

Comparative Study on the Impact of US and China ODA on IIQ of IGAD Member States

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Abstract

The objective of this research is to investigate the impact of official development assistance (ODA) on IIQ of IGAD member states. The study employed secondary unbalanced panel data of eight countries for 20 years period of time from 2000 -2020. To analyses and compare the effect of US and Chinese ODA on IIQ (IIQ), two separate regressions are applied for both countries independently using Random effect model after conducting Housman test. The findings indicate the effect of US and China ODA are statistically significant, but the effects sizes are negligible. However, comparatively US ODA has positive and higher effect size whereas Chinese ODA has negative effect with lower effect size on IIQ in IGAD member states. This paper provides handful insight to both donors of IGAD member states on how well their ODA is contributing to reduction of IIQ. It also opens a door for farther investigation on the reason why ODA has negligible effect size. Moreover, it gives insight to IGAD to designee a common policy approach to pursue doners to support home-grown efforts on revitalizing ODA to tackle collective challenges of high-IIQ which could extend to potential security challenges in the region.

Keywords

Official Development Assistance, IIQ, Random effect, IGAD.

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Introduction

Foreign aid has been one of the most strategic foreign policy instruments in advancing and protecting national interest in international relations. In many cases, donor countries aim to ameliorate their sphere of influence in terms of political, socio-economic matters, and ideological values. The magnitude of instrumentalizing ODA to issues that are not related to poverty and inequality reduction could grow even higher when there are opposing ideological views between contending global powers such as the US and China. According to Dreher et al., (2014) Strategic and geopolitical motives of donors adversely affect the effectiveness of ODA. Thus, ODA objectives of effectively fighting causes of poverty, inequality, and related multifaceted consequences are intertwined with the fundamental construct of donors' national interest and its interplay in international relations. In part, due to different motivations of doner, researches show the effectiveness of ODA in addressing poverty and inequality is controversial.

Over the past fifty years, ODA was directed to developing countries by OECD DAC member states despite its results being contradictory (Pham 2015; Herzer and Nunnenkamp 2012; Shafiullah 2011). According to Alemu and Lee (2015) Only in Africa, 1 trillion USD was directed as development assistance over the past 50 years. A majority portion of ODA is channeled from DAC of OECD member states through bilateral forms and other multilateral organizations like the world bank and IMF which are essentially influenced by the US and its allies such as the Paris club. In 2019 alone 152.8 billion which represents 0.30% of Grosse National Income (GNI) was channeled by DAC member states (Janus, 2022).

However, this trend seems changing due to the rising interest of new donor states that are not economically prosperous like traditional donor states (DAC). Though, new donors' motivations for integrating and instrumentalizing ODA as part of foreign policy tools is not mainly due to altruistic purposes since many of them still have economic challenges internally. Thus, implicit economic and security interest could be driving factors for the growth of Aid funds. China's ODA growth trend over recent years is exemplary case. In the years between 2000 and 2014 alone Chinese foreign aid (ODA and OFF) commitments had grown from 2.6 to 37.3 billion USD whereas US aid had grown from 13.4 to 29.4 for similar periods of time (Regilme and Hodzi, 2021).

As highlighted above, foreign aid as a policy instrument can be associated with development unrelated objectives and conditionalities. In this regard, US foreign aid is mainly associated with conditionalities which are a manifestation of its political economy and ideological values such as freedom of speech, electoral democracy. Moreover, US ODA is mainly directed to human development-related areas (Regilme and Hodzi, 2021). On the other hand, China's ODA has no-interference policy on internal matters, besides its mainly directed to state-led infrastructure building programs (Mueller, 2021). Thus, due to different if not opposing national interest and values of US and China on development assistance allocation; its rational to hypothesis the possibility of resulting different type of impact on IIQ of aid recipient countries.

IGAD (Intergovernmental Authority on Development) is a regional block in East Africa that consists of eight countries: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda. These countries are economically poor however they receive a significant amount of ODA from both the US and China. The region has growing strategic geopolitical relevance that attracted both US and China. Its mainly due to growing multipolarization of power dynamics factored with countries proximity to red sea and middle east oil economies. IGAD member states cover around 6960 Km of coastline with the Indian Ocean, Gulf of Aden, (IGAD, 2020). Moreover, the Red Sea is a get way to the Swiss canal that hosts 20% of global trade volume by linking the Indian ocean and the Mediterranean Sea (Chaisse and Górski, 2018).

