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STABILITY OF INDONESIA'S SECTORAL EMPLOYMENT OPPORTUNITIES AMIDST FDI AND THE COVID-19 PANDEMIC

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Abstract

This study analyzes the impact of Covid-19 and Foreign Direct Investment, how this affects the level of employment in Indonesia and captures Indonesia's role in the global economic recovery. This study uses panel data with eight cross sections and a time series from 2017–2021, with the dependent variable the level of employment opportunity and the independent variables are FDI, real GDP, real wages and Covid- 19 as a dummy variable. This study found that the level of employment opportunity had no effect on the Covid-19 period. The independent variables in this study did not significantly affect the level of employment opportunities. This shows that the economic impact caused by a pandemic is different from war, which does not involve the destruction of capital, rather the death rate in the productive segment of the population, and Indonesia is not affected by this. The lack of effect of the pandemic outbreak on job opportunities and FDI shows that Indonesia is part of the Global Value Chain (GVCs) and Indonesia can suppress investor concerns about the outbreak. The next finding is that the growth in the economic sector in the Covid-19 period was not significant, followed by the level of job opportunities in each of these economic sectors.
Keywords: *Pandemic, Covid-19, FDI, sectoral job opportunities, level of job opportunities*

Abstrak

Penelitian ini menganalisis dampak *Covid-19* dan *Foreign Direct Investment*, bagaimana hal ini berdampak pada tingkat kesempatan kerja di Indonesia dan menangkap peran Indonesia dalam pemulihan ekonomi global. Penelitian ini menggunakan data panel dengan delapan *cross section* dan runtun waktu dari tahun 2017–2021, dengan *variabel dependent* tingkat kesempatan kerja dan *independent variabel* adalah FDI, PDB riil, upah riil dan *Covid-19* sebagai *dummy variabel*. Penelitian ini menemukan bahwa tingkat kesempatan kerja tidak berpengaruh pada periode *Covid-19*. Variabel *independent* dalam penelitian ini tidak signifikan mempengaruhi tingkat kesempatan kerja. Hal ini menunjukkan bahwa dampak ekonomi yang disebabkan oleh pandemi berbeda dengan perang, dimana tidak melibatkan penghancuran modal, lebih kepada tingkat kematian pada segmen populasi produktif, dan Indonesia tidak terdampak akan hal ini. Tidak berpengaruhnya wabah pandemi terhadap kesempatan kerja dan FDI hal ini menunjukkan Indonesia menjadi bagian *Global Value Cha*in (GVCs) dan Indonesia dapat menekan kekhawatiran investor terhadap wabah. Temuan berikutnya adalah bahwa pertumbuhan pada sektor ekonomi di periode *Covid-19* tidak signifikan diikuti oleh tingkat kesempatan kerja di setiap sektor ekonomi tersebut.
Kata kunci : Pandemic, Covid-19, FDI, peluang kerja sektoral,tingkat kesempatan kerja

I. INTRODUCTION

One of the greatest risks to the global economy posed by the Covid-19 pandemic is the rise of protectionist policies. International cooperation is crucial for economic growth (WTO, 2020). In stark contrast to the 2008-2009 global crisis, which resulted in an indirect, largely demand-driven slowdown in global trade, there is now a sharp downward pressure between a decline in production (supply) and a sharp collapse in demand (Kassa, 2020).

The economic impact of a pandemic differs from that of war in that it does not involve the destruction of capital. Thus, a pandemic can be followed by a prolonged period of excess capital per worker and rising real wages if mortality rates among productive segments of the population are high, as in the case of the Black Death of the 14th century and the Great Influenza of 1918 (Jordà, Singh, and Taylor, 2020). In contrast, Garrett (2008) found that the economic impact of the 1918 influenza pandemic was short-term, with evidence of labor shortages and rising wages. The 1918 flu pandemic was significantly more deadly than the COVID-19 pandemic, especially for working-age individuals (Correia, Luck, and Verner, 2020).

(Lemieux et al. 2020) conducted a study in Canada that found that COVID-19 led to a decrease in weekly working hours and a decline in employment. Nearly half of the job losses were attributed to workers in the bottom quartile of income.

