentials in labor is still large and unexploited, especially on quantity.

Differences in labor productivity between provinces are still large (2.2 times).

3.2.3.3. *Contributions of technology to economic growth*

Using Solow model (1956) to measure contributions of labor factor, capital factor, and technological advance, management level, regime and other random factors in CVKER's economic growth in the 2000-2014 period and applied growth accounting method.

CHAPTER 4: EFFECTS OF FDI ON ECONOMIC GROWTH IN CENTRAL VIETNAM KEY ECONOMIC REGION

4.1. Effects of FDI on economic growth through investment in CVKER

4.1.1. Qualitative analysis

Opinion from in-depth interview

Most opinions supported the positive relationship between FDI and economic growth. The opinions also showed other factors such as increasing domestic capital, labor and human capital also positively affect growth.

4.1.2. Quantitative analysis

Models, data and estimation methods

Applying the model (2.3) and deploy the variables into the following equations:

$$ggdp_{it} = \beta_0 + \beta_1 ggdp_{it-1} + \beta_2 gfdi_{it-1} + \beta_3 gdominve_{it} + \beta_4 gl_{it} + \beta_5 tdcmnv_{it} \quad (4.1)$$

Results from REM and FEM showed all the results are statistically significant at < 0.05 level:

Firstly, from the results $P(F) = 0.000 < 0.05$, it can be confirmed the relationship between the variables exists and therefore the hypothesis that regression coefficients of variables are different from 0 is accepted. Thus, the model fits.

Secondly, t test with results at coefficients tables, all sig. - Sig. = p(t) of the variables are statistically significant at 0.05 except for $ggdp_{t-1}$ in FEM method.

Thirdly, Breusch – Pagan test has $\text{Prob} > \chi^2 > 0.05$, we conclude that the model does not have the heterogeneous variance for both methods.

Fourthly, VIF value of explanatory variables (independent variables) are all less than 10, meaning multicollinearity does not exist in the model.

Fifth, Durbin-Watson coefficients are all between 1 and 3, which showed the mode does not have autocorrelation

Sixth, R – sq. value was about 0.88 - 0.89, which means 88% changes in economic growth were explained by effects from FDI growth and other factors.

Seventh, correlated sequence test results have the significant level $< 15\%$, we concluded that the model does not have this problem at this level.

Eighth, Hausman test results in Table 4.6 implied using the results of FEM method is better.

4.1.3. Discussion on the results on effects of FDI on economic growth through investment channels.

Firstly, when the FDI level increased, it created positive effects on economic growth but the effects were not very strong;

Secondly, the important roles of domestic capital in economic growth remains, as it had positive effects on economic growth.

Thirdly, labor factor is still important to the region's economic growth. The effects are positive and strongest compared to the other two types of capital factors. This results showed FDI did not have crowd-out effects but create complementary effects of labor.

Fourthly, labor skills or human capital are still very important in economic growth.

4.2. Spill-over effects of FDI on economic growth in CVKER

4.2.1. Effects of FDI on poverty reduction in CVKER

4.2.1.1. Poverty situation in CVKER

4.2.1.2. Qualitative analysis

4.2.1.3. Quantitative analysis

Models, data and estimation methods

Applying the model (2.4) in 2.4.2.2 and deploy the variables into the following equations:

$$\text{Intylengheo}_{it} = \beta_0 + \beta_1 \text{Infdisogdp}_{it-1} + \beta_2 \text{Indominve}_{it} + \beta_3 \text{Inttpergdp}_{it} + \beta_4 \text{Incmnv}_{it} + \beta_5 \text{Intylettts}_{it} + \varepsilon_{it} \quad (4.2)$$

Estimated results

The estimated results will be showed by two methods: random effects-REM, and (2) fixed effects – FEM but we only solved the lag effect of independent variables. Results are showed in Table 4.10

REM and FEM estimated results showed all values are significant at <0.05:

Firstly, $P(F) = 0,000 < 0,05$ so we concluded that the relationship between the variables exists and accepted the hypothesis the regression coefficients are different from 0. The model fits.

Secondly, the t-tests with the coefficients showed all Sig. = p(t) with the according variables are significant at 0.1, except for Incmnv of FEM method;

Thirdly, Breusch – Pagan test has Prob > chi2 < 0.05, we can conclude that the model has the heterogeneous variance problem for both methods, and has been fixed with robust command

Fourthly, VIF values of explanatory variables (independent variables) are all less than 10, which showed the model does not have the multicollinearity problem

Fifth, Durbin-Watson coefficients are all between 2 to 3, which showed the model does not have the autocorrelation problem.