The study aims to assess and compare the impact of US and China's ODA on curbing IIQ. It's evident that there are preceding researches that assess the impact of ODA on growth (Shafiullah, 2011). However, researches regarding to ODA effect on IIQ are limited. Even though researches like Regilme and Hodzi, (2021) made contrast b/n US and China aid in the context of power dynamics their study doesn't focus on specific countries or regions unlike this paper does by specify IGAD as a region based on similarity of geopolitical characteristics which attracts competing powers.

1. Literature review

Foreign aid has been instrumentalized to serve altruistic motives though its historical evolution doesn't depict that. During the era where rationalism IR theory was a defining approach of relations between states, many countries used foreign aid to push their interest directly or indirectly by helping other nation-states to fight beside or on behalf of them. According to Sinha (2013) at the beginning of the 18th century, countries like Prussia subsidized their allies. Similarly, the French government had also granted aid to the American colonies to assist them in evicting the British who were enemies during the seven years of war (Markovits et al., 2019). Even during the cold war years US leveraged foreign aid to contain USSR's ideological expansion. However, In the aftermath of post-cold war where the US championed liberal unipolar world order, international relations were mainly shifted from Rationalism and bilateral approach to liberalism and multilateral international relations. As a result, foreign aid has become an instrument which serves not only explicit national economic, and political interests rather it also embraces explicit altruistic purposes such as humanitarian and emergency aids as claimed by traditional donors.

However, as it had been seen during the cold war period, as rivalry and competitive major global powers arose to challenge encumberment global order set by hegemonic state; the purpose and distribution of foreign aid changes in a way that doesn't effectively address underdevelopment issues. Thus, when political motivation dominates aid distribution effectiveness could be at stake. According to Herzer and Nunnenkamp (2012) Donors are only self-centered, and mainly politically motivated foreign aid strategic approaches could most likely compromise need-oriented and merit-based aid allocation across countries, since it allows for local political elites to utilize funds in a way that favors the wealthy interest group than the people who are in need in aid recipient countries. Thus, partly the intent of aid allocation and objectives of donor countries are reasons for having controversial research findings on the effect of ODA on economic growth and inequality.

According to Calderón and Chong (2006), the research made using dynamic panel data of 111 countries has got the result which depicts foreign aid has no significant effect curbing IIQ and poverty even taking

the presence of good institutions into account. Another research that aimed to examine the role of foreign aid inference in widening or narrowing IIQ over 27 sub-Saharan African countries for the period of 21 years shows that aid has an increasing widening effect on IIQ (Pham, 2015). On the contrary other research, finding depicts that aid has a small but reducing effect on IIQ (Shafiullah, 2011).

2. Motivations and characterization of donors in IR

One of the major presumptions of this research for comparing US and China aid is versatile and competitive motivation of donors which could result different effects on IIQ. Specifically, in the lens of competitive global power's motivations in the international system. A recent study categorizes the motivation of donors using a different electric topology that is based on power index and regime type in the context of the Realism IR approach. the result indicates countries like the US that are categorized as major powers (powerful and democratic) grant ODA globally mainly to ensure security and economic interest (Sen, 2018) On the other hand countries like China which are labeled as emerging major powers with the character of being (powerful but less democratic), initially prioritize economic interest but assumes dominance in the long run over the existing major power (Ibid). Surprisingly the research indicates middle powers categories such as swidden which are characterized as less powerful but more democratic are the one that considers recipients' need at most (Sen, 2018).

3. US and China ODA principles and conditionalities

Depending on motivations and purpose, donors adopt different aid principles and layout conditionalities to distribute aid among recipient countries. China as a leading contender of the US in global power competition (De Graaff and Van Apeldoorn, 2018), its crafted eight major principles such as respect for sovereignty of the state, non-interference on internal matters, non-conditionality, and focus on low-cost and effective development projects which promotes equality, easing burden of aid recipient countries, ensuring mutual benefit across projects and programs, reducing dependency on aid and promoting self-reliance of aid recipient countries (Regilme and Hodzi, 2021). On the contrary US ODA is mainly based on liberalist principles like electoral Democracy, better Human rights situation, and market-led economies. However, there are times where those principles have been compromised or overshadowed due to other internal political and security priorities. As an example, recently US temporarily frizzed assets and suspended humanitarian aid in Afghanistan to restrain the Taliban's operation amid the takeover of the country (Ioanes, 2022). Though the measure was short-lived it shows how US foreign aid would be instrumentalized when there is a security dilemma.

