

Regression Analysis and Policy Recommendations for Attracting FDI

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ABSTRACT

Recognizing the importance of FDI for economic growth in general, and especially national labor productivity, Vietnam has made many efforts over the years to ensure the establishment of a favorable environment for FDI investors through policies to encourage and attract FDI. In the theoretical basis, there have been many studies on the role of FDI in labor productivity, but most of them are at the enterprise. This study suggests: localities need to establish regulations and standards to select foreign investors with advanced and capable technology, contributing to increasing local labor productivity, contributing to sustainable development. Localities also need to strengthen research, development, creativity and technical improvement in the process of using technology; select appropriate technologies, prepare conditions for receiving and promote the technological level when approaching FDI projects.

Keywords: FDI, foreign direct investment, investment capital, labor productivity, province,

I. INTRODUCTION

Status of FDI attraction of Vietnam in 2022

In 2022, the total registered FDI in Vietnam reached nearly 27.72 billion USD, the realized FDI capital reached a record 22.4 billion USD, up 13.5% over the same period in 2021. This is the amount of FDI capital. highest performance in 5 years (2017 - 2022). Accumulated in the period 1986 - 2022, Vietnam has attracted nearly 438.7 billion USD of FDI; in which, 274 billion USD has been disbursed, accounting for 62.5% of the total valid registered investment capital.

Some new projects have been started with large capital such as Heineken Brewery inaugurated in September 2022 in Vung Tau. With total investment after capital increase is 9,151 billion VND, capacity 1.1 billion liters/year, 36 times higher than before. As the largest brewery in Southeast Asia, Heineken has the fastest canning line among Heineken breweries worldwide. The Japanese LNG Quang Ninh Gas Power Plant Project has been granted a new investment registration certificate, with a total investment of nearly 2 billion USD, and will be started in October 2022.

Investment scale: In 2022, many projects with increased investment capital from the beginning of the

year such as production and manufacturing projects of electronic and high-tech products will be increased capital on a large scale; Samsung Electro-mechanics Vietnam project (Thai Nguyen) increased capital twice: An increase of 920 million USD (1st time) and 267 million USD (2nd time); Samsung HCMC CE Complex Electronics Co., Ltd. project increased capital over 841 million USD; Projects of factories for manufacturing electronics, networking equipment and multimedia audio products in Bac Ninh (increasing by USD 306 million), in Nghe An (increasing by USD 260 million) and in Hai Phong (up by USD 127 million)).

Investment partners: In 2022, there are 108 countries and territories investing in Vietnam; in which, Singapore leads with a total investment of nearly 6.46 billion USD, South Korea ranks second with nearly 4.88 billion USD, Japan ranks third with total registered investment capital of more than 4.78 billion USD, followed by China (\$2.52 billion), Hong Kong (\$2.22 billion)

(source: tapchingham.gov.vn)

Hence we select this topic: **“Analysis and Policy recommendations for attracting FDIs”**

II. PREVIOUS STUDIES

We look at below table:

Table 1 – Summary of related studies

Authors	Year	Contents, results
Nam	2016	Some studies show that the FDI sector has positive effects on income inequality reduction in Vietnam
Anwar and Nguyen	2011	FDI is crucial to the impact and development of Vietnam’s economy. As a channel to increase capital, foreign direct investment has mainly had a major and positive impact on Vietnam’s economic growth
Leung	2009	In addition, political stability is important for foreign investors’

		decision-making. Some studies stated that political stability is one of the dominant and necessary factors to create gravitation for foreign investors in Vietnam
UNCTAD	2020	On 24 January 2021, UNCTAD’s latest Global Investment Trends Monitor announced that global foreign direct investment (FDI) flows fell by 42% worldwide by 2020 compared to the data in 2019, but that figure significantly increased by 12% in East Asia. Furthermore, Vietnam has become the spotlight for foreign investors
Quoc Hoi Le et al	2021	Foreign direct investments (FDI) is an important determinant of economic growth. FDI does not only contribute to the growth and economic development but also affects income through contributing to economic development and the impact on employment and salary structure of developing countries. The aim of this paper is to analyze the impact of FDI on income inequality in Vietnam. This study is the first attempt to examine the impact of FDI on income inequality under the constraints of the institution and education levels. To address the potential endogeneity problem, this study adopts Generalized Method of Moment (GMM) model to conduct the estimation. A two-step GMM model with robust

standard errors is used in the study. Empirical results show that FDI tends to increase income inequality in Vietnam and the existence of a non-linearity relationship between FDI and income inequality is also validated. Moreover, the study finds that the effects of FDI on income inequality are different depending on the level of education and institutions of the host provinces in Vietnam. The results of this study imply that, in order to ensure sustainable development, Vietnam's policies should focus on improving the quality of economic governance and the administrative reform efforts of the government of the provinces and cities. Besides, policies should focus on increasing investment in public education and improving human capital, which not only can reduce income inequality but also can attract more FDI inflows

