Foreign Policy Analysis (2019) **15**, 570–588

China's Energy Diplomacy: Does Chinese Foreign Policy Favor Oil-Producing Countries?

Chia-yi Lee
Nanyang Technological University

Due to its rapid economic growth and increasing demand for energy, China has engaged in numerous efforts to sustain its energy supplies and enhance its energy security. While existing literature argues that access to energy is oftentimes the driving force behind Beijing's foreign policy behavior, little work has been done to systemically examine the bilateral relationship between China and energy-producing countries. This paper explores how China's foreign policy making is influenced by its energy security concern, focusing on three foreign policy instruments—partnerships, foreign aid, and leadership visits. Using a large-*N*, quantitative approach, this paper analyzes the effect of oil production on these three foreign policy indicators. The results show that Beijing is more likely to form partnerships with oil-producing countries. Top Chinese leaders are also more likely to travel to countries that produce a higher level of oil. China's aid allocation to Africa is driven by oil abundance as well, although the findings on aid are only valid in the cross-national analysis.

As an emerging global power and the world's second largest economy, China's energy consumption has been rapidly growing over the last two decades. In 2012, China consumed one-fifth of the world's total primary energy, more than the United States or the whole of Europe.[1] The majority of China's consumed energy, however, is imported, which means a disruption to foreign energy supplies would cause serious harm to China's economy and national interests. Beijing has thus paid increasingly close attention to energy issues and made conscious efforts to enhance energy security both internally and externally. Building a collaborative relationship with foreign energy suppliers, for example, is one of the Chinese government's efforts to secure foreign energy supply.

This paper focuses on the bilateral relationships between China and energy-producing countries. It argues that Beijing has implemented more favorable foreign policies toward energy-producing countries because of its energy security concerns. While numerous scholars have argued that Beijing has deployed energy diplomacy

Chia-yi Lee is an assistant professor at the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore. Her research lies in the intersection between international political economy and conflicts, with a focus on natural resources, foreign direct investment, and terrorism. Her works have appeared in journals such as *International Interactions*, *Journal of Conflict Resolution*, and *Journal of Peace Research*.

Author note: The author would like to thank Daniel O'Neill, Hans Hanpu Tung, Jeffrey Wilson, Tsung-Han Tsai, the *FPA* Editors, and two anonymous reviewers for their helpful comments and suggestions on this paper. The author is also grateful to Nien-chung Chang Liao for generously sharing the data on China's partnerships, to Scott Kastner for generously sharing the data on China's leadership travel, and to Shuting Tan for her excellent research assistance.

[1] Total primary energy consumption includes "the consumption of petroleum, dry natural gas, coal, and net nuclear, hydroelectric, and non-hydroelectric renewable electricity" (EIA 2017).

Lee, Chia-yi (2019) China's Energy Diplomacy: Does Chinese Foreign Policy Favor Oil-Producing Countries?. *Foreign Policy Analysis*, doi: 10.1093/fpa/orz011

toward energy-producing countries in order to meet its energy needs, this argument has rarely been tested empirically. This paper aims to provide a systematic analysis of how China's energy security concern affects its foreign policy preferences. Therefore, it contributes not only to the literature on China's energy security but also to the broader literature on international politics. Existing literature shows that powerful countries, particularly the United States, tend to establish friendships with strategically important countries, including their energy suppliers. This paper argues that China as a rising power, behaves similarly by allocating more foreign policy resources toward energy-producing countries.

Using large-*N* data on three foreign policy indicators—partnerships, foreign aid, and leadership visits, as well as data on oil production and oil reserves, this paper examines whether oil-producing countries are more likely to become China's diplomatic partners, receive Chinese aid, or be the travel destinations of China's top leaders. Results of the statistical analyses show that Beijing is more likely to establish partnerships, especially strategic partnerships and comprehensive strategic partnerships, with oil-producing countries. Furthermore, Chinese presidents and premiers are more likely to travel to oil-producing countries. Chinese aid to African countries is driven by oil endowments as well, although the results only hold in the cross-national analysis. This suggests that access to energy indeed plays an important role in China's foreign policy behavior.

The rest of this paper is organized as follows. The next section discusses China's energy security and the efforts made to strengthen it. The section that follows focuses on China's energy diplomacy and puts forward the hypotheses. Section 4 presents the data, models, and preliminary evidence. Section 5 shows the results of the empirical analysis. The final section concludes.

China's Energy Security and Energy Diplomacy

Since 1993 as China turned into a net oil importer, the issue of energy security has steadily gained traction among Beijing's decision-making authorities and academics. Currently, China is the world's largest oil importing country as well as the second largest oil consuming country (after the United States). The International Energy Agency (IEA) predicts that China will overtake the United States and become the largest oil consumer in the 2030s.[2] To meet its domestic demand due to its rapid economic growth and huge population size, China has imported significant amounts of fossil fuels, including oil, natural gas, and coal, even though it is a major energy producer itself.[3]

Dependence on foreign energy poses a number of challenges to China's energy security. Around half of the oil imported to China, for instance, is from the Middle East, a region plagued with instability and terrorism. Although the Chinese government has managed to diversify its oil import sources, unstable regions including the Middle East and Africa are still dominant sources of China's imported oil (Zhao and Chen 2014). The oil transportation route is also vulnerable, as oil from the Middle East and Africa must be shipped through the Strait of Malacca, a chokepoint jointly controlled by Singapore, Indonesia, and Malaysia and policed by the US Navy. China therefore faces the "Malacca Dilemma" (Zhang 2011), where risks of piracy, terrorist attacks, and a US naval blockade at this critical maritime chokepoint abound.

Aware of the potential threat of an energy supply disruption, the Chinese government has made numerous efforts to ensure its energy security, both internally and externally. Domestically, since 2004 when China was facing an acute energy shortage, the Chinese government has implemented a series of policies to enhance

[2] See International Energy Agency (2014).

[3] China is currently the world's largest coal producer and fourth largest oil producer.

energy efficiency and strengthen energy conservation, such as monitoring industrial energy consumption, adjusting energy pricing, tightening fuel economy standards, and revising building codes for energy-saving purposes (Zhou, Levine, and Price 2010). The central government and China's energy companies have also attempted to increase domestic energy supplies, from both conventional and renewable sources (Andrews-Speed 2015).

In China's energy mix, coal accounts for more than half of its consumed energy and is used to generate three-quarters of its electricity. It is widely known, however, that coal is the least clean fossil fuel, and in recent years, serious air pollution (which is mainly caused by coal-fired power plants) has triggered public awareness and raised corresponding government concerns in China (Li and Zhang 2014; Wang et al. 2016). The safety of coal mines is also a highly charged political issue, as coal mining accidents happen in China every year.[4] To reduce reliance on coal due to concerns about environmental protection and coal mining casualties, China actively engages in the promotion of renewable energy development and utilization. The Renewable Energy Law was enacted in 2005, and the production of renewable energy has been growing rapidly since then, especially in hydropower, wind power, and solar power. Currently, China is the world's largest renewable energy producer, although the share of renewable energy in total energy consumption remains very small (Wang, Yin, and Li 2010).

While China has paid growing attention to its domestic energy system (Kennedy 2010), external efforts have not been reduced. Since the 1990s, China has employed energy diplomacy and engaged in both bilateral and multilateral cooperation. Multilaterally, China has actively participated in regional forums and initiated energy dialogues. Beijing established the Forum on China-Africa Cooperation in 2000 to promote investment in African oil-producing countries (Klare and Volman 2006; Taylor 2006). China is now Africa's largest trading partner, and one-third of China's imported energy is from Africa (Pigato and Tang 2015). The Shanghai Cooperation Organization (SCO) was founded in 2001 with China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan as members. While the major focus of the SCO is regional security issues, particularly anti-terrorism, scholars indicate that China's motivation behind SCO is its appetite for abundant energy in Central Asia (Marketos 2008; Yuan 2010). The One Belt One Road initiative, proposed by the Chinese President Xi Jinping in 2013, is a broader and more ambitious strategy to deepen relationships with Eurasian countries, through which China intends to use economic diplomacy to gradually assert itself as a global power.

