Determinants of inward FDI across six geographic regions in Vietnam under the impact of Covid-19

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Abstract: The paper aims at detecting factors affecting the attraction of foreign direct investment capital in 6 economic regions of Vietnam under the impact of Covid-19 in the period from 2010 to 2021. Through the regression method of the random effects model (REM) and fixed effects model (FEM), the study shows the coefficient of interactive variables such as labor including labor cost (CPLD) and quality of labor (CLLD), infrastructure including facilities (CSHT) and volume of freight (KLHHVC), agglomeration including foreign agglomeration (QTNN) and private agglomeration (QTTN) and market size (GDP) according to Covid are all negative and statistically significant, which shows that when other factors are held constant, the rate of increase in FDI according to the independent variables is lower in the presence of Covid than in the absence of Covid. Based on the findings, some recommendations have been made to improve the ability of Vietnamese provinces and cities to attract foreign investment capital after the Covid-19 pandemic.

Keywords: Foreign direct investment, Capital, Economic regions, Covid pandemic

1. Introduction

Attracting foreign direct investment (FDI) is a topic that receives constant attention both in the world and in Vietnam. Attracting and utilizing foreign direct investment capital helps promote economic transformation, restructure, revitalize the growth model, improve the competitiveness of countries, industries, products, and services; as well as promote institutional reform, economic policy, business investment environment and develop a full, modern and integrated market economy, strengthen foreign relations, cooperation, and international integration.

Among various aspects of FDI, the most important one is the selection of investment locations since this is a difficult issue with a decisive influence on operational performance, economic growth, and the chosen country's economic growth.

Since the appearance of the Covid-19 pandemic in 2020, together with medical isolation and the closing of countries, projects attracting foreign direct investment have been slowed down. However, after two years of the pandemic, according to the Ministry of Planning and Investment’s Report on Foreign Direct Investment in the first eight months of 2022, until August 20, 2022, foreign investors had invested in 53 provinces and cities with a total registered FDI capital of nearly 16.8 billion USD, an increase of 87.7% over the same period in 2021.

Data available shows various disparities across economic regions. At the same time, research resources on the number of studies in Vietnam are limited, especially research between attracting direct investment before and after Covid-19 which therefore necessitates the publication of more research papers. It is critical to consider these factors holistically. Consequently, the research team has chosen the topic "Determinants of inward FDI across six geographic regions in Vietnam under the impact of Covid-19".
2. Literature Review

Many common variables have been proved by lots of different research. First, Agnieszka Chidlow and Stephen Young (2008) used a polynomial logit model and data from 1243 multinational companies in Poland to illustrate the regional determinants of FDI distribution in Poland. The study shows that favorable geographical factors, a high level of agglomeration together with low cost and good education labor resources have a greatly positive impact on attracting foreign direct investment. John Manuel Luiz and Harris Charalambous (2009) also reached similar conclusions and added other factors such as a stable political situation, good infrastructure, and abundant demand for resources.

Later, Suwina Cheng, Kenny Lin, and Richard Simmons (2017) pointed out that foreign direct investment in China specifically depends on a favorable investment environment, including flexibility in labor, assets in skills and technology, private sector participation, contract enforcement, sound financial access and social harmony. Investors are also very concerned about government efficiency, which explains why provinces with large tax burdens, corruption, and bureaucracy tend to have far less capital for investment than other provinces. The same-year study by Nicholas Bailey (2017) on a global scale also gave out the same results as this research.

Meanwhile, in accordance with Vietnamese conditions, Bernadette Andreosso-O’Callaghan and Jodn Joyce (2000) took data from seven regions of Vietnam for two years from 1993 to 1995, and analyzed it based on the model of multiple linear regressions. The author has highlighted the importance of GDP (Gross Domestic Product) as well as the education level of the labor force, which is calculated by the ratio of pupils/students of technical training schools, technical intermediate schools, universities, and colleges to the population of each region in attracting foreign direct investment.

Ngo Vi Dung, Dao Thi Bich Thuy, and Nguyen Ngoc Thang (2018) synthesized and analyzed in more detail the factors affecting the FDI of Vietnamese provinces through the data of 63 provinces in the period from 2008 to 2013. Market Size, Infrastructure, and Quality of Labor are the factors that attract the most foreign direct investment. The study also shows that the level of agglomeration, which is the large concentration of a province, has a much more significant impact on foreign enterprises.

