Vol. 15(2), pp. 90-97, April-June 2021
DOI: 10.5897/AJPSIR2020.1256
Article Number: 2EE7EBC67123
ISSN: 1996-0832

http://www.academicjournals.org/AJPSIR

ACADEMIC JOURNALS
expand your knowledge

African Journal of Political Science and International Relations

Review

East is Red (Ink): China aid and debt diplomacy in Sub-Saharan Africa

Paul James Greenbaum

Princeton School for International Affairs, Schwarzman College, Princeton University, USA.

Received 28 April, 2020; Accepted 12 October, 2020

Using fixed-effects regression analysis, this article demonstrates that China donates more aid dollars to countries which have higher degrees of ethno political competition. This article advances a theory of foreign aid that links domestic political considerations of recipient countries with the desire of donor nations to leverage foreign aid for political gain. States where ethnic identity functions as a relevant political factor, that is, those states where ethnicity has been utilized by elites to mobilize populations for political purposes will receive more aid than countries where ethnicity is irrelevant in the domestic political calculus.

Key words: Politically relevant ethnic groups, ethnopolitical competition, foreign aid.

INTRODUCTION

This article seeks to answer the question, how does ethnicity and ethno political competition impact the distribution of aid on an international level. This article advances a theory of foreign aid that links domestic political considerations of recipient countries with the desire of donor nations to leverage foreign aid for political gain. States where ethnic identity functions as a relevant political factor, that is those states where ethnicity has been utilized by elites to mobilize populations for political purposes, will receive more aid than countries where ethnicity is irrelevant in the domestic political calculus. This theory is based on two testable assumptions: (1) donor nations seek to maximize the strategic value of the marginal aid dollar donated; and (2) ethnic coalitions in power within recipient country governments seek to leverage aid for political gain.

Macro-level quantitative analysis of aid flows shows that both China and Organization for Economic Cooperation and Development-Development Assistance Committee (OECD-DAC) member countries donate more aid to ethnically competitive countries where they have the possibility to extract greater concessions.

LITERATURE REVIEW

The “determinants” literature identifies three major factors of aid allocations: (1) donor political interests, (2) donor economic interests (to include natural resource interests and other trade interests), and (3) recipient interests.

Political interests

Traditional donor nations “use aid to reward allies, punish enemies, build coalitions, and influence public opinion in

E-mail: greenbaumpaul1@gmail.com.

recipient countries" (Dreher et al., 2018). Although a "nontraditional" donor (that is, a donor who is not a member of the OECD-DAC) China also utilizes its aid as a foreign policy tool (Fuchs and Rudyak, 2019) (Dreher et al., 2018) China requires recipients of its aid to shift diplomatic recognition from Taiwan to China. Except for aid doled out immediately following natural disasters, countries which recognize Taiwan receive no aid dollars.

Economic interests

A donor's significant investment interests in an underdeveloped economy incentivize higher aid allocations as a means to ensure that the donor nation's investments remain profitable.[1] Such investments could take the form of infrastructure investments, like port facilities or resource investments, like mining and refining facilities. Furthermore, if the long-term economic success of a country is predicated upon "expanding world commerce" and gaining access to "an increasing supply of raw materials," then foreign aid serves as a means to consolidate access to those resources which are strategically important (Black, 1968).

Chinese aid has been characterized as exceptionally pragmatic, motivated by an insatiable need for natural resources to fuel a booming economy (Alden, 2009; Brant, 2013; Muchapondwa et al., 2016). The "Belt and Road Initiative" (BRI) formerly known as the "One Belt, One Road" (OBOR) project, envisions an infrastructure corridor capable of transporting commodities from resource-rich nations in Africa, Asia, and Europe to China. Aid, alongside private investment, serves as a mechanism both to ensure resource access and to construct infrastructure needed for resource development and extraction. Angola, for example, the second-largest oil producer in Africa, has been the recipient of billions of dollars of concessional Chinese loans, and it has been able to secure a sustained line of Chinese credit with guaranteed oil deliveries (Gregoratti and Åberg, 2010). Similar arrangements have been made in the DRC, where Chinese mining corporations have received concessions to access the country's strategically important cobalt reserves (Jansson, 2009).

