

An economic analysis of trade war and deglobalization in current international relations within the paradigm of globalization

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Abstract. *The purpose of the article is on the deglobalization processes currently taking place in international economic interactions, and also attempts to examine how the trade blocs of the major economies affect the rest of globalization. The Kinked Exponential Model was used to determine decadal growth rates based on 31 years of panel data from 1990 to 2020 for 15 large countries (gross domestic product). Three different regression models i.e., Pooled OLS, Fixed- and Random-effect models were estimated to examine the effects of trade blocs and wars between nations on the world economy. Over the study period, disparities and increasing economic inequality between variables have widened. In addition, international conflicts have had a negative impact on international trade and have significantly affected globalization. More importantly, trade blocs, particularly the OECD, APEC, and BRICS have slowed trade with the rest of the world, reflecting a process known as regionalization, in which countries cooperate rather than at the global level. In particular, during the third decade of the twentieth century, when the growth rate of trade flows among major countries declined rapidly by 8.8 per cent, this regionalization did not stop and expanded significantly.*

Keywords: globalization, deglobalization, trade war, trade impact, trade blocs, economic integration, kinked exponential model.

JEL Classification: F1, F6, F15, F62.

Introduction

The trade disputes between two or more largest economies on the world stage are currently a hot topic. The current state of tensions does not suggest that they will ease anytime soon, nor does it suggest that they will quickly escalate and spiral out of control. Whatever the economic justification for competitive protectionism, including the use of tariff barriers, the formation of trade blocs, and wars between nations, it is undeniably a factor in the downturn of the world economy. According to scholars, factors contributing to deglobalization include trade imbalances, political pressure, populism, high unemployment, and trade conflicts between nations. As the movement of goods and services has been restricted due to the coronavirus pandemic, the global economy has contracted in the first half of 2020. Due to these factors, there is a high probability that the global economy will experience a slump (Kim et al., 2020).

Globalization is the target of the trade war's impact. The structure of the world economy, which affects how social development unfolds in all areas, forms the basis of globalization theory. The world economy is currently facing new difficulties, such as overcoming the global economic slowdown and reducing the dangers associated with it. In addition, nations need to conduct international business and trade in the face of developing deglobalization. Increasing interdependence and integration towards a global society is the process of globalization. Deglobalization is the process of reducing interdependence and integration among specific global entities, often nation-states, and is the opposite of globalization.

From a practical point of view, the current phenomenon of deglobalization is not only a trend but also a very clear governmental behaviour and policy in several countries. Other scholars believe that the original central role of the United States and other rich countries in the development of globalization has been influenced by the emergence of some emerging economies, such as China. The world's largest economies, China and the United States are currently engaged in a trade war that has drawn attention to the trend toward deglobalization. Meanwhile, the United States' movement toward deglobalization reflects the country's internal socioeconomic problems (Yinan, 2021). Some factors contributing to deglobalization processes originate in economic laws, but there is one factor that unites all the segments studied and is likely to be a key factor: the political will of major players, as evidenced by the expansion of the scope and number of restrictions. Growing protectionism in some ways inhibits international trade, investment, and production, and also plays a role in the unpredictability and mistrust that characterize international relations (Stanojevi, 2020).

The effects of the trade war are directed against globalization. The structure of the world economy, which affects how society develops in each sector of the economy, is the basis of globalization theory. This paradigm shift toward a less interconnected world economy has significant implications for economies and cultures around the world (An et al., 2020). The argument about economic dependence and deglobalization that persisted after former U.S. President Donald Trump began trade conflicts with China and other U.S. trading partners several years ago has been reignited by the Russia-Ukraine crisis. Trump at the time, similar to some others, blamed foreign nations, including China, India, Mexico, and Germany, for the problems of the U.S. economy (Weihua, 2022). More realistically,

neutrals are unsure because they have yet to observe any significant long-term impact on the continent. Based on their analysis of the circumstances, the pessimists believe that Africa will suffer some form of direct or indirect collateral damage from the trade war (Huang et al., 2019).