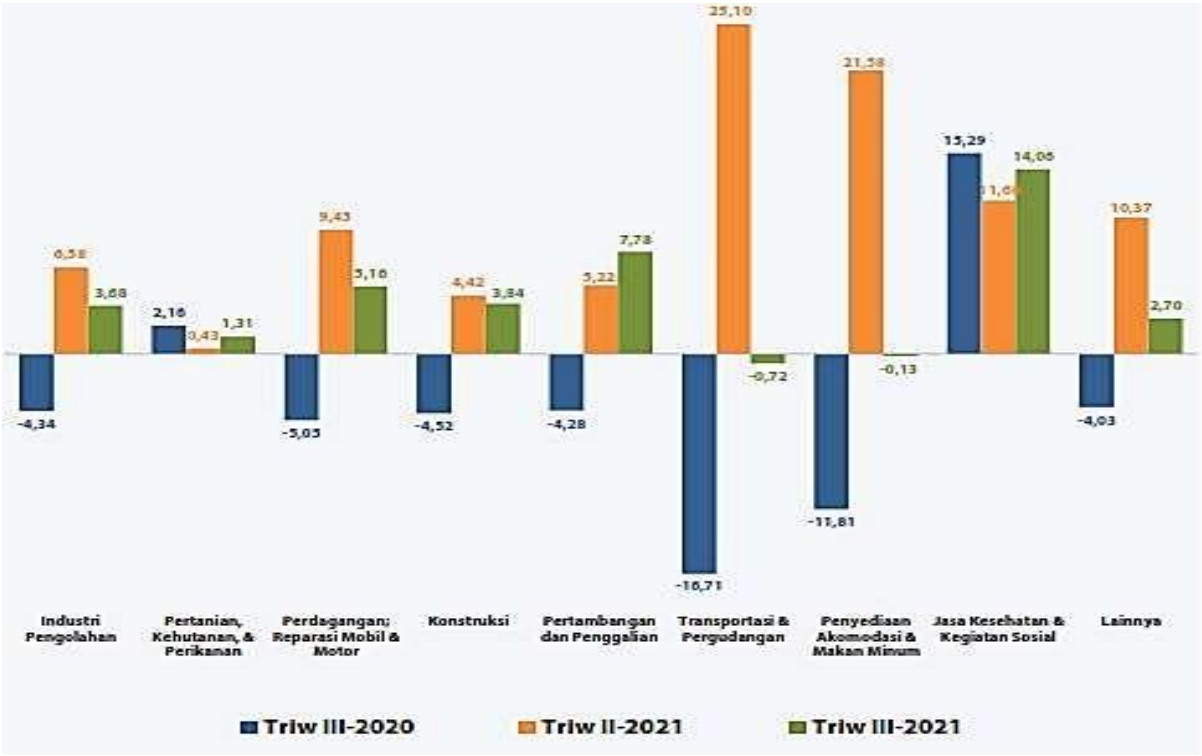
(Barrot, Grassi, and Sauvagnat, 2020), using data from France, showed that employment declines caused by social distancing measures were highest in hotels and restaurants; arts and recreation; agriculture; service activities; food; wholesale and retail; and construction; and lowest in computer services; telecommunications and consulting; and scientific and technical activities.

The impact of the COVID-19 pandemic on employment opportunities in Indonesia, where the Indonesian workforce as of February 2021 was 139.81 million people, 19.10 million of whom were affected by COVID-19. This includes 1.62 million people unemployed due to Covid-19, 0.65 million people not in the labor force (BAK) due to Covid-19, 1.11 million people temporarily unemployed due to Covid-19, and 15.72 million people working due to reduced working hours due to Covid-19 (BPS, 2021a). Countries worldwide, including Indonesia, have responded quickly to the Covid-19 pandemic through various economic policies (Sugandi, 2021). The Indonesian government's crisis-management policies have

resulted in economic recovery. The Indonesian economy grew 3.51% year-on-year in the third quarter of 2021 compared to the third quarter of 2020.

Growth occurred across most business sectors. The sectors with significant growth were Health Services and Social Activities, at 14.06%; followed by Mining and Quarrying, at 7.78%; and Information and Communication, at 5.51%. Meanwhile, the dominant manufacturing industry grew 3.68%. Meanwhile, Agriculture, Forestry, and Fisheries, as well as Wholesale and Retail Trade, Car and Motorcycle Repair, grew by 1.31% and 5.16%, respectively (BPS, 2021).

