Without Strings: Chinese Foreign Aid and Regime Stability in Energy Exporting Countries*

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Abstract

The political conditionality of Western aid is often said to have a positive effect in enhancing recipient countries' governance and civil liberties in the post-Cold War era. Recently, however, developing countries are experiencing a surge in foreign aid by the Chinese government as this rising economic giant seeks to secure a stable energy supply to fuel its domestic growth machine. Yet, unlike Western aid, China's aid often comes with little, it any, political preconditions. Thus, by reducing recipients' reliance on Western aid, China's aid may plausibly undermine the alleged democracy-promotion effect of Western aid. Contrary to widely received claim that China is using its aid to bolster authoritarianism in developing countries, we argue in this paper that China's aid allocation is primarily motivated by its growing energy need and it tends to allocate aid to recipients with significant energy resource sector. Building on this claim, we further contend that China's aid tends to enhance the authoritarian tendency of recipients whose economies rely heavily on energy resource export. We test the empirical implications of these hypotheses with recently available China's foreign aid data. Our seemingly unrelated regression (SUR) analysis distinguishes the energy development-dominated China's aid flow pattern from democracy promotion-oriented Western aid. We then probe more substantively the political effect of China's aid on recipients' democracy-conditional on the size of recipients' energy resource sectors-using treatment effects model, the results supports our hypothesis that China's aid tends to attenuate the positive democracy promotion effect of Western aid, particularly in recipient countries with significant resource sector.

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1 Introduction

Does Chinese foreign aid promote authoritarianism? Every year, the the United States and other Western donors transfer millions of dollars to developing countries in the form of foreign aid to assisst economic development and improve gonvernance. Often attached to these funds are a number of political preconditions aimed at encouraging democratization through securing and expanding protections of human rights, civil liberites, and accountability/transparancy. In the post-Cold War era, these stipulations have been a hallmark of foreign aid. While scholarly consensus on the matter remains elusive, it is often argued that Western aid has a positive effect in enhancing governance and civil liberty in recipient countries (Dunning, 2004; Goldsmith, 2001). Recently, however, developing countries are experiencing a surge in in foreign aid by the Chinese government. Within the past decade, China has become one of the largest providers of foreign aid to the developing world. Notably, unlike its Western counterparts, China's aid allocations usually come without any political preconditions. As some policymakers have noted, the influx of China's aid to developing countries may hinder the ability of Western aid to enhance democratization in these regions (see, *e.g.*, Lum et al. (2009), Wolf, Wang and Warner (2013)). To date, practically no rigorous evidence has been produced to address and substantiate this claim. It is crucial that this question be investigated via rigorous empirical methods. The research presented here does that by testing whether the increase in China's foreign aid to developing countries reduced the effectiveness of Western aid.

In this paper, we survey a variety of published sources to analyze the institutional structure of China's aid system, We identify the determinants of China's recent foreign aid and government-sponsored investment activities (FAGIA) to recipient countries. Drawing upon previous research, we derive number of testable hypotheses are derived and the impact of China's FAGIA on the alleged conditionality effect of Western aid in recipient countries are assessed statistically. Specifically, we contend that the motivations behind China's aid allocations differ from those of the West and that China's aid allocation pattern tends to enhance the authoritarian tendency of recipients whose economies rely heavily on energy resources export (i.e., countries that are "resource-dependent"), which therefore undermines the democracy-promotion efforts by Western donors.

Our analysis shows that the symbiotic resource development-infrastructure aid allocation pattern often associated with China's aid supports the claim that China's recent FAGIA were driven largely by economic motivations—particularly energy resources acquisition. Building on this hypothesized link between China's aid and recipients' resource-dependence profile and the received wisdom on the authoritarian tendency of rentier states, we further argue that by providing an alternative source of aid free from political preconditions, China's aid makes recipient countries less willing to comply with the conditionalities imposed by-Western donors to improve governance through political reforms and ultimately reinforces recipients'authoritarian political institutions. Thus, one might expect China's aid to reduce the incidence of democratic reforms or backsliding in local democratic governance and civil liberties in recipient countries, and this effect will tend to be more observable in recipients with high resource-dependence economic profile.

Employing newly available data on Chinese foreign aid from the AidData, we use use a variety of statistical models to assess the emprical implications of our claim. We first use a seemingly unrelated regression (SUR) to identify the unique determinants of Western aid provision with China's. Buidling on the identification of these aid flow pattenrs, we then test if the presence of Chinese aid reduces the positive conditionality effect of Western aid in recipient countries—especially those with abudant energy resource reserves. For this, we utilize an endogeneous treatment effects model. Our analysis shows that after takng into account the endogeneous link between China's aid and recipients' (energy) resource-dependence economic profile, an increase in China's aid not only accentuates recipients' resource-dependence, but it also translates into a negative effect on recipinets' political institutions that offsets the alleged conditionality effect of Western aid.

The contribution of this research goes considerably beyond documenting patterns in Chinese aid. We provide a new theoretical insight into how the resource aquisition motivation behind China's aid allocations can plausibly hinder the effectiveness of democracy-promotion efforts by Western donors. By elucidating this mechanism and rigorously testing its implications, we offer a novel set of findings to what is an ongoing debate over the provision of foreign aid.

2 The Politics of Foreign Aid: Patterns, Determinants, and Political Consequences

In the contemporary era, aid is generally understood as, according to former USAID official Carol Lancaster, "a voluntary transfer of public resources, from a government to another independent government, to an NGO, or to an international organization (such as the World Bank or the UN Development Program) with at least a 25 percent grant element, one goal of which is to better the human condition in the country receiving the aid." Lancaster (2006, 7). Similarly, a majority of development organizations assess aid performance under the blanket term Official Development Assistance (ODA) and define it as "those flows to developing countries and multilateral institutions provided by official agencies, including state and local governments, or by their executive agencies, ..., it is administered with the promotion of the economic development and welfare of developing countries as its main objective,... , it is concessional in character and contains a grant element of at least 25 %."[1] Note that both definitions look at the allocation of aid from the perspective of governments and emphasize the "voluntary" and "benevolent" aspects of this type of resource transfer, closely align with the pro-development theme of the United Nations Millennium Development Goals and sim-

[1] OECD Official Development Assistance - definition and coverage. http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm.

ilar initiatives advocated by other international organizations.

The donor-recipient link underlying the assistance relationship has changed and evolved over time. Notwithstanding the long and convoluted post-War history of foreign aid, recent emphasis on voluntary and benevolent aspects of aid turns out to be the exception rather than the rule. Notably, due largely to the fact that the resources that constitute aid come from the donation of national governments, the allocation and the use of aid must, in part, address donor governments' strategic and national interests (Schraeder, Hook and Taylor, 1998). In fact, this is the essence of foreign aid politics during the Cold War era: foreign aid was used as an instrument of foreign policy.

2.1 Foreign Aid and Political Development

The operational practices and attitudes of donor countries have changed dramatically since the end of the Cold War. First, more political stipulations are being attached to the disbursement of development aid (Carothers and de Gramont, 2013), reflecting shifts in the attitudes among donors regarding the importance of democracy, human rights performance, and good governance (Crawford, 2001). Beginning in 1990, the British government first stipulated that the role of political freedom to be essential for greater economic and social progress in Africa, this pro-democracy spirit was soon reiterated by USAID's statement that progress toward democratization would be the primary aid allocation consideration (Nelson and Eglinton, 1992). By the mid-90s, the use of political conditionalities in aid allocation has become the modus operandi of major international aid organizations, such as the World Bank (1991) and the DAC of OECD (1993). This attitudinal change has made discernible impact on the effectiveness of aid. Indeed, Dunning (2004) presents empirical evidence showing that in the post-Cold War period, the political conditionality effect of Western aid on democratic institution building in Sub-Saharan countries has increased. This finding is matched by Resnick's ((2012)) evaluation of aid effectiveness in Africa - the leverage of aid increases due to more political conditionalities being attached to development aid.

In addition to the incorporation of conditionalities, another salient change in foreign aid practices concerns the channel through which aid is distributed. Because the promotion of grander objectives, such as democracy and economic development, requires more consistent and consolidated efforts by donors, interational agreements have been struck to facillitate coordination among donors to harmonize their assistance programs and engage recipient countries through multilateralism.[2] In addition, with the rise of emerging donors, DAC has launched a series of outreach strategies beginning in 2005 to foster dialogue and cooperation with non-DAC donors, including the establishment of China-DAC study group in 2008 to facilitate mutual learning on poverty reduction.

If the changing attitude and practices in international aid community have successfully prioritized "political conditionality" in aid allocation consideration and increased multilateral engagement in aid delivery, one should expect aid to be more effective at promoting "good policies" in recipient countries. Yet, the existing empirical evidence on this matter is inconclusive. Goldsmith (2001), for instance, engages this question using statistical analysis of data on ODA to Africa in the period 1975-97. His findings dispel the notion that foreign aid undermines institutional capacity of African states and suggests that aid does improve African states' ability to govern. Finkel, nán and Seligson (2007) and Scott and Steele (2011) distinguish the effects of aid programs that target specifically at promoting democracy from those of overall foreign assistance, and conclude that U.S. democracy assistance programs did have a positive effect on democracy promotion in recipient countries. In line with the optimism exhibited in the political conditionality claim, several analysts also present statistical evidences linking the conditionalities of aid to good policy performance with distinct

2 Examples include the Paris Declaration on aid effectiveness (2005) and the Accra Agenda for Action (2008). However, (Gibson et al., 2005) suggests that, because of coordination problem in aid supervision, the presence of multiple donors increases the recipient government's negotiation power and the incidence of corruption. By the same vein, Acharya, de Lima and Moore (2006, 7) makes a parallel claim: "[T]he more donors there are, the easier it is to assume or assert that the lack of development progress is someone else's fault".

causal mechanisms. Collier and Dollar (2001, 2002) show that the impact of aid varies significantly with good policy performance measured by specific evaluation formula.[3] Others look at how the threat of withholding aid as a punishment for non-democratic actions can induce desired political changes in recipient countries. They find that aid is negatively associated with the incidences of political terror and electoral fraud (Hyde and Boulding, 2008) and the passing of United Nations Commission on Human Rights (UNCHR) resolution reduces multilateral (but not bilateral) aid allocation to countries that committed blatant human rights violations (Lebovic and Voeten, 2009).

Despite the evidence that has so far been marshaled supporting the idea that foreign aid promotes democratization, other research calls into question the positive effect of aid (see, *e.g.*, Rajan and Subramanian (2011)). A majority of this research traces the failure of aid to weak political institutions. Because aid, as a form of public resources, is transferred from donors to the fiscal coffers of recipient countries, it replaces the need for taxation (Rajan and Subramanian, 2011) and generates a perverse incentive for recipient governments to engage in economic and political reforms necessary to deliver good policies (Bauer, 2000; Bräutigam and Knack, 2004; Knack, 2004).[4] Extending from this line of analysis, Djankov et al. (2008) present finding that supports the idea that the "windfall" nature of aid produces a negative effect on democracy in recipient countries. van de Walle (2001), Bueno de Mesquita and Smith (2007), Smith (2008), Morrison (2009), and Wright (2007) press the issue of aid "curse" further, their analyses highlight the mechanisms by which political leaders exploit aid as private largesse to purchase political support from their core supporters and explain why aid provides a disincentive for authoritarian countries to democratize. Others examine the economic consequences of aid, arguing that aid tends to crowd out the share of manufacturing sector in GDP (Rajan and Subramanian ibid; Arellano et al. (2009)), reduce growth

3 More specifically, they argue that the impact of aid varies with indicators measured by World Bank's Country Policy and Institutional Assessment (CPIA) index, underscoring their claim that aid allocation rule does matter.

4 Take Somalia for example, where aid constitutes almost 70 percent of its budget (Coyne, 2008), this high aid-dependency makes the implementation of any substantive economic and political changes difficult.

rate (Moyo, 2009), and thus hinder market-oriented reforms (Heckelman and Knack, 2008).

