



## **Are Geopolitical, Economy, and Social Affecting Unemployments? Evidence From ASEAN-5**

**Danang Tri Hatmaja<sup>1✉</sup>, <sup>2</sup>Muhammad Khoirul Fuddin**

Department of Economics Development, Faculty Economics and Business, University of Muhammadiyah Malang, Indonesia

---

### **Article Information    Abstract**

---

*History of Article*

Received October 2022

Accepted December 2022

Published February 2023

---

*Keywords:*

*ASEAN, de jure KOFGI, de facto KOFGI, Economic, Political, Social, Unemployment.*

---

---

East and Southeast Asia gain tremendous economic and political advantages in terms of economic geopolitics (GPE). However, the impact that emerged in the GPE was further exacerbated by the emergence of the covid pandemic, "one belt, one road" in the global economic and geopolitical recession, which caused figures to soar in several ASEAN countries which is one of the challenges related to economic development. This study used the Vector Error Correction Model (VECM) based on de jure and de facto KOFGI panel data in ASEAN-5 from 1991-2019 to explore the short and long-term relationship between geopolitical, economic, and social factors on the unemployment rate. The results of this study reveal that the four variables have two co-integration relationships: especially in the long term, economic factors harm the unemployment, meanwhile, social and political factors have not provided a conducive influence to maintain the unemployment impact, and they promote no mutual mechanism benefit. The findings also show a negative correlation between political factors and an increase in de facto unemployment. It indicates that the political environment impacts a decrease in social and economic variables. Furthermore, the shock of the loss of de jure economic stability has adverse social and political interactions, thereby increasing the unemployment rate. This due to the critical role of economic stability to reduce the unemployment in ASEAN-5 countries.

## INTRODUCTION

East and Southeast Asia gain tremendous economic and political benefits in terms of economic geopolitics (GPE) (Glassman, 2011, 2018; Desai et al., 2015; Hong, 2016). In frame of GPE, human capital relation (Wibowo, 2019), road infrastructure, and FDI affect the economic growth (Kurniawan and Nihayah, 2021). In addition, GPE with regard to economic growth attain through an export-driven strategy that focuses on Southeast Asian countries (Nayar, 2007). In fact, China, as great as US, and its alliance, Japan, make Southeast Asia their highest geostrategic interest (Blanchard and Flint, 2017; Wrobel, 2019).

However, the region's unresolved historical tensions and conflicts appear to impede the economic progress and integration, along with the possibility of political instability, thus affect the unemployment rate (Therese F. Azeng and Yogo, 2013). Southeast and East Asia's economic integration is a gradual process and hampered by several geopolitical concerns (Glassman, 2018). The political economy problem is one of the most critical factors. Social and cultural variety affect the economic growth thus lead to resource competition that all countries contribute to tensions that hinder regional cooperation.

The impact of tensions within the GPE is further exacerbated by the emergence of political and social contexts which caused the unemployment case worse such as the covid-19 pandemic (Association of Southeast Asian Nations (ASEAN), 2020; Antipova, 2021; Bloem and Salemi, 2021; Chong, Li and Yip, 2021; Jingyi et al., 2021; Viegelaahn and Huynh, 2021), and a "one belt one road" at global economic and geopolitical recession (Blanchard & Flint, 2017; Foo et al., 2020; Hong, 2016; B. A. Iqbal et al., 2019; Villafuerte et al., 2016). However, before the crisis, the employment and unemployment situation had become a significant concern in most countries (Hong, 2016; Villafuerte, Corong and Zhuang, 2016; Blanchard and Flint, 2017; Iqbal, Rahman and Sami, 2019; Foo, Lean and Salim, 2020). In ASEAN, for instance, the potential impact of China's 'One Belt One Road

(OBOR) policy provides a promising mechanism for ASEAN countries that are the largest trading partners of China (Villafuerte, Corong and Zhuang, 2016; Sebastian, 2017; Wrobel, 2019). However, concerns related to the environment, social standards, and labor policies will be closely monitored (Iqbal, Rahman and Sami, 2019) thereby it could be exacerbating the unemployment and poverty rates in the steel industry from the impact of China's overproduction and investment capacity in expanding its economy and geopolitics into Eurasia and beyond (Hong, 2016, 2017). Geopolitically, many countries along the Silk Road are frustrated and challenged to develop closer relations with the EU (Hong, 2016, 2017).

In addition, rising unemployment rates is one of the challenges for many countries especially those in ASEAN who have struggled with economic development. The global financial crisis of covid-19 hurt many countries' economic fundamentals and its consequences continued to plague governments that had to make structural adjustments (Jingyi et al., 2021). A high and sustained unemployment rate is the most visible societal consequence (Chong, Li and Yip, 2021). According to an ISEAS-Yusof Ishak Institute survey in February 2021, the top three severe problems that 10 ASEAN citizen members responded were the threat to heal from COVID-19 (76.0%), followed by unemployment and economic recession (63.0%), and the socioeconomic gaps and income disparity (40.7%). In Southeast Asia countries such as Laos, Brunei, Malaysia, and Myanmar, more than half of the respondents indicate that unemployment and economic recession is the most critical concern (Seah et al., 2021). Thus, given the complex linkages between unemployment and the geopolitical economy, high-quality economic development can only be achieved if the two are matched and coordinated.

In line with the increasing geopolitic, economic and social in ASEAN countries have a potential to increase in globalization, labor market employment, and wage risks from year to year, which can be measured using the KOF Globalization index (Dreher et al., 2008). The KOF index was compiled by the Swiss Economic

Institute that has composite index measuring globalization for every country in the world along the economic, social, and political dimensions (Gygli et al., 2019). The unemployment rate according to KOF Globalization index country in ASEAN, such as Singapore, has significantly decreased of 3.17% in 2010 to 1.69% in 2015. Similarly, in Philippines, the level of globalization is declining in terms of economic and politic, followed by a decrease in the unemployment rate. Meanwhile in Malaysia, Thailand, Laos, and Myanmar, the KOF index in all aspects (economic, social, and political) were increased and followed by a decreased unemployment rate (Lini and Sasana, 2019).

In ASEAN, young people are around three times more likely to be unemployed than adults who are 25 years of age and older according to a recent survey by the YOUTH team in the Employment, Labour Markets and Youth Branch of the ILO. The majority of these young people's employment losses were brought on by firms closing their doors or being laid off. The gap was particularly large in Southern Asia (34.5 percentage points), 10.1 percentage points in South-Eastern Asia and the Pacific, and 9.8 percentage points in Eastern Asia.

Based on these backgrounds, therefore, this study identifies geopolitical economic factors that influence the unemployment rate in ASEAN-5 based on panel data for 1991-2019 of KOF Globalization Index. Three contributions are made by this study. First, many past studies thoroughly examined how geopolitical, economic, and social factors affect the unemployment rate. By examining the impact of de facto and de jure optimization on a country's Level of globalization using the KOF Globalization index, this study investigates the relationship between the two variables. Second, this work employs a vector error correction model (VECM), infrequently employed in comparable studies, to examine the correlations between these three factors in the short-term and long-term. Third, by concentrating on the unemployment rate under the trend of "economic, political, and social" to the current economic development structure in ASEAN-5,

this study analyzes the rational proportions of regional politics, economy, and social.

The integration of geopolitical, economic stability, and the labor market in ASEAN is a subject that has received significant attention in Asian scholarship. This due to the financial crisis of 1997–1998 (Singh, 1998; Knowles, Pernia and Racelis, 1999; Park and Lee, 1999; Krishnamurty, 2009) and the emergence of OBOR (Hong, 2016, 2017; Blanchard and Flint, 2017; Iqbal, Rahman and Sami, 2019; Foo, Lean and Salim, 2020) also the COVID-19 outbreak (Suomi, Schofield and Butterworth, 2020; ADB, 2021; Antipova, 2021; Bloem and Salemi, 2021; Jingyi et al., 2021; Viegelahn and Huynh, 2021). There is a variety of research on this issue due to the emergence of China, regional economic growth, and regional integration. The literature varies well because different geopolitical considerations, national viewpoints, ASEAN multilateral institutions, Western perspectives, also qualitative and quantitative data may all be used to evaluate the different issues. Research groups from all over the world are often writing on the geopolitical economic relationships in East Asia and looking into upcoming developments or forecasts for Asian regionalism. Egbrink and de Putten's "ASEAN, China's Rise and Geopolitical Stability in Asia" by Clingendael for The Netherlands Institute of International Relations offers a thorough analysis of the variations in geopolitical stability between Asia and China within ASEAN nations. They contend that these inherent variations in the economy, culture, and great political power significantly impact the nature and extent of regional integration (Egberink and van der Putten, 2010; Egberink and Putten, 2011).