On the other hand, in consideration of Covid-19’s impact on FDI’s determinations, Kazunobu Hayakawa, Hyun-Hoon Lee, and Cyn-Young Park (2022) used the statistics, comparison, and analysis of the number of Covid-19 infections, the number of deaths, and the state of relaxation on social isolation of more than 173 different countries. The study clearly reflects that the pandemic had a negative and complicated impact on the FDI flows. In short, it is noticeable that most researchers provide the same findings about FDI’s determination, both in Vietnam and in the world, however, not many of them have investigated this topic on the regional level. Moreover, rarely are there any researches relating to FDI’s determinants under the effect of the Covid-19 pandemic.

The research team therefore will look into the impact of the Covid-19 pandemic on the determinants of foreign direct investment at the regional level in order to provide better insights into FDI attraction.

3. Research Methodology

3.1. Hypothesis development

After referencing more than a hundred different research heads and selecting the key research papers in the review, the team extracted seven main independent variables that affect the dependent variable as follows:

<table>
<thead>
<tr>
<th>Table 1: Groups of Independent Variables</th>
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<tbody>
<tr>
<td>Labor</td>
</tr>
<tr>
<td>Labor quality</td>
</tr>
</tbody>
</table>
Notably, the above seven independent variables have been classified into four different groups including Labor, Infrastructure, Agglomeration, and Market Size, accompanied by a Covid 19 dummy variable to highlight the impact of the Covid-19 pandemic on the reception of FDI in economic regions. The division into separate groups of variables will help the research paper analyzes more clearly, more multi-dimensionally, and provide more insight in terms of economic, social, or political aspects.

Research of Hayakawa, Hyun-Hoon Lee, and Cyn-Young Park (2022) examines the coronavirus disease (COVID-19) and analyzes in-depth the extent to which COVID-19 damage affected FDI flows between countries. However, instead of analyzing the damage of COVID-19 to the host country (investment) and the host country as measured by confirmed cases of COVID-19, the number of deaths, and the extent as strict of social distancing policies as reference studies, our research team focuses on more on analyzing the impact of Covid - 19 on factors attracting foreign direct investment of regions in Vietnam's economy. Therefore, we have the following hypotheses:

- Hypothesis H0: Covid-19 has no impact on Labor
- Hypothesis H0: Covid-19 has no impact on Infrastructure
- Hypothesis H0: Covid-19 has no impact on Agglomeration
- Hypothesis H0: Covid-19 has no impact on Market size

3.2 Data collection

The study focuses on the factors influencing Vietnam's FDI attractiveness under the influence of COVID-19, the variables data, as a result, are gathered annually from 2010 to 2021 from four sources according to economic areas.

The first source of data for FDI and GDP is the General Statistics Office's annual publication of the Statistical Yearbooks which includes fundamental information illuminating the dynamic and socioeconomic situation of the entire nation as well as its various economic regions and localities. Besides, Agglomeration data is collected from the second source which is the Statistical Yearbooks of 63 provinces.

The third source is the General Statistical Office's employment survey reports which gathered data on the labor market participation status of adults in Vietnam who are 15 years of age and older. The Labor cost variable is defined by the income of the aforementioned workforce, and the labor quality variable is measured by the percentage of trained employees above the age of 15.

Finally, the variable Facility (Waterway infrastructure and Road infrastructure), and Volume of freight are collected in the Trade - Services data section, posted on the online website of the General Statistics Office.

Table 2: Measurement Unit of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unit of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>Millions of USD</td>
</tr>
<tr>
<td>GDP</td>
<td>Billions VND</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors
3.3 Research model

After referring to previous studies, our research team has determined the factors affecting the attraction of foreign direct investment and proposed the following research model:

\[ \text{lnFDI}_{it} = \alpha_0 + \alpha_1 \text{Labor}_{it} + \alpha_2 \text{Covid19}_t + \alpha_3 \text{Labor}_{it} \times \text{Covid19}_t + \varepsilon_{it} \]
\[ \text{lnFDI}_{it} = \beta_0 + \beta_1 \text{Infrastructure}_{it} + \beta_2 \text{Covid19}_t + \beta_3 \text{Infrastructure}_{it} \times \text{Covid19}_t + \varepsilon_{it} \]
\[ \text{lnFDI}_{it} = \gamma_0 + \gamma_1 \text{Agglomeration}_{it} + \gamma_2 \text{Covid19}_t + \gamma_3 \text{Agglomeration}_{it} \times \text{Covid19}_t + \varepsilon_{it} \]
\[ \text{lnFDI}_{it} = \rho_0 + \rho_1 \text{MarketSize}_{it} + \rho_2 \text{Covid19}_t + \rho_3 \text{MarketSize}_{it} \times \text{Covid19}_t + \varepsilon_{it} \]
FDI: foreign direct investment in region i at time t
Labor: represents the group of Labor variables (including Labor quality and labor cost) of region i at time t
Infrastructure: represents the group of variables Infrastructure (including Facility and Volume of freight by province) of region i at time t
Agglomeration: represents the group of variables Convergence (including Private Agglomeration and FDI Agglomeration) of region i at time t
MarketSize: represents the group of variables Market size (including GDP) of region i at time t