The number of trading blocs has increased significantly throughout the global economy. Multinationalism and worldwide economic integration are closely linked to globalization. The importance of standard operating procedures, open trade, international conformity, and foreign investment is indicated by globalization. International organizations such as the World Trade Organization (WTO), the International Monetary Fund (IMF), and the United Nations Conference on Trade and Development (UNCTAD) have been seen as critical to global trade and economics. However, the criticism of globalism was triggered by great difficulties with injustice and inequality among trading nations (Michalak and Gibb, 2010). This triggered regionalism and led to an increase in regional cooperation, such as free trade agreements (FTAs), at the national level. In addition, regional integration agreements show a shift away from multinationalism and globalism, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the European Union (EU), and the Association of Southeast Asian Nations (ASEAN) (Kim et al., 2020).

In the context of the globalism paradigm, the paper is devoted to an examination of deglobalization processes in current international economic interactions. The main causes of deglobalization are declining trade growth and global trade; the use of trade barriers to spark trade wars or hostilities between nations and groups of countries; the formation of trade or economic blocs; religion; etc. The main causes of this trend are the unequal distribution of the benefits of globalization, rising inequality, job losses, especially in developing countries, the rise of protectionist measures, and the rise of populist leaders around the world. The least developed countries are the most affected by deglobalization because they have had to make the most difficult adjustments to their economies to accommodate the process due to the rapid changes that have, by and large, been initiated by the most developed countries (Reznikova and Ivashchenko, 2018). Taiwan, the Philippines, Korea, Brazil and the U.S. markets were most affected by the U.S.-China trade war, especially through the supply chain. However, India can benefit from positive spill over effects and production relocation due to the high similarity between Chinese and Indian exports in the U.S. market (Abdal and Ferreira, 2021; Misra and Choudhry, 2020; Stephen, 2022).

In the wake of globalization, there have been significant changes and liberalizations in the trade and commerce sectors. However, even there, the benefits of globalization have not been equitably distributed. The practice of persistent discrimination against goods that are particularly important to low-income countries persists today and has for many years (Trois, 2015). If globalization slows or stops altogether, most nations and most socioeconomic classes will suffer severe consequences. The incomes of both the rich and the poor will fall and the number of people living in poverty will rise, even though a retreat into protectionism may improve income equality in some countries (Hillebrand, 2010). This article examines the impact of trade wars and deglobalization on the 15 largest economies selected based on their size. It also recommends an empirical model to examine how these

blocs, religion, international conflict, and other factors have affected globalization and whether there is deglobalization in the world economy. To determine the international economic linkages under the globalization paradigm, The Kinked exponential model and the log-linear regression model were applied.

1. Methodology and source of data

In this article, both the kinked exponential model and the log-linear regression model of trade are analysed. The approach was chosen in accordance with the design of the study. The study relies on secondary data from the International Monetary Fund (IMF) and the World Development Indicators (WDI). The sample size for this study is 15 countries with panel data spanning 31 years from 1990 to 2020 presented in Table 1. Table 2 explains the sources and explanations for the data.

Table 1. List of countries

| Top 15 Countries in terms of the size of the economy (gross domestic product, 2020) in trillions | | | |
|--|----------------------|--------------------|------------------|
| United States (\$20.89) | China (\$14.72) | Japan (\$5.06) | Germany (\$3.85) |
| United Kingdom (\$2.67) | India (\$2.66) | France (\$2.63) | Italy (\$1.89) |
| Canada (\$1.64) | South Korea (\$1.63) | Russia (\$1.48) | Brazil (\$1.44) |
| Australia (\$1.32) | Spain (\$1.28) | Indonesia (\$1.05) | |

Source: World Development Indicators.