Some studies cover various factors that affect the geopolitical economy integration and unemployment among ASEAN countries. The majority of the literature only addresses these problems and gives a thorough study of each element. The Asian Development Bank Institute describes the architecture in various works of the emerging global economy and East Asia and the impact of economic integration on the region's shifting economic landscape (Knowles, Pernia and Racelis, 1999; ADB, 2021).

Economic development is gaining importance on a national and international level. The literature more frequently discusses the relationship between economic globalization and geopolitical economy stability, which is a consideration of the influence of unemployment rates and regions (Adamu et al., 2018; Altiner et al., 2018; Gygli et al., 2019; Das and Ray, 2020). Joachim Klement, in the chapter "Finance and Security in East Asia" of "The Nexus of Economics, Security, and International Relations in East Asia," investigated the relationship between East Asia's economic integration and security issues. In order to provide a thorough analysis of the factors preventing East Asian economic unification, Cohen mixes security issues, nationalistic inclinations, internal politics, and international agenda progress.

**RESEARCH METHODS**

The variables long-term stable equilibrium connection can be investigated using various models, but the relationship is not always constant. Under the influence of exogenous shocks, the variable may may short-term deviate from its long-term equilibrium state. The VECM model accounts for this dynamic process, which

anticipates long-term equilibrium connections between the factors and short-term mistakes were corrected to long-run equilibrium states. Prevent endogeneity issues did not appear to modify this process's subject.

VECM validation, determination, and various stages are needed to analyze. First, the stationary test was carried out as the primary condition to verify the co-integration of each variable. The augmented Dickey-Fuller (ADF) test is the most frequently utilized approach. However, this study performed the Johansen co-integration test since the four variables fluctuate over time, which contains long-term relationships between variables and uses trace statistical analysis or test statistics for eigenvalues.

Then, the data were processed with VECM estimation to identify short-term and long-term causality. This estimation model paid attention to the co-integration relationship of each variable. VECM is used when two or more variables in the model are stationary at first difference. The use of this VECM estimate without data stationery is considered unsuitable. Without blaming the independent and dependent factors, the VECM model treats all variables equally or assumes all variables as endogenous.

**Table 1.** Variable description and sources

Variable	Description	Units	Source
PGG	Unemployment	Percent	World Bank
KOFECGIDF	KOF Economic De Facto Globalization	Index	ETH Zurich
KOFECGIDJ	KOF Economic De Jure Globalization	Index	ETH Zurich
KOFSOGIDF	KOF Social De Facto Globalization	Index	ETH Zurich
KOFSOGIDJ	KOF Social De Jure Globalization	Index	ETH Zurich
KOFPOGIDF	KOF Political De Facto Globalization	Index	ETH Zurich
KOFPOGIDJ	KOF Political De Jure Globalization	Index	ETH Zurich

Source: Data Processed, 2022

The stationary test on the data panel was a prerequisite for conducting a co-integration test. We used five countries (Brunei Darussalam, Philippines, Indonesia, Cambodia, and Laos) in ASEAN from 1991-2019. This test used the Augmented Dickey-Fuller Test (ADF) method, which was used to determine the stationary of the data. The data are said to be stationary if the

probability of the ADF test method is less than 5%. In determining the level of the data stationary, the following models were used:

$$Y_t = \delta Y_{t-1} + U_t \dots\dots\dots(1)$$

If the above equation is reduced by  $Y_{t-1}$ , it will be obtained on the right and left sides:

$$Y_t - Y_{t-1} = \delta Y_{t-1} - Y_{t-1} + U_t \dots\dots\dots(2)$$

$$\Delta Y_t = (\delta - 1)Y_{t-1} - U_t \dots\dots\dots (3)$$

Alternatively, it can be stated as follows:

$$\Delta Y_t = \beta Y_{t-1} + U_1 \dots\dots\dots (3)$$

Based on equation 4, we can make the following hypotheses:  $H_0: \beta = 1$  (Non-stationary panel data); and  $H_0: \beta < 1$  (Stationary panel data). Also, the Johansen Co-integration test (Granger, 1980) initially introduced co-integration, indicating a long-term relationship between economic variables. Engle and Granger (1987) developed a two-step test to determine if co-integration exists, but this test cannot address circumstances in which many co-integrating relationships may be feasible (Johansen, 1988). Two different likelihood ratio tests were proposed to address this issue and enable the identification of co-integrating vectors that are linearly independent. Johansen developed the Engle-Granger co-integration test, then was called the Johansen co-integration test. Johansen's co-integration test uses trace statistic analysis and or test statistics for maximum eigenvalues and critical values at a confidence level = of 5%. The hypothesis of this statistics test will be:  $H_0 =$  there is no r co-integration equation;  $H_1 =$  there is r co-integration equation. The Statistics Test Trace are explained in the equation below:

$$LR_{tr}(r|k) = -T \sum_{i=r+1}^k \log(1 - \lambda_i) \dots\dots\dots (5)$$

Test statistics for maximum eigenvalue:

$$LR_{max}(r|k) = -T \sum_{i=r+1}^k \log(1 - \lambda_i)$$

$$LR_{tr}(r|k) - LR_{tr}(r + 1|k) \dots\dots\dots (6)$$

For  $r = 0, 1, \dots, k -$ , with  $\lambda_i =$  The-i most significant value of the matrix:

$$\pi = (\lambda_1 \leq \lambda_2 \leq \dots \lambda_n) \dots\dots\dots (7)$$

Where T is number of observations, and K is the number of dependent variables. The vector error correction model was used to identify both short- and long-run causality (VECM). The comprehensive kind of error correction is known as VECM. When a model has two or more static variables on the first difference, VECM is employed. Without a doubt, the VECM is a constrained VAR model, even if

it resembles a vector autoregression (VAR) model. In the past, academics, economists, and other experts applied basic regression using VECM. However, in this situation, it is believed that doing so without data stationery is inappropriate.

The VECM model treats all variables symmetrically without blaming independent and dependent variables; in other words, this model treats all variables as endogenous variables. In line with the previous description of this study, here, the classical approach was used to look at variables that affect economic activity in developing countries in ASEAN-5. Therefore, to write the equation of factors of production that influence the determinants of economic activity according to the classical system can be written as follows:

$$PGG = C_1 + a_{1i} \sum_{i=1}^k KOFECGI_{t-k} + a_{1i} \sum_{i=1}^k KOF SOGI + a_{1i} \sum_{i=1}^k KOFPOGI_{t-k} + \varepsilon_1 \quad (8)$$

The dependent variable was unemployment (PGG) in the equation model (8). At the same time, KOF economic globalization (KOFECGI), KOF social globalization (KOF SOGI), and KOF political globalization (KOFPOGI) became independent variables that will affect unemployment (PGG).

$$KOFECGI = C_2 + a_{2i} \sum_{i=1}^k PGG_{t-k} + a_{2i} \sum_{i=1}^k KOF SOGI_{t-k} + a_{2i} \sum_{i=1}^k KOFPOGI_{t-k} + \varepsilon_2 \quad (9)$$

In equation model (9), the unemployment (PGG) rate in Asian countries, KOF social globalization (KOF SOGI), and KOF political globalization (KOFPOGI) affected the area of KOF economic globalization (KOFECGI).

$$KOF SOGI = C_3 + a_{3i} \sum_{i=1}^k KOFECGI_{t-k} + a_{3i} \sum_{i=1}^k PGG_{t-k} + a_{3i} \sum_{i=1}^k KOFPOGI_{t-k} + \varepsilon_3 \dots (10)$$

Model equation (10) shows that KOF economic globalization (KOFECGI), unemployment (PGG), and KOF political globalization (KOFPOGI) affected the KOF social globalization impacts reflected in the public policy changes (KOF SOGI) found in the Asian region.

$$KOFPOGI = C_4 + a_{4i} \sum_{i=1}^k KOFECGI_{t-k} + a_{4i} \sum_{i=1}^k KOF SOGI_{t-k} + a_{4i} \sum_{i=1}^k PGG_{t-k} + \varepsilon_4 \dots\dots\dots (11)$$

Equation model (11) acknowledged the movement and response of political globalization that enters Asian countries if there was a shock to the variable the KOF economic globalization (KOFECGI), the KOF social globalization (KOFSoGI), and unemployment (PGG) in the Asian region.