If it is weak political institutions that leads to bad management of aid, as suggested previously, one might expect aid to be more likely to promote good policy where recipient countries are more institutionalized. In fact, this hypothesis is the foundation of a large body of literature that purports to address the endogeneity issue in aid allocation. Analysts argue that aid tends only to promote growth (Burnside and Dollar, 2000; Svensson, 2003; Armah and Nelson, 2008) and fiscal reforms (Montinola, 2008) in recipient countries having higher degrees of political institutionalization and civil liberties.[5] Similarly, Alesina and Dollar (2000) and Nielsen and Nielson (2010) show that donors allocate more aid to countries with good governance or are on their ways toward democratization (such as nowadays' Myanmar); Garriga and Phillips (2013) further add that because aid signals donors' trust in recipient countries' political fundamental, it helps to attract more foreign investment that further boosts growth and draws more aid, making the relationships between aid, foreign investment, and growth endogenous.

More recently, the literature began to examine more closely the differing impact of aid on political regimes of recipient countries. Kono and Montinola (2009) and Dutta, Leeson and Williamson (2013) find that the political effect of aid can cut both ways: it can give donors substantial influence over democratic recipients but can also make authoritarian recipients more autocratic by giving them free resources against future negative shocks, that is, aid amplifies recipients' existing political institutions. Meanwhile, as more non-Western countries gradually emerge as important donors of development aid, analysts also noticed that interests peculiar to these emerging donors may produce effects that run counter to the hypothesized positive political effect of Western aid. For example, Arab solidarity is identified by Neumayer (2003) as an important determinant of Arab aid to Arab, Islamic and Sub-Saharan African countries. Bermeo (2011) finds that, contrary to the received wisdom that aid from democratic donors promotes democracy, aid from authoritarian donors-particularly

[5] Also see "The Role of Foreign Aid in Economic Development" (Statement of Cindy Williams before the Subcommittee on African Affairs, Senate Committee on Foreign Relations (May 1st 1996)).

oil-rich authoritarian regimes (such as Venezuela)-exhibits a negative relationship with democratization. In sum, these new empirical evidences suggest not only that the political impact of aid differs in democratic and authoritarian recipients, but also the source of aid matters, with donors' preferences regarding democracy helping to determine the link between aid and democratization in recipient countries.

While this body of research helps clarify some of the potential ways by which aid promotes (or hinders) democratization in recipient countries, our understanding of the relationship between Western aid and democracy remains nebulous at best because it does not account for the greater context in which aid occurs. The next section briefly introduces China's policies and its own definition of foreign aid, describe the scope of China's FAGIA and analyze its recent trend; finally, we lay out our hypotheses on the political effects of China's FAGIA and discuss their observable implications.

3 China's FAGIA: Scope, recent trends, and democratization in recipient countries

The transformation of China as the biggest borrower in International Development Association (IDA; the World Bank's fund for concessional loans and grants to the world's poorest countries) in 1991 to now a net donor of bilateral/multilateral aid[6] is hailed as one of the most salient developments in the field of ODA.[7] According to *China Foreign Aid White Paper* (State Council, 2011) released by the State Council of the People's Republic of China (hereafter "State Council"), by the end of 2009, the overall number of countries and interna-

[6] Some may find it inappropriate to refer to China as a net donor instead of an emerging donor; yet, Kobayashi (2008, 7) put it succinctly, "[I]t is more apt to realize that China is no longer the emerging donor overreaching its stature and that it has reemerged as a donor that has accumulated experience and adequate resources to make use of foreign aid as an instrument for achieving its national policy objectives to the maximum extent."

[7] China graduated from its IDA debtor position in 1999 and eventually became a donor in 2007.

tional/regional organizations that have regularly received aid from China has expanded to 161 and 30, respectively, including 123 developing countries (State Council, 2011, IV), with grants, interest-free and concessional loans totaling RMB ¥ 256.29 billion (State Council, 2011, II). The geographical distribution of China's aid, according to the *White Paper*, shows a "comparatively even coverage".

China's FAGIA take many forms. According to the *White Paper*, China's FAGIA can be classified into the following categories:

- Complete Projects: Civil projects (bridges, stadium, government-run factories, etc.) planned, financed, and constructed in recipient countries by Chinese actors, which are a major form of China's foreign aid (State Council, 2011, III).
- Goods and Materials: Goods and materials (*e.g.*, vehicles, equipment, etc.) necessary for the completion of aid projects and financed/provided by China.
- Technical Cooperation: Chinese experts provide on-site training and advice.
- Human Resource Development Cooperation: Research, training, and education programs run by Chinese teams through multilateral or bilateral channels.
- Chinese Medical Teams Working Abroad.
- Emergency Humanitarian Aid: Materials or cash for emergency relief or dispatched relief personnel of its own accord or at the victim country's request.
- Overseas Volunteer Programs: China volunteers dispatched to developing countries to serve the local people in education, medical and health care and some other social sectors.
- Debt Relief: China cancels the mature governmental debts of some developing countries that they owe China.

The above FAGIA are financed through three forms: grants, interest-free loans, or concessional loans. That said, it is important to note that, unlike common Western aid practices, grants, interest-free loans, and concessional loans are financed through different channels within China's aid systems. Grants and interest-free loans are provided by China's state finance: grants are provided for medium and small projects with a social focus, while interest-free loans are used mainly for the construction of public facilities (State Council, 2011, II)[8]. On the other hand, concessional loans are provided by the Export-Import Bank of China (hereafter, the "EXIM bank") to finance projects having "good social benefits"[9] and are made at subsidized rate by China's Ministry of Finance.[10] Recipients of China's concessional loans are requested to source at least half of procurement from Chinese firms for contracted projects; that is, Chinese loans came as export credits and are tied to Chinese goods and services[11] (which would otherwise be classified as Other Official Flows (OOF) by OECD's definition instead of ODA Bräutigam (2011, 761)). These financing requirements have important bearing on explaining the motivations behind China's aid activities for reasons that will be clear in a moment. In addition, China also includes military assistance, subsidized loans for joint-venture and cooperative projects as part of aid[12], which are not included in DAC member statistics.

Like its Western counterparts, the history of China's foreign aid owes it lineage to the bipolar system of the Cold War. Most of China's current foreign aid policy guidelines and practices can find their direct references in some Cold War-era policy statements and principles (though they are not consistent over time[13]), most notably the *Eight Principles for Economic Aid and Technical Assistance to Other Countries* (1964)[14] : (1) equality and mutual benefit; (2) respect for sovereignty with no conditions attached; (3) aid be financed through interest-free or low interest loans; (4) promotes self-reliance, not dependency; (5) quick results; (6) domestic sources-compliant (procurement preference given

8 Also see Cheng, Fand and Lien (2012)

9 See EXIM Bank (2009) Chinese Government Concessional Loan and Preferential Export Buyer's Credit. http://english.EXIMbank.gov.cn/businessarticle/activities/loan/200905/9398_1.html.

10 That is, if the actual cost of the funds (to the EXIM bank) exceed the fixed rate at which the loads were made, then the Ministry of Finance subsides the rate to make up the difference. However, in many projects, concessional loans are made at London Interbank Offered Rate (LIBOR)-a market rate-plus some margins, see Institute of Developing Economies, "The Role of China's Financial Institutions". http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_11.html.

11 As Bräutigam (2010*a*, 38) put it, "the Chinese almost never transfer any actual money through their loans, and only rarely give aid as cash grants". Also, see Hubbard (2007).

12 See Bräutigam (2011, 56) and Grimm et al. (2011, 7).

13 See, for example, Kobayashi (2008) and Bräutigam (2010*a*). In fact, China has had its aid programs since the 1950s, and Egypt was the first African recipient of Chinese aid in 1956 Bräutigam (2010*a*, 7).

14 State Council (2011), *Eight Principles for Economic Aid and Technical Assistance to Other Countries*. http://english.gov.cn/official/2011-04/21/content_1849913_10.htm (Date accessed: Feb. 25th, 2014). The *Eight Principles* is attached as appendix in the *White Paper*.

to Chinese-produced/made materials and equipment); (7) technology transferred through technical assistance; (8) no special privileges for Chinese experts. At first blush, China's foreign aid guidelines largely parallel those enshrined in most national and international donor organizations. For example, the provision of interest?free or low interest loans corresponds to DAC's and IMF's definition for concessional loans/debt[15]; principle (1), (4), and (7) echo the pro-development theme of U.N.'s Millennium Development Goals; finally, domestic content/sources-preference also applies to the procurement policy of USAID[16] and international aid agencies of other countries for their contracts in recipient countries. In these respects, China's practices are not markedly different from their Western counterparts. Yet, the principle of non-interference clearly reveals an aura of "no strings attached" that distinguishes China's aid decisions and practices from those of Western donors who stress that political stipulations should be tied to aid allocation.

This divergence in this important aspect of aid allocation considerations can have important political implications for democratization in recipient countries although, as we will discuss shortly, blocking democratic reforms may not be the underlying motivation behind China's aid allocation. In order to probe the political effect of China's aid, it is necessary to identify the motivations of China's present aid activities and a useful way to approach this is to look at the decision-making structure of Chinese aid system within the context of its aid principles discussed above.

Like nearly all aid-giving governments, China's aid is instrumental to its foreign policy in pursuit of its political and strategic interests-discouraging governments from offering diplomatic recognition of Taiwan, bolstering international support for China's policies, and building a congenial relationship with other countries (particularly developing countries) to promote mutually-beneficial development. A number of cases have been made linking the

15 OECD glossary of statistical terms: Concessional loans. http://stats.oecd.org/glossary/detail.asp?ID=5901. IMF definition for concessional debt. https://www.imf.org/External/NP/sta/bop/pdf/bopteg29.pdf.

16 22 C.F.R. § 228.

variation in China's aid behaviors to "One China Policy"[17] (*i.e.*, the Taiwan issue): China suspended aid immediately after recipients established diplomatic ties with Taiwan (*e.g.*, Burkina Faso (1994), Gambia (1995) Säo Tomé and Príncipe (1997)) and had invoked its veto on the extension of United Nations' peacekeeping operation in Macedonia (U.N. Security Council veto S/PV.3982) after the country recognized Taiwan. In effect, this may be the only political conditionality attached to China's aid-a reference to this point is stated explicitly in China's African Policy (2006, III). However, as the balance of power in the China-Taiwan rivalry has shifted decisively toward China in recent years, this irredentist claim may have become more of a symbolic than strategic motivation. On the other hand, creating a friendly international environment for its ever-increasing economic, military, and diplomatic presence worldwide and, more imperatively, securing the supply of raw materials from developing countries to fuel the growth machine that provides the dynamics to China's global outreach may well be a more pressing strategic motivation for China's present aid activities.

At least since the mid-1960s, China has been a staunch advocate of the principle of self-reliance and emphasizing the principle of mutual benefit in its engagement in developing countries. The abrupt withdraw of aid from the Soviet Union drove home the ominous sign of aid-dependence and pushed China toward seeking cooperation with other developing countries for the pursuit of mutual development. The fact that the *White Paper* starts with the sentence "China is a developing country" with "equality and mutual benefit" listed as the first *Eight Principles* are clear indications of this Cold War heritage. Yet, the emphasis on promoting mutual benefit through aid connotes a sense a *quid pro quo* in China's aid allocation[18]: aid should not only promote recipients' development but it should also bene-

17 One China Policy refers to the principle that Taiwan and mainland China are both inalienable parts of a single China and as a policy, this implies the prohibition of mutual recognition of both People's Republic of China and the Republic of China (Taiwan) with the former as the only legitimate government of China.

18 According to Grimm et al. (2011, 4), China was initially reluctant to use the term "aid" as such, as it is an innuendo of some asymmetrical power relations instead of South-South cooperation that China intends to advocate. Another "moral" reason is that because China itself is a developing country with potentially high level of inequality between income strata and across regions, giving aid to other countries despite the high needs for development finances at home could make aid a sensitive issue.

fit China's interests. While the Chinese government still largely abides by the principle of working with aid recipients on an equal basis as a fellow "developing country," one is hard-pressed to believe China's interests and other motivations have not evolved along with China's astonishing economic development as well as the changing domestic and international environments.

