



Effectiveness of Globalization and Human Capital on Market & Net Income Inequality in BRICS Countries: A Panel Data Analysis

Khaula Walayat* Dr. Mehmood Khalid Qamar** Dr. Zahid Iqbal ***

* NCBA&E. Khaulawalayat@gmail.com

* Vice Rector NCBA & E, Lahore. mahmoodqamar@ncbae.edu.pk

*FC College University Lahore. Zahidiqbal@fccollege.edu.pk

ARTICLE INFO

Article history:

Submitted 18.01.2022

Accepted 20.06.2022

Published 30.06.2022

Volume No. 9

Issue No. I

ISSN (Online) 2414-8512

ISSN (Print) 2311-293X

DOI:

Keywords: Political Globalization, Economic Globalization, Social Globalization, Human Capital, Market Income Inequality, Net Income Inequality

ABSTRACT

This study scrutinizes the impact of defacto and de jure GLOB (KOF GLOB index 2018) on Income inequality on economically emerging countries; BRICS countries. The defacto GLOB indicates the estimate of GLOB including variables representing activities and flows; de jure estimate includes variables which show policies representing enable flows and activities. Our analysis separates the impact of globalization on net and market income inequalities. Pretax/transfer and the post-tax/transfer GINI indices were employed as the measures of income inequality. This analysis used balanced panel for BRICS countries for the period 1990-2015. Economic globalization both defacto and de jure showed positive sign that depicts a significant relationship with dependent variable. It explains that defacto political has positive sign and de jure political globalization decreases inequality while economic globalizations in both divisions have positive sign and significant impact on inequality. Interestingly, defacto social globalization has positive sign but de jure social has positive sign. Moreover, the purchasing power parity and age dependency both have negative sign and significant influence on inequality. These conclusions point out that social and political globalization may be a hindering factor for governance in these countries.



Introduction

Wright Mills almost sixty years ago stated that freedom is dependent upon power and power comes from money. A historical study based on 136 countries between 1981 and 2011 demonstrates that power benefits from income increase with the increase in inequality are biased in favor of rich class as compared to poor. As the level of globalization increases the more inequality raises. The great blessing of the globalization is forming trade cartels among countries which theoretically ensure economic growth.

Income inequalities within developed and developing countries are on the rise since 1980s. Researchers have been trying to come up with explanations of this income inequality. Out of many reasons put forward by research, economic globalization is one of the prominent one. This has led to a major debate in the domain of social science about the impact of international market integration. Researchers are concerned to know how this market integration at international level impacts trade and finance globally (Burstien, 2013; Ravallion, 2001; Atif, 2010; Milanovic, 1999)

Since early 80s income inequality between richest 10% and poorest 10% has increased from 7 to 9.5 times (Cutler et al, 1992). The BRICS is the combat of emerging economies which are basically following the footsteps of countries following the SDGs. According to economic theory when any

country goes through rapid development the cost it pays is inequality and environmental changes. In this article we tried to explain globalization by these emerging economies and will try to see how it impacts the level of inequality in these countries and how that effects the environment in these cartels. By this study we tried to explore the unavoidable outcomes of globalization in the form of inequality and environmental changes. Another widespread fact maybe the economic and social disparities among these countries. our focus was to find out how come these disparities play role in increasing inequality and bringing out harmful effects of globalization.

Likewise, an increasing trend was observed in the GINI coefficient since 1980s. It has increased from 0.29 to 0.32 in average value (OECD, 2008). On the contrary, global share of trade in GDP and share of FDI in total liabilities have sharply increased from (36 to 55) % and (17 to 38) % respectively since 1980s (IMF, 2007).

Researchers like, Pradeepta Sethi (2021) who have found a negative impact of globalization on income inequalities argue that trade liberalization and interconnected international economy creates this income inequality. Nevertheless, finding conclusive empirical evidence regarding this claim is yet to be achieved.

Due to globalization there may be increase in comes but how these incomes are distributed truly determines the benefit drawn from globalization in economy. It appears that disproportionately rich are getting benefits from growth of economy due to globalization, which in turn leads to increase in income inequality.

Despite multiple studies investigating impact of globalization on income inequality within and across countries, results have been inconclusive. This is because due to change in methodology based on weighted average of population or comparison on the basis of same unit, results differ. Therefore, divergent conclusions are drawn from the finding overall. Several studies have been conducted at both within and between country levels. For example, (Dorn, 2019) explained that China and India showed decrease in inequality in the past decades because of their large populations their weight is relatively bigger, and thus, it is easier to see a reduction in global inequality.