Table 2. List of variables

| Name of Variables | Measurement | Source of Data |
|-----------------------------|--|---|
| Trade | Exports plus Imports of Countries to the world | DOTS |
| GDP of Countries | GDP at 2015 constant US dollar | WDI |
| Per-Capita GDP of Countries | GDP Per-Capita at 2015 constant US dollar | WDI |
| World GDP | GDP of the world economy at 2015 constant US dollar | WDI |
| Population of Countries | Population of countries from 1990 to 2020 | WDI |
| Landlocked | If the country is completely landlocked, it is 1 or otherwise | Dummy Variable |
| Religion | If the country is Christian majority, it is 1 or otherwise | Dummy Variable |
| War hit countries | If the country is hit by war in a particular year or years, it is 1 or otherwise | Authors own calculation |
| APEC | if the country is a member of APEC, it is 1 or otherwise | Dummy Variable |
| ASEAN | if the country is a member of ASEAN, it is 1 or otherwise | Dummy Variable |
| OECD | if the country is a member of OECD, it is 1 or otherwise | Dummy Variable |
| BRICS | if the country is a member of BRICS, it is 1 or otherwise | Dummy Variable |
| First Sub-Period | The sub-period growth rates were estimated by using the Kinked Exponential Model; explained in the model specification | See formulation of Kinked exponential model |
| Second Sub-Period | | |
| Third Sub-Period | | |

Note: DOTS (Directorate of Trade and Statistics, IMF). WDI (World Development Indicators, World Bank Database).

Source: Author.

1.1. Formulation of kinked exponential model

Fitting separate exponential trend lines using ordinary least squares to each segment of the series is the standard method for estimating growth rates in the subperiods of a time series (Boyce, 1986). The kinked model assumes that patterns between subperiod growth rates fluctuate and diverge, leading to irregularities and inconsistencies in the overall growth rate over the entire period. These types of anomalies and inconsistencies are often inherent in time series data. In this regard, Boyce (1986) has recommended that the discontinuities

between segments be removed from the piecewise regression when calculating the growth rates of the subperiods of the Kinked Exponential Model.

This study covers the period from 1990 to 2020, divided into three sub-periods, namely 1990-1999, 2000-2009, and 2010-2020. For this purpose, an extended version of the Kinked exponential model was used to calculate the growth rates within sectors for the sub-periods. The procedure in the extended version of the Kinked exponential model is expressed as follows:

The discontinuous growth for the three periods can be estimated using the dummy variable method in the model as follows:

$$\text{Log}Y = a_1 + a_2d_2 + a_3d_3 + (b_1d_1 + b_2d_2 + b_3d_3)t + \mu_t \quad (1)$$

Where:

$d_1 = 1$, for the first period

0, otherwise

$d_2 = 1$, for the first period

0, otherwise

$d_3 = 1$, for the first period

0, otherwise.

The discontinuity is eliminated by a linear restriction at the two breakpoints k_1 and k_2 such that;

$$a_1 + b_1k_1 = a_2 + b_2k_1 \text{ and } a_2 + b_2k_2 = a_3 + b_3k_2.$$

$$\text{i.e., } a_2 = a_1 + (b_1 - b_2)k_1 \text{ and } a_3 = a_1 + (b_1 - b_2)k_1 + (b_2 - b_3)k_2 \quad (2)$$

$$\text{Also } d_1 + d_2 + d_3 = 1$$

Hence, substituting equation (2) into equation (1) becomes

$$\text{Log}Y = a_1 + b_1(d_1t + d_2k_1 + d_3k_1) + b_2(d_2t - d_2k_1 - d_3k_1 + d_3k_2) + b_3(d_3t - d_3k_2)$$

Here, b_1 , b_2 and b_3 are the growth rates of the first period (1990 to 1999), the second period (2000 to 2009) and the third period (2010 to 2020) with the kinks at the points k_1 and k_2 respectively. This method has two advantages over the discontinuous methods. Firstly, the sub-period growth rates which are consistent with the overall period, the growth rate can be estimated and secondly, the sample size and the degrees of freedom can be increased as a result of combining the sub-periods.

1.2. Formulation of regression model

The model follows the theoretical formulation of an extended version of Viner (1950). Seven dummy variables (d_{ij}) are introduced to examine the impact of the top 15 countries on world trade, which is one of the salient features of deglobalization as described in

Stanojevic (2020). Moreover, this approach differs from Viner's (1950) approach to empirical analysis. The details of the variables, measurement, and list of countries are described in Tables 1 and 2. The nonlinear equation appears to be:

$$\ln y_{ij} = \alpha + \beta_1 \ln x_1 + \beta_2 \ln x_2 + \beta_3 \ln x_3 \dots \dots \beta_n \ln x_n + \varepsilon_{ijt} \quad (3)$$

Where: Y_{ij} is the dependent variable, α is an intercept, β_i 's ($i = 1, 2, \dots, n$) are the regression coefficients, x_1, x_2, \dots, x_n are independent or explanatory variables, and e_{ijt} is the model's error term or residuals.