**RESULTS AND DISCUSSION**

Table 2 on KOF de facto globalization shows output where only KOFecGIdf was in the stationary level with a probability value of 0.0197, which is <5%, while PGG, KOFSoGI,

KOFPoGI were not in a stationary level because the probability value is more than 5%. Only one variable was stationary and three variables were not thus it was necessary to do a second stage stationary test using the first difference.

While in KOF de jure globalization, output at the Level was only shown at KOFPoGIdj with a probability value of 0.0002 where <5%. With one stationary variable and the remaining three variables said to be non-stationary, it was possible to carry out a phase 2 stationary test with the first difference.

**Table 2.** Stationary test de facto and de jure globalization

<b>KOF de facto globalization</b>				
<b>Variable</b>	Level		1st Difference	
	Probability	Information	Probability	Information
PGG	0,9772	Non-Stationary	0,0000	Stationary
KOFecGIdf	0,0197	Stationary	0,0000	Stationary
KOFSoGIdf	0,9938	Non-Stationary	0,0000	Stationary
KOFPoGIdf	0,8887	Non-Stationary	0,0000	Stationary
<b>KOF de jure globalization</b>				
<b>Variable</b>	Level		1st Difference	
	Probability	Information	Probability	Information
PGG	0,2610	Non-Stationary	0,0000	Stationary
KOFecGIdj	0,2889	Non-Stationary	0,0010	Stationary
KOFSoGIdj	0,9231	Non-Stationary	0,0020	Stationary
KOFPoGIdj	0,0002	Stationary	0,0006	Stationary

Source: Data Processed, 2022

The stationary test with the first different de facto and de jure degrees shows that the PGG, KOFecGI, KOFSoG, and KOFPoGI variables had a probability value of less than 5%. It can be concluded that this research was stationary at the first different degree.

The results of table 3 show the Johansen co-integration test in which each variable is seen from None, At most 1, At most 2, and At most 3,

which are <5%. The trace statistic value is 241.7377 > from the critical value of 47.85613 in the Johansen Co-integration test. The maximum eigenvalue is 82.40950 > from the essential value of 27.58434. These findings indicated that unemployment, economic, social, and political were co-integrated and have a long-term relationship. Then in the next stage, the VECM test can be carried out

**Table 3.** Co-integration Test de facto

<b>Unrestricted Cointegration Rank Test (Trace)</b>				
Hypothesized No. of C.E. (s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.469491	241.7377	47.85613	0.0001
At most 1 *	0.406750	159.3282	29.79707	0.0001
At most 2 *	0.357573	91.44999	15.49471	0.0000
At most 3 *	0.229688	33.92468	3.841466	0.0000

<b>Unrestricted Cointegration Rank Test (Maximum Eigenvalue)</b>				
Hypothesized No. of C.E. (s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.469491	82.40950	27.58434	0.0000
At most 1 *	0.406750	67.87816	21.13162	0.0000
At most 2 *	0.357573	57.52532	14.26460	0.0000
At most 3 *	0.229688	33.92468	3.841466	0.0000

Note:\* respectively indicate significance at the 5%.

Source: Data Processed, 2022.

Meanwhile, table 4 also shows the Johansen co-integration test that each variable is seen from None, At most 1, At most 2, and At most 3 is <5%. The trace statistic value is 165.6377 > from the critical importance of 47.85613 in the Johansen Co-integration test.

The maximum eigenvalue is 59.78844 > from the essential value of 27.58434. These findings indicated that unemployment, economic, social, and political were co-integrated and have a long-term relationship. Then in the next stage, the VECM test can be carried out.

**Table 4.** Co-integration Test de jure

<b>Unrestricted Cointegration Rank Test (Trace)</b>				
Hypothesized No. of C.E. (s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.368660	165.6377	47.85613	0.0000
At most 1 *	0.298206	105.8493	29.79707	0.0000
At most 2 *	0.251754	59.81430	15.49471	0.0000
At most 3 *	0.156408	22.11129	3.841466	0.0000

<b>Unrestricted Cointegration Rank Test (Maximum Eigenvalue)</b>				
Hypothesized No. of C.E. (s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.368660	59.78844	27.58434	0.0000
At most 1 *	0.298206	46.03500	21.13162	0.0000
At most 2 *	0.251754	37.70300	14.26460	0.0000
At most 3 *	0.156408	22.11129	3.841466	0.0000

Note:\* respectively indicate significance at the 5%.

Source: Data Processed, 2022.

In Johansen's co-integration test of table 3 and table 4, each variable is seen from None, At most 1, At most 2, and At most 3 shows the results of the trace test and co-integrated maximum eigenvalue, which have a long-term relationship. Then it can be determined that the VECM test can be carried out for the subsequent testing stage.

Table 5 represents both the hysteresis of each variable's first-order difference and the connection between transient fluctuations and long-term equilibrium. The de facto VECM estimation results found an error correction of

0.00469 (PGG), 0.04223 (KOFECGIDF), 0.01915 (KOF SOGIDF), and 0.03962 (KOFPOGIDF). This means that every period error is corrected by 0.00469% (PGG), 0.04223% (KOFECGIDF), 0.01915% (KOF SOGIDF), and 0.03962% (KOFPOGIDF) to balance short term and long-term. The long term showed the transmission mechanism of unemployment that was significantly affected by KOF Economic De Facto Globalization, KOF Social de Facto Globalization, and KOF Political De Facto Globalization.

**Table 5.** Results for VECM de facto

<b>VECM long-term de facto</b>				
	D(PGG)	D(KOFECGIDF)	D(KOF SOGIDF)	D(KOFPOGIDF)
CointEq1	1,000000	0,570577 (0,20462)	-0,233979 (0,17833)	0,156077 (0,10392)
<b>VECM short-term de facto</b>				
	D(PGG)	D(KOFECGIDF)	D(KOF SOGIDF)	D(KOFPOGIDF)
CointEq1	0,001926 (0,00469)	-0,127523 (0,04223)	0,037281 (0,01915)	-0,004063 (0,03962)
D(PGG(-1))	-0,176376 (0,09325)	-0,536580 (0,83994)	-0,681315 (0,38091)	0,093181 (0,78792)
D(KOFECGIDF(-1))	0,008580 (0,00944)	0,144331 (0,08507)	0,00446 (0,03858)	-0,040594 (0,07980)
D(KOF SOGIDF(-1))	-0,007021 (0,02236)	-0,076354 (0,20136)	-0,077035 (0,09132)	0,331131 (0,18889)
D(KOFPOGIDF(-1))	-0,006530 (0,00922)	0,060214 (0,08307)	-0,039473 (0,03767)	0,052613 (0,07793)
Cons	-0,000706 (0,04936)	0,697041 (0,44463)	0,995487 (0,20164)	0,118096 (0,41710)
R-squared	0,039431	0,092079	0,057992	0,030388