Bilaterally, China has been building collaborative relationships with energy-producing countries and actively investing in their energy sectors. The Chinese national oil companies (NOCs), supported by the central government, have played a major role in investing in overseas oil projects since the 1990s, especially in Africa and Central Asia. Since the mid-2000s, China has also negotiated bilateral free trade agreements that include resource clauses and investment protection commitments as a tool to enhance its energy security, which is an act similarly done by Japan and Korea (Wilson 2012; Wilson 2014). It remains a debate, however, as to whether Chinese NOCs' corporate interests and China's national interests really converge,[5] and consequently, Chinese NOCs' overseas expansion may not necessarily lead to improvement in energy security. Chen (2011), for example, shows that while China's quest for foreign oil has enhanced the NOCs' reserves and profits, the overall national energy security has not been boosted.

[4] In 2013 alone, for instance, 1,049 workers were killed in coal mining in China. See Express Tribune (2014).

[5] While the conventional view holds that the behavior of Chinese NOCs reflects Beijing's policy objectives, scholars argue that the commercial interests of Chinese state-owned oil companies have significantly affected their operations in Africa, which may not go along with the central government's priorities. See Jiang (2009) and Liou (2009), for example.

Moreover, to reduce dependence on energy shipped through sea lanes, China has built oil and natural gas pipelines that run through its neighboring countries, namely Kazakhstan, Turkmenistan, Uzbekistan, Russia, and Myanmar. The China National Petroleum Corporation (CNPC) is playing a leading role in constructing, operating, and managing these pipeline projects. The natural gas pipeline between China and Turkmenistan and the oil pipeline between China and Kazakhstan enable China to increase energy imports from Central Asia and help diversify China's energy sources and supplies. The Sino-Myanmar oil and natural gas pipeline, which begins at Myanmar's deepwater port Kyaukphyu, and has recently been put into operation, allows China to import crude oil from the Middle East and Africa through a shorter route that bypasses the Malacca Strait. The ultimate goal of building these pipelines is to diversify energy transit routes and further secure China's energy security.

Beijing's Foreign Policy Tools toward Energy Producers

While China's efforts to increase energy security are multifaceted, this paper focuses on bilateral diplomacy and argues that China's foreign policy toward developing countries is influenced by its energy security concern. In other words, if the quest for energy is taken into consideration in Beijing's foreign policy making, it will be observed that Beijing enacts more favorable foreign policies toward energy-producing countries. These policies may not be directly related to energy issues but will enhance the cooperation and intimacy between China and energy-producing countries, which will in turn help secure China's access to energy and advance its national interests.

The argument that China has exerted active energy diplomacy toward energy-producing countries can be seen elsewhere in the literature. Some scholars point out that, in order to pursue its economic or energy interests, Beijing has cultivated intimate relationships with some "rogue states" or "pariah states" and ignored their political development (Taylor 2006; Tull 2006; Carmody and Owusu 2007). Iran is one clear example. Before Tehran agreed to cut its nuclear capabilities in exchange for the lifting of sanctions in 2015, Iran had insisted on developing its nuclear program. Despite the apparent nuclear threat, China—possessing a veto power in the United Nations Security Council—repeatedly expressed its reluctance to accept Western sanctions on Iran (Chen 2008; Van Kemenade 2010), which is China's sixth largest oil-importing partner. Sudan is another key example. With the worst human rights record in the world, Sudan has received huge oil investment from CNPC alongside arms and aid from Beijing, which help empower the authoritarian Khartoum regime but hurt the well-being of its citizens (Taylor 2006; Chen 2008; Jakobson 2009; Lee 2015).

While case studies abound, little work has been done to systematically examine the relationship between energy security and China's foreign policy making. This paper undertakes this task by testing the effect of oil abundance on China's foreign policy behavior, with a focus on Chinese foreign policy toward energy-producing countries. This paper argues that energy is an important determinant of Chinese foreign policy preferences and tests this argument using three quantifiable foreign policy tools—partnerships, foreign aid, and leadership visits. The hypotheses are drawn from the literature on major power diplomacy, as China is a rising global power that may exhibit foreign policy behaviors similar to other major powers.

First, to ensure energy security and protect overseas oil interests, powerful countries often develop a patronage relationship or maintain alliance ties with their energy suppliers. The United States, for instance, has established close ties with energy-exporting countries, particularly the Persian Gulf states, since World War II. Building on an "oil for security" swap, the US government has helped Saudi Arabia and Kuwait overcome internal turbulence or foreign invasion

(Bennett and Paletz 1994; Hart 1998; Bronson 2006). France has also played a significant role in a number of African oil-producing countries (which are France's former colonies), including Gabon, Chad, the Republic of Congo, and Ivory Coast. Gabon, where the French oil company Total has operated for eighty-five years, has been an important French ally in Africa, while the French government has acted as a dedicated foreign patron that had supported the rule of controversial dictator Omar Bongo for forty-two years (Yates 1996; Omgba 2009).

As an emerging global player, China may behave similarly by engaging in alliance politics with strategically important countries. Since its founding in 1949, however, the Chinese government has adhered to the nonalignment principle. While currently only North Korea is a formal ally of China, Beijing has considered partnerships as a nontraditional way of alignment. A partnership is a goal-driven, informal form of cooperation, and the commitment level involved is lower than an alliance (Wilkins 2008). Although it remains a debate as to whether China's foreign policy has become more assertive, Beijing has increasingly formed partnerships with other countries. Oftentimes the partnerships involve cooperation on issues regarding energy and natural resources. For example, in the Joint Statement on Strengthening Comprehensive Strategic Partnership between China and Indonesia in March 2015, both countries "agreed to . . . strengthen cooperation in the development, refinery and storage of land-sea oil and gas resources as well as coal mining and power generators."[6] Recently, in January 2016, China also formed a comprehensive strategic partnership with Saudi Arabia, the second largest oil producer and oil reserves holder in the world. While it seems quite clear that Beijing prefers to establish partnerships with energy-producing countries, there is, to the author's knowledge, no study examining the association between energy and China's partnerships. The first empirically testable hypothesis in this paper, therefore, is:

Hypothesis 1: *China is more likely to build partnerships with countries abundant in energy resources.*

Another important foreign policy instrument is foreign aid. Foreign aid, especially the OECD's official development assistance (ODA), is usually given to underdeveloped or developing countries for the purposes of eliminating poverty, stimulating economic development, or promoting democratic reforms. Some aid donors tie their aid to conditions, such as the imposition of fiscal reforms, peacebuilding, and democratization, in order to advance their specific goals. The effectiveness of foreign aid or aid conditionality, however, has been a topic of continuing debate. While the primary goal of foreign aid or ODA is addressing humanitarian needs, a large body of literature indicates that Western aid donors, particularly the United States, give aid to their allies or strategic friends instead of countries that are in real need (e.g., Meernik et al. 1998; Alesina and Dollar 2000; Kuziemko and Werker 2006; Bueno de Mesquita and Smith 2009). Some scholars also argue that international aid agencies are plagued with bureaucratic politics and fail to provide efficient or productive services (Easterly 2002; Vreeland 2003).

While China is not an ODA donor, its rapidly growing economy has empowered it to become an active aid donor over the last two decades, and a significant portion of aid from China has been flowing to Africa. It is widely believed, however, that China provides aid or infrastructural loans to African countries based on its national interests, notably energy interests, instead of humanitarian concerns.[7] Scholars and policy analysts argue that so-called "rogue aid" is given to corrupt, authoritarian countries and serves as a tool for China to satisfy its energy interests, which in turn exacerbates the weak governance and environmental degradation in the

[6] See Ministry of Foreign Affairs of the People's Republic of China (2015).