As mentioned above, a consistent and significant decline in the share of countries in the exports and imports of the world economy is a symptom of a tendency toward deglobalization of the world economy. We believe that the declining growth of world trade, increasing trade barriers, conflicts between nation-states, and the formation of trade blocs - which may be based on race, religion, or ancestry - are the main causes of today's deglobalization. Based on the size of the economies (gross domestic product) of the top 15 countries, the model variables are measured as exports plus imports (total trade) into the global economy. More specifically, one can assume that the larger an economy's share of world trade is (measured by gross domestic product), the larger it will be, and that this will have a significant positive effect on total trade for world trade. Similarly, we might predict that trade blocs will have a significant positive effect on total trade. On the other hand, we can infer that trade disputes, nation-state conflicts, and religious conflicts may impede international trade, signalling a trend away from globalization. Therefore, we cannot predict whether the impact of each variable on these countries will be positive or negative. Moreover, no matter how open tiny economies may be, we cannot assume that these global phenomena will have statistically significant effects on them.

The model takes the following form:

$$\begin{aligned} \ln y_{ijt} = & \alpha + \beta_1 \text{gdp_con}_{it} + \beta_2 \text{pcgdp_con}_{it} + \beta_3 \text{world_gdp}_{jt} + \beta_4 \text{pop_con}_{it} \\ & + \beta_5 \text{landlock}_{it} + \beta_6 \text{religion}_{it} + \beta_7 \text{war}_{it} + \beta_8 \text{APEC}_{it} + \beta_9 \text{ASEAN}_{it} \\ & + \beta_{10} \text{OECD}_{it} + \beta_{11} \text{BRICS}_{it} + \beta_{12} 1^{\text{st}}_{\text{sub-period}_{it}} + \beta_{13} 2^{\text{nd}}_{\text{sub-period}_{it}} \\ & + \beta_{14} 3^{\text{rd}}_{\text{sub-period}_{it}} + \varepsilon_{ijt} \end{aligned} \quad (4)$$

Where y_{ijt} is the volume of trade (exports plus imports) between countries (i) and the world economy (j) at time (t), $(\text{GDP})_{(i)(j)}$ represents the positive relationship with trade reflecting an economy's productive capacity and a higher volume of trade with the world economy, followed by other independent variables as also described in Table 1, see also (Mishra et al., 2015). The variables highlighted as subperiods indicate the decadal growth rates and represent the intensity of countries' trade volume with the global world. The variables considered as one of the main indicators of trade flows were neglected in the panel data analysis due to the high multicollinearity problem, i.e., world population, world GDP per capita, and WTO. Three different models are estimated: the pooled OLS model, the fixed effect model, and the random effect model from equation 4 (see above) using STATA.

Table 3. Results of Breusch-Pagan/Cook-Weisberg Test for Heteroskedasticity

| Ho | Constant variance |
|-------------|-------------------|
| chi2(1) | 1.31 |
| Prob > chi2 | 0.2532 |

Source: Author.

Before running these models, equation 4 was tested for heteroskedasticity. For this purpose, the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity is estimated over time. The null hypothesis for the Breusch-Pagan/Cook-Weisberg test is that the model is free of heteroskedasticity and the variances are constant over the period. The alternative hypothesis is that the model is affected by heteroskedasticity and is not suitable for further analysis. The results of the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity are shown in Table 3.

Table 3 shows that the series is free of heteroskedasticity and is suitable for further analysis because the probability value was found to be not significant at a 5 per cent level of significance. Therefore, the null hypothesis could not be rejected at a 5 per cent confidence level.

2. Analysis and empirical results

Table 4 shows the descriptive statistics of the panel data from 1990 to 2020. The average trade flow of the countries (exports plus imports) to the global world is 751252.06 million dollars and varies between a minimum value of 34306.81 and a maximum value of 4094855.28 million dollars during the period from 1990 to 2020. The average GDP per capita of the 15 countries and the world is almost the same, 9.65 and 9.06, but varies in terms of minimum and maximum values during the period. The average GDP of the top 15 countries is 28.24 which is only slightly lower than the world GDP by 3.41 during the same period. This is also one of the reasons for choosing the top 15 economies as the sample size in terms of the size of their economies (GDP) for this study during the period from 1990 to 2020. Similarly, the average of the country's population and the world population is just below 4.03 during the period from 1990 to 2020.