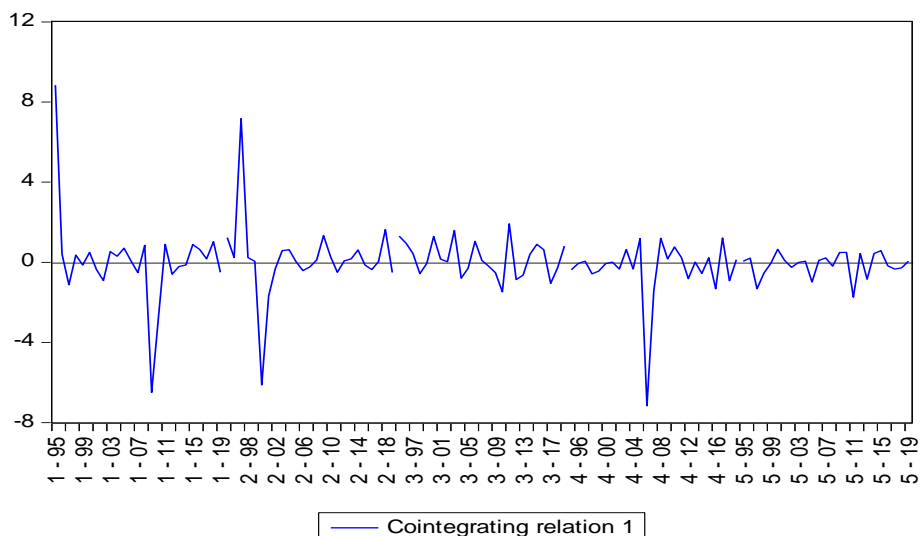
Note: (-1) show log data

Source: Data Processed, 2022

Figure 1 depicts significant fluctuations in crises in Brunei Darussalam at the end of 2009, the Philippines in 2000, and Cambodia at the end of 2006. Meanwhile, in Indonesia and Laos, there was no significant fluctuation crisis in the short term. This large fluctuation also shows

short-term fluctuations that deviate significantly from the long-run equilibrium relationship. The effect of this short-term fluctuation was the crisis in the decline of economic, social, and political factors in 10 years to the unemployment rate.





**Figure 1.** Co-integration Relationship in the Long-term de Facto

Source: Data Processed, 2022

Meanwhile, the de jure VECM estimation results found an error correction of 0.00480 (PGG), 0.03896 (KOFECGIDJ), 0.02043 (KOF SOGIDJ), and 0.02257 (KOFPOGIDJ). It indicates that every period error is fixed by 0.00480% (PGG), 0.03896% (KOFECGIDJ), 0.02043% (KOF SOGIDJ), and 0.02257% (KOFPOGIDJ) to maintain a long-term and short-term equilibrium. Long-term evidence indicates that the transmission mechanism of unemployment is significantly affected by KOF Economic De Jure Globalization, KOF Social De Jure Globalization, and KOF Political De Jure Globalization.

In table 5 and table 6 on the PGG variable, the correlation coefficient between PGG and the lag term of  $D(PGG(-1))$ ,  $D(KOFECGI(-1))$ ,  $D(KOF SOGI(-1))$ ,  $D(KOFPOGI(-1))$  are all significant at the 5% level. This matter indicates that the variables significantly impacted short-term fluctuations in this period in the previous phase. Among them,  $KOFECGI(-1)$  positively promoted short-term fluctuations as the effect of

PGG, whereas  $KOF SOGI(-1)$  and  $KOFPOGI(-1)$  negatively affect short-term fluctuations in PGG, indicating that the influence of social and political factors has not been conducive to influencing the impact of unemployment. There has not been a mechanism for mutual promotion between them.

The error correction term coefficient for the variables  $KOFECGI$ ,  $KOF SOGI$ , and  $KOFPOGI$  is not significant at the 1% level. This matter demonstrated that the prior influence on the equilibrium rate did not affect short-term variations in the unemployment rate. The mistake correcting mechanism's ability to increase economic, social, and political power is shown by the error correction coefficient's positive sign. However, the error correction component does not significantly affect the first-difference lag. So, the Value for any variable indicates that the previous fluctuation of any variable has no substantial impact on lowering unemployment.

**Table 6.** Results for VECM de jure

VECM long-term de jure				
	D(PGG)	D(KOFECGIDJ)	D(KOF SOGIDJ)	D(KOFPOGIDJ)
CointEq1	1,00000	-0,053349	-0,409523	-0,138148
		(0,17630)	(0,11662)	(0,07136)

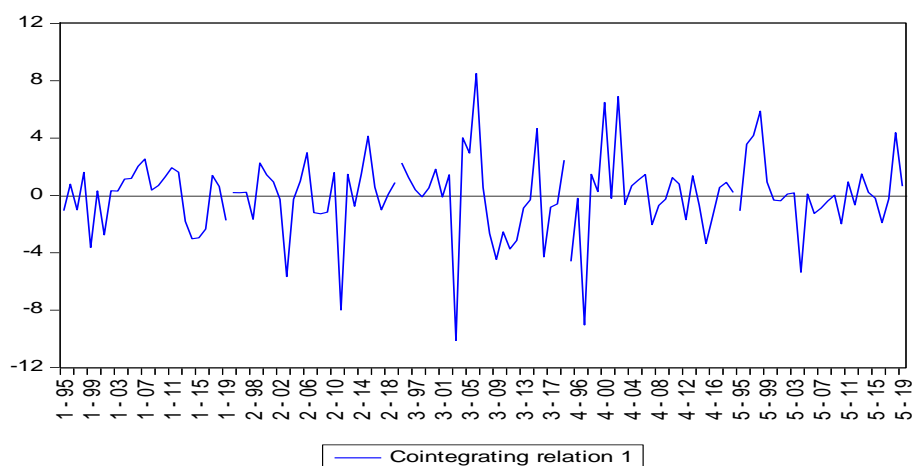
VECM short-term de jure				
	D(PGG)	D(KOFECGI)	D(KOFSOGI)	D(KOFPOGI)
CointEq1	0,003936 (0,00480)	0,077897 (0,03896)	0,041486 (0,02043)	0,091450 (0,02257)
D(PGG(-1))	0,231508 (0,09744)	1728530 (0,79046)	0,625094 (0,41459)	0,369058 (0,45795)
D(KOFECGIDJ(-1))	0,009188 (0,00915)	0,033435 (0,07423)	0,000980 (0,03894)	0,006016 (0,04301)
D(KOFSOGIDJ(-1))	-0,026672 (0,02075)	0,128071 (0,16832)	0,014333 (0,08828)	-0,178000 (0,09752)
D(KOFPOGIDJ(-1))	0,012129 (0,01801)	-0,048381 (0,14610)	-0,057392 (0,07663)	0,038812 (0,08464)
Cons	-0,004742 (0,04217)	0,237344 (0,34207)	0,972755 (0,17941)	1,284343 (0,19818)
R-squared	0,085087	0,085428	0,058160	0,163039

Note: (-1) show log data

Source: Data Processed, 2022

Figure 2 shows a crisis with notable changes in Brunei Darussalam at the end of 1999, the Philippines in 2011, Indonesia in 2003, Cambodia in 1997, and Laos in 2004. It also shows long-term fluctuations, which deviate significantly from the long-run equilibrium

relationship. The effect of this short-term fluctuation is the crisis in the decline in the contribution of economic, social, and political factors in 10 years to the reduction of the unemployment rate



**Figure 2.** Co-integration Relationship in the Long-term de Jure

Source: Data Processed, 2022

Innovation quantifies the effect of a one-unit increase in the GDP's white noise vector or other variables responsive to the impulse response. (Christopher A. Sims, 1980; Verbeek, 2007). Figure 1 presents the results of the analysis of the impulse response from the VECM. Each column displays how other variables affect the same variable. In contrast, each row displays

how the same variable affects other variables. The x-axis scale is the reaction period specified (in years).

Figure 3(a) shows the response to PGG in itself, KOFECGIDF, KOFSOGIDF, and KOFPOGIDF. In the first period, KOFECGIDF and KOFSOGIDF increases in response to PGG before progressively decreasing after the second

stage. PGG has had a sharp downward impact on itself but has yet to respond to a negative KOFPOGIDF. PGG also had an increasing impact in the second period, decreasing response to both KOFECGIDF and KOF SOGIDF and increasing response to KOFPOGIDF, which fluctuated initially before leveling off after about three periods. It implies that the initial shock to unemployment affects the rise in political factors. Thus, economic and social variables become less critical when politics becomes more prominent. The social factor deficit reacted negatively to unemployment in the following period.