For home countries, the COVID-19 outbreak has made FDI investors concerned about the economic outlook, which can impact their cash flow and reduce their new investment plans. Depending on the severity of the COVID-19 outbreak, it can reduce companies' willingness to invest abroad (Fu, Alleyne, and Mu, 2021).



Source: (BPS 2021)

Figure 1. GDP growth in several business sectors (year-on-year) %

What about Indonesia? Overall, this study addresses questions related to FDI and job opportunities: (1) How has the Covid-19 pandemic affected Indonesia's FDI? (2) Is growth in certain economic sectors accompanied by increased job opportunities in those sectors? (3) The global economic recovery, with global FDI investment flows slowly recovering, is

primarily driven by the restructuring of Global Value Chains (GVCs) (UNCDTD, 2020b). What is Indonesia's role in this recovery?

The data used are economic sectors that grew positively during the Covid-19 period (BPS, 2021) and refer to research (Fu, Alleyne, and Mu, 2021) that suggests that the impact of the pandemic on each country is highly dependent on that country's specialization. The selection of economic sectors was based on the fact that the economic sectors that grew during the Covid-19 period are part of Indonesia's specialization/leading sectors, representing the impact of Covid-19 in Indonesia.

Eight sectors experienced significant positive growth: agriculture, forestry, and fisheries; mining and quarrying; manufacturing; construction; trade; transportation and warehousing; information and communication (BPS, 2021).

II. THEORETICAL STUDIES

An economic model of employment (Todaro, 1998). First, market competition is assumed in an economy experiencing traditional equilibrium based entirely on traditional flexible wages; unemployment never occurs. Second, output growth and employment opportunities explain that the phenomenon of rising labor productivity results in an increase in the capital-labor ratio. This model explains the concept of economic development as maximum output growth by introducing more capital-intensive production to generate greater profits. The goals of maximum output growth and maximum employment are contradictory and cannot be achieved simultaneously. Third, the micro-incentive price model reveals the impact of distortions in production factor prices on resource utilization patterns, particularly labor.

The Employment Opportunity Rate (TKK) is the ratio of the employed population aged 15 years and over to the labor force (sirusa.bps.go.id).

$$TKK = \frac{a}{b}$$

Where a is the number of employed people, and b is the number of the labor force. This is useful to indicate the ratio of the labor force to the employed. The higher the Employment Rate (TKK), the higher the employment opportunities.

FDI and employment opportunities have a two-way relationship (positive and negative), where foreign direct investment can affect the level of production efficiency (Smith, 2003).

Foreign Direct Investment

Economic globalization is a manifestation of a country's openness to international trade and foreign investment. One form of foreign investment is foreign direct investment, which is the international flow of capital in the form of direct investment. This includes the construction of factories, the purchase of capital goods, land, raw materials, and so on, carried out by other countries in the recipient country (Tiwari and Mutascu 2011). Therefore, foreign direct investment is not only a transfer of resources but also a form of control over companies abroad.

The contribution of foreign direct investment (FDI) is as important as industrialization to the development of developing countries and cannot be underestimated. FDI is a key incentive for economic growth given its positive impacts on financial resource provision, technology spillovers, human resource development, research and development, international trade integration, market expansion, and economies of scale (Chen, Geiger, and Fu, 2015). The benefits of foreign direct investment (FDI) are beneficial for the development of the industrial sector (Sutton et al., 2016).

The Relationship between FDI and Sectoral Employment Opportunities

Foreign direct investment (FDI) is a form of investment or capital accumulation that can drive economic growth and ultimately increase labor demand.

Mankiw (2003) explains that the supply of goods in the Solow model is based on a production function that states that output depends on the supply of capital and labor:

$$Y = F\ (K, L)\ (1)$$

L = labor input, while

K = capital.

Dividing the variables in equation (1) on both the left and right sides by the variable L, the equation becomes:

$$y = f(k)\ (2)$$

y is Y/L and f(k) is F(K/L), equation (1). Where equation (2) is the amount of output per worker. The demand for goods in the Solow model is derived from consumption and investment.