After that, the group will conduct regression for 4 separate interaction models. For each group of variables, one variable will be selected as the original variable while the others will be the alternative index to check whether the regression model results are stable or consistent in every scenario or not. The models which are studied in this article, no matter what scale is chosen, will be expected to give consistent results. The original and the alternative variables used to test the robustness are summarized in table A.1. Moreover, the research team has summarized the data used in the econometric model and signed the expected coefficient according to table A.2, in which, the sign with FDI is the correlation between the factors and FDI (the results are compiled based on the results of previous studies) and the expectation sign with Covid is the expected correlation between the factor and Covid-19.

4. Empirical Result

4.1 Data Description and Summary

The research group will present descriptive statistics on data collected from the set of the General Statistical Office from 2010 to 2021. All statistics are complete and detailed so the study can be conducted with strongly robust balanced panel data with 72 observations for the final sample. The study uses the annual data descriptive statistics for the variables.

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th>Vars group</th>
<th>Vars names</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td></td>
<td>72</td>
<td>4570.069</td>
<td>4544.029</td>
<td>6.3</td>
<td>16840.4</td>
</tr>
<tr>
<td>Labor</td>
<td>Labor quality</td>
<td>72</td>
<td>19.03056</td>
<td>6.769643</td>
<td>7.9</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Labor cost</td>
<td>72</td>
<td>4718.764</td>
<td>1411.77</td>
<td>1965</td>
<td>7989</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facility</td>
<td>72</td>
<td>22666.18</td>
<td>24525.69</td>
<td>2674.7</td>
<td>117229.1</td>
</tr>
<tr>
<td></td>
<td>Volume of Freight</td>
<td>72</td>
<td>202753.2</td>
<td>142813.5</td>
<td>23058.9</td>
<td>595602.4</td>
</tr>
<tr>
<td>Agglomeration</td>
<td>FDI Agglomera-</td>
<td>72</td>
<td>6.608455</td>
<td>6.266978</td>
<td>0.292</td>
<td>20.465</td>
</tr>
<tr>
<td></td>
<td>tion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private Agglomeration</td>
<td>72</td>
<td>84.54521</td>
<td>6.44486</td>
<td>70.8067</td>
<td>91.8131</td>
</tr>
</tbody>
</table>
From table 3, it is easily seen that the amount of Foreign Direct Investment is on average 4570.069 million USD, with the lowest is 6.3 million USD, the highest is 16840.4 million USD and the standard deviation is 4544.029 million USD. The labor quality has an average of 19.03056%, with the lowest is 7.9%, the highest is 37% and the standard deviation is 6.769643%. The labor cost is on average 4718.764 USD, with the lowest is 1965 USD, the highest is 7989 USD and the standard deviation is 1411.77 USD. Facility has an average of 22666.18 megatons/km, with the lowest is 2674.7 megatons/km, the highest is 117229.1 megatons/km and the standard deviation is 24525.69 megatons/km. Volume of Freight is on average 202753.2 megatons, with the lowest is 23058.9 megatons, the highest is 595602.4 megatons and the standard deviation is 142813.5 megatons. FDI Agglomeration has an average of 6.608455%, with the lowest is 0.292%, the highest is 20.465% and the standard deviation is 6.266978%. Private Agglomeration is on average 84.54521%, with the lowest is 70.8067%, the highest is 91.8131% and the standard deviation is 6.44486%. GDP (Gross Domestic Products) has an average of 77137.51 billion VND, with the lowest is 11438.45 billion VND, the highest is 314098.2 billion VND and the standard deviation is 80894.85 billion VND.