[7] See Brautigam (2009) for an opposing view.

recipient countries (Naim 2007; Zafar 2007; Woods 2008). The criticisms about the ineffectiveness of Chinese aid are even harsher than those about Western aid because Beijing often gives aid with no strings attached. For example, China has provided loans with no or low conditionality and political support to Myanmar and Sudan, which have been accused of failing to meet social and environmental standards (Zhao 2008). While case studies show that China gives aid or loans in exchange for strategic resources (e.g., Alves 2013; O'Neill 2014), large-*N* studies are rarely seen. Dreher and Fuchs (2015), as one exception, find no empirical evidence that resource endowments affect Chinese aid, although they note that their "finding does not rule out that China uses this tool to secure its access to natural resources in individual cases." This paper also undertakes this task by testing the effect of energy abundance on China's aid distribution:

Hypothesis 2: *China is more likely to give aid to countries abundant in energy resources.*

The final foreign policy instrument considered in this paper is leadership visitation. As Kastner and Saunders (2012) argue, leadership travel is usually accompanied by commitments of aid and investment deals and the signing of various agreements. In China, where the political system has remained authoritarian, leadership travel particularly reflects top leaders' preferences and inclinations toward specific countries they are to visit. Therefore, it represents a useful indicator of Beijing's foreign policy priorities. If a country is visited more frequently by top Chinese leaders, it clearly means that Beijing has a stronger desire to engage this country.

Leadership travel is an important indicator linking energy issues and foreign policy in China because top Chinese leaders have been the primary actors in determining the general framework of energy policy (Meidan, Andrews-Speed, and Xin 2009). Due to the lack of an energy ministry, top Chinese leaders have played a key role in endorsing China's energy initiatives and engaging in energy diplomacy, including deciding whether to invest in foreign oil fields (Downs 2004). They also recognize the strategic importance of oil that goes beyond an economic issue (Cheng 2008). As a result, energy-producing countries have increasingly appeared in Chinese leaders' travel itineraries (Wu and Storey 2008), and active leadership travel has boosted commercial interests, as the top leaders' "visits to oil-producing countries in Central Asia, the Middle East, Africa, Latin America and Oceania have helped Chinese enterprises secure major deals" (Cheng 2008).

In recent years, China's foreign policy assertiveness has especially been reflective of top leaders' preferences and perceptions (Chang Liao 2016). The incumbent Chinese President Xi Jinping is the most traveled leader since the People's Republic of China (PRC) was established in 1949.[8] In 2015 alone, he visited fourteen countries, including resource rich countries like Kazakhstan, Russia, and Indonesia. In January 2016, he traveled to three Middle Eastern oil-producing countries—Saudi Arabia, Iran, and Egypt, two of which are among China's top five oil suppliers. The Middle East tour highlights China's growing stake in this energy-abundant region. The last empirically testable hypothesis therefore is:

Hypothesis 3: *Top Chinese leaders are more likely to pay leadership visits to countries abundant in energy resources.*

Research Design and Data

To systematically examine whether Chinese foreign policy preferences are affected by a country's energy abundance, I conduct a large-*N* data analysis. Below, I describe the variables, data, and methods used.

[8] See Kaiman and Yang (2015).

Dependent Variables

To test the first hypothesis, I use data on China's partnerships. Beijing considers three types of partnerships—partnerships, strategic partnerships, and comprehensive strategic partnerships. A strategic partnership means Beijing and its partner have deeper than regular cooperation, including military cooperation and cooperation in other core interests. A comprehensive strategic partnership means both countries share extensive interests and develop cooperation on a wide range of issues, including defense, economy, culture, technology and science, and regional and international affairs. Beijing started its partnership diplomacy in 1993 and has so far built fifty-eight partnerships. The data on China's partnerships are collected from the Ministry of Foreign Affairs of the PRC.[9] A country is coded as 1 as long as it has a partnership connection with China, regardless of the type. I also create another dependent variable indicating whether a country is China's strategic partner or comprehensive strategic partner because these two types involve deeper cooperation regarding strategic interests.

To test the second hypothesis, I use data on China's aid. The data are from the AidData website, where a dataset on China's financial assistance to Africa from 2000 to 2013 is provided.[10] The dependent variable is the logged value of Chinese aid (in constant 2011 US dollars, thousands) given to a country in a year. Because the dataset only provides information on Chinese aid to Africa, I restrict the sample to African countries to avoid false generalization. One issue surrounding Chinese aid to Africa is that it fluctuates substantially from year to year, so in addition to the time-series cross-sectional (TSCS) data, I draw upon cross-national evidence. I create another variable that indicates the total amount of Chinese aid received by a country from 2000 to 2013 (in million dollars, logged).

To test the third hypothesis, I use data on Chinese leadership travels from 1998 to 2013. The data from 1998 to 2008 are from Kastner and Saunders (2012), and the data from 2009 to 2013 are collected by the author. While Kastner and Saunders (2012) do not find a correlation between oil abundance and Chinese leadership travels, they suspect that the effect may be picked up by other variables. Their analysis, moreover, separates the Hu and Wen administration from the Jiang and Zhu administration and finds similar patterns across these two administrations. I therefore merge both and supplement it with the data on the Hu and Wen administration from 2009 to 2012 and the Xi and Li administration in 2013 using information from the Ministry of Foreign Affairs of the PRC.[11] Because the Kastner and Saunders (2012) data do not indicate the year when a leadership visit was paid, a TSCS analysis is not feasible. I simply perform a cross-national model in which the dependent variable is the total number of leadership visits paid to a country by Chinese presidents and premiers during the period 1998–2013.

To provide a preliminary overview of how changes in these Chinese foreign policy instruments are related to China's energy security, I graphically present China's oil consumption, the number of China's partnerships, and the amount of Chinese aid to Africa over time in figure 1. The left panel of figure 1 shows China's oil consumption (in thousand barrels per day) since 1990 and the number of partnerships China has established since 1993.[12] As shown, both oil consumption and partnerships have increased rapidly over time. It seems that the more oil China has consumed, the more partnerships China has formed. The right panel presents

[9] A list of these countries and the years when the partnerships were formed can be seen in Table A1.

[10] Available at AidData (2013).

[11] Most of the information was collected from the Ministry of Foreign Affairs' official website by a research assistant who reads Chinese. Some was from news media—for example, Sina. From 2009 to 2013, there were a total of ninety-three visits paid by top Chinese leaders, three of which were scheduled but later cancelled.

[12] The data on China's partnerships only indicate the year when the partnership was established. I assume that a partnership has continued from its establishment up to 2013.