This means that output per worker, (y), is consumption per worker (c) and investment per worker (i):

$$y = c + i\ (3)$$

Assuming that for each year people save a portion s of their income and consume a portion (1-s), the equation becomes:

$$c = (1 - s)\, y \quad (4)$$

Where s is the degree of relationship (between zero and one). To see whether the consumption function has an effect on investment, c is replaced by (1-s) y in equation (4).

$$y = (1 - s) + i \quad (5)$$

So from equation (5) the following equation is obtained:

$$i = sy \quad (6)$$

Equation (6) explains that investment equals saving, so the saving rate is also a portion of output that reflects investment. In equation (6), the production function y represents investment per worker.

$$i = sf(k) \quad (7)$$

To incorporate depreciation into the model, we can assume that a certain portion of the capital stock is used up each year (δk). Here (δ) represents depreciation. We can express the impact of investment and depreciation on the capital stock as follows:

$$\Delta k = i - \delta k \quad (8)$$

Equation (8) can explain that the change in capital is equal to investment minus depreciation. Because investment (i) is equal to f(k), then equation (8) can be written as follows:

$$\Delta k = sf(k) - \delta k \quad (9)$$

The higher the capital stock, the greater the output and investment. However, the higher the capital stock, the greater the depreciation. Increased investment results in increased output if the investment value exceeds the depreciation value. This increase in output increases the demand for several production inputs, one of which is labor.

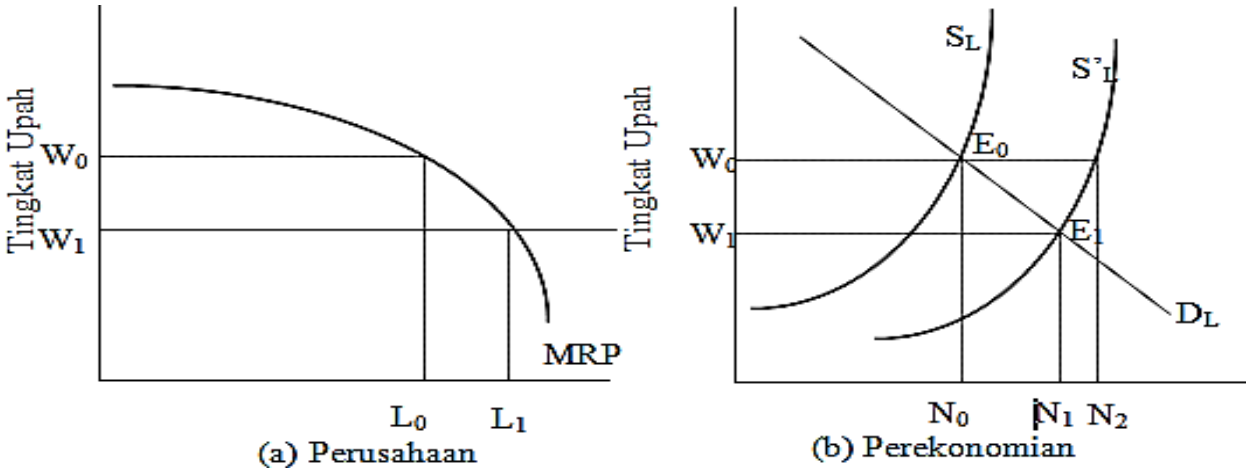
The Relationship between Wages and Sectoral Employment

Labor demand is the relationship between the wage rate and the number of workers employed by a firm over a given period. Binger and Hoffman (1988) explain that labor demand theory is an extension of the demand for a single short-term variable input.

Figure 2 shows the prevailing wage rate in a firm and the labor market. Figure b shows the labor demand (DL) and labor supply (SL and S'L) in the economy. The initial equilibrium of labor supply and demand is established at E0. The equilibrium wage rate is W0, and the number of workers is N0. If a change in the labor supply occurs in the economy, shifting the

SL curve to S'L, this will impact the wage rate from W0 to W1. Consequently, the number of workers will increase from N0 to N1.

This suggests that sectoral employment opportunities in countries with a high labor force or unemployment rate will shift the labor supply curve, assuming the output price level remains constant. This shift in the supply curve will lead to lower wages. This benefits companies by increasing the workforce to increase output production and maximize profits. Therefore, the sectoral wage level is a determinant of a country's sectoral employment opportunities.