Table 4. Descriptive statistics

| Variables | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------------|-----|----------|------------|-----------|----------------|
| Trade | 465 | 34306.81 | 4094855.28 | 751252.06 | 731839.81 |
| lnTrade | 465 | 10.44 | 15.23 | 13.10 | 0.98 |
| lnCountries PCGDP | 465 | 6.27 | 11.01 | 9.65 | 1.24 |
| lnWorld PCGDP | 465 | 8.82 | 9.31 | 9.06 | 0.16 |
| lnCountries GDP | 465 | 26.32 | 30.62 | 28.24 | 0.87 |
| lnWorld GDP | 465 | 31.21 | 32.07 | 31.65 | 0.27 |
| lnCountries Population | 465 | 16.65 | 21.07 | 18.56 | 1.17 |
| lnWorld Population | 465 | 22.39 | 22.77 | 22.59 | 0.11 |

Source: Author.

In addition, to understand the basic relationship, the bivariate correlation of coefficient was calculated among the variables. The results of the correlation coefficient are shown in Table 5, where we can see that the per capita GDP of the countries and the world, the GDP of the countries and the world and the world population have a positive relationship with the trade flow of the countries to the global world (exports plus imports) and the natural logarithm

of the trade flow of the countries to the world (lnTrade) has shown an insignificant association with the population of the countries. Similarly, an insignificant relationship was found between world GDP per capita and country population (lnCPOP). Nevertheless, world GDP, GDP per capita, and world population are closely related. For this reason, world population (lnWPOP) and world GDP per capita (lnWPGDP) were excluded from the analysis due to high collinearity, as shown in Table 5.

Table 5. *Correlations*

| Variables | lnTrade | lnCPGDP | lnWPGDP | lnCGDP | lnWGDG | lnCPOP | lnWPOP |
|-----------|---------|---------|---------|--------|--------|--------|--------|
| lnTrade | 1 | | | | | | |
| lnCPGDP | 0.626 | 1 | | | | | |
| lnWPGDP | 0.582 | 0.183 | 1 | | | | |
| lnCGDP | 0.774 | 0.433 | 0.302 | 1 | | | |
| lnWGDG | 0.581 | 0.183 | 0.999 | 0.303 | 1 | | |
| lnCPOP | -0.075 | -0.739 | 0.055 | 0.287 | 0.055 | 1 | |
| lnWPOP | 0.576 | 0.183 | 0.993 | 0.302 | 0.998 | 0.056 | 1 |

Source: Author.

Table 6 shows the empirical results of the model for equation 4. The results are divided into (1) pooled OLS, (2) fixed-effect model, and (3) random-effect model. The first model describes the expected signs of GDP of the top 15 countries and the world-on-world trade over the period. However, the effects of a country's GDP per capita and population have shown negative signs on trade flows between countries and the global world. Also, it does not matter whether the country is landlocked or has a different religion for international relations and has shown a positive impact on trade flow from selected major economies to the global world. Nevertheless, wars between countries and trade blocs have a negative impact on global trade, except the OECD, which had a positive impact on global trade during this period. In addition, the pooled OLS model shows that as the size of the economy increases, the flow of trade from countries to the global world has also increased.