Sixth, with the correlated sequence test results $\text{Prob} > F = 0.8161$ so the model does not have this problem at this level;

Seventh, R - sq is 0.8709 with REM and 0.8462 with FEM which showed 84% and 87% of the changes in poverty were explained by the effects of FDI and other factors.

Eighth, hausman test results $\text{Prob} > \chi^2 = 0.0384 < 0.05$, therefore, at significance level 5%, there are enough evidences to reject hypothesis H_0 (there is no systematic differences between REM and FEM). In this case we can choose FEM.

4.2.1.4. Discussions on results on effects from FDI to poverty reduction in CVKER.

Firstly, qualitative analysis and quantitative analysis results both showed FDI positively affects or improves poverty situation in CVKER;

Secondly, the above results confirmed that factors improve income per capita also positively affect poverty reduction;

Thirdly, high population growth will negatively affect poverty reduction. This result implies population control and family planning should be improved;

Fourthly, increase in domestic investment strongly affects poverty reduction because this type of investment will promote production, create jobs and generate income for the poor. The strength of these effects is stronger than that of FDI because its quantity and scope are larger.

Fifthly, the results shown human capital is not a significant factor.

4.2.2. Effects from FDI to business environment, infrastructure, commerce and integration in CVKER.

4.2.2.1. Effects on business environment

According to the World Bank (WB), elements of business environment include: firm establishment, construction permits,

access to electricity, property registration, credit loan, protecting investors, tax, international commerce, contracts enforcement, etc.

4.2.2.2. . Effects on infrastructure

Highest evaluated scores of CVKER is 3.8, with the improvement of telecommunication infrastructure and lowest is 3,55 with the improvement of traffic infrastructure and logistics.

4.2.2.3. Effects on commerce and integration

Majority of asked officers did not agree or has neutral viewpoint with the statement FDI firms helped domestic private firms with market expansion and searching for new partners. Average score was 2.72 and mode=3. Among other provinces in the region, Da Nang has the highest score and Binh Dinh has the lowest.

4.2.2.4. Discussion on effects of FDI on business environment, infrastructure, commerce and integration in CVKER

Firstly, in recent years, FDI firms in CVKER have affected the business environment in the region more and more positively

Secondly, the infrastructure of the provinces in the region had significant improvement, especially the information telecommunication and traffic infrastructure;

Thirdly, FDI firms also contributed and promoted commercial development and international economic integration.

4.2.3. Effects of FDI on jobs, labor skills, and productivity in CVKER

4.2.3.1. Effects on jobs and labor skills

With small number of FDI firms, they have created high number of jobs for provinces and municipalizes in CVKER. According to Industrial Development Organization of United Nations (2011), FDI also created many job opportunities for female workers and they also pay higher wages.

4.2.3.2. Spill-over effects on productivity

FDI firms 'regulations on jobs, income and social security are better and these regulations will spread out and create changes in

domestic firms' policies. FDI firms' technology and productivity level are also higher than domestic firms. FDI firms provide devices

CHAPTER 5 : CONCLUSION AND POLICY RECOMMENDATION

5.1. General conclusion

5.1.1. Conclusion on FDI situation in CVKER

Firstly, amount of FDI for economic growth attracted by provinces in CVKER has not been significantly large;

Secondly, although FDI flow into CVKER is not large, it is concentrated in areas that have more advanced social-economic infrastructure and more favorable business environment;

Thirdly, FDI firms 'scale is small and they mostly focus on taking advantage of labor and natural resources of the region;

Fourthly, although the roles of FDI to economic growth has been recognized and there are different policies and solutions for attracting FDI; there are still limitations and weaknesses existing, especially when compared with other provinces in Vietnam.

5.1.2. Conclusion on effects of FDI to economic growth through investment

Firstly, increased FDI created positive effects on economic growth or FDI positively affects GDP growth through investment channel;

Secondly, investment from FDI in CVKER did not have the crowd-out effects on domestic investment in the GDP generation process. The effect of domestic investment on economic growth is positive.

Thirdly, FDI helps provinces to promote their labor potential. This factor has the strongest positive effect on economic growth among other factors in the model;

Fourthly, FDI also helps to promote human capital. The effect is positive although it is not large.

Dissertation's new findings

5.1.3. Conclusion on the spill-over effects of FDI

5.1.3.1. Effects on poverty

Firstly, FDI has positive effects or it improved poverty in CVKER. The strength of the effects is quite small;

Secondly, average income per capita growth has positive effects on poverty reduction in CVKER;

Thirdly, domestic investment has positive effects on poverty reduction, and these effects are larger than that of FDI;

Fourthly, population growth has negative effects on poverty reduction. Demographic changes in the region seems to be an obstacle to poverty reduction efforts.