(source: author synthesis)

III.METHODOLOGY

The regression model is built as follows:

$$Y = a_0 + a_1 \cdot X_1 + a_2 \cdot X_2 + a_3 \cdot X_3 + a_4 \cdot X_4 + a_5 \cdot X_5 + a_6 \cdot X_6 + a_7 \cdot X_7 + \epsilon$$

In there:

- a0 to a7: coefficients to find;
- Y: Local labor productivity, measured by the average GDP of workers;
- X7: control variable for local economic growth;
-

Using Stata 16 software, first, the author evaluates the correlation coefficient between the independent variables. The results in Table 5 show that the correlation coefficients of X2 and X3, X4 and X5, X4 and X6, X5 and X6 are quite high > 0.6; especially the correlation coefficient between X4 and X5, X5 and X6 > 0.7; and are statistically significant at the 95% confidence level. This high correlation coefficient indicates that there may be a problem of multicollinearity in the regression model.

IV.MAIN FINDINGS

4.1 Background

We see that:

Figure 1- Top ten FDI countries July 2002

Countries and territories	Number of projects	Capital (\$ mill)
Singapore	254	6,907.67
Taiwan	832	5,298.33
Japan	339	4,119.02
South Korea	403	3,461.86
Hong Kong	234	2,819.21
France	117	2,039.57
B.V.Islands	144	1,759.48
Netherlands	42	1,655.56
Russia	41	1,506.36
UK	40	1,171.56

Source: Vietnam Investment Review, No 563/July 29-August 4, 2002.

Figure 2 – Top 5 foreign investors in 2022

Thứ tự	Đối tác/Quốc gia	Tổng vốn FDI (tỉ USD)	Chiếm tỉ lệ (%)
1	Singapore	6,46	23,3
2	Hàn Quốc	4,88	17,6
3	Nhật Bản	4,78	17,2
4	Trung Quốc	2,52	9,1
5	Hồng Kông	2,22	8,0

(source: Ministry of Planning and Investment)

"It shows that small and medium-sized foreign investors continue to care and believe in Vietnam's investment environment in making new investment decisions. Along with that, this is also a sign that large corporations are cautious, considering continuing to make large investments in Vietnam in the context of the impact of the global minimum tax policy," according to the Foreign Investment Agency.

According to the management agency, projects with an investment capital of less than 1 million USD account for nearly 70% of new projects, but the total investment capital only accounts for nearly 2.2% of the total registered investment capital. new in 3 months.

4.2 Results - Regression

Table 2: Correlation analysis between independent variables

	X1	X2	X3	X4	X5	X6	X7
X 1	1						
X 2	0,305 1*	1					
X 3	0,107 1*	0,65 44*	1				
X 4	0,294 4*	0,46 82*	0,354 0*	1			
X 5	0,216 0*	0,40 36*	0,216 4*	0,761 5*	1		
X 6	0,257 0*	0,52 07*	0,203 6*	0,664 0*	0,75 54*	1	
X 7	0,143 0*	0,13 50*	- 0,016 1	0,068 9	0,06 2	0,1 156 *	1

* p < 0,05

To evaluate the problem of multicollinearity, the article further analyzes the coefficient of variance inflation factor (VIF) in the linear regression model implemented by Stata 16 software. The results are presented in the table. 6 shows that the VIF values of the independent variables X4, X5 and X6 are all greater than 2. Combined with the analysis of correlation coefficients, the linear regression model has multicollinearity, which can cause bias. results. Therefore, the author conducts robust standard error regression analysis to eliminate multicollinearity. The final results are presented in Table above.

V. DISCUSSION AND CONCLUSION

So, the regression analysis shows that the proportion of FDI enterprises in the total number of enterprises operating in the local economy (variable X4) does not have a significant impact on labor productivity (variable Y) in different countries. locality at 95% confidence level with statistical coefficients B=-0.007926 & p = 0.088 > 0.05, respectively. The results imply that the indirect spillover effect on the number of FDI enterprises has no direct role on labor productivity in the localities of our country.

At the same time, localities need to establish regulations and standards to select foreign investors with advanced and capable technology, contributing to increasing local labor productivity, contributing to sustainable development. Localities also need to strengthen research, development, creativity and technical improvement in the process of using technology; select appropriate technologies, prepare conditions for receiving and promote the technological level when approaching FDI projects.

Regarding labor and efficiency of FDI projects, localities need to encourage and prioritize FDI projects that use a large number of workers, and create high value of goods and services for society, in order to increase the number of employees. FDI sector's activities and the proportion of net revenue contribution of the FDI sector compared to the total of the whole locality, thereby increasing labor productivity.

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Conflicts of interest

There is no conflict of interest.

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