Recipient interests

Recipient need is captured by two variables: (1) aid previously allocated by bilateral donors, and (2) recipient wealth per capita (Hoeffler and Outram, 2011). Those nations which receive large amounts of aid from other foreign donors are theoretically less deserving of additional aid, as are those nations which have comparatively high per capita incomes. Recipient merit, on the other hand, captures those nations which have more democratic regimes and growth-oriented economic policies (Ibid).

"An inefficient, economically closed, mismanaged non-democratic former colony politically friendly to its former colonizer, receives more foreign aid than another country with similar level of poverty, a superior policy stance, but without a past as a colony" (Alesina and Dollar, 2000). The recipient interest model lacks explanatory power to account for aid flows. Although the stated goal of development aid may be to reduce poverty and promote economic growth, the "donor interest" model accounts for a much greater percentage of aid flows than "recipient interest" model.

Ethnicity and politics in Africa

The key assumption underlying the theory of foreign aid advanced in this paper is that ethnicity plays an important role in political processes in sub-Saharan Africa. Ethnicity plays an important role both in the formation of political coalitions and in a country's long-term economic growth. Political coalitions in sub-Saharan Africa coalesce around ethnic identity because membership in a certain ethnic group limits the size of the coalition to a comparatively small percentage of a country's population (Fearon, 1999). Since an individual cannot choose their ethnicity, any coalition based around ethnicity will be restrictive, thereby allowing each individual member to reap the maximum benefits from political power (Ibid). Whether because of ease of mobilization or because of a desire to maximize rewards from political power, ethnicity is a highly relevant in post-colonial politics in sub-Saharan Africa.

Contribution to literature

The central question advanced in this article, how does ethnicity impact the distribution of aid on both an international and a sub-national level, and the framework developed to answer it, are original. Previous efforts have investigated how the ethnicity of a leader affects intra-country aid allocations (Dreher et al., 2018). However, as demonstrated above, a leader's ethnicity and the ethnic coalition in control of government are distinctly different metrics. Furthermore, no study has focused on how this metric could influence aid allocations between countries, and few studies have combined micro and macro-level analyses of Chinese aid in sub-Saharan Africa.

THEORY OF FOREIGN AID

This article argues that donor nations give more to countries where ethnic divisions are politically salient. The study shows that developmental financing is often

[1] Ibid

distributed with the donor's political goals and economic interests in mind. A rational donor nation, therefore, will seek to maximize the amount of political and economic capital it receives from the recipient country per dollar donated. On the recipient side, elites of the leading ethnic coalitions within countries that have highly competitive, ethnically driven political processes will be incentivized to utilize foreign aid rents to cement their ethnic coalition's hold on political power.

Recognizing that developmental financing can be a political boon, these elites will seek to maximize the amount of developmental financing their country receives, while minimizing the political strings attached to the financing. A donor nation, recognizing that an ethnic coalition's desire to utilize developmental financing for political ends could increase its political "return on investment", will be more likely to donate. This return on investment could take the form of favorable mineral concessions, long-term trade deals, and access to strategic infrastructure like ports. This positive feedback loop – where the ethnic coalition in power in a country where ethnicity is politically relevant and a strategically-motivated donor nation both benefit from increasing aid allocations – serves as the theoretical justification behind Hypotheses 1-4, outlined in Table 1.

The practice of conditionality disrupts this feedback loops by de-incentivizing the elites of recipient countries from seeking OECD-DAC aid, especially in the presence of a readily available Chinese aid. Since China does not attach political strings or conditions to its aid, elites within recipient countries will find Chinese aid particularly attractive and seek to maximize it over OECD-DAC sources of aid.