Most variables have a fairly high standard deviation which means that the differences between the smallest, largest and the mean values are quite large. This rather large disparity may come from factors such as the differences between the regional economic development levels, physical infrastructure, cultural and labor level, scientific and technical level in each region or from the time factor. The data set spans 11 years from 2010 to 2021. Therefore, changes in prices, inflation, economic development, etc. also make the values in recent years significantly different. The differences between the minimum value and the maximum value are also large for some variables.

Meanwhile, other variables including Labor Cost, FDI Aggregation and Private Aggregation were quite stable throughout the period, with standard deviations all below 7, indicating sustainable development over the statistical periods.

4.2. Regression Analysis Result

4.2.1. Hausman Test

We evaluated two types of regression models for our investigation, including the Fixed Effects Model (FEM) and the Random Effects Model (REM). FEM assumes that national features impact variable correlations; whereas REM assumes that random fluctuations exist across nations. To determine which model is best suited to our sample data, we use the Hausman Specification Test that gives the hypothesis:

\[ H_0: \text{Random effect model is suitable} \]
\[ H_1: \text{Fixed effect model is suitable} \]

In the case of the Hausman test for p-value greater than 0.05, the Random effect model is suitable and vice versa if the p-value of the Hausman test is less than 0.05, then the Fixed effect model is suitable.

Table A.3 shows the results of the Hausman test and which model is chosen in each scenario.

4.2.2. Regression Result

After choosing the suitable model, we run regression models for four variable groups. Firstly, for each group of variables, we conduct the regression model for only the original variable. Then in the next part, we will use the alternative variable to robustness check the results. The results of these regression models are shown in tables 4 to 7.
Labor quality with Covid-19 (Labor group of variable)

Labor Quality and Covid-19 have a negative correlation and are statistically significant at the 1% level. This finding emphasizes the relationship between Labor Quality and Covid-19, demonstrating that when all other variables are held constant, the rate of increase in FDI capital by Labor Quality is roughly 8.07% lower in the presence of Covid than in the absence of Covid. This outcome is consistent with our expectations.

Table 4: Regression Model Result of Labor Quality

|                | Coef.   | Std. Err. | z    | P > |z| |
|----------------|---------|-----------|------|-----|---|
| CLLD           | 0.963927| 0.0296465 | 3.25 | 0.001 |
| COVID-19       | 2.117709| 0.7126966 | 2.97 | 0.003 |
| CLLD_COVID     | -0.0841003| 0.0296254 | -2.84 | 0.005 |
| _cons          | 5.687049| 0.8519598 | 6.68 | 0.000 |

Source: Compiled by the authors

Volume of Freight with Covid (Infrastructure group of variable)

The interactive term between Volume of Freight and Covid-19 is statistically significant at 1% level. When all other conditions are maintained equal, the rate of increase in FDI capital by volume of freight is roughly 4.2x10^-4% lower in the presence of Covid than in the absence of Covid. This result is in line with our expectations.

Table 5: Regression Model Result of Volume of Freight

|                | Coef.   | Std. Err. | z    | P > |z| |
|----------------|---------|-----------|------|-----|---|
| KLHHVC         | 4.14e-06| 1.45e-06  | 2.85 | 0.006 |
| COVID-19       | 1.468893| 0.3706552 | 3.96 | 0.000 |
| KLHHVC_COVID   | -4.20e-06| 1.25e-06  | -3.37 | 0.001 |
| _cons          | 6.646317| 0.2868557 | 23.17 | 0.000 |

Source: Compiled by the authors

Foreign Agglomeration with Covid-19 (Agglomeration group of variable)

At the 5% level, the Interaction Term between Foreign Agglomeration and Covid-19 is statistically significant. When other conditions are held equal, the rate of rise in FDI under the Foreign Agglomeration is roughly 6.16% lower in the presence of Covid than in the absence of Covid. These results are in accordance with our expectations.

Table 6: Regression Model Result of Foreign Agglomeration

|                | Coef.   | Std. Err. | z    | P > |z| |
|----------------|---------|-----------|------|-----|---|
| QTNN           | 0.1403474| 0.0377341 | 3.72 | 0.000 |
| COVID-19       | 0.8482699| 0.3320781 | 2.55 | 0.011 |
As predicted, the interaction term between GDP and Covid-19 is negative. At the 5% level, its coefficient is statistically significant. When all other variables are held equal, the rate of rise in FDI by Market Size is roughly 5.57\times 10^{-4}\% lower in the presence of Covid than in the absence of Covid.