Figure 3(b) represents the impact of KOFECGIDF on itself, PGG, KOF SOGIDF, and KOFPOGIDF. KOFECGIDF had a downward effect but an upward impact on KOFPOGIDF and negatively responded to both PGG and KOF SOGIDF. The result of KOFECGIDF on itself first decreased until the second period, then stabilized after the fourth period. It shows that the economy has a downward effect that has the potential to harm unemployment and social welfare. Thus, the economic impact that initially decreased, then increased and stabilized did not positively affect the unemployment and social factors. It seems that the economy has not significantly boosted growth.

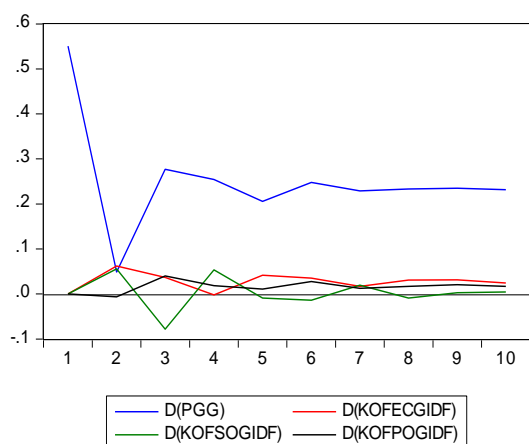
Figure 3(c) represents the impact of KOF SOGIDF on itself, PGG, KOFECGIDF, and KOFPOGIDF. KOF SOGIDF decreased in

the initial period, which then rose in the second period responding positively to KOFECGIDF and KOFPOGIDF but responding negatively to PGG. The impact of KOF SOGIDF stabilizes after the fourth period, which responds to all impulses. It shows that the mechanism of social factors only responds to economic and political factors, although not yet significant. This finding indicated that social factors in the long term have not provided a positive interaction on unemployment.

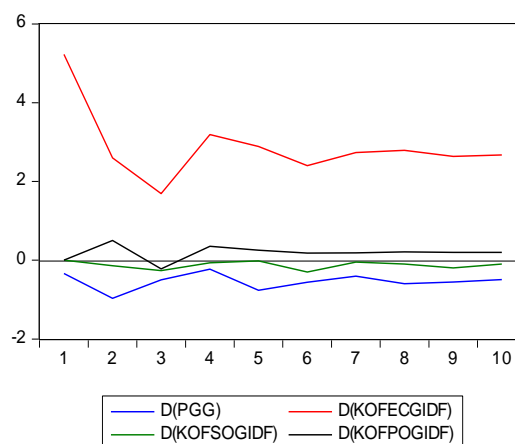
Figure 3(d) represents the impact of KOFPOGIDF on itself, PGG, KOFECGIDF, and KOF SOGIDF. KOFPOGIDF had a common effect on three periods before an increase in period four, which responded to the decline in PGG and KOF SOGIDF before everything stabilized in the fifth period. Still, KOFPOGIDF has not made a positive contribution to KOFECGIDF. It shows that political factors harmed the unemployment and social shocks but have not responded to favorable movements in the long-term economy.

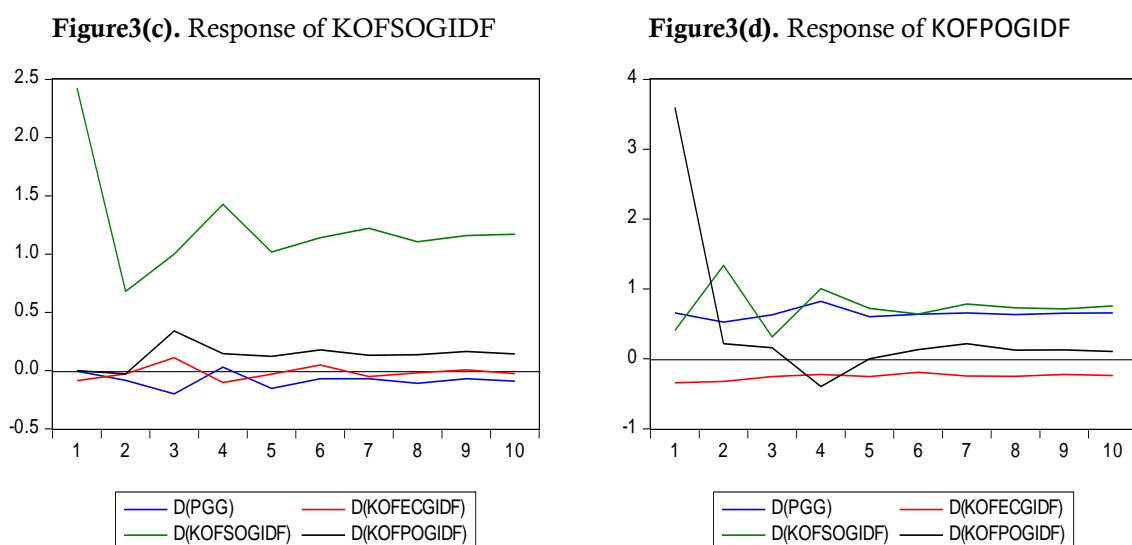
The conclusion from this de facto graphic is that the increase in unemployment was negatively related to political factors, indicating that the mechanism of political growth affects the decline of economic and social aspects. The economic and social ecosystems must be formed to support the political reduction that can reduce the unemployment rate.

**Figure 3(a).** Response of PGG



**Figure 3(b).** Response of KOFECGIDF





**Figure 3.** Impulse Respons Function (IRF) De Facto KOF Globalization Index  
 Source: Data Processed, 2022

Figure 4(a) shows the impact of PPG on itself, KOFECGIDJ, KOF SOGIDJ, and KOF POGIDJ. PPG had a downward impact on itself during the initial two periods, but it positively impacted KOFECGIDJ in the initial period before responding negatively in the next period. The increase in PPG in the third period resulted in a decrease in KOF POGIDJ. On the other hand, it responded positively to KOF SOGIDJ before everything stabilized in period four and gave a gradual negative response to KOFECGIDJ. It shows that the economy experiences the lowest negative response when unemployment increases. It can be said that the economy needs to be improved so that unemployment can be minimized or decreased, thereby suppressing the number of social and political problems that are increasingly spreading above unemployment.

Figure 4(b) shows the impact of KOFECGIDJ on itself, PPG, KOF SOGIDJ, and KOF POGIDJ. KOFECGIDJ had a downward impact on itself in the early period but an upward impact on PPG, KOF SOGIDJ, and KOF POGIDJ. The impact of KOFECGIDJ in the second period increased and then stabilized after the fourth period, which responded negatively to PPG. It shows that the economic downturn harms unemployment in the long run. Besides, when politics first rises and stabilizes,

the initial negative impact on the economy on upgrading gradually flattens. It seems that the economy has not been significant in stabilizing unemployment which had risen at the beginning of the period.

Figure 4(c) shows the impact of KOF SOGIDJ on itself, PPG, KOFECGIDJ, and KOF POGIDJ. KOF SOGIDJ decreased in the initial period, which then rose in the second period responding positively to KOFECGIDJ but responding negatively to PPG and KOF POGIDJ. The impact of KOF SOGIDJ stabilizes after the third period, which responds to all impulses. It shows that the mechanism of social factors responds negatively to unemployment and political factors, although the intensity is still tiny. This finding indicates that social factors in the long term have not provided a positive interaction on unemployment.

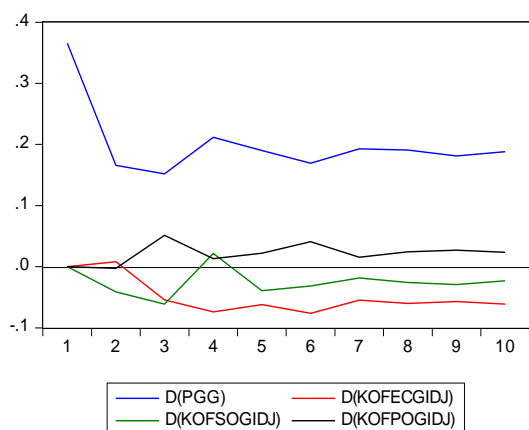
Figure 4(d) shows the impact of KOF POGIDJ on itself, PPG, KOFECGIDJ, and KOF SOGIDJ. KOF POGIDJ had a declining impact before period two, which responded to the increase in PPG, KOFECGIDJ, and KOF SOGIDJ before they all declined again in period three and stabilized in period four. Still, KOF POGIDJ has not made a positive contribution to KOF SOGIDJ. It shows that political factors harm social shocks and

significantly affect fluctuations in unemployment and the economy.