METHODOLOGY

This article uses fixed effects multiple regression analysis to test whether ethnic diversity, as measured using two separate indices, function as a determinant of Chinese and OECD-DAC aid allocations. The first index used for regression modeling is the Ethnolinguistic Fractionalization Index (ELF). The ELF is derived from data compiled by Soviet ethnographers in the 1960s, inputted into a Herfindahl concentration index ('Posner - Measuring Ethnic Fractionalization in Africa.pdf', no date). While the ELF has been widely used in literature examining the impact of ethnic diversity on economic growth, it fails to take into account the relevancy of ethnicity within a given country's political system (Easterly and Levine, 1997) ('Posner - Measuring Ethnic Fractionalization in Africa.pdf', no date). The Politically Relevant Ethnic Group index (PREG index) accounts for inter-group alliances and ethno-political competition ('Posner - Measuring Ethnic Fractionalization in Africa.pdf', no date). It measures the relevancy of ethnicity in a country's political context. Tanzania, for example, contains over 120 distinct ethno-linguistic groups, giving it an ELF of 0.93 (Posner (2004). These ethnic groups, however, have coalesced into several politically relevant coalitions, leaving Tanzania with a PREG index measure of only 0.59. The DRC, on the other hand, has similar levels of ethnic diversity when compared to Tanzania – with an ELF of 0.90- but fewer of these ethnic groups have politically coalesced – leaving it with a PREG of 0.80. Ethnicity, therefore, is more salient within the DRC's political process than within Tanzania's.

Data on Chinese and OECD-DAC aid dollars donated to African nations come from two datasets; the Chinese dataset is published by the AidData research lab at the College of William and Mary, while the OECD-DAC publishes their own dataset. The AidData dataset was first pared down to only include those countries which are identified as members of the sub-Saharan region, creating a sample of 48 different countries. Burkina Faso, the Gambia, and Swaziland received no Chinese aid allocations during the time period examined, due to their recognition of Taiwanese statehood. These three countries were dropped from the dataset to create a final population size of 45 countries. Projects which AidData does not recommend for were removed, as were so-called "umbrella" projects which contained several sub-projects whose funding was already accounted for elsewhere in the dataset. Projects were then aggregated by the recipient country and the year funding was pledged, providing a total dollar value for fifteen years of aid flows for each country (standardized to 2014 dollars). OECD-DAC official financing data was obtained from the OECD Query Wizard for International Development Statistics (QWIDS) search engine. Data for each recipient country was then aggregated by year. These aid totals were then regressed against two separate indices of ethnic diversity, the ELF and the PREG. In order to create effect sizes based off single-unit increases in the PREG and ELF, the Herfindahl index ranges from 0-1, both indices were multiplied by 100 to create a new index ranging from 0-100.

Variable

Table 2 displays the variables and associated range of values used in the regression, Table 3 provides descriptive statistics for the data used, and Table 4 provides a list of the pairwise correlations between all explanatory and control variables. GDP per capita is controlled for in order to account for the recipient need model of aid allocations (that is, the idea that the most "deserving" nations will be granted the most aid). Trade and trade dependency are controlled for data on trade statistics comes from Global Insight search engine as well because trade and aid have historically been linked in so-called "Aid for Trade" (AfT) deals (Calì and Te Velde, 2011). Examining the amount of oil produced per year controls, at least in part, the "donor interest" model of aid allocations. A donor's resource interests affect aid allocations.

RESULTS AND DISCUSSION

A high density fixed-effects regression model consistent with the estimator used in Correia (2015) was used in order to include year fixed-effects. Table 5 displays the results of the regressions for Chinese aid. Both the PREG and the ELF indices are significant determinants of aid allocations without controls. Upon adding controls, the PREG index remains a significant determinant of China's aid allocations, while the ELF is no longer significant. Several other variables are significant, although their effect sizes are much smaller than that of the PREG. Most surprisingly, however, GDP per capita is not a significant predictor of aid allocations, lending credence to the argument that recipient need is less relevant than China's political interest.

The above regressions were repeated utilizing OECD-DAC aid between 2002 and 2014 (data for 2000

Table 1. Four testable hypotheses.