Table 6. *Results on regression models*

| Variables | Pooled OLS | | Fixed Effect Model | | Random Effect Model | |
|----------------------------|------------|-------|--------------------|-------|---------------------|-------|
| | Coef. | P>t | Coef. | P>t | Coef. | P>t |
| lnCountries PCGDP | -31.989 | 0.000 | -23.473 | 0.000 | -19.855 | 0.001 |
| lnCountries GDP | 32.434 | 0.000 | 23.913 | 0.000 | 20.324 | 0.000 |
| lnWorld GDP | 3.493 | 0.000 | 3.233 | 0.000 | 3.361 | 0.000 |
| lnCountries Population | -31.732 | 0.000 | -22.161 | 0.000 | -19.211 | 0.001 |
| Landlock | 0.577 | 0.000 | 0.000 | | 0.825 | 0.014 |
| Religion | 0.373 | 0.003 | 0.000 | | 1.175 | 0.004 |
| War | -0.135 | 0.003 | -0.089 | 0.007 | -0.105 | 0.001 |
| APEC | -0.200 | 0.000 | 0.000 | | -0.398 | 0.012 |
| ASEAN | -0.452 | 0.000 | 0.000 | | -0.574 | 0.229 |
| OECD | 0.296 | 0.000 | 0.000 | | -0.345 | 0.039 |
| BRICS | -1.245 | 0.000 | 0.000 | | -2.269 | 0.000 |
| 1 st Sub-Period | -4.9 | 0.000 | -5.4 | 0.000 | -5.3 | 0.000 |
| 2 nd Sub-Period | -1.5 | 0.016 | -1.5 | 0.000 | -1.5 | 0.000 |
| 3 rd Sub-Period | -9.0 | 0.000 | -8.9 | 0.000 | -8.8 | 0.000 |
| _cons | -114.026 | 0.000 | -125.164 | 0.000 | -117.588 | 0.000 |
| Number of obs | 465 | 465 | 465 | 465 | 465 | 465 |
| F_STAT | 351.130 | | 552.130 | | 4346.240 | |
| Prob > F | 0.000 | | 0.000 | | 0.000 | |
| R-squared | 0.918 | | 0.911 | | 0.909 | |

Source: Author.

However, the results of the pooled OLS model are not relatively reliable because the series is affected by collinearity. So, before going through the fixed effect and random effect models, it is very useful and important to determine the estimation model between FEM and REM. For this purpose, the Hausman test was estimated and the results are shown in Table 7.

Table 7. Hausman test (fixed vs random)

| Variables | Fixed | Random | Difference |
|----------------------------|-----------|-----------|------------|
| lnCountries PGDP | -23.47289 | -19.85525 | -3.617632 |
| lnCountries GDP | 23.91315 | 20.32395 | 3.5892 |
| lnWorld GDP | 3.233359 | 3.360995 | -.1276354 |
| lnCountries POP. | -22.16105 | -19.21064 | -2.950404 |
| War | -.0888724 | -.1053381 | .0164658 |
| 1 st Sub-Period | -.0536475 | -.0527069 | -.0009405 |
| 2 nd Sub-Period | -.0149318 | -.0149625 | .0000308 |
| 3 rd Sub-Period | -.0892341 | -.0884546 | -.0007795 |
| Chi-Sq. Statistics | 15.35 | | |
| Prob>chi2 | 0.0527 | | |

Source: Author.

The null hypothesis of the Hausman test is that both FEM and REM give similar results, whereas the alternative hypothesis is that FEM is more appropriate. The results of the Hausman test show that we cannot reject the null hypothesis because the probability value of the Hausman test is greater than a significance level of 5 per cent. Moreover, the results of FEM described in Table 6 are strongly affected by multicollinearity. So, based on the above results, we can consider the random effects model as more appropriate. The obtained results can be considered statistically reliable and valid according to all criteria. The coefficient of determination (R^2) is very high in all countries, 0.909, and the F-statistic is also significantly high in the random-effects model, 4346.240.

Thus, the results of the random effects model portrayed in Table 6, shows that the GDP of the top 15 countries and the world GDP have a significant impact on trade flows to the global world. Obviously, during the period from 1990 to 2020, the size of the economy plays a significant role in world trade, which indicates that the integration of countries into the global world has led to globalization. In contrast, trade flow decreases when countries' per capita GDP and population have increased. This shows that the size of economies and the world only matters for trade, while it has had a negative effect on countries' GDP per capita and population. On the one hand, the trade flow of countries into the global world leads to strong integration of economies, which we can call growing globalization in the world. On the other hand, globalization also leads to more inequalities and inequities between countries and has widened the gap between rich and poor (Postrel, 2002).