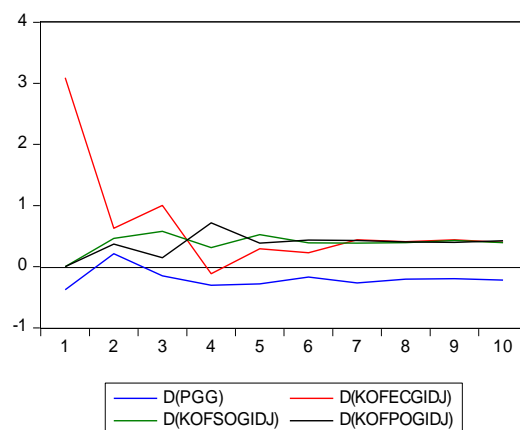
In conclusion, from this de jure analysis, the increase in unemployment is negatively related to the main social and political effects that

cause economic stability shocks to decrease. Therefore, it is necessary to strengthen the economic to reduce or limit the unemployment, which will help to maintain the social and political issues.

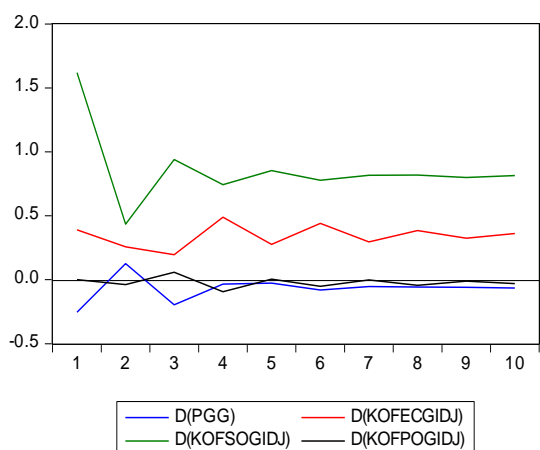
**Figure 4(a).** Response of PGG



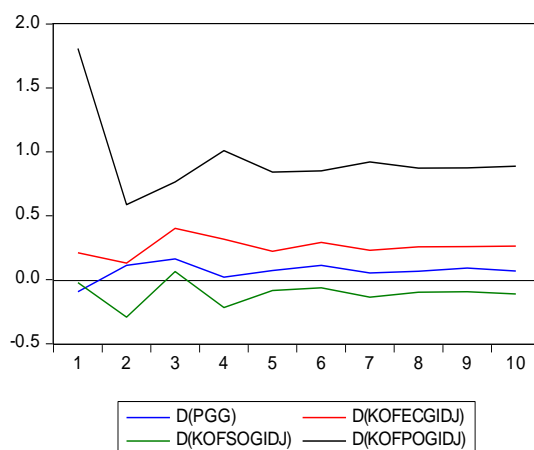
**Figure 4(b).** Response of KOFECGIDJ



**Figure 4(c).** Response of KOFSOGIDJ



**Figure 4(d).** Response of KOFPOGIDJ



**Figure 4.** Impulse Response Function (IRF) De Jure KOF Globalization Index

Source: Data Processed, 2022

Table 7 demonstrates that in the prior period, the characteristics of PGG 100% changed variables. However, in the second period, the forecast error for PGG attributes is 0.01% due to politics and 1.24% due to economics. Period 3 shows that the variation in PGG is not only due to political factors (0.41%) but also to economic

and social factors, which are 1.31% and 2.32%, respectively. Changes in the value of this contribution continued to fluctuate up to period 10. The PGG variable experienced its shock of 96.49%, while in other variables, 1.39%, 1.62%, and 0.51% were observed due to economic, social, and politic factors.

**Table 7.** Variance Decomposition De Facto

Variance Decomposition of D(PGG):					
Period	S.E.	D(PGG)	D(KOFECGIDF)	D(KOFSOGIDF)	D(KOFPOGIDF)
1	0.550481	100.0000	0.000000	0.000000	0.000000
2	0.558968	97.74988	1.237655	1.000255	0.012205
3	0.631193	95.95215	1.311289	2.323361	0.413196
4	0.682755	95.85365	1.121388	2.598844	0.426120
5	0.714457	95.83705	1.361284	2.389152	0.412518
6	0.757740	95.91906	1.425539	2.156880	0.498523
7	0.792160	96.13274	1.349308	2.035741	0.482207
8	0.826580	96.25802	1.376657	1.881246	0.484072
9	0.860193	96.35017	1.406548	1.738051	0.505233
10	0.891353	96.48721	1.385727	1.620922	0.506146

Source: Data Processed, 2022

While in Table 8, it is shown that the characteristics of PGG in period 1 of 100% still experience shocks without being influenced by other variables. PGG was value of 98.91%, had a shock impact on the economy of 0.04%, the social of 1.04%, and politics of 0.004% during the second period. Meanwhile, in the third period,

the variation in PGG was not only social of 2.78% but also economic and political factors of 1.55% and 1.35%, respectively. This contribution continued to fluctuate until the 10th period, in the PGG variable, whose shocks were 89.76%, while the economic, social, and political factors had an effect of 6.55%, 2.23%, and 1.46%, respectively.

**Table 8.** Variance Decomposition De Jure

Variance Decomposition of D(PGG):					
Period	S.E.	D(PGG)	D(KOFECGIDJ)	D(KOFSOGIDJ)	D(KOFPOGIDJ)
1	0.365354	100.0000	0.000000	0.000000	0.000000
2	0.403499	98.90982	0.041916	1.043771	0.004494
3	0.441845	94.31797	1.545351	2.781762	1.354920
4	0.496089	93.01348	3.446107	2.397103	1.143311
5	0.536731	91.99643	4.274713	2.585667	1.143195
6	0.570230	90.30148	5.580674	2.593781	1.524063
7	0.604873	90.40172	5.781406	2.397889	1.418984
8	0.638098	90.17081	6.087646	2.319247	1.422299
9	0.667007	89.91629	6.301428	2.315640	1.466646
10	0.696532	89.75575	6.551919	2.233952	1.458375

Source: Data Processed, 2022

Unemployment can cause state losses that threaten the politics. State policies in controlling unemployment, also caused by the Covid-19 pandemic, are strongly affected by political pressure that changes with the pandemic's duration. It threatens state stability and social and economic welfare (Tisdell, 2020). De facto

political conditions for unemployment rose in 1991 from 45.91% to 58.24% in 2019. The increase was due to political shocks since there was a high increase in unemployment and was also driven by a decline in the country's economy. This affected the citizens' social conditions that led to several communities,

including racial and ethnic minorities, and low-income groups, to be burdened. These issues include a lack of economic prospects and other inequities caused by social impacts (Peterson, Stephen; Westfall, John; Millers, 2020). Therefore, to maintain a harmonious and peaceful external political and economic environment that will foster a good social sense, ASEAN-5 cooperates with China in supporting a new era of development through "One Belt One Road" (OBOR). With this, it is hoped that ASEAN and China will have infrastructure and connectivity as the main priorities to promote more comprehensive trade, investment, information, and people-to-people exchanges to reduce high unemployment rates (Soong, 2018).

The results from graph 2 above show that the trend of economic growth is not relevant to unemployment in ASEAN-5 at this stage. The unemployment shock did not provide a consistently positive social impact, while politics put increasing pressure on easing restrictions to reduce economic costs during the COVID-19 pandemic. As a result, state governments changed their Bergson-type preference function in response, taking this political influence into account (Bergson, 1938; Tisdell, 2020). To support the achievement of economic stability does not appear to be modifying the subject. The northern and southern states have developed service jobs and mostly implemented low wages for decades to achieve excellent economic stability and secure a dynamic labor market (Antipova, 2021). Moreover, supported by the Beijing Asia-Pacific Economic Summit cooperation in 2014, China disbursed US\$40 for the Silk Road Fund to develop infrastructure and promote economic integration. The China-backed AIIB will contribute to the funding of approximately \$150 billion in infrastructure development needed for infrastructure integration (Soong, 2018).