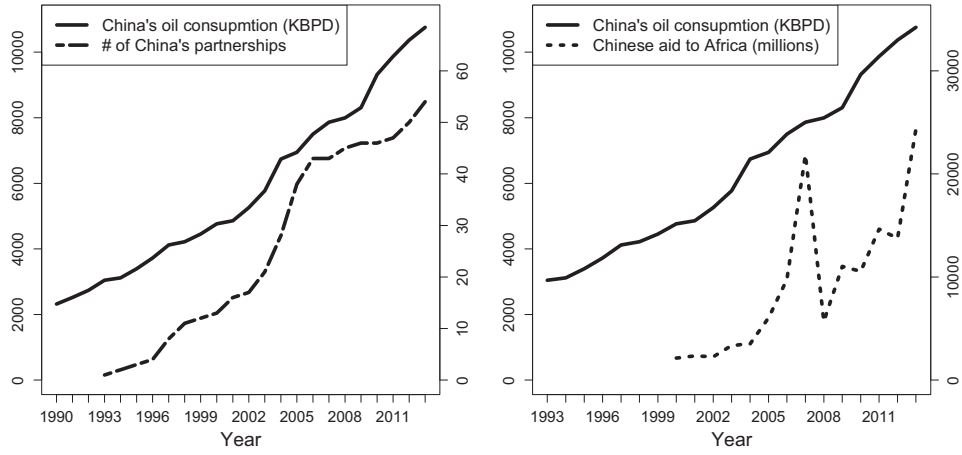

Figure 1. China's oil consumption, partnerships, and aid to Africa

Table 1. Cross-tabulation of dependent and independent variables

	Oil producers	Non–oil producers	Total
China's partners	31 (43%)	8 (14%)	39
Nonpartners	41 (57%)	48 (86%)	89
Aid recipients*	20 (100%)	27 (90%)	47
Non–aid recipients*	0 (0%)	3 (10%)	3
Countries visited	48 (67%)	20 (35%)	68
Countries not visited	24 (33%)	37 (65%)	61

Notes: OECD countries are excluded in the table. *Only African countries are reported. Percentages by columns are shown in the parentheses.

China's oil consumption and Chinese aid to Africa (in million dollars) since 2000. As it shows, China's financial assistance to Africa has not always covaried with its oil consumption and has fluctuated. While the amount of aid reached a peak in 2007, overall the trend is positive along with China's increasing oil consumption.

Independent Variable

To test the above hypotheses, I use a country's oil production to measure its energy abundance. Oil is by far the most important energy resource, and oil imports are critical to China's energy security. The data on oil production are from the US Energy Information Agency (EIA).[13] Another often used data source for oil production is the BP Statistical Review of World Energy.[14] I use EIA data instead of BP data because the former covers a larger number of countries. Nonetheless, the results remain unchanged when BP data are employed. This variable is the logged amount of annual oil production (in thousand barrels) in a country.

Table 1 displays the distribution of the independent variable against three dependent variables. All variables are dichotomized for the sake of simplicity. A country is considered an oil producer as long as its oil production is larger than 0. In the first two rows, I classify developing countries into those that formed partnerships with China and those that did not form partnerships with China, based on 2013

[13] Available at EIA (n.d.).
[14] Available at BP (2018).

data. As can be seen, among the seventy-two oil producers, 43 percent of them have partnership relationships with China. Among fifty-six non–oil producers, only 14 percent of them have partnership relationships with China. The next two rows report the numbers of African countries that have received financial assistance from China and those that have never received Chinese assistance. As shown, forty-seven out of fifty African countries in the sample are Chinese aid recipients. Among these forty-seven countries, twenty are oil producers. Three countries have never received aid from China—Burkina Faso, Gambia, and Swaziland, and none of them is an oil producer.[15]

Lastly, the last two rows report the numbers of countries Chinese leaders visited and the number of countries that were not visited by Chinese leaders during the period 1998–2013, respectively. Among 129 developing countries in the sample, Chinese leaders traveled to sixty-eight of them. Forty-eight of these sixty-eight countries are oil producers, accounting for 67 percent of all oil producers in the sample. Among sixty-one countries that Chinese leaders had not visited, only twenty-four of them are oil producers. Overall, table 1 offers preliminary evidence that China is more likely to establish partnerships with, give aid to, and pay leadership visits to oil-producing countries.

Control Variables

While table 1 presents the results of bivariate analyses, this paper relies mainly on multivariate analyses to more rigorously examine the effect of oil production on China's foreign policy preferences. In order to avoid the effect of energy abundance being picked up by other variables, I keep the model parsimonious and only include a number of important control variables. First, I include three economic variables: GDP per capita (in current US dollars, logged), GDP growth rate, and FDI inflows (in current US dollars, logged) to test whether China's foreign policy making is influenced by a country's economic conditions. The data on these three variables are from the World Bank's World Development Indicators database.

Second, as the world's largest trading country, China's foreign policy may be highly driven by its trade relationships. A number of studies show that trade dependence on China results in foreign policy convergence with the Chinese government (Flores-Macias and Kreps 2013; Kastner 2016; Strüver 2016). I therefore include bilateral trade with China as a control variable. This variable can be in a variety of forms, such as overall trade flows with China, trade with China as a percentage of a country's GDP, and trade with China as a percentage of a country's total trade. Because this paper focuses on Beijing's foreign policy toward individual countries rather than individual countries' foreign policy alignment with China, I use a country's trade importance to China, which is measured as a country's bilateral trade with China (imports plus exports) as a percentage of China's overall trade.[16] The data are from the International Monetary Fund's Direction of Trade Statistics.

Third, I include the level of democracy to check whether Beijing favors authoritarian countries or countries with poor governance. The data on democracy are from the standard Polity index, ranging from −10 to 10, with a higher value indicating a higher level of democracy. Moreover, having a stable domestic environment usually helps a country's external relations, and thus, I include a variable to measure the level of internal instability. This variable is a weighted sum of eight forms of domestic conflicts, ranging from 0 to 85,620, and is log-transformed. The data

[15] In fact, all these three countries had maintained formal diplomatic relations with Taiwan, among which Gambia stopped recognizing Taiwan in November 2013. Thanks to an anonymous reviewer for pointing out this important factor. Adding diplomatic ties with Taiwan as a control variable, however, does not change the main results.

[16] When I use trade dependence on China, measured as a country's trade with China as a share of its total trade, the results remain substantially unchanged.

are from the Cross-National Time-Series (CNTS) Data Archive (Banks and Wilson 2014).[17]

Finally, some scholars believe that China, being a rising power, may want to balance US influence or even challenge US dominance internationally (Mearsheimer 2010; He and Feng 2012). Therefore, I include a variable US ally to test whether China tends to court or avoid approaching US strategic friends. The data on US allies are from the Correlates of War Formal Alliance dataset v4.1 (Gibler 2008). This variable is coded as 1 when a country has a formal alliance tie with the United States (with mutual defense pacts, nonaggression treaties, and ententes all included) in a given year and 0 otherwise. To avoid a simultaneous effect or reverse causality, all the independent and control variables are lagged one year behind the dependent variable.

Statistical Models

Five models are employed in the empirical analysis. In the first two models, the dependent variable is a binary indicator of whether a country is China's (strategic) partner, and I perform a logistic model. The dataset on China's partnerships indicates the year when a partnership was formed, but it is unclear for how long a partnership has lasted. If each partnership is assumed to have lived up to now, then there exists little time-serial variation. So, I simply employ cross-national models in which the dependent variable is coded as 1 as long as a country formed a (strategic) partnership with China between 1993 and 2013. The sample includes 125 developing countries. Developed countries (i.e., OECD members) are excluded from the sample because their relationships and interactions with China may follow a different pattern. All the independent and control variables enter the model at their mean values between 1992 and 2012.

In the third model, the dependent variable is the logged amount of Chinese aid. The unit of analysis is the country-year, and the data structure is TSCS, which is a multilevel structure. I therefore perform a multilevel linear model and include country and year random effects to control for country heterogeneity and contemporaneous shocks.[18] A lagged dependent variable is also included because aid-giving may be largely path-dependent. Nevertheless, the results remain unchanged without the lagged dependent variable. The sample includes forty-nine African countries. In the fourth model, the dependent variable is the total amount of Chinese aid received by a country from 2000 to 2013, which is a cross-national structure. The independent and control variables enter at their mean values between 1999 and 2012.

In the final model, the dependent variable is the number of leadership visits paid by top Chinese leaders between 1998 and 2013, which is a nonnegative count. The data are overdispersed, so I use a negative binomial model instead of a Poisson model. The data structure is cross-national, and 125 countries are included. The independent and control variables enter the model at their mean values between 1997 and 2012. A list of these countries can be seen in Table A2.