Hypothesis 1: Chinese aid flows to sub-Saharan Africa between 2000 and 2014 are positively correlated with the political salience* of ethnicity diversity within recipient countries.
Hypothesis 2: OECD-DAC aid flows to sub-Saharan Africa between 2002 and 2014 are positively correlated with the political salience of ethnicity diversity within recipient countries.
Hypothesis 3: Chinese aid flows have a greater correlation with the political salience of ethnic diversity than OECD-DAC aid flows.
Hypothesis 4: Neither Chinese nor OECD-DAC aid flows have any correlation with ethnic diversity.
*****Note the distinction between ethnic diversity and the "politically salience" of ethnic diversity. In an ethnically diverse country, there are many different ethnic groups. In a country with a high *salience* of ethnic diversity, these ethnic groups compete over political resources.

Table 2. Coded list of variables used for stata regression analysis.

Variable code	Description	Measure
PREG100	**Explanatory** variable measuring the saliency of ethnicity in recipient country political process.	0-100
ELF100	**Explanatory** variable measuring ethnic diversity in recipient countries.	0-100
usd_defl_2014_mil	**Dependent** variable measuring the total amount of Chinese aid received by 45 countries .	Millions 2014 US dollars
OECD-defl_2014_mil	**Dependent** variable measuring the total amount of OECD aid received by 45 countries.	Millions 2014 US dollars
ln_GDP	**Control**: GDP per capita of recipient countries, normalized using the natural log.	ln(GDP per capita)
trade_china	**Control**: Combined recipient country imports from China and exports to China.	millions 2014 USD
trade_dependency_china	**Control**: Total trade with China divided by total trade with the rest of the world.	0-100
trade_OECD	**Control**: Combined recipient country imports from OECD countries and exports to OECD countries.	2014 US dollars
trade_dependency_OECD	**Control**: Total trade with OECD divided by total trade the rest of the world.	0-100
oil_production	**Control**: Total amount of oil per year produced by recipient nations, used to control for donor resource interest.	1000 barrels/day
english_language	**Control**: Binary indicator variable used to control for potential bias in the AidData TUFF methodology. Indicates whether English is the official language of the recipient country.	0 or 1

and 2001 was not available). Table 6 displays the results of four separate regressions: two regressing OECD-DAC aid allocations on the PREG, and two regressing OECD-DAC aid allocations on the ELF. With and without added controls, both PREG and ELF are significant at the 0.01 level and have large effect sizes in all regression models. Additionally, all controls are significant at the .05 level or lower, although the effect sizes are much smaller than either the ELF or the PREG.

Hypotheses 1 and 2

The results of the regressions support Hypotheses 1 and 2. Both China and OECD-DAC member nations give more foreign aid to sub-Saharan African countries which have higher levels of ethnopolitical competition. In the China case, the PREG is a significant determinant of aid allocations at the 0.05 level, and a one unit increase in the adjusted PREG index correlates with an average

Table 3. Descriptive statistics for datasets.

Predictor variable	(1)	(2)	(3)	(4)	(5)
	N	mean	sd	min	max
Trade China (millions 2014 USD)	660	1,323	4,058	0.0199	37,167
Trade OECD-DAC (millions 2014 USD)	660	5952	16,189	30.26	115,636
Trade dependency China (trade world/trade China)	630	7.57	7.15	0.00826	39.3
Trade dependency OECD (trade world/trade OECD)	600	51.1	29.2	3.02	280.8
Oil production (1000 bbl/d)	663	122.2	414.2	-0.318	2,631
GDP per capita (USD)	648	1,917	3,145	111.4	22,742
PREG	570	45.64	19.58	5	80
ELF	570	64.18	25.09	4	93
English language	675	.45	.49	0	1
	(1)	(2)	(3)	(4)	(5)
Outcome variables	N	mean	sd	min	max
Millions 2014 USD donated by China	675	171.4	445.7	0	3,581
Millions 2014 USD donated by OECD-DAC	576	496.95	777.25	2.86	11,754

Table 4. Pairwise correlation values for all variables.