Kobayashi's (2008) assessment of China overseas investment data released by China's Ministry of Commerce (MOFCOM) lends some initial empirical supports to this conjecture. Contrary to the claim that the geographic distribution of China's aid exhibits a "comparatively even coverage," Kobayashi finds that "China's foreign economic cooperation, which includes part of aid (believed to be complete plant projects and technical cooperation), is concentrated in Africa and Asia. Its targets are neighboring Asian countries sharing borders with China and resource-rich African countries" (Kobayashi, 2008, 32-3). For that matter, according to the statistics given in the White Paper, Africa accounts for nearly half (45.7%) of China's aid allocated in 2009 (51 countries overall)[19], followed by Asia (32.8%, 30 countries) and Latin America and the Caribbean (12.7%, 18 countries). Viewing these trends from a longitudinal and comparative perspective, Kobayashi's finding and the official statistics supplied by the White Paper are matched by recent LexisNexis search by Wolf, Wang and Warner's (2013) reveals that in the years 2001 to 2011, China's worldwide pledged aid increased from US $1.7 billion to $189 billion, and 71% of which were pledged between 2009 and 2011, marking the most dramatic increase in this period; in terms of the composition of aid projects, projects related to natural resources development (including energy resources (*e.g.*, oil, gas, and coal) and mining of minerals and metals) and infrastructures (roads, ports, power plants) account for 42% and 40% of total aid pledged. Finally, with regard to geographic distribution, Latin America received the largest amount of aid of any region covered in Wolf et al.'s study driven mainly by natural resource investment

19 It should be noted that China does not differentiate between Sub-Saharan Africa and Northern Africa in their foreign aid data. See See "Chinaï£¡s Growing Role in Africa: Implications for U.S. Policy" (Statement by David H. Shinn before the Subcommittee on African Affairs, Senate Committee on Foreign Relations. Nov. 1st 2011)).

programs funded by China's three largest national oil companies,[20] followed by Africa-a region where China has the longest and most extensive engagement[21]-in which oil was the largest resources by both program size[22] and frequency, with infrastructure development programs growing fastest in recent years.[23] It is worth noting that although Central Asia (a region well-endowed with energy and mineral resources) received comparatively minuscule amount of aid, "most assistance to this region was offered to fund oil, natural gas, and mining projects" and the absolute amount of aid or joint-venture programs allocated to natural resources development and related infrastructure projects has increased significantly as a result of China's increasing multilateral trade with this region facilitated by Shanghai Cooperation Organization Wolf, Wang and Warner (2013, 40-2).[24] Overall, these statistics

20 They are China Petroleum & Chemical Corporation (SINOPEC), China National Offshore Oil Corporation (CNOOC), and China National Petroleum Corporation (CNPC). Using a structured comparison of four Peruvian mines with foreign ownership, Kotschwar, Moran and Muir (2012) of Peterson Institute examines China's natural resources-related investment projects in Latin America and finds that China's investments and procurement arrangements have become more diversified and made more competitive Latin America's natural resources market. In addition, one of Kotschwar et al.'s case studies also reveals a change in Chinese investor behavior before and after the Fujimori regime in Peru, suggesting that foreign investment may be associated with certain human rights practices conditional on host countries' political regimes. China's state-run Shougang Group acquired Peru's state-owned Hierro Peru (Marcona) mine in 1992, since then labor relations and environment infractions have always troubled the company's business management; also, it was also reported that the company imported Chinese workers to displace local workers. However, the company has improved its compliance since the post-Fujimori political transition.

21 Bräutigam (2009).

22 This is corroborated by Foster et al. (2009) estimation using the new World Bank-PPIAF Chinese Projects Database (based on information comprised of press release), they find that Chinese infrastructure finance commitments to sub-Saharan Africa totalled $16 billion from 2001-2007 (Foster et al., 2009, 47). Most loans were used to finance projects fall in the categories of power (mainly hydropower), transport (mainly railroads), and information and communications technology, where traditional donors allocate least assistance. Also, in terms of natural resources commitments and power and transport commitments, Nigeria (48% and 40%, respectively) and Angola (23% and 15%, respectively) received most investment and finance commitments.

23 Wolf et al. notes that from 2005 to 2009, pledged and delivered infrastructure disbursements to Africa accounted for almost 80 percent of China's worldwide FAGIA infrastructure projects.

24 Personal conversation with USAID official (official 1) to Kazakhstan via Skype on Dec. 16th, 2013. Interviews with returned Peach Corps Volunteers to Turkmenistan (Subject 1, interviewed on May 25th, 2013) and Kazakhstan (Subject 2, interviewed on June 2nd, 2013), both indicated they have observed CNOOC's and SINOPEC's corporate logos in these two countries, both claims were later confirmed by our Google search. According to Stein (2011), the Kazakhstan-China oil pipeline-a joint venture project between CNPC and KazTransOil-linking Kumbol oilfield in Western Kazakhstan with the city of Alashankou (China) has begun delivering oil to China in 2012. Furthermore, Chinese companies' extensive involvements in Kazakhstan's mining industries (including copper, uranium, and gold mines) has received broader media attention due to the occurrence of a series of protests in various minefields in 2011 (personal conversation with participants at "Debating Social Issues and Civil Societies in Kazakhstan" forum

point to a clear pattern: much of China's aid is allocated to resources-rich countries (especially countries well-endowed with energy resources) centered around Latin America and, particularly, Sub-Saharan region rather than developing countries in general.

Crucially, the affinity between natural resources-related projects and infrastructures in geographic distribution of China's FAGIA reflects the complementarity between natural resources development and transportation. This complementarity is suggested by Wolf et al.'s trend analysis, "infrastructure projects predominated in the first half of the 2001-2011 period, thereby paving the way for subsequent projects to focus on natural resource development, which predominated in the second half of the period" (Wolf, Wang and Warner, 2013, 23). It comes as no surprise that many of Chinese-financed railroad and runway projects are adjacent to major mining sites in recipient countries. For example, the US $7.5 billion Tinaco-Anaco railway line that Venezuela contracted to China (in 2009) is expected to benefit industrial activities along Orinoco oil belt; the Chinese-financed railway construction in Zambia (where copper constitutes 40% of the country's GDP and 95% of its exports) linking Zambia's copperbelt to the Tanzanian port of Dar es Salaam; finally, among all Sino-Iranian bilateral agreements signed in 2011, US $13 billion were contracted for the construction of eight railway lines and an addition $12 billion for oilfield development.[25] These empirical evidences further reinforce our conjecture that natural resources development may have become a more important determinant of China's aid allocation, which dovetails nicely with the conclusion drawn from the CRS report by Lum et al. (2009) cited in the beginning of the introduction section suggesting that China's aid to Africa and Latin American is motivated mainly by the extraction of natural resources.

The reason for this symbiotic natural resources-infrastructure aid allocation pattern may have to do with the institutional structure of China's aid delivery system, mostly prominently the relationships among the Ministry of Commerce of the People's Republic of China

held by Central Asia Program of IERES, George Washington University, Nov. 18th 2013).

25 For a list of Chinese-financed infrastructure projects and their geographic distribution, see Facts and Details (2012) Africa and China: Foreign Aid, Projects, Supporters and Critics. http://factsanddetails.com/china/cat8/sub52/item2874.html. Also, see Wolf, Wang and Warner (2013).

(hereafter "MOFCOM"), The Department of Foreign Aid (hereafter "DFA"), and the EXIM bank. MOFCOM, established in 2003, is in charge of all domestic and foreign trade, external economic cooperation, and foreign investment. DFA is the primary executive branch under MOFCOM responsible for the implementation of aid policy, policy planning, developing aid measures and evaluation, and the supervision of aid implementation; DFA therefore serves as a window for coordinating affairs pertaining to external aid with relevant domestic and foreign actors.[26] Finally, the EXIM bank is China's main policy bank is subject to the supervision of MOFCOM and the People's Bank of China.

Because MOFCOM has responsibilities over international economic activities, the fact that both DFA and the EXIM bank are affiliated under MOFCOM suggests the possibility that many of China's FAGIA are driven by economic motivations, particularly on the aspects of trade-promotion and overseas investment that have become China's recent fascination in international engagement. According to a study by United Nations Economic Commission for Latin America and the Caribbean (ECLAC, 2010), judging by current China-Latin America import-export growth trend, China is expected to displace the EU as the second-largest economic partner (after the U.S.) in 2016; meanwhile, "China has become Africa's largest trade partner, and Africa is now China's major import source, second largest overseas construction project contract market, and fourth largest investment destination" (China-Africa Economic and Trade Cooperation 2013)[27]. These materials facts reveal a tinge of mercantilism in China's FAGIA, as argued by Wang and Bio-Tchané, "[But] on the basis of the information available, it appears that China has played a variety of roles in Africa-trading partner, donor, financier and investor, and contractor and builder. The data also show that trade, investment, and other commercial activities combined have outpaced official devel-

26 For a more detailed discussion on the institutional structure and communication and coordination mechanism with China's aid system, see Kobayashi (2008).

27 Xinhuanet.com (2013), China-Africa Economic and Trade Cooperation (2013). http://news.xinhuanet.com/english/china/2013-08/29/c_132673093.htm. Also, see OECD Factbook 2011-2012: Economic, Environmental and Social Statistics, based on the calculation from UN ComTrade data, China overtook the U.S. as leading trading partner to Africa in 2009. http://www.oecd-ilibrary.org/sites/factbook-2011-en/04/01/05/index.html?itemId=/content/chapter/factbook-2011-37-en.

opment assistance (ODA) and become dominant in financial terms" (Wang and Bio-Tchané, 2008, 45).

Given these patterns in aid allocation, how does China's FAGIA influence recipients' political regimes? Current academic consensus presents a mixed view on the political effects of China's aid. In line with the institutional capacity and political conditionality argument elucidated in the previous section, some scholars (Naím, 2007; McCormick, 2008) are concerned that the relative lack of political conditionality consideration in China's aid allocation might cause aid be given to recipients that do not possess the institutional capacity necessary to deliver good policy outcomes. The image of China as an authoritarian financier egregiously supporting dictators in weak and fragile states to block democratic change is imprinted in many contemporary cases (Diamond, 2008; Koesel and Bunce, 2013). In African states of Angola and Sudan, China's generous and yet timely offer of US $2 billion worth of oil-for-loan deal undermined the IMF's effort to use conditionality to induce reforms in Angola, and China turned a blind eye to the atrocities in Darfur while continuing to invest in oil and natural gas pipelines in Sudan; in Myanmar, China's unwavering economic and military aid-including its recent investment in the Sino-Burma pipelines[28]-is said to have helped prop up the SPDC military regime. These negative views have led Naím to dub aid from nondemocratic regimes like China as "rogue aid" and question if such aid promotes anything other than these rogues' own interests.

However, there is also evidence that refutes these claims or points to the positive aspects of China's aid. First, Dreher and Fuchs (2011) statistical analysis finds that, at least in the time period (1956-2006) covered in their study, China's aid allocation seems to be relatively independent of political regimes in recipient countries though they also find no significant association between natural resource endowments and China's aid allocation. On the positive side, a number of scholars have also acknowledged the indispensable role of China's aid in financing infrastructure projects (Foster et al., 2009) and promoting private sector

28 Aung Shin, “Contested Sino-Myanmar oil pipeline nears completion." *Myanmar Times*, Nov. 17th 2013 (Accessed March. 2nd 2013).

growth (Wang, 2007) in Africa, Davies et al. (2008) note that China "mutual respect" approach in aid allocation tends to the development needs of many "smaller African countries with relatively little economic or political significance" (Davies et al., 2008, 5). Bräutigam (various studies), in particular, argues that the large lines of credit offered through China's concessional loads by the EXIM bank is pivotal to Chinese-financed telecoms, fixed line, and wireless projects[29] in Sub-Saharan Africa and at least a dozen industrial and export processing zones spanning across the MENA region, a crucial aspect of "development" that is often ignored by traditional donors; in fact, Bräutigam adds that "they (the Chinese) are interested in every sector of our (Africa's) economy".[30] The clear contradiction between the negative views of democratic backsliding associated with China's aid imprinted in occasional news reports and the positive findings of sectoral growth in some particular areas voiced by country specialists might provoke our skepticism about either the authenticity of these news sources or the validity of the measures and causal mechanisms raised by these country specialists. On the other hand, the apparent boom in natural resources, infrastructures, and transportation sectors of recipient countries and the observed negative political outcomes in these countries might also raise our concern that China's FAGIA are indeed driven by economic motivations and that this aid allocation pattern can help explain the negative political outcomes (or the lack thereof) across recipient countries.