Findings

Table 2 presents the results. In model 1, the dependent variable is whether a country has a partnership connection with China. As can be seen, the coefficient for oil production is positive and statistically significant at the 5 percent level. This means that China is more likely to build partnerships with oil-producing countries.

[17] I use the CNTS variable domestic9, which is a composite index of eight types of domestic conflicts (with weights in parentheses): assassinations (25), strikes (20), guerrilla warfare (100), government crises (20), purges (20), riots (25), revolutions (150), and anti-government demonstrations (10).

[18] An OLS model with country and year fixed-effects produces similar results.

Table 2. Energy production and Chinese foreign policy preferences

Dependent variable	Partnership Model 1	Strategic partnership Model 2	Chinese aid to Africa Model 3	Model 4	Leadership visits Model 5
Oil production	0.131	0.184	0.050	0.316	0.074
	(0.058)**	(0.069)***	(0.080)	(0.151)**	(0.025)***
GDP per capita	−0.335	−0.525	−0.108	−0.673	−0.232
	(0.270)	(0.322)	(0.356)	(0.683)	(0.110)**
GDP growth	−0.033	−0.003	0.041	0.068	0.009
	(0.089)	(0.088)	(0.035)	(0.170)	(0.034)
FDI inflows	0.261	0.305	0.129	0.090	0.121
	(0.081)***	(0.096)***	(0.235)	(0.134)	(0.031)***
Trade importance	1.302	1.825	3.186	2.582	1.194
	(0.826)	(0.879)**	(2.096)	(5.063)	(0.249)***
Level of democracy	−0.007	−0.046	0.145	0.298	−0.025
	(0.051)	(0.059)	(0.066)**	(0.108)***	(0.021)
Domestic conflict	0.201	0.166	0.111	0.222	−0.030
	(0.138)	(0.159)	(0.064)*	(0.327)	(0.061)
US ally	−0.921	−0.505	0.734	−1.132	−0.099
	(0.777)	(0.891)	(2.704)	(3.435)	(0.315)
Lagged Chinese aid			0.203		
			(0.040)***		
Number of observations	125	125	603	49	125
Number of countries	125	125	49	49	125
Log likelihood	−55.55	−44.35	−1778.55	−123.23	−191.22
AIC	129.09	106.70	3583.10	266.46	400.44
BIC	154.55	132.16	3640.33	285.38	428.72

Notes: Standard errors are in parentheses. *$p < .1$; **$p < .05$; ***$p < .01$.

Other things being equal, a one unit increase in the oil production variable makes a country 14 percent more likely to be China's diplomatic partner.

In model 2, the dependent variable indicates whether a country is a strategic or comprehensive strategic partner of China. The coefficient for oil production is also positive and statistically significant, and the effect is stronger than that in model 1. This suggests that the more oil a country produces, the higher the probability China will consider this country a strategic or comprehensive strategic partner. When all the control variables are set at the mean values, the predicted probability for a country without oil to form a strategic partnership with China is 5.7 percent, whereas that for a country producing the average amount of oil (which is equivalent to 266 thousand barrels per year) is 14.4 percent. In other words, energy abundance plays an important role in determining Beijing's partnership building. In addition to oil production, FDI has a strong, positive effect in models 1 and 2, meaning that China is more likely to form partnerships with countries that receive more FDI. Trade importance is also positively associated with the formation of strategic or comprehensive strategic partnerships. These findings show that China's partnership diplomacy is largely driven by economic considerations.

In model 3, the dependent variable is the amount of financial assistance given by China to African countries. As shown, the coefficient for oil production is positive, although it fails to achieve statistical significance. This null finding is consistent with that of Dreher and Fuchs (2015). As mentioned previously, however, the data on Chinese aid to Africa display notable over-time fluctuations within countries, while the data on oil production are quite stable across years. In model 4, therefore, I conduct a cross-national analysis in which the dependent variable is the total

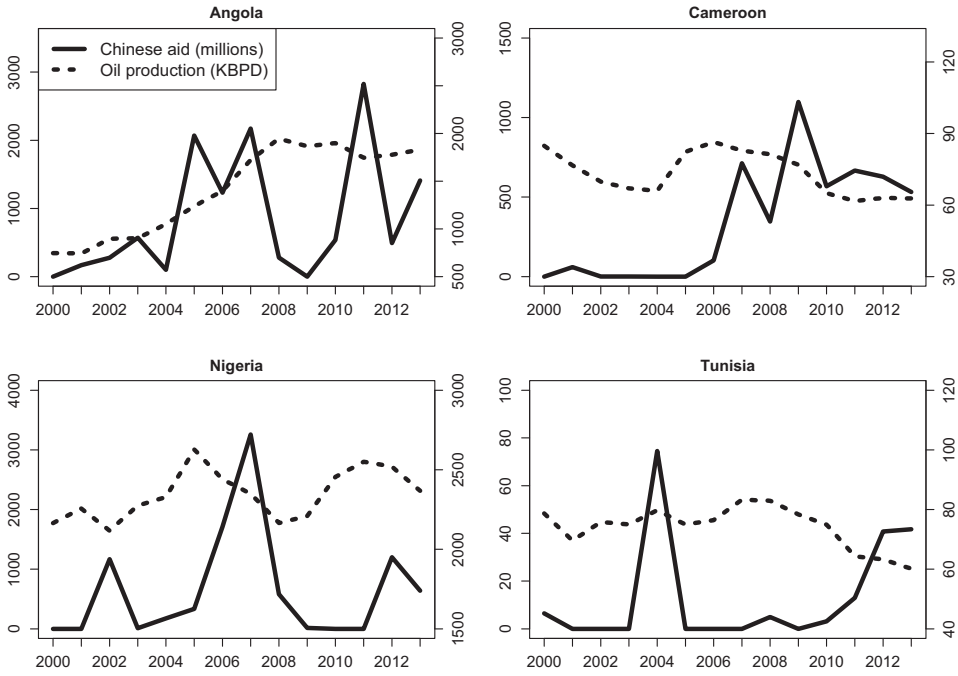

Figure 2. Chinese aid and oil production in four selected African countries

amount of Chinese aid given to a country from 2000 to 2013, and the independent and control variables enter at the mean values between 1999 and 2012. As the results show, the coefficient for oil production is positive and statistically significant at the 5 percent level. This suggests that, in Africa, other things being equal, Chinese aid is more likely to flow to oil-producing countries.

To address the inconsistent results between the TSCS model and the cross-national model, I select four African oil-producing countries that have received Chinese aid, and graphically present the amount of aid received and their oil production from 2000 to 2013 in figure 2. As shown in figure 2, Chinese aid (denoted by the solid line) fluctuates from year to year, whereas oil production (denoted by the dashed line) is relatively stable over time. Angola, for example, received more than 2 billion dollars from China in 2005, 2007, and 2011 each but none in 2000 or 2009. In other words, if the time-serial variation is taken into account, the results may be confounded by the volatility of Chinese aid. Because the annual aid amount is subject to the Chinese government's yearly budget, it is less likely that it will clearly follow aid recipients' oil production every year. When I only focus on the variation across African countries, however, it is observed that African oil producers in general receive more Chinese aid than non–oil producers.[19]

Some other findings in models 3 and 4 are noteworthy. Domestic conflict is positively associated with Chinese aid to Africa, although it only achieves statistical significance in the TSCS model. This seems to confirm the suspicion that Chinese aid is more likely to flow to unstable countries. The level of democracy has a positive effect on Chinese aid, which is against the conventional wisdom

[19] This explanation seems to be further validated when I perform a TSCS model without country fixed-effects (and only with year fixed-effects). In the results of this model, the coefficient for oil production is positive and statistically significant at the 10% level. Because a year fixed-effects model only considers the variation between countries within given time (instead of that within countries), it successfully captures the effect of oil production on Chinese aid across countries with time-specific impact controlled.

but echoes Brautigam's (2009) observation that Chinese aid to Africa may be benign, rather than merely flowing to dictators. In fact, African countries that have higher Polity scores, including Benin, Botswana, Ghana, and Senegal, are among the major recipients of Chinese aid. So, the unexpected finding of a positive effect of democracy on Chinese aid to Africa may in fact reflect the real allocation of Chinese aid.