Table 7: Regression Model Result of GDP

|                | Coef.       | Std. Err.    | z      | P > |z|  |
|----------------|-------------|--------------|--------|-----|----------------|
| GDP            | 0.0000126   | 4.21e-06     | 2.99   | 0.003|
| COVID-19       | 0.8830547   | 0.3032017    | 2.91   | 0.004|
| GDP_COVID      | -5.57e-06   | 2.40e-06     | -2.32  | 0.020|
| _cons          | 6.497028    | 0.7567733    | 8.59   | 0.000|

Based on the results of the applied regression models and their statistically significant coefficients, we can infer that Covid has a negative relationship with Labor Quality, Infrastructure, Market Size, and Agglomeration.

4.2.3 Robustness Check

The robustness check is used to evaluate how certain "core" regression coefficient estimates behave when the regression specification is amended in some way. If the estimated regression coefficients' signs and magnitudes are also plausible, this is commonly interpreted as evidence that the estimated regression coefficients can be reliably interpreted as the true causal effects of the associated regressors, with all of the implications for policy analysis and economic insight. (Lu and White, 2014: 194).

We investigated two ways for verifying the robustness and trustworthiness of data. The results of all the applied regression models have been presented in Table A.4.

The first technique will be utilizing different models including the Fixed Effects Model (FEM) and the Random Effects Model (REM). The goal of this approach is to lessen the restrictions of the two models which may cause bias or alteration to the outcomes ... Table A.4 shows the results of regression using FEM and REM with the variables addressed in the paper. The interaction variables are statistically significant in both models, as seen in the table above. In other words, we may claim that the regression findings are the same regardless of whatever model is chosen.

The second way will be to compare the outcomes of the original variable with the alternative variable in the same group. This method is also applied in other research such as (Keisuke Okada, Sovannroeun Samreth; 2012) ... In the Labor group, Labor Cost is considered to be the alternative index for Labor Quality. Similarly, Facilities are an alternative variable for the Volume of Freight in the Infrastructure group and Private Agglomeration is an alternative index for FDI Agglomeration in the Agglomeration Group. Table A.4 shows that, despite the varied levels of significance, the variable Labor Cost and the variable Labor Quality both have a persistent negative connection with Covid in the Labor group of variables. The findings are similar for the remaining variable groupings which include Agglomeration and Infrastructure. This demonstrates that the variables produce the same effects regardless of scale being used.
In conclusion, we obtain similar results, proving the robustness of our main results. The two techniques of testing the robustness of the given model reinforce the stability of the team’s computed model findings.

5. Further Discussion

Based on the research results, the slope difference coefficients for independent variables such as labor, facilities, agglomeration or market size according to Covid have negative signs and are statistically significant, which shows that when other factors are held constant, the rate of increase in FDI under the independent variables is smaller in the presence of Covid than in the absence of Covid.

The rate of increase in FDI by Labor quality is approximately 8.07% smaller in the presence of Covid than in the absence of Covid. This is actually the largest change when comparing the capital increase rate after and before the Covid-19 outbreak which reflects the significant impact of Covid on labor variables. This massive change in terms of Labor can be explained by some following events.

According to the General Statistics Office, in 2020, there were 134.9 thousand newly registered enterprises and the total number of registered employees is 1,043 thousand employees, a decrease of 2.3% in the number of enterprises and a decrease of 16.9 % in terms of number of employees compared to 2019. Besides, up to 101.7 thousand enterprises temporarily suspended business stopped operating waiting for dissolution procedures and completed dissolution procedures. This is an increase of 13.9% in comparison with the previous year.

The number of jobs plummeted due to the impact of the pandemic. By the end of the second quarter, the labor force decreased by 2.4 million people compared to the same period in 2019, the number of employees working decreased by 2.4 million compared to the previous quarter. The overall unemployment rate is around 2.26% - 0.27 percentage points higher than the same period last year. The unemployment rate of workers in the age group is about 2.47% - 2.16% higher than the same period last year. The unemployment rate of working age workers in urban areas is up to 4.46% (the highest since 2011) (GSO, 2020).

The results from the enterprise survey also clearly reflect the above impact. Among the surveyed enterprises, 0.27% of enterprises are waiting for dissolution/bankruptcy; and 0.27% of enterprises have to stop operating for a long time; 3.07% of enterprises had to suspend production and business activities; 29.87% of enterprises had to reduce their production and business scale and 60.53% of enterprises were still operating normally as before the COVID-19 pandemic.