Variable	-1	-2	-3	-4	-5	-6	-7	-8	-9
(1) PREG	1								
(2) ELF	0.49	1							
(3) Oil production	0.19	0.17	1						
(4) GDP per capita	-0.08	-0.04	0.23	1					
(5) English language	0.36	-0.08	0.07	0.13	1				
(6) Trade OECD-DAC	0.17	0.24	0.6	0.34	0.2	1			
(7) Trade dependency OECD	0.01	0.16	0.14	0.12	-0.22	0.12	1		
(8) Trade dependency China	0.09	0.14	0.21	0.08	-0.27	0.13	-0.04	1	
(9) Trade China	0.18	0.19	0.5	0.3	0.03	0.68	-0.02	0.47	1

increase of 2.7 million dollars in China's aid allocation to a specific country in a given year.

Trade and oil production are significant determinants across all models, although their effect sizes are much smaller than the PREG, for both Chinese and OECD-DAC aid. This provides evidence that resource considerations play an important role in both Chinese and OECD-DAC aid allocations, consistent with Dreher et al. (2018). Curiously, although the coefficient on ln (GDP) is negative, it is not significant for Chinese aid (p-value of 0.51 for Chinese aid). This lends further weight to the argument that China's strategic interest trumps the donor's need for foreign aid.

Hypothesis 3

The results from the models lead to a rejection of Hypothesis 3. OECD-DAC aid, like Chinese aid, is highly correlated with the PREG index. For every one unit increase in the PREG index of a recipient country, aggregated OECD aid increases by approximately 9 million dollars per year. Although the OECD-DAC over the observed time period has donated more than double the amount of aid, this coefficient is still more than three times the size of the comparable coefficient for Chinese aid, and it is significant at the .01 level. Part 2 theorized that the OECD-DAC practice of attaching policy conditions to its aid would disrupt the positive feedback loop between donor nations and recipient regimes, de-incentivizing recipient nations from seeking aid from traditional, Western sources, in favor of Chinese aid. Yet instead of being weakened by conditionality, this feedback system appears to have been strengthened.

What could be behind this unexpected behavior? This model of aid allocations relies on two important assumptions: (1) recipient nations will seek to maximize the amount of foreign aid received; and (2) donor nations seek to maximize political capital per dollar donated, above all other considerations. Several factors could

Table 5. Chinese aid flows by year regressed on PREG and ELF

Predictor variable	(1) Millions USD donated	(2) Millions USD donated	(3) Millions USD donated	(4) Millions USD donated
PREG	4.490***		2.701**	
	(1.078)		(1.167)	
ELF		2.847***		1.274
		(0.747)		(0.776)
GDP per capita			-13.49	-18.84
(ln(USD))			(20.86)	(16.97)
Trade			0.0258***	0.0261***
(millions 2014 USD)			(0.00584)	(0.00557)
Trade dependency			4.95	7.23**
(millions 2014 USD)			(3.566)	(3.285)
Oil production			0.138***	0.147***
(1000 bbl/d)			(0.0499)	(0.0469)
English language			-22.44	36.79
			(47.55)	(40.08)
Constant	-2.196	-3.013	75.77	95.17
	(53.53)	(51.48)	(155.1)	(134.8)
Observations	495	570	495	557
R-squared	0.117	0.097	0.231	0.226

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 6. OECD aid flows per year regressed on PREG and ELF.

Predictor variables	(1) Millions USD Donated	(2) Millions USD Donated	(3) Millions USD Donated	(4) Millions USD Donated
PREG	12.25***		10.64***	
	(2.026)		(2.261)	
ELF		8.710***		7.914***
		(1.402)		(1.552)
GDP per capita			-163.7***	-178.7***
(ln(USD))			(42.24)	(33.76)
Trade (OECD)			0.00834**	0.00557*
(millions 2014 USD)			(0.00276)	(0.00253)
Trade dependency (OECD)			-5.391***	-4.391***
			(1.52)	(1.40)
Oil production			0.222**	0.314***
(1000 bbl/d)			(0.105)	(0.0974)
English language			-195.8** (90.79)	20.01 (78.03)
Constant	21.48	-30.41	(1,481)	1,388***
	(100.6)	(96.59)	(312.3)	(259.9)
Observations	429	494	403	457
R-squared	0.106	0.098	0.202	0.214