In model 5, the dependent variable is the number of leadership visits made by Chinese leaders from 2008 to 2013. As shown, the coefficient for oil production is positive and statistically significant at the 1 percent level, suggesting that Chinese presidents and premiers are more likely to visit oil-producing countries. Other things being equal, a one unit increase in the oil production variable leads to a 7 percent increase in Chinese leadership visits. In contrast, GDP per capita has a negative effect on Chinese leadership visits, indicating a higher likelihood of top Chinese leaders traveling to less developed countries. Both FDI and trade importance have positive and statistically significant effects, meaning that Chinese leaders are more likely to travel to FDI host countries or countries that have deeper trade relationships with China. These results suggest that China's foreign policy, at least in the context of partnership building or leadership travel, is primarily determined by economic interests in general and energy interests in particular.

Robustness Checks

To check the robustness of the results, I conduct two additional analyses. First, one may suspect that the previous results suffer from an endogeneity problem, as a country's energy production may increase after the enactment of Beijing's favorable policies. This suspicion is not untenable, but China, as a latecomer in the global oil market, is less likely to influence a country's overall production than other major powers. To address this issue, nevertheless, I use the amount of oil reserves as an alternative measure of energy abundance. Since the level of oil reserves represents a country's future potential instead of its current capacity, China may cultivate close relationships with countries with a higher level of oil reserves. The data on oil reserves are from the EIA (in thousand barrels), and this variable is log-transformed.

Second, I use the total number of days that China's top leaders spent in a given country from 1998 to 2013 to measure leadership travel. The data are from Kastner and Saunders (2012) and the author's collection. I use a negative binomial model because the number of days is a nonnegative count, and the data are overdispersed.

The results are presented in table 3. Models 6–10 are identical to models 1–5 in table 2, with the exception that the main independent variable, oil production, is replaced by oil reserves. As can be seen, the results remain unchanged when the level of oil reserves is used to measure energy abundance. The results of models 6 and 7 show that a country that has a higher level of oil reserves is more likely to be China's diplomatic partner or (comprehensive) strategic partner. While in model 8, which is a TSCS model, the coefficient for oil reserves is positive but statistically insignificant, that in model 9 reaches statistical significance. This suggests that oil abundant African countries are more likely to receive Chinese financial assistance than the other African countries. In model 10, the results show that top Chinese leaders are more likely to travel to oil-abundant countries.

In models 11 and 12, the dependent variable is the number of days top Chinese leaders spent in a country during their visit. As can be seen, the coefficients for oil reserves and oil production are positive and statistically significant at the 10 percent level. When Chinese leadership travel is measured in days, the findings are consistent that Chinese leaders pay more or longer leadership visits to oil-rich countries.

Table 3. Energy production and Chinese foreign policy preferences: robustness checks

Dependent variable	Partnership	Strategic partnership	Chinese aid to Africa		Leadership visits	Number of days spent on leadership visits	
	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Oil reserves	0.106	0.137	0.016	0.273	0.055		0.051
	(0.050)**	(0.059)**	(0.072)	(0.119)**	(0.022)***		(0.028)*
Oil production						0.073	
						(0.033)**	
GDP per capita	−0.321	−0.462	−0.143	−0.615	−0.209	−0.196	−0.164
	(0.268)	(0.310)	(0.353)	(0.646)	(0.112)*	(0.145)	(0.146)
GDP growth	−0.027	0.004	0.050	0.067	0.014	0.012	0.019
	(0.092)	(0.092)	(0.036)	(0.168)	(0.035)	(0.046)	(0.046)
FDI inflows	0.261	0.306	0.149	0.131	0.122	0.149	0.149
	(0.080)***	(0.095)***	(0.240)	(0.136)	(0.031)***	(0.038)***	(0.039)***
Trade importance	1.327	1.830	3.574	3.122	1.235	1.558	1.645
	(0.823)	(0.873)**	(2.112)*	(4.890)	(0.252)***	(0.392)***	(0.396)***
Level of democracy	−0.005	−0.050	0.125	0.301	−0.024	−0.020	−0.019
	(0.052)	(0.060)	(0.067)*	(0.106)***	(0.022)	(0.028)	(0.029)
Domestic conflict	0.198	0.179	0.104	0.206	−0.024	−0.019	−0.014
	(0.139)	(0.157)	(0.065)	(0.322)	(0.062)	(0.080)	(0.081)
US ally	−0.914	−0.475	0.579	−0.999	−0.127	−0.320	−0.352
	(0.772)	(0.871)	(2.683)	(3.402)	(0.318)	(0.406)	(0.409)
Lagged Chinese aid			0.196				
			(0.040)***				
Number of observations	125	125	588	49	125	125	125
Number of countries	125	125	49	49	125	125	125
Log likelihood	−55.85	−45.33	−1736.43	−122.76	−192.34	−281.43	−282.20
AIC	129.69	108.66	3498.87	265.51	402.69	580.86	582.40
BIC	155.14	134.11	3555.76	284.43	430.97	609.14	610.69

Notes: Standard errors are in parentheses. *$p < .1$; **$p < .05$; ***$p < .01$.

In addition to the above analyses, a number of other robustness checks are conducted. First, following Kastner and Saunders (2012), I break down the data by administration, performing three separate models for Jiang-Zhu, Hu-Wen, and Xi-Li administrations. Second, I include developed countries in the sample, instead of only focusing on developing countries. Finally, I add additional control variables to the model, including population size, distance to China, an indicator of whether a country is contiguous to China, an indicator of whether a country has formal diplomatic relations with Taiwan, and dummy variables for regions. The results of these robustness analyses (which are shown in the online appendix) remain basically unchanged.

In sum, the results of the large-*N* analysis show that the energy security concern plays an important role in China's foreign policy making. Using three foreign policy indicators, this paper finds that oil production is positively associated with at least two of them—partnerships and leadership visits. Beijing is more likely to form partnerships with oil rich countries. Top Chinese leaders are also more likely to pay leadership visits to oil-producing countries. The findings on Chinese aid allocation is mixed, but the cross-national evidence indicates a positive effect of oil endowments on Chinese aid.

Conclusion

As an emerging global power as well as the world's largest oil importer, China has fully realized the importance of energy to its economy and national security and has made numerous efforts to strengthen its energy security. These efforts include the implementation of domestic energy policies and the exertion of energy diplomacy through bilateral and multilateral forums. While scholars and policy analysts argue that the appetite for energy plays an influential role behind Beijing's foreign policy behavior, very few studies have been done to systematically test this assertion. This paper fills this gap by investigating the effect of oil abundance on the foreign policy resources allocated by China to a country. I hypothesize that China is more likely to establish partnerships with, to give aid to, and to pay leadership visits to oil abundant countries.

To test these hypotheses, I draw upon data on oil production from EIA and data on three Chinese foreign policy instruments. I perform cross-national or TSCS models to analyze the effect of oil production on China's partnerships, aid to Africa, and leadership travels. The results show that Beijing is more likely to form partnerships with and pay leadership visits to countries that produce more oil. China's aid to Africa is also affected by oil endowments, although the finding is not significant in the TSCS model, which is very likely due to the irregular rise and fall of Chinese aid over the years. One consistent finding is that Chinese aid to Africa is positively associated with the level of democracy, suggesting that the suspicion of Chinese aid mainly flowing to African dictators may be a myth.