Source: Sukino (2000)

Figure 2. Wage flexibility and labor utilization

The Relationship between GDP and Sectoral Employment Opportunities

Economic growth refers to the increase in the output of goods and services produced by an economic system over time. This leads to an increase in the demand for factors of production, such as labor. Assuming that firms are competitive and aim to maximize profits, the supply of output in the market and the demand for labor are derived from the primary objective of maximizing profits.

The increase in employment opportunities is strongly influenced by the size of output offered in other markets. An increase in the supply of production output will encourage firms to increase production by employing more workers to maximize profits. Therefore, the increase in labor demand in economic sectors is influenced by the increase in the supply of sectoral production output.

Figure 3 shows that the production function curve exhibits diminishing marginal product. Holding capital constant, the marginal product of labor declines as the number of workers

increases. Firms consider the additional revenue generated by increased production generated by additional labor.

The Relationship Between Covid and Sectoral Employment Opportunities

Covid-19 and the lockdown caused an unprecedented economic contraction and turbulence in financial markets, leading to the largest portfolio capital outflows from emerging market economies (EMEs) (Sugandi, 2021).

Large-Scale Social Restrictions (PSBB) were implemented to mitigate the spread of Covid-19, resulting in significant economic impacts due to the closure of financial markets, corporate offices, businesses, and events (Ozili and Arun, 2020). The direct impact on the economy is reflected in market changes, such as demand (consumption and investment), the supply of goods and services, and the labor market (ILO, 2020).

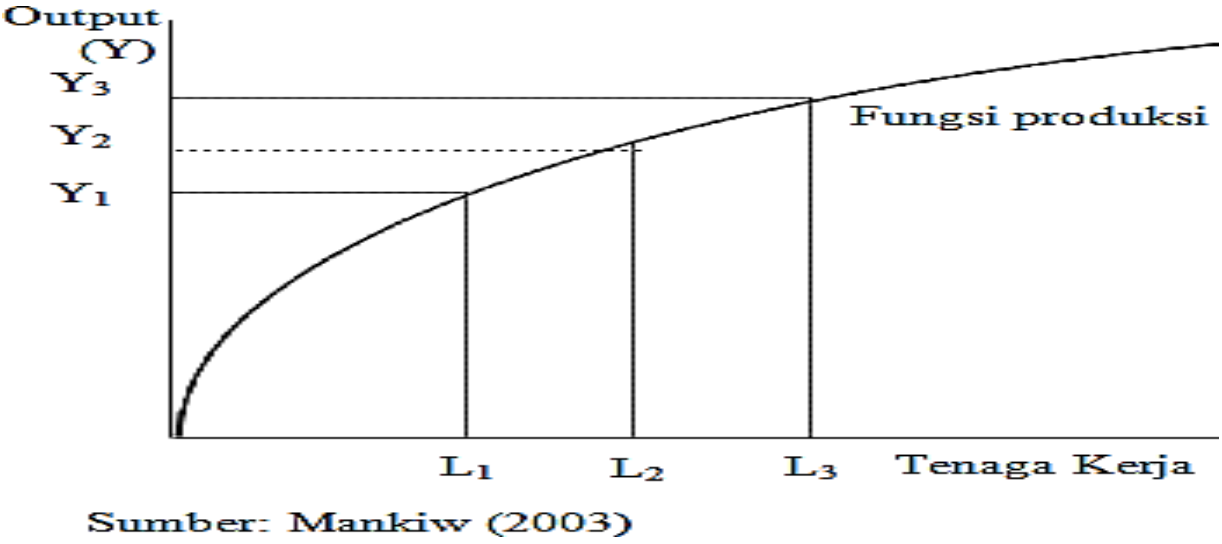


Figure 3. Short-Term Production Output and Input Relationship

COVID-19 and the Large-Scale Social Restrictions (PSBB) policy have suppressed household activities and corporate productivity through restrictions on public movement and corporate operations, resulting in a decline in household and corporate consumption. This decline in consumption has led to a decline in business income and reduced demand for labor, a key production input.

Previous Research

The impact of the COVID-19 pandemic on the economy in each country depends heavily on the country's specialization (Fu, Alleyne, and Mu, 2021). Consistent with previous findings, data from the United States shows that the entertainment, restaurant, and tourism sectors face significant supply and demand shocks (Maria del Rio-Chanona et al., 2020). At

the occupational level, the same research indicates that high-wage jobs are relatively immune to adverse supply and demand shocks, while low-wage jobs are much more vulnerable.