In line with most analysts on this topic, our argument therefore builds, in part, on the relationship of foreign aid *to* recipients' political outcomes. However, we depart from much of existing literature by distinguishing the factors that significantly determine the allocation of China's aid from those that draw Western aid and, based on these causal mechanisms, we focus specifically on the political effect of China's aid on recipients' democratic governance. Drawing on the perverse political effect of aid elaborated by previous analysts, who have

29 Most notably, by ZTE and Huawei, two of China's largest telecoms companies. This part of the discussion benefits from one of the author's (Huan-Kai Tseng) conversation with a former D-Link sales representative (Asia Pacific region) in Rosslyn, Virginia (Oct. 21st 2011).

30 Deborah Bräutigam, "China in Africa: Think again." *World Financial Review*. http://www.worldfinancialreview.com/?p=197 (Date accessed: Feb. 28).

argued that because aid, as a windfall income, marginally reduces the need for taxation and endows rulers with additional financial and material resources to court political support from the populace, aid thus constitutes a disincentive for rulers to engage in meaningful democratic and economic reforms *when there are no conditionalities attached*. By displacing the fiscal need of rulers to promote economic growth as a means to augment their tax bases, aid allegedly obviates the need to implement economic reforms necessary to bring about economic growth; yet, when aid comes with no conditionalities attached, aid not only makes rulers less willing to initiate reforms but also increases their incentives to exploit this windfall income to strengthen their political power. Advocates of the conditionality effect of aid have apparently hinged their claims on the inverse of the above argument: in the presence of conditionalities (good governance and economic growth), aid induces recipients to pursue good policies. However, because good policies are predicated on strong institutional capacity (*e.g.*, political institutionalization and accountability) to carry them out, some analysts appear to suggest that political reform might be the necessary condition for good policies and should be tied to aid allocation.[31]

In way similar to this theoretical approach, we argue that the "string unattached" character of China's aid allocation tends to offset the positive conditionality effect of Western aid on recipients' political regimes and this effect is more observable in recipient countries whose economies are highly resource-dependent. The key to this is the motivation of China's aid allocation. As our previous discussion has suggested, China's recent FAGIA are strongly driven by its quest for natural resources and the desire to secure a stable supply of these resources abroad to fuel its growth machine. In this respect, China's symbiotic natural resources-infrastructure aid allocation and investment pattern is therefore consistent with

[31] This line of reasoning can be found in the keynote speech by former IMF director Michael Camdessus at the conference on "Financing for Development: Regional Challenges and the Role of Regional Development Banks" in Washington, D.C., who noted that IMF should expand assistance to enhance institutional capacity in poor countries, this emphasis was then reflected in IMF's mission statement, see Camdessus, The Role of Capacity Building in Poverty Reduction http://www.imf.org/external/np/exr/ib/2002/031402.htm. For the script of Camdessus's original speech, see http://www.piie.com/publications/papers/print.cfm?ResearchId=437&doc=pub (Date accessed: March 1st 2014).

the observable implication of this resource acquisition motive. By offering an alternative source of aid free from preconditions, China's aid makes recipient countries less willing to comply with the conditionalities imposed by Western donors and therefore reduces their incentives to improve governance through political reforms. While recipient countries may not turn down Western aid due to the availability of China's aid,[32] the presence of China's "unconditional" aid may offset the conditionality effect of Western aid; in recipient countries where the share of China's aid predominates as compared to other sources of aid, Western aid is expected to be less effective at inducing recipient countries to adopt political reforms. Other things equal, China's aid decreases the incidence of democratic reforms in recipient countries.

Furthermore, we argue that this unconditional effect of China's aid may be more observable in resource-exporting countries. Previous political economy literature has analyzed at great length about how the easy extractability of resource rents can lead to underdevelopment and income inequality in the non-resource sector and eventually heighten incumbent rulers' tendency for political repression in order to maximize their discretion over resource rents (Ross, 2001; Wantchekon, 2002; Jensen and Wantchekon, 2004; McSherry, 2006; Dunning, 2008). These findings highlight a clear causal relationship between resource rents and political regimes–resource rents are associated with authoritarianism. Although promoting authoritarianism is not Beijing's primary motivation for aid allocation, the infusion of China's aid will likely reinforce such authoritarian tendency. On the economic side, while the infrastructure boom experienced by recipient countries may pave the way for future growth.[33] These China-invested infrastructure projects facilitate rent extraction that further distorts the sectoral imbalance between the resource and non-resource sector development[34] and increases rulers' desire to control the distribution of rents through authoritarian

[32] In fact, some recipient countries regard the acceptance of Western aid as a signal of their commitment to international cooperation. Private conversation with USAID official (official 1) on Dec. 16th 2013 and email correspondence with USAID official (official 2) on Jan. 9th 2014.

[33] See Eric Ombok, "African Infrastructure Boom to Boost Syndicated-Loan Growth" *Bloomberg* Oct. 11th 2013.

[34] There are anecdotal news reports suggesting that Chinese contractors tend to import Chinese work-

rule. Although the infusion of China's aid allegedly stimulates growth in recipient countries' resource and infrastructure sectors, resources interests will certainly be privileged in recipients' public policies (Tull, 2006) and the evolution of recipients' social and political systems will be distorted toward resource sector development in ways elucidated by previous literature. Seen in this light, China's aid may turn out to be a mixed blessing for recipient countries by carrying with it opposing effect on sector-specific growth and political regimes in recipient countries: in short, China's aid can promote sectoral economic growth but suppress hinder the progress of democratic institution building in resource-exporting recipient countries. Thus, conditional on the degree of resource dependence in recipient countries' economies, one might expect the effect of China's aid to be more pronounced in influencing recipient countries' political outcomes. An invariance[35] in recipient countries' political institutions or backsliding in local democratic governance and civil liberties may more likely to be observed as China's aid toward these recipients increases.

Hence, we have the following hypotheses:

Hypothesis 1 *The motivation behind China's aid differs from that of Western aid.*

Hypothesis 1a *China's aid is primarily determined by recipients' exportable resource wealth.*

Hypothesis 1b *As informed by our previous discussion, this association (in terms of China's FAGIA pattern) is be more observable in countries with high resource-dependent economic profile.*

ers to work in recipient countries' construction sites, which may have the negative effect of displacing local workers and increasing unemployment rates and income inequality in recipient countries, as our previous Shougang Group case has suggested. However, an equally convincing argument can be made that these collaborative projects increases labor demand and creates jobs for local workers, so the net effect of China's aid on recipients' unemployment and income inequality is uncertain. For a list of China's aid projects and local/Chinese labor breakdown, see Deborah Bräutigam's Chinese workers data http://www.chinaafricarealstory.com/p/chinese-workers-in-africa-anecdotes.html (Date accessed: March 3rd 2014).

35 "Invariance" refers to a form of institutional persistence in which institutional practices and distribution of political power do not change over time. This concept has been employed by Acemoğlu and Robinson (2008) to refer to the persistence of bad political outcomes.

We further assess these claims on a dataset of African countries:

Hypothesis 2 *The unconditional effect of China's aid tends to reduce the positive effect of Western aid on recipient countries' democracy where recipients' economies are more resource-dependent.*

4 Empirical Analysis

In this section, we employ a variety of statistical models to assess the determinants of China's aid as compared to that of Western aid. Building on the identification of these associational patterns, we then test if the presence of China's aid reduces the alleged positive conditionality effect of Western aid in recipient countries, conditional on the levels of resource-dependency in recipients' economies.

We briefly describes the data source, preparation, and operationalization of our aid data in the next section before proceeding to statistical analysis.

4.1 Data

The backbone of our data is derived from the database of the AidData project stored and maintained by the Institute for the Theory and Practices of International Relations at the College of William and Mary. This dataset contains aggregate financial transfers between donors and recipients and aggregate unofficial flows between individual financing agencies (from donor countries) and recipients.[36]

We draw our Western and China's aid data from AidData and its affiliated AidData–

[36] Part of the datasets from this database are derived and assembled from a list of recent publications (for example, Winters (forthcoming), Nielsen et al. (2011), Lebovic and Voeten (2009), Kono and Montinola (2009), Wright (2010), Bearce and Tirone (2010)). See Tierney et al. (2011) for more detailed descriptions of this dataset and its applications.

China datasets[37], respectively. The first dataset contains over five hundred and sixty thousands counts of aid transfer data covering committed and disbursed money amount associated with aid transferred from the aid agencies of donor countries or donor organizations to their recipient counterparts. The second data are an aggregated of two version of dataset releases, of which the earlier release (Version 1.0) contains official flows (aid pledged and transferred by Chinese government agencies), unofficial flows (mostly amount pertains to investment projects committed by Chinese companies (and most of them are state-owned companies)), military assistance, canceled and suspended flows, and a documentation of inactive projects and later release (Version 1.1) contains only unofficial flows. Because aid to a particular recipient in a given year come from many sources (including bilateral aid from a donor country, international aid organizations, as well as funds transferred from donors to regional organization and then allocated to this particular recipient country), yet the empirical implications of our hypotheses concern primarily with the intertemporal variation in democracy *with country*. For processing, we first dropped projects related to disaster/emergency relief as those are not received by recipients on a *regular* basis, thus are not counted as foreign aid by the definition given earlier. We then deleted aid records that were allocated to multiple recipients or regional organizations as the exact amount allocated to a particular country is hard to identify. Finally, we merged these observations by country-year to get the total amount of Western aid received by a recipient country in a given year. We did the same for China's aid data. However, because each count of China's aid record is coded by a project id and the overlap in Version 1.0 and 1.1 releases indicate some duplications in counting. To tackle this issue, we appended these two datasets together, matched them by project id and deleted duplicated record, and then sum the dollar amount of these unique project by country-year format. In addition, because some of China's official and unofficial flows are denominated in Chinese Yuan (¥) or other foreign currencies, we divided the amount of each project by the yearly average exchange rate listed in the dataset and

[37] This dataset belongs to a different affiliated project, *Tracking Chinese Development Finance to Africa*, under the AidData project.

converted them to constant 2000 USD.

Finally, we matched China's official and unofficial flows with Western aid data to form a more detailed dataset containing official and unofficial aid transferred from Western donors and China to recipients in country-year format. Because China became a net donor in 1999, the timeframe within which all our data are coded and collated began in 1999 and ended in 2011.

4.2 Pursuing the Determinants of Western and China's Aid: An Indirect Test

Before we move to test the unconditional effect of China's aid on recipients' democracy, we first take a step back by examining the determinants of Western and China's aid to see if the hypotheses (**H 1**, **H 1a**, **H 1b**) suggested by our previous discussion are borne out by empirical data. That is, we begin our empirical investigation by examining recipients' political and economic characteristics that motivate China's aid allocation rather than looking at the effects of China's aid on recipients' political outcomes.

Our previous analysis assumes that Western and China's aid are driven by different political and economic considerations; thus, from an statistical estimation standpoint, a set of regressors may uniquely identify the dependent variable for one of the two aid allocation decision equations but not the other. Essentially, the two equations are only correlated through their error terms. As an indirect way to assess this claim, we employ seemingly unrelated regression (SUR; Zellner (1962)) that renders two unrelated systems of equations in which any one system can have different set of dependent and independent variables while allowing the systems to be related to each other by the error terms. To express this formally,

$$\begin{aligned} Western\ aid_{it} &= \alpha_1 + X_{1[it]}\beta_1 + \ldots + X_{m[it]}\beta_m + u_{Westernaid} \\ China's\ aid_{it} &= \alpha_2 + X_{1[it]}\gamma_1 + \ldots + X_{m[it]}\gamma_m + u_{China'said}, \forall i \in N, \forall t \in T. \end{aligned}$$

on the expectation that the joint test of $\beta_m = \gamma_m = 0\ \forall m \in M$ and Corr($u_{Westernaid}$, $u_{China'said}$) $\neq 0$.