An interesting pattern this paper discovers regarding partnerships and leadership visits is that both are substantially influenced by FDI, bilateral trade, and oil endowments. This suggests that economic interests, including energy interests, play a key role in Beijing's foreign policy making. While energy security is beyond an economic issue and is a critical component of national security, energy is still the key driver of economic growth in China. The question as to whether Beijing's diplomatic activities have yielded economic gains or greater energy security, however, is not answered in this paper. Future research may examine the effect of China's foreign policy behavior on its energy security or other relevant dimensions. Also, while this paper considers three useful foreign policy indicators, they do not entirely represent Beijing's diplomatic priorities. Future research may consider analyzing other quantifiable indicators of China's foreign policy preferences to assess its energy security concern.

Supplemental Information

Supplemental information is available at the *Foreign Policy Analysis* data archive.

Appendix

Table A1. List of China's diplomatic partnerships

Year	Partnership	Strategic partnership	Comprehensive strategic partnership
1993		Brazil	
1994	Russia		
1995	Pakistan		
1996	Nepal	Russia	
1997	France, Canada, Mexico	United States	
1998	South Korea, United Kingdom, Japan, European Union		
1999		Egypt	
2000	South Africa, Laos		
2001	Argentina, Ukraine, European Union	Venezuela	
2002	Kyrgyzstan		
2003	Germany, South Korea, India, Mongolia, Ethiopia	Mexico, European Union	
2004	Poland, Romania, Hungary, Chile	German, Argentina, South Africa, Algeria	United Kingdom, France, Italy
2005	Bangladesh, Croatia, Sri Lanka, Uzbekistan, Peru, Jamaica	India, Pakistan, Canada, Indonesia, Kazakhstan	Italy, Spanish, Portugal,
2006	Cambodia, Fiji, Afghanistan	Nigeria	Greece
2007		Japan	
2008	Nepal	South Korea, Peru	Denmark, Vietnam
2009		Serbia	Lao
2010	Bangladesh	Germany, Cambodia	South Africa,
2011		Mongolia, Poland, Ukraine	Kazakhstan, Myanmar
2012		Afghanistan, United Arab Emirates, Ireland, Uzbekistan, Cambodia, Chile	Russia, Thailand, Brazil
2013		Kyrgyzstan, Sri Lanka, Tajikistan, Turkmenistan	Pakistan, Mongolia, Peru, Mexico, Belarus, Malaysia

Table A2. List of countries included in the analysis

Afghanistan	Albania	Algeria	Angola
Argentina	Armenia	Azerbaijan	Bahrain
Bangladesh	Belarus	Benin	Bhutan
Bolivia	Botswana	Brazil	Bulgaria
Burkina Faso	Burundi	Cambodia	Cameroon
Central African Republic	Chad	Chile	Colombia
Comoros	Congo Brazzaville	Congo Kinshasa	Costa Rica
Croatia	Cyprus	Djibouti	East Timor
Ecuador	Egypt	El Salvador	Equatorial Guinea
Comoros	Congo Brazzaville	Congo Kinshasa	Costa Rica
Croatia	Cyprus	Djibouti	East Timor
Ecuador	Egypt	El Salvador	Equatorial Guinea
Eritrea	Ethiopia	Fiji	Gabon
Gambia	Georgia	Ghana	Guatemala
Guinea	Guinea-Bissau	Guyana	Haiti
Honduras	India	Indonesia	Iran
Iraq	Ivory Coast	Jamaica	Jordan
Kazakhstan	Kenya	Kuwait	Laos
Latvia	Lebanon	Lesotho	Liberia
Libya	Lithuania	Macedonia	Madagascar
Malawi	Malaysia	Mali	Mauritania
Mauritius	Mexico	Moldova	Mongolia
Montenegro	Morocco	Mozambique	Myanmar
Namibia	Nepal	Nicaragua	Niger
Nigeria	Oman	Pakistan	Panama
Papua New Guinea	Paraguay	Peru	Philippines
Qatar	Romania	Russia	Rwanda
Saudi Arabia	Senegal	Serbia	Sierra Leone
Singapore	Solomon Islands	South Africa	Sri Lanka
Suriname	Swaziland	Syria	Tajikistan
Tanzania	Thailand	Togo	Trinidad and Tobago
Tunisia	Turkey	Turkmenistan	UAE
Uganda	Ukraine	Uruguay	Uzbekistan
Venezuela	Vietnam	Yemen	Zambia
Zimbabwe			

Notes: This is the list of the 125 countries used in models 1, 2, and 5 in table 2. Models 3 and 4 only include African countries.

References

AidData. 2013. "Chinese Development Cooperation in Africa: AidData's Chinese Official Finance to Africa Dataset, 2000-2012, Version 1.1." Published April 15, 2013. 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.

Alves, Ana Cristina. 2013. "Chinese Economic Statecraft: A Comparative Study of China's Oil-Backed Loans in Angola and Brazil." *Journal of Current Chinese Affairs* 42 (1): 99–130.

Andrews-Speed, Philip. 2015. "China's Energy Needs and Energy Security." In *Sino-US Energy Triangles: Resource Diplomacy under Hegemony*, edited by David Zweig and Yufan Hao, 38–54. Routledge.

Banks, Arthur S., and Kenneth A. Wilson. 2014. *Cross-National Time-Series Data Archive*. Jerusalem: Databanks International.

Bennett, W. Lance, and David L Paletz. 1994. *Taken by Storm: The Media, Public Opinion, and US Foreign Policy in the Gulf War*. University of Chicago Press.

BP. 2018. "Statistical Review of World Energy." http://www.bp.com/statisticalreview.

Brautigam, Deborah. 2009. *The Dragon's Gift: The Real Story of China in Africa*. Oxford: Oxford University Press.

Bronson, Rachel. 2006. *Thicker Than Oil: America's Uneasy Partnership with Saudi Arabia*. Oxford: Oxford University Press.