Beland et al. (2020) examined the short-term consequences of Covid-19 on employment and wages in the US. Their findings indicate that Covid-19 increased unemployment, reduced hours worked and labor force participation, and had no significant impact on wages.

The economic impact of a pandemic differs from that of war because it does not involve the destruction of capital. Thus, a pandemic can be followed by a prolonged period of excess capital per worker and rising real wages if mortality rates among the productive segment of the population are high, as in the case of the Black Death of the 14th century and the Great Influenza of 1918 (Jordà, Singh, and Taylor, 2020).

UNCTAD (2020b) estimates that global FDI flows will drop drastically after the outbreak and spread of COVID-19. (Fana, Torrejón Pérez, and Fernández-Macías 2020) The labor segments most likely to be impacted by social distancing policies due to the COVID-19 pandemic are the most vulnerable groups, including the self-employed and temporary workers, those with lower education, those working in micro-sized workplaces and low-wage workers. Natural disasters referred to as epidemics can impact investment decisions and FDI flows made by Multinational Corporations (MNCs) before investing (Oh et al., 2020).

In general, the COVID-19 outbreak and spread have had a negative impact on FDI flows, but the effects vary across sectors. The impact of COVID-19 has been relatively minor, with FDI transactions delayed when the country of origin exhibits a high mortality rate. The impact of COVID-19 also varies across economic sectors. It was insignificant in the agriculture and mining sectors but significant in the services sector. It is reasonable to expect the COVID-19 lockdown to impact the services sector, given the large-scale movement of people (Fu, Alleyne, and Mu, 2021).

III. RESEARCH METHODS

Data Types and Sources

Data

The data used is panel data, with cross-sectional data from eight sectors that experienced significant positive growth (agriculture, forestry, and fisheries; mining and quarrying; manufacturing; construction; trade; transportation and warehousing; information

and communication; and health services and social activities). The time series spans from 2017 to 2021.

The data sources were obtained from the Statistics Indonesia (SNI). Data on employment opportunities, real GDP, wage levels, and realized FDI by economic sector are from the Statistics Indonesia (BPS).

Model Equation

The modified model used in this study refers to research by Ilhamdi, Oktaviani, and Purnamadewi (2018). The equation is constructed using the variables FDI, economic growth, wages, and a COVID-19 dummy for employment opportunities in leading economic sectors, as follows:

$$lnL_{it} = \lambda + Ø_1 lnFDI_{it} + Ø_2 lnY_{it} + Ø_3 lnW_{it} + Ø_4 DCovid_{it} + \varepsilon_{it}$$

Where:

L = Employment opportunities (people),

FDI = Real foreign investment in US dollars,

Y = GDP = Real Gross Domestic Product in rupiah,

W = Real wage rate in rupiah, and Covid-19 is a dummy variable, where

DCovid = 0 indicates before Covid, and

Dcovid = 1 indicates during Covid.

Where Ø is the estimated coefficient, λ is the intercept of the regression equation, and ε is the error term. i represents the cross-section of economic sectors, and t is the observation period. To simplify the analysis, all data were converted to natural logarithms except for the Dcovid variable.

Panel Data Model

This study aims to determine the impact of Covid-19 and FDI on employment opportunities in sectors that experienced significant positive growth during the Covid-19 period (BPS 2021). Researchers attempted to address this phenomenon by using static panel data econometrics to examine the influence of individual effects on the model. Panel data is data obtained from cross-sectional and time series data across different units and time periods. Panel data is robust against violations of the assumptions of classical Gauss-Markov regression.

Panel data processing employs three estimation approaches: common effects, fixed effects, and random effects. Several tests were conducted to determine which model to use

(the best). The first step was to select between the common effects and fixed effects approaches using the Chow test, where the null hypothesis (Ho) was tested using the same intercept and slope values. The F-statistic formula used was explicitly:

$$F = \frac{\frac{(\mathrm{RSS1} - \mathrm{RSS2})}{\mathrm{n} - 1}}{\frac{\mathrm{RSS2}}{\mathrm{nT} - \mathrm{n} - \mathrm{K}}}$$

Where n is the number of observations, T is the number of time periods, K represents the number of parameters in the FEM model, and RSS1 and RSS2 are the residual sum of squares for the common effect and fixed effect models, respectively.