Comparing aid conditionalities, US ODA conditionalities have strong and wide scope than China. This is mainly due to conditionalities imposed are not only limited to its own bilateral aid but also its extended influence on agenda setting for other western donors and multilateral institutions such as WBG (World Bank group) and IMF (International monetary fund) (Sullivan, 1996, p.402). Thus, it's better to consider both direct bilateral and indirectly administrated aids to understand governing aid conditionality. In this lens, US conditions that influence or "re-engineer" internal political and economic policy matters of recipient counties... "through *democratic governance, market-led development and civil society empowerment* [mainly promotion of media freedom]" (Regilme and Hodzi, 2021, p.121, my italics). Similarly, on multilateral track World bank and IMF instigates conditionalities like devaluation, trade liberalization, removing subsidies for industries, reducing government expenditure, increasing tax (Hodd, 1987, pp. 333 – 335). On contrary, Chinese development assistance programs give wider freedom of choice for aid recipients to manage their internal matter since it doesn't have conditionalities aligned with the recipient nation's commitment to human rights, democracy, and political paradigm. However, there are some non-negotiable conditionalities on foreign policy issues such as conformity to One China Policy together with conditionalities on economic issues like tied aid procurement of Chinese-manufactured equipment and technical assistance on development projects (Regilme and Hodzi, 2021, p.117). The scope and intensity of these conditionalities are less impactful in redrawing internal political and economic policy matters as compared to US conditionalities.

4. Data and methodology

To analyze and compare the effect of US and China ODA on IIQ, the research employed five variables, from credible international database which are highlighted on table one. Secondary data is gathered for 20 years period of time from 2000 to 2020 except for South Sudan which covers only 9 years after the day of

independence July 9, 2011. Moreover, the data has unbalanced long panel data format that consists of eight countries of IGAD member states which are mentioned on introduction part. Missing data is handled using data imputation technique.

Outcome variable: Income inequity is a dependent variable measured by GINI coefficient. Gini is not the only indicator to measure IIQ it has been commonly used in many preceding researches. It shows the extent of income distribution among households in population deviates from the hypothetical perfect equality line. The index measures inequality within the range of 0 and 1; where 0 indicates the lowest ideal level of IIQ while 100 indicates the highest level of IIQ. The research collected IIQ data from World Inequality Database and Standardized World IIQ Database version 9.1. “SWIID gathers and standardize observations from different data sources [using] Bayesian approach to...maximize the comparability of available IIQ data for the broadest possible sample of countries & years (Solt, 2016, p1).”

Predictor variable: Net ODA is a flow of financial assistance granted by official agencies including state and local governments mainly aiming promotion of economic development and welfare of developing countries. It also includes loans made on concessional terms net of principal repayment with a minimum grant element of 25 % at 10 % discount rate (OECD, 2021). However, the grant element increases as high as 45% for all LDC that includes all IGAD member states. This description of ODA exactly matches US ODA, however Chinese version of ODA doesn’t have clarity on defining the term since its mixed with trade and investment (Regilme and Hodzi, 2021). To address such confusion, data is extracted only by ODA-like flow class from (Custer et al, 2021).

Control variables: government spending (% of GDP), Employment in agriculture (% of total employment), and trade openness (export and import) (% of GDP) index are taken as a control variable from WB (World Development Indicators) database. These variables are selected based on theoretical relevance, significant coefficients on preceding research together with testing correlation matrix to identify the strength of the relationship and exclude variables that induce multicollinearity among independent variables.

Literatures regarding to the causal effect relations, Trade openness has contradicting effect on IIQ. Research conducted by Meschi and Vivarelli (2009) using dynamic specification to measure with in-country IIQ indicates that developing countries' trade with high-income countries deteriorate income distribution effect. However, according to Reuveny and Li, (2003) a study which covers 69 countries shows economic openness reduces IIQ in developing countries. This research also hypothesizes an inverse relationship between IIQ and Trade openness as trade openness could reduce cost of Imports of household consumption goods.

Government expenditure indicates its ability to mobilize financial resources from internal and external source such as loans or tax collection to cover state machine running costs and to finance public goods such as health, infrastructure, and education. This is expected to have an inverse relationship with IIQ since it has a redistribution effect which helps to ensure social welfare through subsidies and investment on common good. Government expenditure is represented as a percentage of GDP.

Employment in agriculture has significant conceptual relations with IIQ. This is mainly due to majority of inhabitants in developing countries make earnings from agriculture activities. Thus, an increase in employability in agricultural sector is expected to reduce IIQ for a majority of the people in developing countries which have predominantly agrarian economies.