Bueno de Mesquita, Bruce, and Alastair Smith. 2009. "A Political Economy of Aid." *International Organization* 63 (2): 309–40.
Carmody, Padraig R., and Francis Y. Owusu. 2007. "Competing Hegemons? Chinese versus American Geoeconomic Strategies in Africa." *Political Geography* 26 (5): 504–24.
Chang Liao, Nien-Chung. 2016. "The Sources of China's Assertiveness: The System, Domestic Politics or Leadership Preferences?" *International Affairs* 92 (4): 817–33.
Chen, Matthew E. 2008. "Chinese National Oil Companies and Human Rights." *Orbis* 51 (1): 41–54.
Chen, Shaofeng. 2011. "Has China's Foreign Energy Quest Enhanced Its Energy Security?" *China Quarterly* 207: 600–25.
Cheng, Joseph Y.S. 2008. "A Chinese View of China's Energy Security." *Journal of Contemporary China* 17 (55): 297–317.
Downs, Erica S. 2004. "The Chinese Energy Security Debate." *China Quarterly* 177: 21–41.
Dreher, Axel, and Andreas Fuchs. 2015. "Rogue Aid? an Empirical Analysis of China's Aid Allocation." *Canadian Journal of Economics / Revue canadienne d'économique* 48 (3): 988–1023.
Easterly, William. 2002. "The Cartel of Good Intentions: The Problem of Bureaucracy in Foreign Aid." *Journal of Policy Reform* 5 (4): 223–50.
EIA. 2017. "International Engergy Statistics: Total Primary Energy Consumption." https://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=44&pid=44&aid=2.
EIA. n.d. "Petroleum and Other Liquids." http://www.eia.gov/petroleum/data.cfm.
Express Tribune. 2014. "China coal mine accidents kill 1,049 in 2013: Govt." January 6, 2014. http://tribune.com.pk/story/655504/china-coal-mine-accidents-kill-1049-in-2013-govt/.
Flores-Macias, Gustavo A., and Sarah E Kreps. 2013. "The Foreign Policy Consequences of Trade: China's Commercial Relations with Africa and Latin America, 1992–2006." *Journal of Politics* 75 (2): 357–71.
Gibler, Douglas M. 2008. *International Military Alliances, 1648–2008*. CQ Press.
Hart, Parker T. 1998. *Saudi Arabia and the United States: Birth of A Security Partnership*. Bloomington: Indiana University Press.
He, Kai, and Huiyun Feng. 2012. "Debating China's Assertiveness: Taking China's Power and Interests Seriously." *International Politics* 49 (5): 633–44.
International Energy Agency. 2014. *World Energy Outlook*. http://www.worldenergyoutlook.org/media/weowebsite/2014/141112_WEO_FactSheets.pdf.
Jakobson, Linda. 2009. "China's Diplomacy Toward Africa: Drivers and Constraints." *International Relations of the Asia-Pacific* 9 (3): 403–33.
Jiang, Wenran. 2009. "Fuelling the Dragon: China's Rise and Its Energy and Resources Extraction in Africa." *China Quarterly* 199: 585–609.
Kaiman, Jonathan, and Yingzhi Yang. 2015. "China's President Is the Country's Most-Travelled Leader since Communism." *Sydney Morning Herald*. December 26, 2015. http://www.smh.com.au/world/chinas-president-is-the-countrys-mosttravelled-leader-since-communism-20151226-glv49i.html.
Kastner, Scott L. 2016. "Buying Influence? Assessing the Political Effects of China's International Trade." *Journal of Conflict Resolution* 60 (6): 980–1007.
Kastner, Scott L., and Phillip C. Saunders. 2012. "Is China a Status Quo or Revisionist State? Leadership Travel as an Empirical Indicator of Foreign Policy Priorities." *International Studies Quarterly* 56 (1): 163–77.
Kennedy, Andrew B. 2010. "China's New Energy-Security Debate." *Survival* 52 (3): 137–58.
Klare, Michael, and Daniel Volman. 2006. "America, China & the Scramble for Africa's Oil." *Review of African Political Economy* 33 (108): 297–309.
Kuziemko, Ilyana, and Eric Werker. 2006. "How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations." *Journal of Political Economy* 114 (5): 905–30.
Lee, Chia-yi. 2015. "Chinese Outward Investment in Oil and Its Economic and Political Impact in Developing Countries." *Issues and Studies* 51 (3): 131–63.
Li, Meina, and Lulu Zhang. 2014. "Haze in China: Current and Future Challenges." *Environmental Pollution* 189: 85–86.
Liou, Chih-shian. 2009. "Bureaucratic Politics and Overseas Investment by Chinese State-owned Oil Companies: Illusory Champions." *Asian Survey* 49 (4): 670–90.
Marketos, Thrassy N. 2008. *China's Energy Geopolitics: The Shanghai Cooperation Organization and Central Asia*. London: Routledge.
Mearsheimer, John J. 2010. "The Gathering Storm: Chinas Challenge to US Power in Asia." *The Chinese Journal of International Politics* 3 (4): 381–96.
Meernik, James, Eric L Krueger, and Steven C Poe. 1998. "Testing Models of US Foreign Policy: Foreign Aid during and after the Cold War." *Journal of Politics* 60 (1): 63–85.
Meidan, Michal, Philip Andrews-Speed, and Ma Xin. 2009. "Shaping China's Energy Policy: Actors and Processes." *Journal of Contemporary China* 18 (61): 591–616.

Ministry of Foreign Affairs of the People's Republic of China. 2015. "Joint Statement on Strengthening Comprehensive Strategic Partnership between the People's Republic of China and The Republic of Indonesia." March 27, 2015. http://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t1249201.shtml.

Naim, Moises. 2007. "Rogue Aid." *Foreign Policy* (159): 96.

Omgba, Luc Désiré. 2009. "On the Duration of Political Power in Africa: The Role of Oil Rents." *Comparative Political Studies* 42 (3): 416–36.

O'Neill, Daniel C. 2014. "Risky Business: The Political Economy of Chinese Investment in Kazakhstan." *Journal of Eurasian Studies* 5 (2): 145–56.

Pigato, Miria, and Wenxia Tang. 2015. "China and Africa: Expanding Economic Ties in an Evolving Global Context." World Bank Group Working Paper, Washington DC.

Strüver, Georg. 2016. "What Friends Are Made Of: Bilateral Linkages and Domestic Drivers of Foreign Policy Alignment with China." *Foreign Policy Analysis* 12 (2): 170–91.

Taylor, Ian. 2006. "China's Oil Diplomacy in Africa." *International Affairs* 82 (5):937–59.

Tull, Denis M. 2006. "China's Engagement in Africa: Scope, Significance and Consequences." *Journal of Modern African Studies* 44 (3): 459–79.

Van Kemenade, Willem. 2010. "China Vs. the Western Campaign for Iran Sanctions." *Washington Quarterly* 33 (3): 99–114.

Vreeland, James R. 2003. *The IMF and Economic Development*. Cambridge: Cambridge University Press.

Wang, Feng, Haitao Yin, and Shoude Li. 2010. "China's Renewable Energy Policy: Commitments and Challenges." *Energy Policy* 38 (4): 1872–8.

Wang, Yutao, Mingxing Sun, Xuechun Yang, and Xueliang Yuan. 2016. "Public Awareness and Willingness to Pay for Tackling Smog Pollution in China: A Case Study." *Journal of Cleaner Production* 112: 1627–34.

Wilkins, Thomas S. 2008. "Russo–Chinese Strategic Partnership: A New Form of Security Cooperation?" *Contemporary Security Policy* 29 (2): 358–83.

Wilson, Jeffrey D. 2012. "Resource Security: A New Motivation for Free Trade Agreements in the Asia-Pacific Region." *The Pacific Review* 25 (4): 429–53.

———. 2014. "Northeast Asian Resource Security Strategies and International Resource Politics in Asia." *Asian Studies Review* 38 (1): 15–35.

Woods, Ngaire. 2008. "Whose Aid? Whose Influence? China, Emerging Donors and the Silent Revolution in Development Assistance." *International Affairs* 84 (6): 1205–21.

Wu, Kang, and Ian Storey. 2008. "Energy Security in China's Capitalist Transition: Import Dependence, Oil Diplomacy, and Security Imperatives." In *China's Emergent Political Economy: Capitalism in the Dragons Lair*, edited by Christopher A. McNally, 190–208. New York: Routledge.

Yates, Douglas Andrew. 1996. *The Rentier State in Africa: Oil Rent Dependency and Neocolonialism in the Republic of Gabon*. Africa World Press.

Yuan, Jing-Dong. 2010. "China's Role in Establishing and Building the Shanghai Cooperation Organization (SCO)." *Journal of Contemporary China* 19 (67): 855–69.

Zafar, Ali. 2007. "The Growing Relationship Between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment, and Aid Links." *The World Bank Research Observer* 22(1):103–30.

Zhang, ZhongXiang. 2011. "China's Energy Security, the Malacca Dilemma and Responses." *Energy Policy* 39 (12): 7612–5.

Zhao, Chunfu, and Bin Chen. 2014. "China's Oil Security from the Supply Chain Perspective: A Review." *Applied Energy* 136: 269–79.

Zhao, Suisheng. 2008. "China's Global Search for Energy Security: Cooperation and Competition in Asia–Pacific." *Journal of Contemporary China* 17 (55): 207–27.

Zhou, Nan, Mark D. Levine, and Lynn Price. 2010. "Overview of Current Energy-Efficiency Policies in China." *Energy Policy* 38 (11): 6439–52.