As informed by our previous analysis, we insert a set of three variables $X \subset$ {$\triangle$Polity, $\triangle$GDP, resource-dependence} to the RHS of these two equations and use the feasible GLS algorithm described in Greene (2012, 293-4) to estimate this system of two unrelated equations. Polity and GDP refer to the 21-point Polity score from Polity IV project (Marshall and Gurr) and the annual GDP data from the World Bank's World Development Indicators. Note that we rescaled Polity scores to all positive values for interpretation purpose and converted GDP data to constant 2000 USD. We then take the first difference of these variables to capture the "progress" exhibited in recipient i's political institution and economic growth from time t-1 to time t which, according to previously literature, are important determinants of Western aid. Finally, the data for the resource-dependence variable are extracted from the `net_oil_gas_export_value` variable from Michael Ross's "Oil and Gas Data", however, we converted this annual oil-gas export value, $\text{Exp}_{\text{oilgas}[it]}$, to constant 2000 USD and reoperationalized this measure to be $\frac{Exp_{oilgas[it]}}{(GDP_{it} - Exp_{oilgas[it]})}$ to get a better measure of resource-dependence in recipients' economic activities.[38] It is expected that China's aid tends to privilege more resource-dependent recipients due to China's increasing resource demand and this variable should be positively associated with the flow of China's aid but not Western aid.

The estimation results are listed in Table 1. From model results, we see that the determinant of China's aid clearly differs from that of Western aid and they connote different political implications. For Western aid, one point increase in the level of democracy (as

38 As Ross (2012, 16) himself has noted "if we measure them (oil income) by oil-exports-to-GDP ratios, however, we will find that Angola's measure (0.789) is much higher than Netherlands' (0.056), because Angola is too poor to consume much of its own oil (making the numerator larger), and because its GDP is much smaller (making the denominator smaller)". Therefore, a better way to measure country-specific "resource-dependence" profile is to construct an index approximating the ratio of value-added in the resource sector to that of non-resource sector (which is simply GDP minus oil-gas export value) in a given economy, as we did here.

measured by the 21-point Polity score) is associated with more than 3 units increase in the inflow of Western aid, the positive conditionality effect is certainly present in this associational relationship; yet, Western aid is not significantly associated with recipients' growth and resource-dependence profile. On the other hand, China's aid exhibits a strong positive association with recipients' resource-dependence profile, indicating that recipients whose economies are more resource-dependent tend to draw more China's aid. Combined, these findings lend support to **Hypothesis 1** and **Hypothesis 1a**. Note, however, that the χ^2 of the correlation of the residuals of the two equations derived from Breusch-Pagan test did not warrant us to significantly reject the hypothesis that this correlation is zero, which indicates that Western and China's aid allocation decision criteria may not significantly differ from each other.

As a further test for this claim, we dropped all non-Middle East and Africa observations to focus our analysis on the MENA region–where resource-dependence averaging 0.2346, the highest among all regions–specifically. The results are given in the lower panel of Table 1. From there we see that the same associational pattern persists, the flow of China's aid is still strongly associated with resource-dependent recipients but the level of democracy was never a significant determinant of China's aid allocation in our analysis of both the full and sub-sample of the data. However, once we narrowed down our analysis to the MENA region, $\triangle$Polity lost significance while $\triangle$GDP rose up to become a significant determinant of the flow of Western aid though its substantive effect is almost immaterial (Coef. = 0.0516). More importantly, the χ^2 of the correlation of the residuals significantly rejects the hypothesis of zero correlation of the two error terms, thus, supporting the hypotheses that China's aid motivation differs significant from that of Western aid(**Hypothesis 1**) and that China China tends to allocate its aid to recipients with highly resource-dependent economic profile (**Hypothesis 1b**).

Table 1: Identifying the determinants of Western and China's aid using SUR

	Western aid		China's aid	
Variable	Coef.	(Std. Err.)	Coef.	(Std. Err.)
△Polity	3.17***	(0.731)	-2.08	(6.55)
△GDP	0.003	(0.002)	-0.005	(0.014)
Resource-dependence	-1.52	(1.16)	4.29***	(1.04)
$\chi^2(1)$	2.614			
Pr	0.1059			
N	1298		1298	
Subsample	(North & Sub-Saharan Africa)			
△Polity	-2.55	(3.48)	-1.12	(1.81)
△GDP	0.0516***	(0.006)	0.016	(0.003)
Resource-dependence	-8.35	(4.24)	5.75**	(2.21)
$\chi^2(1)$	41.357			
Pr	0.0000			
N	429		429	

Note: ***$p<.01$, **$p<.05$, *$p<.10$. Coef. and s.e. for constants not reported.

While this statistical evidence presented in Table 1 strengthens our claim that China's aid are driven primarily by Beijing's more economic-oriented concern for energy resources acquisition, it also suggests, indirectly, that the positive conditionality effect of Western aid may be less significant in promoting democratic reforms in recipient countries in the presence of China's aid and, particularly, in countries where energy resources (oil and natural gas) constitute a substantial share of their economies. To probe the empirical implications suggested by our hypothesis and the evidence from our SUR analysis in this subsection, we turn to treatment effects model to directly assess this conditional relationship.

4.3 Regime Change and Stability in resource-exporting recipient countries

In this subsection, we probe the alleged "unconditional" effect of China's aid on recipients' democracy. While the statistical evidence inferred from our previous SUR results supports the claim–made by some recent empirical literature and country-specific policy reports–that promoting authoritarianism is not the primary goal nor a hidden agenda behind China's aid consideration, the causal paths identified by our SUR analysis also suggests that China's aid tends to flow to recipients with high resource-dependence profile and this association tends to offset the positive "conditionality" effect of Western aid, which helps to inform the foundation of **Hypothesis 2**.

However, two caveats warrant our attention before we move on to pursue the validity of **Hypothesis 2**. First, researchers might be interested in assessing statistically the so-called "mean/average causal effect"[39], to borrow a statistical jargon, of China's aid and its offsetting impact on Western aid by incorporating both terms in the RHS of the equation and regressing them on the polity score to obtain the mean/average causal effect of these two regressors. The net mean/average causal effect of Western and China's aid is thus interpreted as the difference between the two coefficients, $\beta^*_{Western\ aid} - \beta^*_{China's\ aid}$, since effects are all additive in linear models. Secondly, one may be tempted to include a dummy term, *resource-dependent*, and multiplied it with China's aid to create an interaction term as a means to test if the unconditional effect of China's aid or the net effect between Western and China's aid raised earlier is more pronounced (in coefficient term) in resource-dependent recipients.

Our answer to these modeling strategies is that they do not address the causal mechanism we described here. To being with, as our argument and SUR analysis have empha-

39 King, Keohane and Verba (1994) interpret the coefficient term as "mean causal effect". This same concept is referred to as "average causal effect" by Mahoney (2008). The term "average treatment effect" used by Angrist and Imben (1995) and Sobel (1996), among others, may be more conceptually similar to the statistical estimation approach we adopted here.

sized, China's aid allocation is not significantly associated with recipients' levels of democracy *per se*, although the presence of China's may aggravate the authoritarian tendency of resource-exporting countries (which are termed as "rentier states" (Mahdavy, 1970) in many academic literature) and thereby make the conditionality effect of Western aid less effective at inducing democratic reforms. The links underlying this web of causal mechanism run *from* Western aid and energy resources export *to* political regime change in recipient countries, China's aid does not feature directly in these links and its effect is translated largely through recipients' energy resources. The linear specification of both Western and China's aid in the RHS may be displaced. Secondly, the specification of a dummy term *resource-dependent* does not take into account of the link between China's aid and recipients' energy resources while the interpretation of the net effect of a particular regressor of the multiplicative interaction term would impose a no-linearity constraint and require one to set the other constituent term to zero (Brambor, Clark and Golder, 2006) and this multiplicative specification is not backed by causal mechanism we argued here. Furthermore, both our argument and previous SUR findings suggest that resource-dependent recipients are more likely to receive China's aid and its symbiotic resources development-infrastructure aid allocation pattern may further exacerbate the already authoritarian tendency of these countries. To pin down the elusive effect of China's aid in this causal mechanism, it is necessary to put the link between China's aid and recipients' resource-dependence profile into appropriate perspective in model specification.

To address these estimation issues, we conceptualize resource-dependence as a type of treatment that increases recipients' exposure to China's aid, t_i = {t(resource-dependent) = 1, t(¬resource-dependent) = 0}, and estimate the average treatment effects of resource-dependence on recipient countries' democracy, conditional on the flow of China's aid. The intuition behind this approach is straightforward, it is simply an issue of purging endogeneity in model specification. The argument we made here and the empirical evidences we reviewed so far suggest that countries well-endowed with exportable energy resources are more likely to become the recipients' of China's aid *and* this specifically-targeted aid could facilitate rent extraction, thus enhancing such resource-dependence characteristic in recipients' economies, making the link between China's aid and recipients' resource-dependence endogenous. For recipients with significant resource-dependence profile, this endogenous link implies not only that being resource-dependent (*i.e.*, $t_i = 1$) increases a country's likelihood of receiving more aid from China, but also this aid has the tendency of reinforcing the link between resource-dependence and authoritarianism, which may be reflected in the over-time change in recipients' levels of democracy. One thus can conceptualize the observed level of democracy for country i in year t, $Democracy_{o[it]}$, as the potential outcome corresponding to whether a country is resource-dependent

$$Democracy_{o[it]} = (1 - t_i)Democracy_{0[it]} + t_i Democracy_{1[it]}, \tag{1}$$

then, assuming no ignorability (Imai et al., 2011; Pearl, forthcoming)[40] in the DGP and treated and untreated groups are sufficiently overlap, the two potential outcomes (of recipient i's level of democracy) are a linear function of a set of variables and share a common idiosyncratic error

$$Democracy_{0[it]} = \alpha_0 + X_i^{'}\beta_0 + \epsilon_i \tag{2}$$
$$Democracy_{1[it]} = \alpha_1 + X_i^{'}\beta_1 + \epsilon_i, \tag{3}$$

where β_0 and β_1 are coefficients to be estimated and $X^{'} \perp \epsilon_i$. Eqn (4.1) is the outcome model.

The observed level of democracy for recipient i in year t is therefore

40 Ignorability refers to missing data problem.

$$\begin{aligned} Democracy_{o[it]} &= (1-t_i)*(\alpha_0 + X_i^{'}\beta_0 + \epsilon_i) + t_i(\alpha_1 + X_i^{'}\beta_1 + \epsilon_i) \\ &= X_i^{'}\beta_0 + t_i X_i^{'}(\beta_1 - \beta_0) + \alpha_0 + t_i(\alpha_1 - \alpha_0) + \epsilon_i. \end{aligned} \quad (4)$$

Suppose the treatment, resource-dependence, is specified by a treatment assignment process

$$t_i = \begin{cases} 1 \text{ if } \Pi_{it}\gamma + \eta_i > 0 \\ 0 = otherwise \end{cases} \quad (5)$$

where Π_{it} represents the amount of China's aid allocated to recipient i in year t and γ is a coefficient vector, η_i is an unobservable error that is not related to $X_i^{'}$ but may be related to ϵ_i in the outcome model by the covariance matrix

$$\begin{bmatrix} \sigma^2 & \rho\sigma \\ \rho\sigma & 1 \end{bmatrix}$$

where the sign of ρ indicates the effect of the unobservable (China's aid) on the outcome variable ($Democracy_{o[it]}$) tends to occur with the unobservable increases (or decreases) the treatment (resource-dependence). Substituting expression (4.5) (when t_i = 1) into (4.4), yield

$$Democracy_{o[it]}|t_i = 1 = X_i^{'}\beta_0 + (\Pi_{it}\gamma + \eta_i)X_i^{'}(\beta_1 - \beta_0) + \alpha_0 + (\Pi_{it}\gamma + \eta_i)(\alpha_1 - \alpha_0) + \epsilon_i. \quad (6)$$

On the other hand, when t_i = 0, $Democracy_{o[it]}$ is reduced to (4.2).