Table no. 1. Summary of variables

Variable	Indicator	Source
IIQ	GINI coefficient	SWIID, WID
ODA	Net ODA US and China	OECD & AIDDATA
Employment in agriculture	Employment in agriculture (% of total employment)	WBG
Government expenditure	government spending (% of GDP)	WBG
Trade openness	export and import (% of GDP)	WBG

Table no. 2. Descriptive statistics

Variables	GINI	NET ODA US,000\$	NET ODA China, 000\$	Employ't Agri% share	Trade openness%	Gov't expenditure %
Mean	43.49773	356,000	243,000	66.5335	78.65079	13.5194
Std. Dev.	6.149688	332,000	497,000	16.0588	82.19276	8.5300
Min	26.74404	60,000	10,373	24.55	0.7846308	0.8336
Max	57.98276	1,130,000	5,070,000	83.18	443.9956	32.4837
Obs	157	157	157	157	157	157
GINI	1.0000					
NET ODA US	0.2071	1.0000				
NET ODA China	-0.1914	0.0649	1.0000			
Agri Emp/Total	-0.0012	0.3151	-0.0192	1.0000		
Trade Openness/GDP	-0.1432	-0.4074	-0.0961	-0.7609	1.0000	
Gov't expenditure/GDP	-0.3748	0.0527	0.1319	-0.4131	0.1597	1.0000

Source: own compilation

Based on table two which describes variables statistical characters and correlation index. The average Income distribution score of IGAD member states (MS) is 43.94, which can be categorized with big income disparity range of 0.4–0.5 (40–50) (Aysan et al., 2021). These numbers are closest to Eritrea's average score of 44.25 scores and specifically 43.5 scores recorded in 2007. Minimum (26.74) and maximum (57.98) GINI coefficient are recorded by Djibouti in 2020 and Kenya in 2016 respectively.

Average ODA granted is by US amounts 356 million which is higher by 31.74% as compared to Chinese average of 243 million. Comparing of U.S. 332 million and China 497 million standard deviations, US ODA variability is low. This shows US ODA is distributed in a relatively constant manner across years over countries in the region. On contrary, the Chinese ODA flow has high variability in IGAD Member states. This could be due to Chinese ODA flow includes huge concessional loans which are granted to commence massive infrastructure investment projects for some specific countries as compared to others. The minimum amount of US development assistance which amounts 60,000 was granted to Eritrea in 2019 whereas China's minimum assistance which amounts 10,373 was granted to Sudan in 2013 for the purpose of emergency response. Maximum amount of ODA of U.S. is 1.13 billion granted to Sudan in 2009 whereas China's maximum aid which amounted 5.07 billion was delivered to Ethiopia in 2015 as a concessional loan to finance development projects in railway and telecommunication sector.

All control variables are expressed in percentage share. Average percentage of employment in agriculture sector in the region is 66.53%. Besides, it has low standard deviations which amounts 16.05%, this could be due to similar economic structure of IGAD MS that is based on primary agricultural products. Low employment share in agriculture sector is 24.55% which is recorded by Djibouti in 2019 whereas the highest 83.18% is recorded by Somalia in 2000. The average trade openness is 78.65 with a minimum percentage of 0.78 (Sudan) in 2020 and a maximum value of 443.95% of Djibouti in 2007. The percentage is very high due to low GDP is factored by low investment, government expenditure and trade deficit. Average Government expenditure as a percentage of GDP is 13.51% with a minimum value (0.83%) of South Sudan in 2016 which is caused by a civil war which erupted in Juba after independence in 2011. The maximum percentage of government expenditure is amounting 32.48% is recorded by Kenya in 2020.

The correlation matrix depicts linearity relations between variables. The lower section of Table two shows net U.S. ODA as a positive relationship whereas net China ODA has an inverse relationship with GINI coefficient. However, it doesn't imply causal effect relation of ODA and IIQ. Also, Trade openness and ODA are inversely related. Government expenditure is inversely related with IIQ however it's positively related with ODA. Finally, correlation values are less than 0.8 which indicates the absence of multicollinearity across variables.