Difference in income distribution between different groups within an economy is depicted in the construct of income inequality. Milanovic (2011) classified income inequality into three categories depending upon the scale of measurement. According to him these categories include within country income inequality, across-countries income inequality and global individual income inequality.

Literature discussed here focuses on the question of how is this income inequality, be it of any category, impacted by globalization. Global economic integration is a necessary ingredient for trade openness, competitiveness, technology transfer and increased business freedom (Bergh & Nilsson, 2010; Francois & Gerussi, 2013). This global economic amalgamation also attracts foreign direct investment (Arkolakis et al, 2012). We know that FDI inflows result in economic growth in turn via initiating private investment, technology transfer and enhanced management skills (Meinhard and Potrafke (2012); Persson & Tabellini (1994); Naumotte, Lall and Papageorgiou (2013); Torres (2001). Furthermore, global integration of economies leads to peripheral benefits including increased business potentials, lower per unit costs, fewer trade barriers and more accessible market ideas (Hennighausen, 2014).

Bhagwati (2004) finds it interesting how globalization is hailed as a hero for bringing economic growth and increased business potentials worldwide but at the same time treated as a villain for increasing income inequalities and environmental degradation.

If we look at the changes in the global trends of across countries inequalities, we notice that for a long period since 1820 till end of 1900 almost for two centuries, world saw growing inequalities across countries of the world (Atansava,2021). First decade of 2000 saw these inequalities on the decline and thus this period is known as the Great Leveling in the rich world. However, from second decade of 2000s inequalities across the rich world have started increasing again and this time picture looks really grim (Solt, 2016).

Researchers like Borjas & Ramey 1994; Stiglitz (2002); Cornia (2004); Marjit et al. (2004) and Bergh & Nilsson (2011) argue that due to globalization insecurities in economies increase, in turn increasing income inequalities both in developed and developing countries. Most shocking is the fact

that rich are getting richer and poor are getting poorer both at individual and national levels (Stiglitz, 2006). He further shows that this phenomenon of inequality has increased even in most developed countries. Ways to investigate the causal effect of globalization on income inequality include Cointegration techniques and globalization indices (Borjas and Ramey, 1994; Zhou et al., 2011).

Data, Model and Methodology

Current study focuses on the impact of globalization on inequality (market and net inequality) in BRICS (Brazil, Russia, India, China, and South Africa) as per categorized by World Bank from the time period of 1990-2015. For the measurement of globalization, it uses the improved version of KOF globalization index introduced by Gyglia, Haelgb and Sturmb (2018). This revised version of the KOF Globalization Index introduces a clear difference between defacto and dejure measures of globalization. Within defacto and dejure classification this index measures social, economic and political globalization. Economic globalization has two categories including financial and trade globalization whereas interpersonal, information and cultural globalization define social globalization. In our analysis we distinguish between the impact of globalization on market income inequality and net income inequality. As measures of income inequality, we will employ the pretax/transfer and the post-tax/transfer GINI indices taken from Solt's (2016) most recent version of the Standardized World Income Inequality Database (V 5.1).

Model and Methodology

The globalization is multicounty phenomenon and this study focusses on the nexus of this factor with Market & NET income inequality and. So, in the present scenerio, the cross-sectional regression is commonly used to capture the relationship among above mentioned variables at one point of time. But in order to consider the impact of time series data along with cross sections, panel data techniques are more appropriate as they utilize both cross sectional and time data for the analysis (Shampa & Ejike,2021). These techniques enhance the strength and size of the data sets, leading to reorganization of the analysis (Helpman et al, 2017). Moreover, the panel data methods have more leaverage for more hetrogeniety, variability, efficiency and degree of freedom so, the models which are analysed by these methods, have lesser restrictions (Epinger et al., 2016).

Definitions of variables: -

Kof Globalization

Our definition of globalization stems from Dreher (2006) and is based on Clark (2000) and Norris (2000). The definition states that globalisation describes the process of creating networks of connections among actors at intra- or multi-continental distances, mediated through a variety of flows including people, information and ideas, capital, and goods. Globalisation is a process that erodes national boundaries, integrates national economies, cultures, technologies and governance, and produces complex relations of mutual interdependence.