Based on this formal expression, we then put our data to a test. We include three more variables, Standardized World Income Inequality indicator by Solt which provides a wider coverage of time-series net income inequality measures across countries, ethno-linguistic fractionalization (ELF) index by Roeder,[41] and the annual oil gas export value data obtained from Ross's Old and Gas dataset. Previously literature on civil war Fearon and Laitin (2003); Collier and Hoeffler (2004); Fearon (2005) argue that these factors may increase the incidence of civil war and authoritarianism, we therefore include them as additional control variables in the outcome model (equation (4.1)) to test the explanatory power of alternative explanations relative to ours. We first implemented coarsened exact matching (Iacus, King and Porro, 2011, 2012) to trim our data using the Stata code written by Blackwell et al. (2009) to check the balance of our explanatory variables (except for the treatment variable) to ensure that, across the full range of distribution, the treated and untreated groups all have positive probability of receiving treatment. The treated and untreated groups appear to be sufficiently well overlap.

We then use 1 standard deviation above the standardized mean of our resource-dependence variable, $\frac{Exp_{oilgas[it]}}{(GDP_{it}-Exp_{oilgas[it]})}$, as cut-point for constructing a binary indicator for "high resource-dependent". Finally, we employ endogenous treatment effects model formalized by Cattaneo (2010)[42] using this binary indicator as treatment and the annual flow of China's aid as endogenous variable for the treatment model (expression (4.5)). The entire endogenous treatment effects model thus contain an linear outcome model and a non-linear treatment model. The model is estimated using two-stage method with the treatment model estimated by a logit link function[43] and the outcome model estimated with GMM method. We also estimated an average treatment effect model (ATET) without endogenous variable as a comparison to the endogenous model. The estimation results are listed in Table 2 with expected sign of each variable listed in the second column of the table. Coefficient estimates and 95% confidence intervals for the parameters of these two models are plotted in Figure 1 (in the appendix).

41 We use Roeder's ELF85 variable which does not distinguish racial differences within the same linguistic groups. Note that the value of this variable is fixed throughout the period of observation.

42 Also, see Abadie (2005).

43 Logit is the default method in Stata's treatment effects family of models.

Table 2: Probing the “unconditional effect" of China’s aid in MENA region
DV: Polity score

		ATET		Endogenous Π: China’s aid	
Variable	Expected sign	Coef.	(Std. Err.)	Coef.	(Std. Err.)
Western aid	+	0.483**	(0.1751)	0.810***	(2.302)
Oil Gas Exp	−	-1.628***	(0.531)	-1.736***	(0.571)
Inequality	−	-0.670***	(0.127)	0.043	(0.030)
ELF	−	0.4661***	(0.084)	0.467***	(0.098)
GDP	+	0.104	(0.532)	0.104	(0.532)
t(Resource-dependence = 1)	−	-0.378***	(0.099)	-0.713**	(0.3425)
China’s aid	+			0.771***	(0.193)
$Log-Likelihood$				-1238.148	
N		397		389	
ρ				-0.444	

Note: ***p<.01, **p<.05, *p<.10. Coef. and s.e. for constants not reported.

From Table 2, we see that whether or not China’s aid entered as an endogenous variable in the estimation, being relatively resource-dependent exerts a significant negative effect on recipients’ political outcomes (it makes them less democratic). The coefficients of all variables in the outcome model (the upper panel of Table 2), except for ELF, all exhibit expected signs. Much to the delight of aid conditionality advocates, the positive association between Western aid and democracy seems to suggest that Western aid tends to promote democracy in recipient countries; yet, the negative coefficient of annual oil gas export value also suggests that, in line with resource curse argument, an increase in resource rents itself has a negative effect on democracy, perhaps by enhancing rulers’ incentive to block democratic reforms in order to appropriate resource rents for their own political survival or for private wealth accumulation.

We now discuss the endogenous effect of China’s aid on recipients’ democracy. In the right panel of Table 2, after the endogeneity between recipients’ resource-dependence and China’s aid has been accounted for, an increase in China’s aid flow substantially increases the treatment effect of resource-dependence, although not directly comparable, the coefficient of t goes from -3.775 to -7.129 which translated into much larger degree of negative effect on recipients' levels of democracy. The interpretation of the positive ρ value (0.444) indicates that the negative effect of China's aid (*i.e.*,the unobservable) on recipients' democracy tends to occur when China's aid increases recipients' resource-dependence ($\gamma > 0$).[44] To evaluate the impact of China's aid on recipients democracy more substantively and recall expression (4.6), the net effect of China's aid on recipients' democracy when both Western and China's aid are set to their means, which are US \$820,000,000 and \$93,500,000, respectively, is -0.713$*$(93,500,000)$*$(0.771)$*$(820,000,000)$*$(0.810) = -3.414; that is, holding other things constant, there exists a net negative relationship between China's aid and democracy in resource-dependent recipient countries. This statistical finding is therefore consistent with our claim that the unconditional effect of China's aid tends to offset the allegedly positive conditionality effect of Western aid on recipients' democracy, particularly in recipient countries with high resource-dependent economic profile, at least the MENA region data used in this analysis.

5 Discussion

The empirical evidences from our statistical analysis in the last section not only validate the hypotheses suggested by our argument, but also suggests that recent studies that concern China's FAGIA attenuating the effectiveness of Western aid are not unwarranted. For example, Dutta, Leeson and Williamson (2013) argues aid serves to *amplify* recipients' existing political regime characteristics by making democracies more democratic through promoting democratic reforms while entrenching the authoritarian rulers' hold on power by giving them with free financial and material resources. This amplification argument is par-

[44] Note that the treatment model is estimated by logit function, the coefficient γ is the log of odds ratio (with Pr $\simeq$ 0.885). The γ value of 7.709 means that one unit increase in China's aid increases the probability a recipient being more resource-dependent by about 7.7 times (relative to being not resource-dependent).

tially supported by our statistical findings because, as our analysis has shown, although the alleged positive conditionality effect of Western aid is borne out by our statistical findings, recipients with high resource-dependence profile tend to attract more China's aid and thereby have greater propensity of experiencing amplified authoritarian effect of aid suggested by Dutta, Leeson and Williamson. Our analysis thus places a score condition on this argument.

In addition, Neumayer's (2003) and Bermeo's (2011) findings also raise our concerns that the *sources* of foreign aid and the motivations of donors, particularly emerging donors whose political and economic interests may be orthogonal to those of Western donors, may be the missing variables that can help to explain the variation in democratic outcomes across recipient countries. More specifically, Neumayer and Bermeo both point to aid from oil-rich Middle Eastern donors as a potential source of authoritarian influence. Our argument addresses this concern and our empirical approach not only describes how such authoritarian effect can occur but also provides a more carefully-specified estimation strategy to model it.

Finally, it is worth noting that in Table 2, the coefficient of Western aid actually increases (from 0.483 to 0.810) after the endogenous effect of China's aid has been taken into account. This is certainly not what we have expected. Nevertheless, given that Western donors may have already anticipated this offsetting unconditional effect of China's aid on their democracy-promotion efforts, it is plausible that Western donors attempt to counteract China's influence by either increasing their democracy-promotion efforts through pledging more aid or by incorporating such increasingly important source of aid into existing multilateral aid networks (which is what DAC-China study group aims to achieve) to redirect this potentially opposing influence. This presents an intriguing theoretical extension worthy of future research.

6 Conclusion

Among the more vexing issues for international relations scholars is the effectiveness of foreign aid in encouraging democratic reforms. For more than a decade, scholars have debated, both theoretically and empirically, whether and how foreign aid can translate into more democratic governance. Consensus on the matter has been elusive. Evidence has been marshaled that both corroborates and repudiates a causal link between aid and democratization. To some, aid is associated with higher levels of democracy (Goldsmith, 2001), particularly in the post-Cold War period (Dunning, 2004). To others, aid reduces the likelihood of democratization by helping to sustain corrupt or “bad" political institutions through increasing rents to those who control the state, allowing elites to fend off political opposition, and thereby hindering the incidence of democratic rule (Bräutigam and Knack, 2004; Djankov et al., 2008). While previous research offers important insights, it largely fails to account for some dramatic changes in the politics of foreign aid over the past several decades; specifically, the emergence of new donor countries—China, in particular—as major providers of foreign aid.

This study surveyed the scope and extent of China's recent FAGIA, analyzed its motivation and potential political impact on recipients' democratic development. Our analysis identifies the unique determinants of Western and China's aid and suggests that although supporting authoritarianism may not be on Beijing's primary aid agenda, given China's current energy resource acquisition-oriented aid allocation pattern, an increase in China's aid tends to offset the alleged positive democracy-promotion effect of Western aid and thereby influence the incidence of democracy or the persistence of authoritarianism in recipient countries-particularly in recipients whose economies are heavily resource-dependent.

The central theoretical contribution of this study lies not only in extending the ongoing debate on China's aid by testing the political effect of this alternative source of aid—as well the hypothesized causal path through which this effect occurs—more rigorously with statistical analysis, but also in suggesting and elucidating a plausible causal mechanism that might help to explain variation in democratic reform outcomes across recipient countries. In the context of aid program evaluation, our findings imply that, rather than questioning the effectiveness of political conditional *per se*, Western donors and international aid organizations can better improve the effectiveness of aid by encouraging resource-dependent recipients to “diversify" their economies (OECD, 2011), which can eventually serve as a fertile ground for promoting democratic reform in recipient countries in the long run. If it is the resource-dependence of recipient countries that draws more *unconditional* aid from China as well as from other rising donors (who do not intend to use aid specifically for promoting authoritarianism) in the first place and thereby amplifies the existing authoritarian tendency of resource-dependent recipients, then the recommendation of throwing out the aid baby with the political conditionality bath water altogether may be misplaced;[45] in fact, the overall efficacy of aid policy can be improved by modifying the conditionality clause from emphasizing democratic reforms to prioritizing economic diversification. This study thus serves as a platform for bridging academic and policy views on this important emerging issue in international relations.

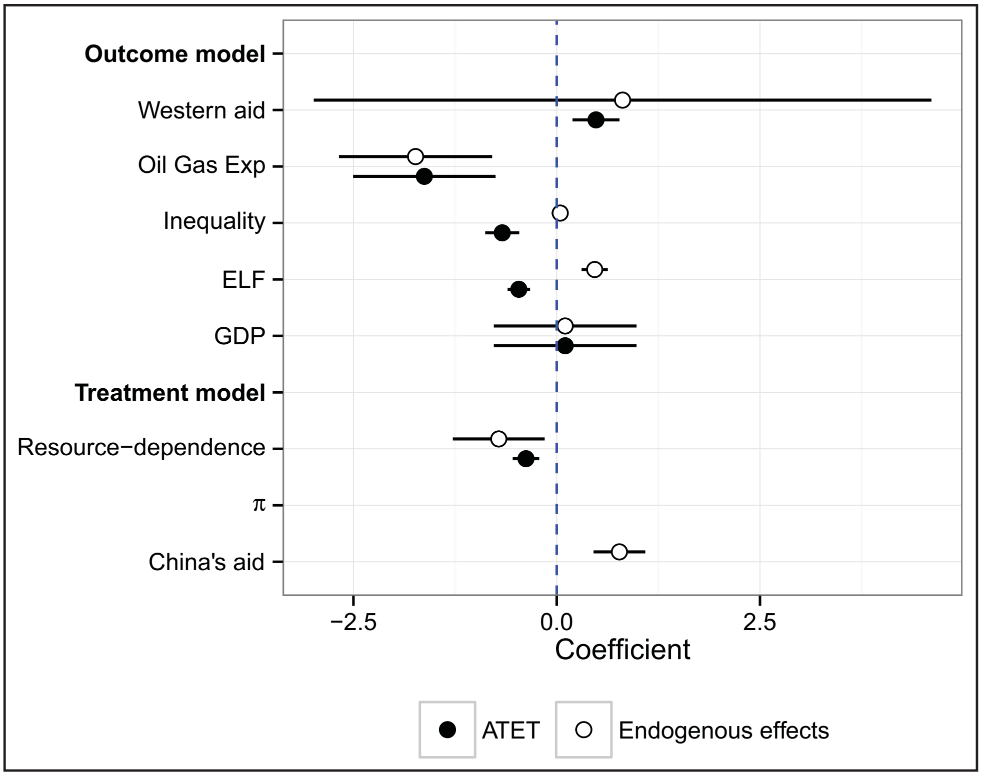
On the empirical contribution side, this study employs a variety of statistical models to evaluate our hypotheses. The causal pathways analysis we conducted using SUR and treatment effects estimation used to probe the political effects of China’s aid on recipient countries (after the determinant of China’s aid flows has been identified) can be further extended and analyzed using causal mediation analysis to partial out the “direct effect" of aid and the effect mediated through recipients’ resource-dependence (Imai, Tingley and Keele, 2010; Imai, Keele and Yamamoto, 2010; Imai et al., 2011; Hicks and Tingley, 2011; Imai, Tingley and Yamamoto, 2013)[46] in order to assess, more substantively, impact of Western and China’s aid on recipient countries’ democratic development. This will be our goal in the near-term.