If the Chow test yields a p-value less than α, then Ho is rejected, thus the FEM model is superior to the common effect model (Ho = model follows common effect; H1 = model follows fixed effect).

Next, the Housman test (fixed effect and random effect) is performed, based on whether the heterogeneity is constant or random (correlated with the independent variable). The Housman test uses random effects as the reference (Ho).

The hypotheses are:

Ho = random effect (individual effect uncorrelated)

H1 = fixed effect

Using the chi-square test as follows:

$$\chi^2 hit = (b - \beta)' Var(b - \beta)^{-1}(b - \beta)$$

Where b is the random effect coefficient, and β is the fixed effect coefficient. Therefore, if $\chi 2hit > \chi 2(\mathrm{k}, \alpha)$ or the p-value is less than alpha, then the hypothesis Ho is rejected, or the FEM model is chosen as superior to the REM model.

The next step after conducting the model selection test is to conduct econometric criteria tests, which include multicollinearity, autocorrelation, and heteroscedasticity.

If perfect multicollinearity is found among the explanatory variables, no conclusions or interpretations can be drawn from the regression coefficients. Next, a heterogeneity test is performed, where the linear regression model must meet the BLUE (Best Linear Unbiased Estimator) parameter requirement, where the residual variances are equal or homogeneous; $\mathrm{Var}(\epsilon i)=\mathrm{E}(s2)=\sigma 2$.

An autocorrelation test is performed, where there is no autocorrelation or serial correlation between the residuals. One test for detecting autocorrelation problems is the Durbin-Watson statistical test.

IV. RESEARCH RESULTS

Determine the model from the existing data by conducting a test comparing the Pooled Least Squares (PLS) model and the fixed effects model. This is followed by a Houstman test, which compares the fixed effects model with the random effects model. Statistical data summary:

Table 1. Descriptive Statistics of Research Variables

Summary statistics				
Nama Variabel	Mean	SD	Min	Max
TKK (%)	0.1%	0.09	0.001%	0.30%
FDI (US$)	2.764.113	3.423.698	5.370.000	12.908.280
PDB riil (Rp)	2.644.552	2.680.863	144.830.7	9.022.109
Upah riil (Rp)	2.918.518	813.502,3	1.615.192	4.608.071
No. Of sektor (i)	8			
No. Of time periods(t)	5			
No. Of Observation	175			

Source: eviews 12 data processing

Note:

TKK = Employment Opportunity Rate; FDI = Foreign Direct Investment;

Real GDP = Gross Domestic Product; and Real Wages.

Chow Test

Ho = PLS model;

H1 = FEM model; if H1 is accepted, if probability value < H1.

Table 2. Chow Test

Redundant Fixed Effect Test Equation: Untitled

Test Cross-section fixed effect

Effect test	statistic	d.f	Prob
Cross-section F	154.995023	(7.28)	0.0000
Cross-section Chi-square	147.303142	7	0.0000

Source: eviews 12 data processing

Table 3. Houstman Test

Test Summary	Chi-Sq Statistic	Chi-Sq.d.f	Prob
Cross-section random	70.301203	4	0.0000

Source: eviews 12 data processing

Based on Table 2, the p-value is 0.0000 < 0.05, so the selected model is FEM.

Houstman Test

The Hausman test is used to select the best model between fixed effects and random effects with the following hypotheses:

Ho = REM model;

H1 = FEM model; if H1 is accepted, the results are as shown in Table 2.

Based on Table 3, the Haussman statistical test yielded a probability of 0, thus concluding that there is no random effect (REM). Therefore, the best model to use in the panel data regression model in this study is the fixed effects model (FEM).

Empirical Results: The Effect of FDI and Covid-19 on Employment Levels

The estimation results using the variables Employment Rate, FDI, Real GDP, Real Wages, and a Covid Dummy can be seen in Table 4. Foreign Direct Investment (FDI) has a positive impact on employment, but is not significant at 1%, 5%, or 10% during the Covid-19 period.

This indicates that there is no excessive concern among FDI investors in Indonesia, as it continues to grow positively. This indicates that investors still perceive a positive outlook for the Indonesian economy and will not negatively impact their cash flow. Foreign direct investment continues to grow and has a positive impact on employment growth. This is despite the negative trend in global FDI flows during the Covid-19 period.