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

drive sub-Saharan African nations away from seeking Chinese developmental aid. Chief among them are donor credibility concerns. The distribution of foreign aid is more than just the transfer of cash, "aid is about bargaining and diplomacy."[2] Those nations which are able to deliver on their promises of foreign aid are seen as reliable partners. A look at China's unfulfilled foreign aid promises in the Philippines show why China could be perceived as a less reliable partner than its Western counterparts.[3] Similar foregone pledges by China in sub-Saharan Africa show that China can be an unreliable partner in development (Brautigam, 2013).

Hypothesis 4

This article hypothesizes that both China and OECD-DAC countries would donate more towards countries with high PREG indices, not towards countries with high ELF indices. The ELF is not a significant determinant for Chinese aid, but it is a significant determinant at the .01 level for OECD-DAC aid (although its coefficient is substantially smaller). However, because ethnic diversity serves as a prerequisite for competitive ethnic political processes, the ELF and PREG are highly correlated (R^2=0.49). There is a high probability, therefore, that a high-PREG country also has a comparatively high ELF. This provides a rationale for the significance of the ELF in determining OECD-DAC aid and increases the robustness of the comparison between the PREG and ELF for Chinese aid allocations.

The model ignores the preferences of individual donor nations to donate to those recipient countries with which they have preferential relationships (that is, former colonies). These relationships could account for a portion of the unexplained variation in the model and provide a potential rationale for the significance of the ELF among OECD-DAC nations but not China (China was never a colonial power in Africa). France, for example, is well-known for donating heavily to former colonies, "without much regard to other factors, including poverty levels or choice of politico-economic regimes" (Alesina and Dollar, 2000, pp. 34–35) Since the OECD is examined as a monolith, not its individual constituents separately, it is difficult to capture these individual preferences, muddling the results and leading the significance of the ELF for OECD-DAC donations.

Conclusion

This article has empirically shown how the political saliency of ethnicity within a recipient nation can affect foreign aid allocations for both established OECD-DAC donors and China. However what does this mean within the larger discussion surrounding the effectiveness of foreign aid? China does not donate to the most deserving nations, those nations where the marginal aid dollar would have the greatest potential positive impact, but rather to high PREG countries where it can extract the most political capital. While OECD-DAC nations also donate significantly more to high PREG nations, their aid allocations are more oriented towards low-GDP per capita countries, confirming that OECD-DAC member nations at least consider recipient need as a relevant factor

Furthermore, the river of Chinese aid to Africa does not appear to be slowing down. Data from the Johns Hopkins China-Africa Research Initiative indicates that from 2015-2017, China loaned almost fifty-four billion dollars to sub-Saharan Africa. In the short term, a readily available supply of Chinese loans, alongside African leaders eager to use those loans as a means to political ends, as opposed to economic development, has the possibility to load low-GDP countries with large amounts of debt with little possibility of repayment.

Open markets, access to strategic infrastructure, and voting alignment in international institutions are only a few of many political concessions China can derive from recipients of its aid. Domestic investigative journalism in Kenya uncovered that Kenya's Mombasa port had been offered up as collateral for loans for the SGR, and the suspicious timing of changes in Kenya's domestic fish market raises serious concerns that China could leverage its influence on other, more critical sectors (Oruko, 2018). This research carries with it several limitations:

(1) The PREG index is not a time varying index. Although Posner defines the PREG for each decade between 1960 and 2000 to reflect changes in ethnic alliance structure, the PREG does not vary on a year-to-year basis. Ordinarily, this does not pose much of a problem, as ethnic alliances are generally immutable. However the Kenya case proves to be exceptionally difficult because ethnic alliances evolve rapidly, and ethnic groups fade in and out of political relevance.

(2) The regression models fail to consider several relevant variables. They do not use UN votes as a control variable due to time constraints and difficulty consolidating the data into a usable format. Those countries which vote with China a greater percentage of the time in the UN receive more Chinese aid, which could explain part of the variance the model fails to capture.