Evidence underlies the mechanism that shows that there has not been a de facto political and economic de jure relationship. Includes the de facto political sub-index, which combines the number of embassies, the number of

participation, and the quantity of NGOs participating in UN peacekeeping in a nation. While the de jure economic sub-index is constructed utilizing economic and commercial de jure globalization indicators. This de jure indicator, according to the Doing Business report, is a de jure commercial indicator associated with the average non-tariff barriers, procedural costs, and trade taxes assessed by export-related taxes as a proportion of total revenue. The IMF Chinn-Ito Index, the Index (Wang and Blomström, 1992), and investment constraints, such as regulations governing international financial flows and the percentage of foreign ownership, are some indicators of financial globalization (Wang and Blomström, 1992; Hodabalo Bataka, 2019). It can be shown that the de facto and de jure aspects of globalization support the studies (Quinn, Schindler and Toyoda, 2011; Pethe et al., 2014). Different results concerning the link between globalization and economic growth resulted from the choice to utilize de facto and de jure globalization measurements.

The International Labour Organization (ILO) poll on young people in the Asia and Pacific area estimates that the unemployment rate will be 14.1 percent in 2020, which is higher than the 13.7 percent global forecast. According to the ILO, young women have lower rates of unemployment of 12.1 percent than young males (15.0 percent). Both Eastern and Southern Asia are affected by this. While young women in South-Eastern Asia and the Pacific have a higher unemployment rate of 11.2 percent than young males of 10.6 percent.

The de facto politics nevertheless impact the country's economic growth, even though the de jure economy does support the economy's stability. That is undoubtedly also influenced by the yearly changes in the shock unemployment rate brought on by the COVID-19 pandemic and made worse, including unemployment and labor underutilization, as well as by the slowing economic activity brought by the COVID-19 pandemic, the ensuing supply chain disruptions, and the decreased consumer spending. It is

expected to strengthen the country's economy and reduce unemployment, which over time rises in number, by working with China's One Belt One Road (OBOR) initiative to improve the trade routes between nations.

## CONCLUSION

The short- and long-term relationships between unemployment and geopolitical economics (GPE) were explored in this study using VECM and it tied to China's One Belt One Road (OBOR) in ASEAN-5 from 1991 to 2019. The second generation panel test was used to compare the factors of obstacles that drive the increase in unemployment in ASEAN-5 from the de facto and de jure points of view of the group. Thus, the findings of this analysis revealed that geopolitical economics (GPE) had an expansive effect on unemployment in ASEAN-5. The political dimension of de facto globalization still impacts the economy, while the economic extent of de jure globalization is more conducive to economic stability. The results also proved that de facto and de jure had different effects on actions, both in nature and magnitude.

Furthermore, the study's findings indicated that the increase in de facto unemployment was negatively related to political factors, indicating that the mechanism of political increase affects the decline of economic and social factors. Meanwhile, the decrease in stability shocks in the de jure economy had a negative social and political relationship that increased the unemployment rate. This was due to economic stability That was essential in suppressing the unemployment problem in ASEAN-5 countries.

Considering the above findings did not appear in ASEAN-5 countries thus it should consider recommendations to achieve a low unemployment rate. Countries with high unemployment rates must implement measures to reverse the political decline and economic growth. The political impact of de facto globalization has had a detrimental impact on unemployment. As a result, it affects social and economic inequality, resulting in increased unemployment in the country due to lack of

employment, poverty, and health. Likewise, with the economy, ASEAN-5 countries with high unemployment rates experience a trade-off between politics and the economy. In other words, economic growth can be called a critical component that affects all aspects, especially fluctuations in the unemployment rate.

In connection to this problem, ASEAN-5 needs to cooperate with China's One Belt One Road (OBOR) in improving the chain of trade routes between countries which is also exacerbated by the COVID-19 pandemic. An economic vulnerability can be related to the COVID-19 condition, which includes the country's economic burden, which is also strongly affected by the current political climate system and by the various objectives of the rulers. This results in a significant disparity in the methods used by various nations to control the spread of COVID-19 illnesses and the stringency of preventive social separation in the case of COVID-19. In addition, there is uncertainty regarding the virus's epidemiology and effects on economic activity and public health. So the One Belt One Road (OBOR) initiative opens another avenue for ASEAN-5 countries to strengthen their economic ties within the regional bloc and outside the bloc. This possibility is essential amid the uncertainty of the current economic climate and especially in the future. We think that the empirical findings of this study can contribute to a comprehensive discussion of the bilateral trade partnership between China and ASEAN-5. Especially in hectic conflicts like today, ASEAN-5 cooperation with OBOR is necessary to stabilize the country's economy through trade routes. It is also hoped that this will revive the country's economy and may suppress the unemployment rate which apparently is increasing over time due to the existence of the economic conflicts..

## REFERENCES

- Adamu, P. *et al.* (2018) 'Impact of globalization on unemployment in Sub-Saharan African (SSA) countries', *International Journal of Economics and Management*, 12(Special Issue 2), pp. 443–454.
- ADB (2021) *COVID-19 and Labor Markets in Southeast Asia: Impacts on Indonesia, Malaysia, The*