In addition, landlocked countries and religions do not seem to be obstacles to the flow of trade from countries to the global world that can hinder global trade; rather, they have had a positive effect on global trade over time. Nevertheless, wars between countries, which occurred frequently in the third period after the 1990s, have greatly affected the flow of trade of countries to the global world and led to deglobalization, whether they are economic, trade or political wars (see List of wars between 1990 and 2022). Trade blocs

have aided the process of globalization, i.e., the increasing interconnectedness of the world as a result of increased trade with factors such as economic, social, political, and cultural, as they have helped countries to remove economic barriers, allowing for more trade and the free movement of capital and labour (Campa et al., 1996). In contrast, the selected trade blocs have had a negative impact on countries flow of trade to the global world, showing that trade over the period flows only within the member countries of the trade blocs. Among them, APEC and OECD are the most significant trade blocs, consisting of 21 and 38 countries, respectively, most of which are among the top 15 countries in terms of the size of the economy (GDP). Similarly, out of the 5 countries, 4 important member countries of BRICS are among the most important countries selected in this study. However, ASEAN consisted of 11 countries has shown an insignificant impact on the global trade except all the major trade blocs. It may be that among the 15 major countries selected for this study, only one country is the member of ASEAN bloc i.e., Indonesia. Based on the above results, the study shows that both a war between countries and trade blocs have influenced deglobalization at the global level.

The results of the decadal growth rates, divided into three subperiods and estimated with the kinked exponential model (see Table 6), shows that the trade flows of the major economies to the global world declined by 5.3 per cent in the first sub-period from 1990 to 1991. In the second sub-period, it declined slightly by 1.5 per cent. However, in the third sub-period from 2010 to 2020, the growth rate of trade flows of selected countries to the global world declined rapidly by 8.8 per cent. Moreover, the third sub-period (2010-2020) was the most conflict-ridden decade; (see the list of wars between 1990 and 2022). In addition, regionalization - a process in which nations cooperate and conduct all their trade within a single trading bloc-could replace globalization as the preferred economic strategy. Regionalization reinforces interdependence at the local level rather than on a global scale. Moreover, trade disputes or wars have negatively impacted countries' ability to trade with each other, which has greatly slowed globalization and led to the process by which rich countries get richer and poor ones to get poorer.

3. Conclusion and discussions

The article is devoted to the study of deglobalization processes in contemporary international economic relations in the context of the paradigm of globalism. The main drivers of deglobalization are defined as follows: the slowdown of trade growth and the decline of world trade; the application of trade restrictions that provoke trade wars or wars between countries and groups of countries; the creation of trade or economic blocs; religion, etc. However, the results reflect that there is no doubt that as the size of an economy increases, so does trade. Nevertheless, inequalities and income disparities among the selected countries have increased during the study period. Countries' GDP per capita and population has had a negative impact on world trade. In addition, the wars between countries, especially from 2010 to 2020, have negatively affected the trade flow of countries to the global world and have led the paradigm of deglobalization. More

importantly, the trade blocs (especially OECD, APEC, and BRICS) have abridged the flow of trade to the global world, reflecting regionalization, which is a process in which countries work among themselves rather than at the global level. This regionalization has not ceased but has increased rapidly, especially in the third decade of the twentieth century, during which the growth rate of trade flows among major countries has declined rapidly by 8.8 per cent.

The international agreements that have guided the world economy for many years are increasingly giving way to bilateral interactions between economic nations. Some factors contributing to deglobalization processes originate in economic laws, but there is one factor that unites all the segments studied and is probably a key factor: the political will of the major players, as evidenced by the expansion of the scope and number of restrictions. Globalization will be severely damaged by the formation of trade blocs and a worldwide decline in international trade. As a result of globalization, some countries benefit while others are left behind and experience growing inequality. According to Hans Rosling, globalization is often blamed for the rise of "the West and the rest" (Rosling et al., 2018). While the poor benefit from neoliberalism, the richest are getting richer and the wealth gap is not getting smaller. Taking a broader view, we find that while China and India are reducing poverty rates, other emerging economies are still lagging behind and are not treated equally in the process of global economic integration. As a result, Joseph Stiglitz's assertion that regional integration has suffered disproportionately from globalization seems to hold true. The analysis of the impact of globalization on inequality and poverty in developing countries falls short. The problem with globalization is not the term itself, but the way it is managed and implemented is highly problematic (Stiglitz, 2017).

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