The revised version of the KOF Globalisation Index is based on 42 individual variables, which are aggregated to a de facto and a de jure index of five sub-dimensions (trade, financial, interpersonal, informational and cultural globalisation), three dimensions (economic, social and political globalisation) and one total index. We can thus differentiate between as many as eighteen different indices if we maintain the distinction between de facto and de jure. We also report an overall index for the total and each of the three dimensions, which is calculated as the average of the de facto and the de jure index. This increases the total number of indices to twenty-two (Gygli et al. 2018).

Gini market

The SWIID recently incorporates comparable Gini indices of disposable and market income inequality for 198 countries for as many years as possible from 1960 to the present; it also includes information on absolute and relative redistribution. Therefore, according to SOLT (2016) Gini market reflect the inequality of market income. The market income or the pretax, pre-transfer income.

Gini net

The SWIID recently incorporates comparable Gini indices of disposable and market income inequality for 198 countries for as many years as possible from 1960 to the present; it also includes information on absolute and relative redistribution. Therefore, according to SOLT (2016) Gini market reflect the inequality of Net disposable income income. Net disposable income reflects posttax, post

transfer net income.

Model:

So, the present study has utilized the panel data from year 1990 to 2015 for the analysis and hence, the study is divided into two sections. In the first section, the effect of globalization is checked on inequality. The functional panel data models which have analyzed are three basic model. First is for economic globalization, second is for political globalization and third is for social globalization as follows:

$$\begin{aligned} \text{Ineq(M)} &= \alpha_1 + \beta_{2i} \text{DfEG}_t + \beta_{3i} \text{DjEG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (1) \\ \text{Ineq(M)} &= \alpha_1 + \beta_{2i} \text{DfPG}_t + \beta_{3i} \text{DjPG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (2) \\ \text{Ineq(M)} &= \alpha_1 + \beta_{2i} \text{DfSG}_t + \beta_{3i} \text{DjSG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (3) \\ \text{Ineq(N)} &= \alpha_1 + \beta_{2i} \text{DfEG}_t + \beta_{3i} \text{DjEG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (4) \\ \text{Ineq(N)} &= \alpha_1 + \beta_{2i} \text{DfPG}_t + \beta_{3i} \text{DjPG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (5) \\ \text{Ineq(N)} &= \alpha_1 + \beta_{2i} \text{DfSG}_t + \beta_{3i} \text{DjSG}_{it} + \beta_{4i} \text{PPP}_{it} + \beta_{5i} \text{HC}_{it} + \beta_{6i} \text{AD}_{it} + \mu_{it} \quad (6) \end{aligned}$$

Where Ineq(M) is market inequality, Ineq(N) is net inequality, DfEG and DJEG are defacto and dejure KOF economic globalization index, DfPG and DJPG are defacto and dejure KOF political globalization index, DfSG and DJSG are defacto and dejure KOF social globalization index, PPP is purchasing power parity, HC is human capital index and AD is age dependency, μ is error term, 'it' is panel data ('i' for cross section 't' for time series)

For the analysis of panel data models, three basic techniques are pooled ordinary least square (OLS), fixed effects and random effects. The pooled OLS model assumes homogeneity among cross sections. But if the specification of model requires the heterogeneity, fixed and random effects methods are applied. The fixed effects model assumes the heterogeneity among cross sections and time with the help of varying intercept whereas random effects model allows for random distribution in error variances. This study applies both fixed and random effects methods on different models. The decision of application of either in a specific model is done on the rejection and acceptance of null hypothesis in Hausman test (Hausman, 1978).

The results of Hausman tests for BRICS are given below.

Table 3.1(a)

Hausman Test for Model Specification (BRICS)

Hausman GINmarket	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFECGLDF	.0820825	5489839	-.4669015	.
KOFECGLDJ	-.5045892	-.0362276	-.4683615	.
PPP	-.6073884	-.394899	-.2124893	.0513319
AGEDEPEND	2.13161	1.66369	.4679201	.3387992
HCI	1.196513	.2557096	.9408034	.1284486
CHI-SQ	-69.58	prob	0.0000	

Table 3.1(b)

Hausman GINinet	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFECGLDF	.1850015	.7210503	-.5360488	.
KOFECGLDJ	-.4958612	-.1767079	-.3191533	.
PPP	-.1625479	-.063477	-.0990709	.
AGEDEPEND	1.208571	1.456137	-.247566	.2147514
HCI	.5250812	-.0075106	.5325918	.0732979
CHI-SQ	-53.18	prob	0.0000	