Most businesses have to cut labor, the heaviest are those operating in the fields of tourism, accommodation and catering, the number of employees as of September 1, 2020 was only 53.27% (cutting down 46.73% labor force). However, in the fields of Finance, banking, insurance and information technology, the number of employees as of September 1, 2020 increased compared to the average of 2019.

At the same time, a large number of enterprises cut business maintenance costs by cutting labor and reducing wages, which had a negative impact on the Labor cost variable.

In such macroeconomic conditions, the restriction on the increase in the scale of FDI into Vietnam has resulted in a disparity in the rate of growth of FDI capital in the presence of Covid compared to that in the absence of Covid, with a relative decrease in the rate of FDI inflows. high 6.16%.

By the end of 2021, Vietnam will still be one of the world's economies that maintain a positive growth momentum (2.6%) despite being heavily affected by the epidemic. In general, the socio-economic situation in 2021, despite many difficulties and limitations, still achieved some positive results. The epidemic was gradually under control, localities began to relax social distancing, gradually reopening the economy in a state of "Bình thường mới" (“new normal”).

Regarding FDI attraction, it can be seen that Vietnam continues to be the choice of many large investors in the world. Although the COVID-19 pandemic, especially strict social distancing measures, has a direct impact on production activities and has a certain impact on the movement of foreign investment flows, the possible results are still positive. The recent outlook on FDI inflows still shows an optimistic signal.
6. Recommendation

To attract FDI, local governments often have different strategies, policies and tools based on the guiding documents of international organizations such as the World Bank, or the OECD, when reviewing attraction policies. FDI at the local level.

To attract investors, regulators need to develop strategies with clear objectives. It is necessary to identify the development of industrial parks, economic zones, models and provide important solutions to help promote economic restructuring, renovate the growth model, industrialize the country and ensure Sustainable Development. We need to continue to perfect the legal corridor to create favorable conditions for the operation of provinces with industrial parks and economic zones by improving the effectiveness and efficiency of the one-stop shop model in association with the role of management boards of industrial parks and economic zones. For localities, it is necessary to review and quickly implement investment procedures to create favorable conditions for enterprises to go into production and business activities soon. The final solution is the point of view that does not attract investment at all costs, but focuses on quality, efficiency and sustainable development.

The policy and policy of focusing on foreign direct investment in provinces and cities has had a lot of influence on FDI flows into Vietnam in recent years. In terms of positive effects, this policy has helped increase the overall attractiveness of Vietnam in the eyes of foreign investors and thereby increase the amount of investment capital into Vietnam. After Vietnam opened up and integrated with the world economy, the numbers of FDI enterprises registered to invest in Vietnam increased rapidly, many provinces have become the destination of many major FDI enterprises from the change. this important mechanism of the state. Binh Duong, Dong Nai, Ba Ria - Vung Tau in the south, Bac Ninh, Hai Phong, Vinh Phuc in the north are examples.

7. Conclusion & Limitation for Further Research

Attracting foreign direct investment is completely influenced by the macroeconomic factors of the economy and the outstanding characteristics of each locality. All four groups of factors Labor, Facilities, Aggregation and Market size have a strong impact on the investment choice decision factor. Policies to attract quality and skilled workers, and provide programs to improve the knowledge and expertise of workers in a locality will have spillover effects to many localities in the region. The group of variables Labor and Aggregation are the two groups of variables most strongly affected by the Covid-19 pandemic. In general, Covid-19 has a negative effect on four main groups of factors that affect FDI. That is the general situation that took place after the global financial crisis caused by the impact of Covid-19 and this impact goes beyond the usual local administrative boundaries.

Research is limited because the model has not really shown the impact of Covid between regions. The use of this data source has many advantages such as allowing the study of changes in phenomena. At the same time, the available data often do not completely match the research model and factors. The model does not really show the impact of Covid between regions because the data index for the post-pandemic period has not been fully updated (2 years). Therefore, the following research groups can think of quarterly data collection and take advantage of this research gap to dig deeper into the impact of Covid on Vietnamese provinces.

Acknowledgement

This paper has been supported by National Economics University, Vietnam

References


10. The Effect of COVID-19 on Foreign Direct Investment Kazunobu Hayakawa, Hyun-Hoon Lee, and Cyn-Young Park No. 653 | March 2022 Kazunobu Hayakawa (hayakawa0922@gmail.com) is a senior research fellow at the Bangkok Research Center, Institute of Developing Economies. Hyun-Hoon Lee (hhlee@kangwon.ac.kr) is a professor at the