- Philippines, Thailand, and Vietnam*. Philippines: Asian Development Bank. doi:10.22617/TCS210508-2.
- Altiner, A. *et al.* (2018) 'The Effect of Economic Globalization on Unemployment in Emerging Market Economies', *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 22(Özel Sayı 2), pp. 1763–1783.
- Antipova, A. (2021) 'Analysis of the COVID-19 impacts on employment and unemployment across the multi-dimensional social disadvantaged areas', *Social Sciences & Humanities Open*, 4(1), p. 100224. doi:10.1016/j.ssaho.2021.100224.
- Association of Southeast Asian Nations (ASEAN) (2020) 'Economic Impact of Covid-19 Outbreak on ASEAN', 1(April), pp. 1–17. Available at: [https://asean.org/storage/2020/04/ASEAN-Policy-Brief-April-2020\\_FINAL.pdf](https://asean.org/storage/2020/04/ASEAN-Policy-Brief-April-2020_FINAL.pdf).
- Bergson, A. (1938) 'A reformulation of certain aspects of welfare economics', *The Quarterly Journal of Economics*, 52(2), pp. 310–334. doi:10.2307/1881737.
- Blanchard, J.M.F. and Flint, C. (2017) 'The geopolitics of China's maritime silk road initiative', *Geopolitics*, 22(2), pp. 223–245. doi:10.1080/14650045.2017.1291503.
- Bloem, J.R. and Salemi, C. (2021) 'COVID-19 and conflict', *World Development*, 140, p. 105294. doi:10.1016/j.worlddev.2020.105294.
- Chong, T.T.L., Li, X. and Yip, C. (2021) 'The impact of COVID-19 on ASEAN', *Economic and Political Studies*, 9(2), pp. 166–185. doi:10.1080/20954816.2020.1839166.
- Christopher A. Sims (1980) 'Macroeconomics and Reality', *Econometrica*, 48(1), pp. 1–48.
- Das, R.C. and Ray, K. (2020) 'Does Globalisation Influence Employment? Empirical Investigation on Individual as well as Panel of South Asian Countries', *Review of Market Integration*, 12(1–2), pp. 7–34. doi:10.1177/0974929220969222.
- Desai, R. *et al.* (2015) *Research in Political Economy: Theoretical Engagements in Geopolitical Economy*. 1st edn, Emerald Books. 1st edn. Edited by R. Desai. Bingley, United Kingdom: Emerald Group Publishing Limited.
- Dreher, A., Gaston, N. and Martens, P. (2008) *Measuring Globalisation: Gauging Its Consequences, Measuring Globalisation*. New York: Springer. doi:10.1007/978-0-387-74069.
- Egberink, F. and van der Putten, F.-P. (2010) 'Introduction: What is ASEAN's Relevance for Geopolitical Stability in Asia?', *Journal of Current Southeast Asian Affairs*, 29(3), pp. 91–94. doi:10.1177/186810341002900304.
- Egberink, F. and Putten, F.-P. Van der (2011) *ASEAN, China's Rise and Geopolitical Stability in Asia*, Netherlands Institute of International Relations 'Clingendael'.
- Engle, R.F. and Granger, C.W.J. (1987) 'Co-Integration and Error Correction: Representation, Estimation, and Testing', *Econometrica*, 55(2), p. 251. doi:10.2307/1913236.
- Foo, N., Lean, H.H. and Salim, R. (2020) 'The impact of China's one belt one road initiative on international trade in the ASEAN region', *North American Journal of Economics and Finance*, 54, p. 101089. doi:10.1016/j.najef.2019.101089.
- Glassman, J. (2011) 'The Geo-political Economy of Global Production Networks', *Geography Compass*, 5(4), pp. 154–164. doi:10.1111/j.1749-8198.2011.00416.x.
- Glassman, J. (2018) 'Geopolitical economies of development and democratization in East Asia: Themes, concepts, and geographies', *Environment and Planning A*, 50(2), pp. 407–415. doi:10.1177/0308518X17737170.
- Granger, C.W.J. (1980) 'Long memory relationships and the aggregation of dynamic models', *Journal of Econometrics*, 14(2), pp. 227–238. doi:10.1016/0304-4076(80)90092-5.
- Gygli, S. *et al.* (2019) 'The KOF Globalisation Index – revisited', *Review of International Organizations*, 14(3), pp. 543–574. doi:10.1007/s11558-019-09344-2.
- Hodabalo Bataka (2019) 'De jure, De facto Globalization and Economic Growth in Sub-Saharan Africa', *Journal of Economic Integration*, 34(1), pp. 133–158.
- Hong, Z. (2016) *Trends in Southeast Asia, China's One Belt One Road: An Overview of the Debate*. No.6, ISEAS-Yusof Ishak Institute. No.6. Singapore: ISEAS Publishing. Available at: <https://www.cambridge.org/core/books/chinas-one-belt-one-road/chinas-one-belt-one-road-an-overview-of-the-debate/CE33A335DB92B4E9DC6159EE2AC4E0A3>.
- Hong, Z. (2017) "'One Belt One Road" and China–Southeast Asia Relations', in *Southeast Asia and China: A contest in mutual socialization*, pp. 211–225.
- Iqbal, B.A., Rahman, M.N. and Sami, S. (2019) 'Impact of Belt and Road Initiative on Asian Economies', *Global Journal of Emerging Market Economies*, 11(3), pp. 260–277. doi:10.1177/0974910119887059.
- Jingyi, L. *et al.* (2021) 'COVID-19 pandemic's impact on the labour market in ASEAN countries', *AEI Insights: An International journal of Asia-Europe relations*, 7(1), pp. 59–76. doi:10.37353/aei-insights.vol7.issue1.5.
- Johansen, S. (1988) 'Statistical analysis of cointegration vectors', *Journal of Economic Dynamics and Control*, 12(2–3), pp. 231–254. doi:10.1016/0165-1889(88)90041-3.
- Knowles, J.C., Pernia, E.M. and Racelis, M. (1999) *Social Consequences of the Financial Crisis in Asia*. 60. Manila.
- Krishnamurty, J. (2009) *Learning from the 1997-1998 Asian Financial Crises: The ILO Experience in Thailand and Indonesia*. Geneva.
- Kurniawan, G.F. and Nihayah, D.M. (2021) 'Impact

- of Road Infrastructure and Foreign Direct Investment to ASEAN Economy', *Economics Development Analysis Journal*, 10(2), pp. 233–242.
- Lini, Z.Z. and Sasana, H. (2019) 'Pengaruh Tingkat Globalisasi Terhadap Pengangguran Di Asean the Effect of Globalization Against Unemployment in Asean', *Jurnal REP (Riset Ekonomi Pembangunan)*, 4(1), pp. 41–52.
- Nayar, B.R. (2007) 'The Southeast Asian Emulators', in *The Geopolitics of Globalization*. Oxford University Press, pp. 168–180. doi:10.1093/acprof:oso/9780195693034.003.0009.
- Park, K.Y. and Lee, W.H. (1999) 'The Financial Crisis Of 1997-1998 And Its Impact On Security Relations In East Asia', *Asian Perspective*, 23(3), pp. 128–51. Available at: <http://www.jstor.org/stable/42704225>.
- Peterson, Stephen; Westfall, John; Millers, B. (2020) 'Projected Deaths of Despair from COVID-19', pp. 1–12.
- Pethe, A. *et al.* (2014) 'Re-thinking urban planning in India: Learning from the wedge between the de jure and de facto development in Mumbai', *Cities*, 39, pp. 120–132. doi:10.1016/j.cities.2014.02.006.
- Quinn, D., Schindler, M. and Toyoda, A.M. (2011) 'Assessing measures of financial openness and integration', *IMF Economic Review*, 59(3), pp. 488–522. doi:10.1057/imfer.2011.18.
- Seah, S. *et al.* (2021) 'The State of Southeast Asia: 2021 Survey Report', *ASEAN Studies Centre, ISEAS-Yusof Ishak Institute*, pp. 1–60. Available at: <https://www.iseas.edu.sg/frontpage-publications/the-state-of-southeast-asia-2021-survey-report-2/>.
- Sebastian, M.A. (2017) *China, ASEAN and the MSR: A southeast Asian perspective*, ORF. Available at: <https://www.orfonline.org/research/china-asean-and-the-msr-a-southeast-asian-perspective/> (Accessed: 25 April 2022).
- Singh, A. (1998) *Financial Crisis in East Asia: 'The End of the Asian Model?'* 24. Geneva. Available at: [https://ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_123610.pdf](https://ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_123610.pdf).
- Soong, J.J. (2018) 'China's One Belt and One Road Initiative Meets ASEAN Economic Community: Propelling and Deepening Regional Economic Integration?', *Chinese Economy*, 51(4), pp. 291–297. doi:10.1080/10971475.2018.1457335.
- Suomi, A., Schofield, T.P. and Butterworth, P. (2020) 'Unemployment, Employability and COVID19: How the Global Socioeconomic Shock Challenged Negative Perceptions Toward the Less Fortunate in the Australian Context', *Frontiers in Psychology*, 11(October), pp. 1–10. doi:10.3389/fpsyg.2020.594837.
- Therese F. Azeng and Yogo, T.U. (2013) *Youth Unemployment and Political Instability in Selected Developing Countries*, Working Paper. 171. Tunisia. Available at: <https://doi.org/10.1080/0023656X.2019.1645320>
- Tisdell, C.A. (2020) 'Economic, social and political issues raised by the COVID-19 pandemic', *Economic Analysis and Policy*, 68, pp. 17–28. doi:10.1016/j.eap.2020.08.002.
- Verbeek, M. (2007) *A guide to modern econometrics*, *Applied Econometrics*.
- Viegelahn, C. and Huynh, P. (2021) *COVID-19 and the ASEAN labour market: Impact and policy response*, *Policy Brief*. Bangkok.
- Villafuerte, J., Corong, E. and Zhuang, J. (2016) 'The One Belt, One Road Initiative - Impact on Trade and Growth', in *19th Annual Conference on Global Economic Analysis*, pp. 1–30.
- Wang, J.Y. and Blomström, M. (1992) 'Foreign investment and technology transfer. A simple model', *European Economic Review*, 36(1), pp. 137–155. doi:10.1016/0014-2921(92)90021-N.
- Wibowo, M.G. (2019) 'Human Capital Relation with Welfare in Indonesia and Asean Countries', *Economics Development Analysis Journal*, 8(1), pp. 81–93. doi:10.15294/edaj.v8i1.28730.
- Wrobel, R.M. (2019) 'Chinese Geopolitics in Southeast Asia: A New Pattern of Economic Power within ASEAN?', *Asiatische Studien - Études Asiatiques*, 73(1), pp. 149–191. doi:10.1515/asia-2017-0049.