Table 3.1(c)

Hausman GINmarket	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFPOGLDF	-.647022	-2.574822	1.9278	.
KOFPOGLDJ	.0459321	.8078165	-.7618844	.
PPP	-.6825976	-.2621722	-.4204254	.0981109
AGEDEPEND	1.64081	.9797692	.6610405	.3068623
HCI	1.104503	.1459347	.9585687	.1469458

CHI-SQ	-46.26	prob	0.901	
--------	--------	------	-------	--

Table 3.1(d)

Hausman GINInet	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFPOGLDF	-.1678578	-2.039727	1.871869	.
KOFPOGLDJ	.1882109	1.022477	-.8342664	.
PPP	-.2711574	-.0025542	-.2686032	.0439874
AGEDEPEND	1.049644	1.007466	.0421778	.2030578
HCI	5370989	-.0240593	.5611582	.0892562
CHI-SQ	-39.82	prob	0.753	

Table 3.1(e)

Hausman GINImarket	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFPOGLDF	.0072671	.0373375	-.0300704	.004632
KOFPOGLDJ	-.0323402	-.0223353	-.0100049	.
PPP	-.7285168	-.0175529	-.7109639	.0641637
AGEDEPEND	.3344619	2.075974	-1.741512	.3709855
HCI	1.401222	-.1419719	1.543194	.1195274
CHI-SQ	36.056	prob	0.654	

Table 3.1(f)

Hausman GINInet	Coefficient (b) FE	Coefficient (B) RE	Difference (b-B)	S.E
KOFPOGLDF	0062052	.0381712	-.0319661	.0034079
KOFPOGLDJ	-.0199586	-.0108667	-.009092	.
PPP	-.2853823	.0811968	-.3665791	.0445549
AGEDEPEND	-.0960916	1.61344	-1.709532	.2761763
HCI	.6440043	-.4113011	1.055305	.0881667
CHI-SQ	463.58	prob	0.123	

In the table 3.1, the results show that in case of economic globalization, the null hypothesis of no difference between fixed effects and random effects model is rejected against the alternative hypothesis stating that the fixed effects model is more preferable and vice versa. So, based on these preliminary estimates fixed effects model with cross-sectional weights is finalized for our panel data analysis.

In the next step, we apply Breusch Pagan test to check heteroscedasticity. The results are given in the below table:

Heteroscedasticity BRICS

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	gini_mk
Chi-bar ²	31.11
Prob	0.0779

Breusch–Pagan (Breusch 1978) tests conclude that results of model are free from problems of heteroscedasticity as in all cases, probability value is greater than 0.05. Here, the null hypotheses of homoscedasticity are accepted. Moreover, chi-square test statistics presented in table are unable to reject our null hypothesis.

In the next step, we apply Breusch and Pagan Lagrangian multiplier test to check autocorrelation of BRICS countries in the model.

Wooldridge test BRICS

Wooldridge test	gini_mk
Chi-bar ²	0.00
Prob	1.000

Wooldridge test has applied to check the autocorrelation in the model and the results showed that chi-square statistics accept the null hypothesis. Wooldridge test conclude that results of model are free from problems of serial correlation as in all cases, probability value is greater than 0.05. Here, the null hypotheses of homoscedasticity and no serial correlation are accepted.

To check multicollinearity among variables, VIF test has applied and the mean VIF shows that there is no multicollinearity among the variables. The results for BRICS panel are given below;

Table 3.7(a)
VARIANCE INFLATION FACTOR (BRICS)

Variables	VIF	1/VIF
KOFSoGldflog	31.29	0.031956
KOFSoGldjlog	9.15	0.109323
KOFPoGldflog	4.42	0.226348
KOFPoGldjlog	7.37	0.135773
KOFEcGldflog	6.07	0.164755
KOFEcGldjlog	3.38	0.295440
Agedepend	3.54	0.282189
PPplog	17.83	0.056072
HumanCapit	24.93	0.040120
Mean VIF	12.00	

The table reveals that mean vif value is 12.02 that shows there is no multicollinearity in the variables of the model. To check multicollinearity among variables, VIF test has applied and the mean VIF shows that there is no multicollinearity among the variables.