These empirical findings align with research (Fu, Alleyne, and Mu, 2021) that found the outbreak of COVID-19 has made FDI investors concerned about the economic outlook, which can impact their cash flow and reduce their new investment plans, depending on the severity of the COVID-19 outbreak. In other words, it reduces companies' willingness to invest abroad. This research indicates a global economic recovery, with global FDI flows slowly recovering, led by the restructuring of Global Value Chains (GVCs) (UNCDTD 2020b). Indonesia's FDI, unaffected by Covid-19, indicates that Indonesia plays a role in these Global Value Chain flows.

Table 4. Estimation results of the model of the influence of FDI and Covid-19 on the Employment Rate

Variabel	Coefficient	Prob
LOG (FDI)	0.01169	0.4658
LOG(PDBRIIL)	0.034607	0.2187
LOG(W)	0.039062	0.8553
Dummy Covid	0.019561	0.4175
C	-4.276452	0.1753
R-Squared		0.998401
Adjusted R-Squared		0.997772

Source: eviews 12 data processing

Note: Significant at *** (1%), ** (5%), * (10%)

The COVID-19 pandemic, which had no significant impact on Indonesia's employment rate, is shown in Table 4. The impact was insignificant at the 1%, 5%, or 10% levels. Even with an increase in COVID-19 cases, it still did not result in a decrease in employment rates. This is consistent with research that states that the economic impact of a pandemic differs from that of war, as it does not involve the destruction of capital. A pandemic can be followed by a prolonged period of capital per worker increases and real wage increases if the mortality rate caused by the pandemic occurs in the productive segment of the population, as was the case with the Black Death of the 14th century and the Great Influenza of 1918 (Jordà, Singh, and Taylor, 2020). This indicates that the mortality rate experienced in Indonesia did not significantly affect the productive segment of the population, as shown in Table 4, showing an increase in gross domestic product (GDP) and real wages.

Furthermore, within the fixed effect, individual heterogeneity correlates with the independent variable and can be presented as a constant. To see each constant for each cross-section, see Table 5. Employment opportunities due to the impact of the Covid-19 pandemic in Indonesia for economic sectors experiencing positive growth (BPS, 2021). Empirical findings in Table 5 indicate that the decline in employment during the Covid-19 pandemic, caused by pandemic measures according to Barrot, Grassi, and Sauvagnat, 2020, is more related to social distancing. This research conducted in France is partly consistent with the empirical findings in this study, namely that sectors experiencing a decline in employment opportunities despite positive growth are transportation and warehousing, information and communication, health services and social activities, and mining and quarrying. Positive growth in the economic sector accompanied by employment opportunities (although not

significant) is found in the agricultural, forestry and fisheries economic sector, the manufacturing industry sector, the construction sector, and the trade sector.

Table 5. Coefficients of each cross section

Cross Section	***Coefficient***
Pertanian, kehutanan dan perikanan	1.822650
Pertambangan dan penggalian	-1.482663
Industri pengolahan	1.032791
Konstruksi	0.245957
Perdagangan	1.361493
Transportasi dan pergudangan	-0.105006
Informasi dan komunikasi	-1.825647
Jasa kesehatan dan kegiatan sosial	-1.049575

Source: Eviews 12 data processing

V. CONCLUSION

This study analyzes the impact of Covid-19 and Foreign Direct Investment (FDI) on employment in Indonesia amidst a negative trend in global FDI flows. The global economic recovery, driven by FDI flows, is primarily driven by the restructuring of Global Value Chains (GVCs) and the suppression of concerns about the Covid-19 outbreak, which are key determinants of investor willingness to invest.

The overall empirical findings related to Indonesia are that the Covid-19 pandemic has had no significant impact on FDI and employment. The economic impact of a pandemic differs from that of war, in that it does not involve the destruction of capital but rather the mortality rate among the productive population, a situation Indonesia was not affected by.

The following findings address the question of how Indonesia's role in global economic recovery relates to the restructuring of Global Value Chains and the severity of the pandemic in destination countries. Empirical evidence that FDI and employment were unaffected during the Covid-19 period provides empirical evidence that Indonesia is contributing to the global economic recovery.

Economic growth during the pandemic was not always accompanied by employment, even in economic sectors experiencing positive growth.

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