45 For example, Dijkstra (2002).

46 Note that the procedure for testing the violation of sequential ignorability assumption is essentially an application of the iterative fGLS algorithm of the SUR model, see Imai, Tingley and Keele (2010, Appendix D) and Hicks and Tingley (2011, 6).

Appendix

Figure 1: The political effect of China's aid on recipients' democracy. The dots represent the parameter estimates. The horizontal lines represent the 95 percent confidence intervals around the estimates.



References

Abadie, Alberto. 2005. "Semiparametric Difference-in-Differences Estimators." *Review of Economic Studies* 72(1):1–19.

Acemoğlu, Daron and James A. Robinson. 2008. "Persistence of Power, Elites, and Institutions." *American Economic Review* 98(1):267–93.

Acharya, Arnab, Ana Teresa Fuzzo de Lima and Mick Moore. 2006. "Proliferation and Fragmentation: Transactions Costs and the Value of Aid." *Journal of Development Studies* 42(1):1–21.

AidData. 2011. “AidData Users’ Guide Version 2.0.” Research Release: Nov. 17th 2011 .

AidData. N.d. “Donor datasets.” http://aiddata.org/donor-datasets.

Alesina, Alberto and David Dollar. 2000. “Who Gives Foreign Aid to Whom and Why?” *Journal of Economic Growth* 5(1):33–63.

Angrist, Joshua D. and Guido W. Imben. 1995. “Two-stage Least Squares Estimation of Average Causal Effects in Models with Treatment Intensity.” *Journal of the American Statistical Association* 90(430):431–42.

Arellano, Cristina, Aleš Bulíš, Timothy Lane and Leslie Lipschitz. 2009. “The Dynamic Implications of Foreign Aid and its Variability.” *Journal of Development Economics* 88(1):87–102.

Armah, Stephen E. and Carl H. Nelson. 2008. “Is Foreign Aid Beneficial for Sub-Saharan Africa? A Panel Data Analysis.” Paper Presented at 2008 Annual Meeting of American Agricultural Economics Association, Orlando, Florida. April, 2008 .

Bauer, Peter T. 2000. *From Subsistence to Exchange and Other Essays*. Princeton, NJ: Princeton University Press.

Bearce, David H. and Daniel C. Tirone. 2010. “Foreign Aid Effectiveness and the Strategic Goals of Donor Governments.” *The Journal of Politics* 72(3):837–51.

Bermeo, Sarah Blodgett. 2011. “Foreign Aid and Regime Change: A Role for Donor Intent.” *World Development* 39(11):2021–31.

Blackwell, Matthew, Stefano M Iacus, Gary King and Giuseppe Porro. 2009. “cem: Coarsened exact matching in Stata.” *The Stata Journal* 9(4):524–46.

Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. “Understanding Interaction Models: Improving Empirical Analyses.” *Political Analysis* 14(1):63–82.

Bräutigam, Deborah. 2009. *The Dragon’s Gift: The Real Story of China in Africa*. New York, NY: Oxford University Press.

Bräutigam, Deborah. 2010*a*. “China, Africa and the International Aid Architecture.” *African Development Bank Working Paper.* .

Bräutigam, Deborah. 2010*b*. ““China in Africa: Think again" *World Financial Review*.” http://www.worldfinancialreview.com/?p=197. (Accessed March. 3rd 2013).

Bräutigam, Deborah. 2011. “Aid ‘With Chinese Characteristics’: Chinese Foreign Aid and Development Finance Meet the OECD-DAC Aid Regime.” *Journal of International Development* 23(5):752–64.

Bräutigam, Deborah. n.d. “Chinese workers data.” http://create.usc.edu/research/50788.pdf. (Accessed March 3rd 2013).

Bräutigam, Deborah A and Stephen Knack. 2004. "Foreign Aid, Institutions, and Governance in Sub-Saharan Africa." *Economic Development and Cultural Change* 52(2):255–85.

Bueno de Mesquita, Bruce and Alastair Smith. 2007. "Foreign Aid and Policy Concessions." *The Journal of Conflice Resolution* 51(2):251–84.

Burnside, Craig and David Dollar. 2000. "Aid, Policies, and Growth." *The American Economic Review* 90(4):847–68.

Camdessus, Michael. 2002. "The Role of Capacity Building in Poverty Reduction." Reductionhttp://www.imf.org/external/np/exr/ib/2002/031402.htm. (Accessed March 4th 2013).

Carothers, Thomas and Diane de Gramont. 2013. *Development Aid Confronts Politics: The Almost Revolution*. Washington, D.C.: Carnegie Endowment for International Peace.

Cattaneo, Matias D. 2010. "Efficient Semiparametric Estimation of Multi-valued Treatment Effects under Ignorability." *Journal of Econometrics* 155(2):138–54.

Cheng, Shuaihua, Ting Fand and Hui-Ting Lien. 2012. "ChinaŠs International Aid Policy and Its Implications for Global Governance." Indiana University Research Center for Chinese Politics and Business (RCCPB) Working Paper No. 29 .

China's African Policy. 2006. "ChinaŠs African Policy (released Jan. 12th 2006)." http://www.focac.org/eng/zt/zgdfzzcwj/t230479.htm. (Accessed Feb. 26th 2013).

Collier, Paul and Anke Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4):563–95.

Collier, Paul and David Dollar. 2001. "Can the World Cut Poverty in Half? How Policy Reform and Effective Aid Can Meet International Development Goals." *World Development* 29(11):1787–802.

Collier, Paul and David Dollar. 2002. "Aid Allocation and Poverty Reduction." *European Economic Review* 46(8):1475–1500.

Coyne, Christopher J. 2008. *After War: The Political Economy of Exporting Democracy*. Palo Alto, CA: Stanford University Press.

Crawford, Gordon. 2001. *Foreign Aid and Political Reform: A Comparative Analysis of Democracy Assistance and Political Conditionality*. New York, NY: Palgrave MacMillan.

Davies, Martyn, Hannah Edinger, Nastasya Tay and Sanusha Naidu. 2008. "How China delivers development assistance to Africa." Centre for Chinese Studies (University of Stellenbosch), paper prepared for the Department for International Development (DFID), Beijing .

Diamond, Larry. 2008. "The Democratic Rollback: The Resurgence of the Predatory State." *Foreign Affairs* 87(2):36–48.

Dijkstra, A. Geske. 2002. "The Effectiveness of Policy Conditionality: Eight Country Experiences." *Development and Change* 33(2):307–34.

Djankov, Simeon, , José Garcia Montalvo and Marta Reynal-Querol. 2008. "The Curse of Aid." *Journal of Economic Growth* 13(3):169–194.

Dreher, Axel and Andreas Fuchs. 2011. "Rogue Aid? The Determinants of China's Aid Allocation." CESifo Working Paper Series No. 3851 .

Dunning, Thad. 2004. "Conditioning the Effects of Aid: Cold War Politics, Donor Credibility, and Democracy in Africa." *International Organization* 58(2):409–23.

Dunning, Thad. 2008. *Crude Democracy: Natural Resource Wealth and Political Regimes*. New York, NY: Cambridge University Press.

Dutta, Nabamita, Peter T. Leeson and Claudia R. Williamson. 2013. "The Amplification Effect: Foreign Aid's Impact on Political Institutions." *International Review for Social Sciences* 66(2):208–28.

ECLAC. 2010. "The People's Republic of China and Latin America and the Caribbean: towards a strategic relationship." United Nations Economic Commission for Latin America and the Caribbean (ECLAC) .

EXIM Bank. 2009. "Chinese Government Concessional Loan and Preferential Export BuyerŠs Credit." http://english.EXIMbank.gov.cn/businessarticle/activities/loan/200905/9398_1.html. (Accessed Feb. 27th 2013).

Facts and Details. 2012. "Africa and China: Foreign Aid, Projects, Supporters and Critics." http://factsanddetails.com/china/cat8/sub52/item2874.html. (Accessed Feb. 26th 2013).

Fearon, James D. 2005. "Primary Commodity Exports and Civil War." *Journal of Conflict Resolution* 49(4):483–507.

Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *Amercian Political Science Review* 97(1):75–90.

Finkel, Steven E., Aníbal Pérez-Li nán and Mitchell A. Seligson. 2007. "The Effects of U.S. Foreign Assistance on Democracy Building, 1990Ű2003." *World Politics* 59(3):404–440.

Foster, Vivien, William Butterfield, Chuan Chen and Nataliya Pushak. 2009. *Building Bridges: ChinaŠs Growing Role as Infrastructure Financier for Sub-Saharan Africa*. Washington, D.C.: World Bank.

Garriga, Ana Carolina and Brian J. Phillips. 2013. "Foreign Aid as a Signal to Investors: Predicting FDI in Post-conflict countries." *Journal of Conflict Resolution* doi: 10.1177/0022002712467937 .

Gibson, Clark C., Krister Andersson, Elinor Ostrom and Sujai Shivakumar. 2005. *The Samaritan's Dilemma: The Political Economy of Development Aid*. New York, NY: Oxford University Press.

Goldsmith, Arthur A. 2001. "Foreign Aid and Statehood in Africa." *International Organization* 55(1):123–48.

Greene, William H. 2012. *Econometric Analysis* 7th ed. Upper Saddle River, NJ: Prentice Hall.

Grimm, Sven, Rachel Rank, Matthew McDonald and Elizabeth Schickerling. 2011. "Transparency of Chinese Aid: An analysis of the published information on Chinese external financial flows." Publish What You Found report .

Heckelman, Jac C. and Stephen Knack. 2008. "Foreign Aid and Market Liberalizing Reform." *Economia* 75(299):524–48.

Hicks, Raymond and Dustin H. Tingley. 2011. "Causal Mediation Analysis." *The Stata Journal* 11(4):1–15.

Hubbard, Paul. 2007. "Aiding Transparency: What We Can Learn About China Exim BankŠs Concessional Loans." Center for Global Development Working Paper No. 126 .

Hyde, Susan D. and Carew E. Boulding. 2008. "Political Terror, Election Fraud, and Foreign Aid: When to donors withdraw aid to promote democracy?" Paper Presented at Annual Meeting of Midwest Political Science Association in Chicago, IL. April, 2008 .

Iacus, Stefano M, Gary King and Giuseppe Porro. 2011. "Multivariate Matching Methods That are Monotonic Imbalance Bounding." *Journal of the American Statistical Association* 106(493):345–61.

Iacus, Stefano M, Gary King and Giuseppe Porro. 2012. "Causal Inference Without Balance Checking: Coarsened Exact Matching." *Political Analysis* 20(1):1–24.