Empirical Analysis

This chapter provides the results of the specified models for four above mentioned regional cooperation and also analyzes these results based on previous literature. Table 4.1(a) depicts the effects of defacto and dejure economic, political and social globalization on Gini market by taking the data of countries cooperated in BRICS by three separate models; economic globalization, political globalization and social globalization.

Table 4.1(a) depicts the effects of defacto and dejure economic, political and social globalization on CO2 emmissions by taking the data of countries cooperated in BRICS by three separate models.

Table 4.1(a) : Gini market and KOF Globalization index (BRICS).

Variables	Gini market log		
	(1)	(2)	(3)
C	-10.92504 0.000	6.590141 0.000	-5.813063 0.0000
Log of KOF defacto economic Gloablization	.0820825 0.477		
Log of KOF dejure economic Gloablization	.5045892 0.0000		
Log of KOF defacto Political Gloablization		2.574822 0.000	
Log of KOF dejure Political Gloablization		.8078165 0.000	
Log of KOF defacto Social Gloablization			.0373375 0.000
Log of KOF dejure Social Gloablization			.0223353 0.000
Log of Purchasing power parity	-.6073884 0.000	-.2621722 0.022	-.0175529 0.904
Log of agedependency ratio	2.13161 0.000	.9797692 0.000	2.075974 0.000
Log of human capital index	1.196513 0.000	.1459347 0.221	-.1419719 0.218
R2	0.632	0.910	0.814
Selected model	Fixed	Random	Random

	effects	Effects	Effects
Included cross sections	5	5	5
Included observations	129	129	129

The Table 4.1(a) shows the results for brics, where dejure economic globalization is good for inequality but opposite for economic defacto globalization. Whereas, defacto political as well as dejure political globalization is good for the inequality in this cooperation by decreasing inequality. In addition, the defacto as well as social globalization both have significant effect on inequality.

Table 4.1(b) : Gini net and KOF Globalization index (BRICS).

Variables	Gini net log		
	(1)	(2)	(3)
C	-5.82362 0.000	2.13551 0.160	-3.332718 0.000
Log of KOF defacto economic Gloablization	.1850015 0.017		
Log of KOF dejure economic Gloablization	.4958612 0.000		
Log of KOF defacto Political Gloablization		2.039727 0.000	
Log of KOF dejure Political Gloablization		1.022477 0.000	
Log of KOF defacto Social Gloablization			.0381712 0.000
Log of KOF dejure Social Gloablization			.0108667 0.003
Log of Purchasing power parity	-.1625479 0.097	-.0025542 0.980	.0811968 0.460
Log of agedependency ratio	1.208571 0.000	1.007466 0.000	1.61344 0.000
Log of human capital index	.5250812 0.000	-.0240593 0.818	-.4113011 0.000
R2	0.450	0.860	0.908
Selected model	Fixed effects	Random Effects	Random Effects
Included cross sections	5	5	5
Included observations	129	129	129

These results showed that defacto economic globalization has positive relationship with inequality confirming the deteriorating impact of defacto economic globalization on inequality. Whereas, in case of social globalization, defacto and dejure each index has positive effect on inequality. Moreover, interestingly, in case of political globalization defacto has positive relationship but dejure has positive impact on inequality. This means that globalization is the main cause of economic inequality.

Conclusion

The objective of this study is to find out the impact of defacto and dejure globalization (as in explained in KOF globalization index 2018) on inequality and in NEXT11 countries. The defacto

globalization indicate the measures of globalization include variables that represent flows and activities, de jure measures include variables that represent policies that, in principle, enable flows and activities.

The empirical evidences shows that de jure economic and social globalization has significant impact on environmental degradation in NEXT 11 countries which indicates that the favorable trade & financial globalization policies in these countries enabled more economic globalization led to more industrialization which increased inequality in these countries. While Increased Social globalization also increased the inequality in NEXT11 countries. As a result of limited convergence process and increasing inequality in all these countries people are more unequal today than before.

During this study I have observed that though free trade and liberalization have expanded the canvas for free markets but it could not break the panorama of developed and developing. In my view after conducting this study is that small size economies could not be benefitted more by regional co-operations as their big size economies' counter parts did. Maybe lifting all trade barriers did not support the small size economies and more defacto economic and social globalization increased income inequality and environmental degradation increased in these countries.