5. Econometric analyses

The research applied two Random effect model independently on both US and Chinese ODA to analyze and compare effects of ODA on IIQ.

$$Y_{it} = \beta + \beta_1 X_{1,it} + \beta_2 X_{2,it} + \alpha_i + u_{it} \quad (1)$$

Random effect model is chosen after conducting Hausman test which determines appropriateness of a model comparing with fixed effect model to control unobserved country / individual specific effect. In

Hausman specification test (1978), a null hypothesis assumes that individual specific effects are uncorrelated with the other regressors. Falling to reject null hypothesis leads to accept Random effect model (RE) as appropriate model to analysis. Therefore, the test result shows null hypothesis is not rejected at P-value < 0.05 significant level. Thus, RE is useful method to control for unobserved heterogeneity or country specific effects. Following that Breusch-Pagan Lagrange multiplier (LM) test is conducted to choose between random effect and pool OLS. After testing the null hypothesis which assumes that variance across levels is zero or no panel effect across countries. The result shows for both countries P-value was significant at < 0.05, thus null hypothesis is rejected in favor of alternative hypotheses which assumes the presence of panel effect or variance between countries.

$$IIQ_{it} = \beta + \beta_1 Net\ US\ ODA_{,it} + \beta_2 Agri_Empl/ Total_Emp_{,it} + \beta_3 Trade\ openes/ GDP_{,it} + \beta_4 Gov't\ expe/ GDP_{,it} \alpha_i + u_{it} \quad (2)$$

$$IIQ_{it} = \beta + \beta_1 Net\ China\ ODA_{,it} + \beta_2 Agri_Empl/ Total_Emp_{,it} + \beta_3 Trade\ openes/ GDP_{,it} + \beta_4 Gov't\ expe/ GDP_{,it} \alpha_i + u_{it} \quad (3)$$

As indicated in general model eq 1 Random effect model assumes that unobserved heterogeneity or individual-specific effect alpha (α_i) is random and not correlated with independent variables. However, the composite error term which includes individual-specific effect and idiosyncratic error term is correlated over time within each individual. This results serial correlation by transferring part of each period error term to the other that could lead to biased estimation. It's evident that such correlation happens because individual-specific effect alpha (α_i) doesn't change or it duplicate itself overtime for every individual.

Thus, the random effect model uses a parameter to adjust time de mean values by multiplying them with parameter of weighted average values of pooled OLS and fixed effect estimator valued between 0 and 1. In other words, it partially pools idiosyncratic error variance from individual-specific effect or Fixed effect estimator. This makes random effect efficiently control unobserved heterogeneity or country-specific effect by pooling out or reducing idiosyncratic error term and allowing covariance of error terms to be managed by Feasible Generalized List Square estimator. In the presence of serial correlation OLS can't be used to generate an efficient estimate of parameters as it violates Best Linear Unbiased Estimator (BLUE) assumption.

6. Result and discussion

The aim of this research is to examine the effect of US and China ODA on Income distribution of IGAD member states. Moreover, to compare the results which is defect size and direction, - for twenty years period of time from 2000 to 2020.

Table no. 3. Summary of variables

Dependent variable: IIQ

Independent variables	Random Effect: US (R1)			Random Effect: China (R2)		
	Coefficient	Standard error	Robust Std. Err.	Coefficient	Standard error	Robust Std. Err.
ODA	4.54E-09	(0.000134) ***	(0.000969)***	-1.68E-09	(0.0000645)***	(5.06e-10)***
Agri_EmplofTempl	-0.1983	(0.055984) **	(0.1139555)*	-0.2040639	(0.0570236)***	(0.1259292)
TradeopenessasofGDP	-0.01478	(0.0071004)***	(0.008033)*	-0.0198043	(0.0073009)***	(0.0075656)***
GovexponeducGDP	-0.2534	(0.0490307)***	(0.0930899)**	-0.2458011	(0.049763)***	(0.0717414)***
_cons	59.55516	(4.42069)***	(8.290325)***	62.15156	(4.508876)***	(9.163196)***
Observations	157					
No. countries	8					
Adjusted R ²						
Between	0.4824			0.3954		
Within	0.2062			0.1846		
Wald chi ² overall F-test	36.19***			41.69***		

*Notes: P-value of coefficient for corresponding standard and robust standard errors is *Significant at 10%; **Significant at 5%; ***Significant at 1%. Standard errors and errors in parentheses.*

Table three shows random effect coefficients and corresponding standard error and robust error used to estimate for two independent regressions. R1 indicates random effect regression result which includes US ODA and R2 Indicates RE regression result which includes Chinese ODA. P- values which are indicated in asterisk shows significant value of relations (coefficients) when respective Standard and robust standard errors are employed. Also, adjusted R² of between and within indicates how well the variance of dependent

variable is explained by independent variables within country over time and across countries. Thus, result depicts that adjusted R^2 is higher in between effect than within effects. This implies, independent variables explain 48% and 39% of variation of dependent variable in R1 and R2 between countries. So, the RE model captured the variance in IIQ better between countries than within country overtime (country specific effect).