Imai, Kosuke, Dustin H. Tingley and Luke Keele. 2010. "A General Approach to Causal Mediation Analysis." *Psychological Methods* 15(4):309–34.

Imai, Kosuke, Dustin Tingley and Teppe Yamamoto. 2013. "Experimental Designs for Identifying Causal Mechanisms." *Journal of the Royal Statistical Society, Series* A (Statistics in Society) 176(1):5–51.

Imai, Kosuke, Luke Keele, Dustin Tingley and Teppei Yamamoto. 2011. "Unpacking the Black Box of Causality: Learning about Causal Mechanisms from Experimental and Observational Studies." *American Political Science Review* 105(4):756–89.

Imai, Kosuke, Luke Keele and Teppe Yamamoto. 2010. "Identification, Inference, and Sensitivity Analysis for Causal Mediation Effects." *Statistical Science* 25(1):51–71.

IMF. n.d. "Definition for concessional debt." `https://www.imf.org/External/NP/sta/bop/pdf/bopteg29.pdf`. (Accessed Feb. 26th 2013).

Institute of Developing Economies, Japan External Trade Organization. n.d. “The Role of China’s Financial Institutions.” http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_11.html. (Accessed Feb. 25th 2013).

Jensen, Nathan and Leonard Wantchekon. 2004. “Resource Wealth and Political Regimes in Africa.” *Comparative Political Studies* 37:816–41.

King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press.

Knack, Stephen. 2004. “Does Foreign Aid Promote Democracy?” *International Studies Quarterly* 48(1):251–66.

Kobayashi, Takaaki. 2008. “Evolution of ChinaŠs Aid Policy.” JBIC Institute Working Paper No.27 .

Koesel, Karrie J. and Valerie J. Bunce. 2013. “Diffusion-Proofing: Russian and Chinese Responses to Waves of Popular Mobilizations against Authoritarian Rulers.” *Perspectives on Politics* 11(3):753–68.

Kono, Daniel Yuichi and Gabriella R. Montinola. 2009. “Does Foreign Aid Support Autocrats, Democrats, or Both?” *The Journal of Politics* 71(2):704–18.

Kotschwar, Barbara, Theodore H. Moran and Julia Muir. 2012. “Chinese Investment in Latin American Resources: The Good, the Bad, and the Ugly.” Peterson Institute for International Economics Working Paper 12-3 .

Lancaster, Carol. 2006. *Foreign Aid: Diplomacy, Development, Domestic Politics*. Chicago, IL: University of Chicago Press.

Lebovic, Jame H. and Erik Voeten. 2009. “The Cost of Shame: International Organizations and Foreign Aid in the Punishing of Human Rights Violators.” *Journal of Peace Research* 46(1):79–97.

Lum, Thomas, Hannah Fischer, Julissa Gomez-Granger and Anne Leland. 2009. “China’s Foreign Aid Activities in Africa, Latin America, and Southeast Asia.” Congressional Research Service No. R40361 .

Mahdavy, Hossein. 1970. “The Pattern and Problems of Economic Development in Rentier States: The Case of Iran" In Michael Allan Cook ed. *Studies in the Economic History of the Middle East*. London, UK: Oxford University Press.

Mahoney, James. 2008. “Toward a Unified Theory of Causality.” *Comparative Political Studies* 41(4-5):212–36.

Marshall, Monty G. and Ted Robert Gurr. N.d. “Polity IV Project: Political Regime Characteristics and Transitions, 1800-2012.” http://www.systemicpeace.org/polity/polity4.htm.

McCormick, Dorothy. 2008. "China & India as Africa's New Donors: The Impact of Aid on Development." *Review of African Political Economy* 35(115):73–92.

McSherry, Brendan. 2006. "The Political Economy of Oil in Equatorial Guinea." *African Studies Quarterly* 8(3):23–45.

Montinola, Gabriella R. 2008. When Does Aid Conditionality Work PhD thesis Stanford University.

Morrison, Kevin M. 2009. "Oil, Non-Tax Revenue, and the Redistributional Foundations of Regime Stability." *International Organization* 63(1):107–38.

Moyo, Dambisa. 2009. *Dead Aid: Why Aid Is Not Working and How There Is a Better Way for Africa*. New York, NY: Farrar, Straus and Giroux.

Naím, Moisès. 2007. "Rogue Aid." *Foreign Policy* March-April:95–6.

Nelson, Joan M. and Stephanie J. Eglinton. 1992. "Encouraging Democracy: What Role for Conditioned Aid?" Policy Essay No. 4. Washington, DC: Overseas Development .

Neumayer, Eric. 2003. "What Factors Determine the Allocation of Aid by Arab Countries and Multilateral Agencies?" *The Journal of Development Studies* 39(4):134–47.

Nielsen, Richard A., Michael G. Findley, Zachary S. Davis, Tara Candland and Daniel L. Nielson. 2011. "Foreign Aid Shocks as a Cause of Violent Armed Conict." *American Journal of Political Science* 55(2):219–32.

Nielsen, Richard and Daniel Nielson. 2010. "Triage for Democracy: Selection Effects in Governance Aid." Mimeo .

OECD. 2011. *Economic Diversification in Africa: A Review of Selected Countries*. Paris, France: OECD Publication.

OECD. n.d.*a*. "Glossary of statistical terms: Concessional loans." http://stats.oecd.org/glossary/detail.asp?ID=5901. (Accessed Feb. 26th 2013).

OECD. n.d.*b*. "OECD Factbook 2011-2012: Economic, Environmental and Social Statistics." http://www.oecd-ilibrary.org/sites/factbook-2011-en/04/01/05/index.html?itemId=/content/chapter/factbook-2011-37-en. (Accessed March. 2nd 2013).

OECD. n.d.*c*. "OECD official development assistance-definition and coverage." http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm. (Accessed Feb. 26th 2013).

Ombok, Eric. 2013. ""African Infrastructure Boom to Boost Syndicated-Loan Growth" *Bloomberg* Oct. 11th 2013." http://www.bloomberg.com/news/2013-10-11/african-infrastructure-boom-to-boost-syndicated-loan-growth-1-.html. (Accessed March. 3rd 2013).

Pearl, Judea. forthcoming. "Interpretation and Identification of Causal Mediation." *Psychological Methods* .

Rajan, Raghuram G. and Arvind Subramanian. 2011. "Aid, Dutch Disease, and Manufacturing Growth." *Journal of Development Economics* 94(1):106–118.

Resnick, Danielle. 2012. "Foreign Aid in Africa: Tracing Channels of Influence on Democratic Transitions and Consolidation." UNI-WIDER Working Paper No. 2012/15 .

Roeder, Philip G. 2001. "Ethnolinguistic Fractionalization (ELF) Indices, 1961 and 1985." http://pages.ucsd.edu/~proeder/elf.htm. (Accessed March 5th 2014).

Ross, Michael L. 2001. "Does Oil Hinder Democracy?" *World Politics* 53(3):325–61.

Ross, Michael L. 2012. *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*. Princeton, NJ: Princeton University Press.

Ross, Michael L. 2013. "Oil and Gas Data (February 2013 Release)." http://thedata.harvard.edu/dvn/dv/mlross/faces/study/StudyPage.xhtml;jsessionid=c78ee5f9990d50eae3ed5ff68dbb?globalId=hdl:1902.1/20369&studyListingIndex=0_c78ee5f9990d50eae3ed5ff68dbb.

Schraeder, Peter J., Steven W. Hook and Bruce Taylor. 1998. "Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows." *World Politics* 50(2):294–323.

Scott, Jame M. and Carie A. Steele. 2011. "Sponsoring Democracy: The United States and Democracy Aid to the Developing World, 1988Ű2001." *International Studies Quarterly* 55(1):47–69.

Shin, Aung. 2011. ""Contested Sino-Myanmar oil pipeline nears completion." *Myanmar Times* Nov. 17th 2013." http://www.oecd-ilibrary.org/sites/factbook-2011-en/04/01/05/index.html?itemId=/content/chapter/factbook-2011-37-en. (Accessed March. 2nd 2013).

Shinn, David H. 2011. ""ChinaŠs Growing Role in Africa: Implications for U.S. Policy". United States Senate, 113th Cong. (2011) (Statement of David H. Shinn before the Subcommittee on African Affairs, Senate Committee on Foreign Relations. Nov. 1st 2011).".

Smith, Alastair. 2008. "The Perils of Unearned Income." *The Journal of Politics* 70(3):780–793.

Sobel, Michael E. 1996. "An Introduction to Causal Inference." *Sociological Methods* 24(3):353–79.

Solt, Frederick. 2013. "The Standardized World Income Inequality Database (Version 4.0 Release)." http://myweb.uiowa.edu/fsolt/swiid/swiid.html.

State Council. 2011. “Eight Principles for Economic Aid and Technical Assistance to Other Countries.” http://english.gov.cn/official/2011-04/21/content_1849913_10.htm. (Accessed Feb. 25th 2013).

Stein, Matthew. 2011. “The Wariness in Kazakhstan of Chinese Economic Investments and Interests.” Foreign Military Studies Office Working Paper. Fort Leavenworth, KS .

Svensson, Jakob. 2003. “Why Conditional Aid Does Not Work and What Can Be Done About It?” *Journal of Development Economics* 70(2):381–402.

Tierney, Michael J., Daniel L. Nielson, Darren G. Hawkins, J. Timmons Roberts, Michael G. Findley, Ryan M. Powers, Bradley Parks, Sven E. Wilson and Robert L. Hicks. 2011. “More Dollars than Sense: Refining Our Knowledge of Development Finance Using AidData.” *World Development* 39(11):1891Ű1906.

Tull, Denis M. 2006. “China’s engagement in Africa: Scope, Significance and Consequences.” *The Journal of Modern African Studies* 44(3):459–79.

U.N. Security Council. 1999. “U.N. Security Council Resolution on “The situation in the former Yugoslav Republic of Macedonia". 3982nd meeting. Feb. 25th 1999.” http://www.un.org/en/ga/search/view_doc.asp?symbol=S/PV.3982. (Accessed Feb. 27th 2013).

van de Walle, Nicolas. 2001. *African economies and the politics of permanent crisis, 1979-1999*. New York, NY: Cambridge University Press.

Wang, Jian-Ye. 2007. “What Drives ChinaŠs Growing Role in Africa?” IMF Working Paper WP07/211 .

Wang, Jian-Ye and Abdoulaye Bio-Tchané. 2008. “AfricaŠs Burgeoning Ties with China.” *Finance & Development* 45(1):44–7.

Wantchekon, Leonard. 2002. “Why do Resource Abundant Countries Have Authoritarian Governments?” *Journal of African Finance and Economic Development* 5(2):57–77.

Williams, Cindy. 1996. ““The Role of Foreign Aid in Economic Development". United States Senate, 98th Cong. (1996) (Statement of Cindy Williams before the Subcommittee on African Affairs, Senate Committee on Foreign Relations. May 1st 1996).”.

Winters, Matthew S. forthcoming. “Targeting, Accountability and Capture in Development Projects.” *International Studies Quarterly* DOI: 10.1111/isqu.12075 .

Wolf, Charles Jr., Xiao Wang and Eric Warner. 2013. *China’s Foreign Aid and Government-Sponsored Activities: Scale, Content, Destinations, and Implications*. Washington, D.C.: RAND Corporation.

World Bank. N.d. “World Development Indicators.” http://data.worldbank.org/data-catalog/world-development-indicators.

Wright, Joseph. 2007. “When Does Economic Crisis Lead to Democratization?” Working Paper, Princeton Center for Globalization and Governance .

Wright, Joseph. 2010. "Aid Effectiveness and the Politics of Personalism." *Comparative Political Studies* 43(6):735–62.

Xinhuanet.com. 2013. "China-Africa Economic and Trade Cooperation." http://news.xinhuanet.com/english/china/2013-08/29/c_132673093.htm. (Accessed March. 1st 2013).

Zellner, Arnold. 1962. "An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias." *Journal of the American Statistical Association* 57(298):348–68.