By taking the GINI MARKET and GINI NET indices (Solt, 2016) enabled the deep lenses observation on inequality in NEXT 11 countries. These emerging economies made big collaterals which helped more to developed countries rather than developing countries. Another interesting observation came from this study is that de jure globalization did not significantly impact all emerging countries. By going through the literature and observing socio and geo political changing canvas, we can say that the governments within these countries tried to protect their economies from harsh side effects of increasing globalization by applying protection policies, though active variables based on free trade policies narrated deepened and increased in equality and environmental degradation.

Recommendations & Limitations

For policy recommendations I would suggest that small size economies need to protect their infant industries so they should make policies which could protect their domestic market but at the same time they should invest in technology and modern infrastructure in order to take part in open competition. The big size economies should invest in small size economies in order to strengthen their future regional bond. Another important factor behind increasing inequality in this regional cooperation is that developed countries use small economies as consumer market mostly which create imbalance in their trade and fiscal parameters. Such policies should be made within countries which not only encourage healthy competitive trade but counterfeiting inequalities within economies.

Governments should religiously follow the environmental laws in order to avoid the increasing environmental degradation. The super powers in world should obey these rules at first. Recycling, less use of plastic and opposition of deforestation should be mandatory. The ethical codes of conducts in trade are no more effective in this rapidly globalized capitalistic world therefore the accountability and implication of law should be the priority of states and world trade institutions. The only limitation on my behalf was the lack of resources and in some cases the data availability.

References

- Acemoglu, D. (2002). Technical Change, Inequality, and the Labor Market. *Journal of Economic Literature*, 40(1), 7-72.
- Andrews, and J. Stock, ed., *Identification and Inference for Econometric Models: Essays in Honour of Thomas Rothenberg*, Cambridge: Cambridge University Press, 80-108.
- Arkolakis, C., A. Costinot, and A. Rodríguez-Clare (2012). New Trade Models, Same Old Gains?. *American Economic Review*, 102(1), 94–130
- Atif, SM, & Mohazzam, S, (2010). Inclusive Growth Strategies for Pakistan -- Myth or Reality for Policymakers!. MPRA Paper No. 41376, 01-23 , retrieved at: <http://mpra.ub.uni-muenchen.de/41376>
- Atif, Syed Muhammad and Srivastav, Mudit and Sauybekova, Moldir and Arachchige, Udeni Kathri (2012): Globalization and Income Inequality: A Panel Data Analysis of 68 Countries;