5.1.3.2. Effects on business environment, infrastructure, commerce and integration in CVKER

First, business environment in CVKER has improved under the effects of FDI firms;

Secondly, infrastructure in CVKER has considerable improvement; however, it is still necessary to create more positive changes in infrastructure quality;

Thirdly, FDI firms have promoted and contributed to commercial development and integration by increasing goods' export volume. FDI firms also helped domestic firms to expand their markets and integrate.

5.1.3.3. Effects on jobs, labor skills and productivity

First, FDI firms have directly created a significant number of jobs and helped to improve the worker regulations of other firms in the region;

Secondly, labor skills in the region are improved with FDI firms 'contribution through their support for domestic firms in job training and improving professional attitude for local workers;

Thirdly, the roles of FDI firms in improving productivity in CVKER are quite clear and these firms also have huge potential.

5.1.4. Conclusion on economic growth

Firstly, analyzed results shows GDP continuously increased in the last fifteen years.

Secondly the above results show signs of slowing-down of the economy due to the weakening of main growth drivers,

Thirdly, one source of economic growth was the economic structure that has positive changes on output. However, this structure has revealed its limitations as it did not promote productivity improvement.

Fourthly, economic growth in CVKER was generated from mobilizing and using resources in a proper way, gradually reforming the institution and business environment, stimulating technology improvement of firms and promoting the roles of labor;

5.2. Policy implications

5.2.1. Developing the role of FDI in promoting economic growth via the channel of investment

Specific directions:

First recognize the importance of FDI to economic growth in CVKER provinces;

Second, adopt a new approach in planning and implementing the policies on foreign investment in the coming years;

Third, continue to improve business environment of the provinces in the region and provide the suitable conditions for firms' operation, especially FDI firms;

Fourth, improve and expand infrastructure connection in the region.

Fifth, continue to effectively mobilize domestic capital sources and use these sources in the resonance with FDI for economic growth.

Sixth, maximize the mobilization of labor resource, give priority to skill training for workers and invest more in human capital.

5.2.2. (Developing the indirect impacts of FDI on improving economic growth)

First, recognize FDI firms as the most important factors in innovation and technology transfer;

Second, improving firms' capability to absorb technology.

Third, build a mechanism for cooperation and development in CVKER to promote FDI's roles in economic growth.

5.3. Research limitations

Firstly, the dissertation did not consider negative effects of FDI on economic growth, especially those on the environment;

Secondly, research on effects from FDI to economic growth often at national or cross-nation level;

Thirdly, the data used in the research have both time and space elements. Although it met the requirements for econometric model, but with only 15 year period and 5 provinces covered, there are still limitations;

Fourthly, research method did not make comparison with other quantitative methods to solve research questions and objectives.

CONCLUSIONS

Firstly, the dissertation successfully built a theoretical framework on effects of FDI to economic growth. This framework was formed by synthesizing and generalizing different research in Vietnam and other countries on the topic. The framework made clear that there are two channels that FDI impacts economic growth. There are direct effects through investment channel and spill-over effects to poverty reduction, labor skills, jobs, and production efficiency. The framework also provided the economic and empirical model to analyze effects of FDI to growth through these channels. This is the evidence to affirm that the first objective of the dissertation has been achieved;

Secondly, the dissertation has achieved its second objective. It gave a thorough review of the current situation of FDI attraction in

CVKER and the performances of FDI firms in this region. Compared to other regions, FDI in CVKER is still low in volume and only account for a small share in total capital. FDI in CVKER allocated in provinces with good social economic infrastructure, favorable business environment to take advantage of resources and labor of these provinces. FDI firms' performances are positive and have contributed to local economic development. The dissertation focused on analyzing and completely evaluating economic performances in CVKER. The region achieved high and stable growth based on effectively mobilizing resources including FDI;

Thirdly, research results have provided evidences to support hypothesis 1. The results showed that FDI has positive effects to economic growth and did not crowd-out other resources, generate growth such as domestic investment and labor in CVKER. This also contribute to achieve the third objective;

Fourthly, the results at the end of chapter 4 showed FDI has spill-over effects to (i) poverty reduction, (ii) business environment, infrastructure and integration, (iii) jobs, worker skills and production efficiency in CVKER. These results provide evidences to support hypothesis 2 and achieve the third objective of the research.

Fifthly, the dissertation has also achieved the fourth objective. It shown policy implications aimed at promoting the roles of FDI sector in generating economic growth in CVKER. These implications focused on designing policies that could provide conditions for FDI to promote its roles in generating growth and promote FDI firms 'roles in changing growth model.

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1. Land resource factor in Danang' s growth model. *Economic growth model in the period of industrialization and modernization. Scientific conference proceeding*, pg. 298-305.
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