(3) While the Aid Data dataset is a highly regarded source of information, the results remain limited by the fact that China does not publish information surrounding its foreign aid program. The dataset does not include data from 2016 onward, despite the fact that Chinese loans to Africa have only increased during this time period.[4] Obtaining project-level data between 2016 and

[2] "Analysis | There's Another Big Reason U.S. Foreign Aid Is Important."
[3] "China Hasn't Delivered on Its $24 Billion Philippines Promise."
[4] "Data." Chinese Lonas to Africa.

2020 would substantially increase the number of observations for the regressions and case study analysis, improving the validity of the results.

This research raises several important questions which could be answered using future research:

(1) To what degree does Chinese aid impact corruption in recipient countries? Do Chinese companies bribe in order to secure favorable contracts?
(2) How does Chinese aid compare to Western aid in terms of its capacity to boost local development? Is it more or less effective?
(3) Does the theoretical framework I have advanced here hold true in other parts of the world? Are similarly ethnically diverse countries in Eastern Europe and South Asia susceptible to the same kind of debt trap diplomacy I have showed exists in sub-Saharan Africa?

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

Alden C (2009). China and Africa's Natural Resources: The Challenges and Implications for Development and Governance, Africa Portal. Available at: https://www.africaportal.org/publications/china-and-africas-natural-resources-the-challenges-and-implications-for-development-and-governance/

Alesina A, Dollar D (2000). Who Gives Foreign Aid to Whom and Why? Journal of Economic Growth 5(1):33-63.

Black LD (1968). The Strategy of Foreign Aid. https://www.amazon.com/Strategy-Foreign-Aid-Lloyd-Black/dp/0442007884

Brant P (2013). Chinese Aid in the South Pacific: Linked to Resources? Asian Studies Review 37(2):158-177.

Brautigam D (2013). 'Rubbery Numbers for Chinese Aid to Africa'. China in Africa the Real Story.

Calì M, Te Velde DW (2011). 'Does aid for trade really improve trade performance?. World development 39(5):725-740.

Correia S (2015). Singletons, cluster-robust standard errors and fixed effects: a bad mix Technical Note, Duke University.

Dreher A, Fuchs A, Parks B, Strange AM, Tierney MJ (2018). Apples and Dragon Fruits: The Determinants of Aid and Other Forms of State Financing from China to Africa, p. 184.

Easterly W, Levine R (1997). Africa's Growth Tragedy: Policies and Ethnic Divisions. The Quarterly Journal of Economics 112(4):1203-1250.

Fearon JD (1999). Why ethnic politics and "pork" tend to go together. In an SSRC-MacArthur sponsored conference on "Ethnic Politics and Democratic Stability," University of Chicago.

Fuchs A, Rudyak M (2019). The motives of china's foreign aid. In Handbook on the International Political Economy of China. Edward Elgar Publishing.

Gregoratti C, Åberg J (2010). Chinese Financial Assistance in Angola-Promise, Curse or an Uncertain Venture? p. 103.

Hoeffler A, Outram V (2011). Need, Merit, or Self-Interest-what determines the allocation of aid?. Review of Development Economics 15(2):237-250.

Jansson J (2009) Patterns of Chinese Investment, Aid and Trade in Central Africa (Cameroon, the DRC and Gabon). University of Stellenbosch, Centre for Chinese Studies, Johannesburg, p. 59.

Muchapondwa E, Nielson D, Parks B, Strange AM, Tierney MJ (2016). '"Ground-Truthing" Chinese Development Finance in Africa: Field Evidence from South Africa and Uganda'. The Journal of Development Studies 52(6):780-796.

Oruko MO (2018). China threatens to stop SGR funding after Kenya bans Chinese fish imports, Tuko.co.ke - Kenya news. Available at: https://www.tuko.co.ke/290469-china-threatens-stop-sgr-funding-kenya-bans-chinese-fish-imports.html.

Posner DN (2004). Measuring ethnic fractionalization in Africa. American Journal of Political Science 48(4):849-863.