- MPRA_paper_42385. 01-16, retrieved at: <https://mpra.ub.uni-muenchen.de/42385/>
- Bergh, A & Nilsson, T. (2011). Do Liberalization and globalization increase income inequality?. *European Journal of Political Economy*, 26, 488-505.
- Bergh, A., & Nilsson, T. (2010). Do liberalization and globalization increase income inequality?. *European Journal of Political Economy*, 26(4), 488-505.
- Bergh, A., and T. Nilsson (2010). Do Liberalization and Globalisation Increase Income Inequality?. *European Journal of Political Economy*, 26, 488-505.
- Bernard, A. B., & Jensen, J. B. (2000). The impact of international Trade on Wages. (227-268): University of Chicago Press.
- Bhagwati, J. (2004). In Defense of Globalization. New York: Oxford University Press, 3.
- Borjas, G. J., & Ramey, V. A. (1994). Time-series evidence on the sources of trends in wage Inequality. *The American Economic Review*, 84(2), 10-16.
- Burstein, A., J. Cravino, and J. Vogel, (2013). Importing Skill-Biased Technology. *American Economic Journal: Macroeconomics*, 5, 32–71.
- Cingano, F. (2014). Trends in Income Inequality and its Impact on Economic Growth. OECD Social, Employment and Migration Working Papers, No. 163, OECD Publishing. <http://dx.doi.org/10.1787/5jxrjncwxv6j-en>
- Cornia, G. A. (2004). Inequality, Growth, and Poverty in an Era of Liberalization and Globalization. New York: Oxford University Press, Inc.
- Cutler, D. M., & Katz, L. F. (1992). Rising Inequality? Changes in the Distribution of Income and Consumption in the 1980s. National Bureau of Economic Research.
- Dorn, F. (2016). On Data and Trends in Income Inequality around the World. *CESifo DICE Report - Journal of Institutional Comparisons*, 14(4), 54-64.
- Dreher, A. (2006b). The Influence of Globalization on Taxes and Social Policy - an Empirical Analysis for OECD Countries. *European Journal of Political Economy*, 22, 179-201.
- Dreher, A., and N. Gaston (2008). Has Globalisation Increased Inequality?. *Review of International Economics*, 16, 516-536.
- Eppinger, P., and N. Potrafke (2016). Did Globalisation Influence Credit Market Deregulation?. *World Economy*, 39(3), 444-473.
- Francois, J., & Gerrosi. (2013). Trade, technology, and wages: General equilibrium Mechanics. *The economic journal*, 108(450), 1483-1499.
- Gygli, S., Haelg, F., Potrafke, N., & Sturm, J. E. (2018). The KOF globalisation index-revisited.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 1251-1271.
- Helpman, E., O. Itskhoki, M.-A. Muendler, and S. Redding (2017). Trade and Inequality: From Theory to Estimation. *Review of Economic Studies*, 84(1), 357-405.
- Hennighausen, T. (2014). Globalization and income inequality: The role of transmission mechanisms: LIS Working Paper Series.
- IMF (2007), World Economic Outlook: Globalization and Inequality, October, IMF, Washington DC.
- IMF (2016). *World Economic Outlook*. October 2016. Washington, DC : International Monetary Fund.
- Marjit, S., Beladi, H., & Chakrabarti, A. (2004). Trade and wage inequality in developing countries. *Economic Inquiry*, 42(2), 295-303.
- Meinhard, S., and N. Potrafke (2012). The Globalisation-Welfare State Nexus reconsidered. *Review of International Economics*, 20(2), 271-287.
- Milanovic, B. (1999). Explaining the Increase in Inequality During Transition. *Economics of Transition*, 7(2), 299-341.
- Milanovic, B., and L. Ersado (2011). Reform and Inequality During the Transition. An Analysis Using Panel Household Survey Data, 1990-2005. In G. Roland, ed., *Economies in Transition. The Long Run View*, Palgrave Macmillan: London, 84-108.
- Naumotte, F., S. Lall, and C. Papageorgiou (2013). Rising Income Inequality: Technology, or Trade and Financial Globalisation? *IMF Economic Review*, 61(2), pp. 271-309.

- OECD. (2008). *Growing Unequal? Income Distribution and Poverty in OECD Countries*. Paris: OECD.
- Persson, T., & Tabellini, G. (1994). Is inequality harmful for growth? *The American Economic Review*, 600-621.
- Pradeepta Sethi, Sankalpa Bhattacharjee, Debkumar Chakrabarti, Chhavi Tiwari, The impact of globalization and financial development on India's income inequality, *Journal of Policy Modeling*, Volume 43, Issue 3, 2021, Pages 639-656 [Atanasova, Irina](#); [Tsvetkov, Tsvetomir](#). **SHS Web of Conferences** 2021; *Les Ulis*, Vol. 92,
- Solt, F. (2009). Standardizing the world income inequality database. *Social Science Quarterly*, 90(2), 231-242.
- Solt, F. (2016). The Standardized World Income Inequality Database. *Social Science Quarterly*, 97(5), 1267-1281.
- Solt, F. (2016). The standardized world income inequality database. *Social science quarterly*, 97(5), 1267-1281.
- Shahbaz M, Khan S, Ali A, Bhattacharya M (2017a), The impact of globalization on CO2 emissions in China. *Singap Econ Rev*, 62(04), 929–957.
- Shampa Roy-Mukherjee & Ejike Udeogu (2021) Neo-liberal Globalization and Income Inequality: Panel Data Evidence from OECD and Western Balkan Countries, *Journal of Balkan and Near Eastern Studies*, 23:1, 15-39, DOI: 10.1080/19448953.2020.1852004
- Stiglitz, J. (2006). *Making Globalization Work*. New York: W. W. Norton, 8.
- Torres, R. (2001). *Towards a socially sustainable world economy: an analysis of the social pillars of globalization, studies on the social dimensions of globalization*. International Labour Office, Geneva.
- Zhou, L, Biswas, B., Bowles, T, & Saunders, P. J. (2011). Impact of globalization on Income Distribution Inequality in 60 countries. *Global Economy Journal*, 11 (1), 1-18.
- Zhou, X., & Li, K. W. (2011). Inequality and development: Evidence from semi parametric estimation with panel data. *Economics Letters*, 113(3), 203-207.