The first random effect regression model (R1) result shows that USA ODA has direct relation and statistically significant effect on IIQ at less than 1% level of significance. This implies on average an increase of U.S. ODA by 1% across IGAD member states over time leads to an increase on IIQ by 4.54E-09. However, the coefficient (effect size) is negligible. On contrary, the second regression (R2) shows, Chinese ODA has inverse relation and statistically significant effect on IIQ. It implies Chinese ODA effect on IIQ is inversely related. Thus, an increase of Chinese ODA by 1 % across time and countries decrease IIQ by -1.68E-09 — Which is negligible effect size. Since the coefficients are very low, they converted to Standardize coefficient beta (β) to zoom in for comparison purpose. Therefore, based on standardized coefficient beta U.S. ODA has higher the effect size which is (β) 0.25 while Chinese ODA has -0.14. Based on the result, it's possible to summarize that U.S. and Chinese ODA has contradictory and statistically significant effect on IIQ. However, there effect size is negligible due to having very low coefficients.

This result is similar with findings such as (Cuesta et al., 2006) who found “aids ...effect [on] recipient countries’ inequality [is] neither largely nor always in the same direction”. This could be mainly due to donors conditionality on economic policy which could undermine recipient countries effort to reduce IIQ such as policy prescription to shrink government expenditure. Moreover, poor management of funds such as provision of high administrative costs on projects financed by ODA, together with volatility of aid flow and less predictability could be reasons that reduced effect size.

In the R1 Employment in agricultural has inverse r/n and significant effect on IIQ at 5 and 10 percent significant level for standard and robust estimation respectively. This indicates 1 % increases of employment in agricultural sector reduces IIQ on average by 19.8%. likewise, in R2 employment in agriculture has negative effect on IIQ significant at 1 percent however robust regression is not significant at any level of significance. Coefficients indicate 1 % increase of employment in agriculture sector by 1% reduces IIQ on average by 20.8%.

An increase of trade openness has negative and significant effect on IIQ at 1% and 10% significant level when standard and robust estimate are used respectively. This shows a 1 percent increase in trade openness/GDP leads to a decrease in IIQ by 1.4% in R1. Similarly, in R2 an increases of trade openness/GDP by 1 percent reduces IIQ by 1.9 %. This might be due to trade openness could reduce prices of imported goods. Moreover, export of commercial agricultural products could help majority of a people in IGAD member states to generate income from better price in international market.

The finding in R1 and R2 show that government expenditure has percentage of GDP has significant negative effect on IIQ based on estimates made using both standard and robust error. There coefficients show strong effect size, which tells an increase in 1 percent of government expenditure leads to a decrease of IIQ by 25.3% and 24.5% respectively in R1 and R2. This implies government expenditure has strong contribution in reduction of IIQ in IGAD member states. It might be due to spendings are essentially targeting poor segment of the population. The effect could be realized through increasing spends on infrastructure project which create jobs directly and indirectly by providing benefits from the projects such as education which can reduce IIQ in long run.

Conclusion

Over the years ODA has been granted aiming a betterment of societies in Lest developed countries (LDC). However different researches indicate contradictory findings of ODA effect on addressing IIQ and economic growth which are one of the manifestations of betterment of the society. This research chooses U.S. and China by takings into account growing polarization b/n opposite global powers in international system could affect the way they use ODA to project their contending national interest in aid recipient countries which could influence the effectiveness of ODA on IIQ in IGAD member states. In the research, model specification is determined after conducting Hausman test to choose between fixed and random effect models. After conducting two independent Random effect for both regressions of U.S.(R1) and Chinese (R2) ODA on unbalanced panel data of eight IGAD member states for 20 years period of time from 2000 to 2020. The results indicated that the effect of U.S. and China ODA are statistically significant but the effects sizes are negligible based on masseurs using both standard and robust estimates. However, in comparison U.S. ODA has higher effect size and increasing effect on IIQ of IGAD member states. Whereas, Chinese ODA has lower effect size but decreasing effect on IIQ of IGAD member states. This

result is consistent with other findings of prior studies such as (Cuesta et al., 2006). Other controlling variables which are Agriculture employment, trade openness, government expenditures are statistically significant in both independent random effect regressions R1 and R2. Moreover, all of them have relatively higher effect size and reducing effect on IIQ in IGAD member states.

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