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Volberding, Peter; Warner, Jason

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CHINA*AFRICA RESEARCH INITIATIVE

China and uranium: Comparative possibilities for agency in statecraft in Niger and Namibia

Peter Volberding and Jason Warner



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NO. 11 | MARCH 2017:

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CORRESPONDING AUTHOR:

Peter Volberding *Email:* pvolberding@fas.harvard.edu

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ABSTRACT

SAIS-CARI WORKING PAPER NO. 11 | FEBRUARY 2017:

"China and uranium: Comparative possibilities for agency in statecraft in Niger and Namibia"

by Peter Volberding and Jason Warner IN 2007, A CHINESE STATE-OWNED nuclear company, CNNC, announced China's first investment in a uranium mine in Africa, in Niger. Five years later in 2012, another state-owned Chinese company, CGNPG, announced its acquisition of the rights to develop the Husab Mine in Namibia, an investment that would become China's single largest investment project on the continent. Chinese resource extraction investments have garnered both attention and notoriety, yet literature examining both Chinese investments in African uranium industries, as well as how Chinese investments have impacted the agency of African states to manage these investments, is scarce. In this paper we ask how the entry of Chinese firms in African uranium markets has impacted the agency of host African states to pursue strategies of economic and social statecraft. Using a comparative case study method with extensive field work, we examine how Chinese investment has impacted the uranium sector in both Niger and Namibia and, more critically, the impact investment has had on these states' ability to enact state agency across eight indicators in both economic and social domains. We find that the impact has been mixed and uneven. While the Chinese investment in Niger was widely regarded as a failure—and thereby broadly reduced Niger's agency on these dimensions of statecraft --we find the opposite to be true in Namibia, where Chinese investment at the Husab Mine has broadly improved Namibian agency in statecraft.

INTRODUCTION

WHILE SCHOLARS HAVE DOCUMENTED CHINA'S INVOLVEMENT in Africa's resource development in sectors ranging from petroleum to precious metals to food production, China's role in African uranium extraction is not well understood.¹ This is particularly perplexing for two reasons: uranium potentially has the widest ranging impact on global and economic security given its role in nuclear weapons and nuclear energy production, and also, uranium is one of China's top mining interests on the continent. At the same time, the vast majority of analyses that exist tend to emphasize how China benefits from its engagement, while the impact on African countries is often detrimental. Current literature tends to suggest that African states are being taken advantage of—or in the case of uranium, "undermined"—by Chinese presence on the continent.² For their part, African states are commonly ascribed little agency in their negotiations or their ability to manage and regulate the investments. Whereas recognition of ascendant African agency has been increasing within most variants of scholarship on African international relations, only rarely is African agency employed as a useful heuristic through which to understand relationships between African states and China.3

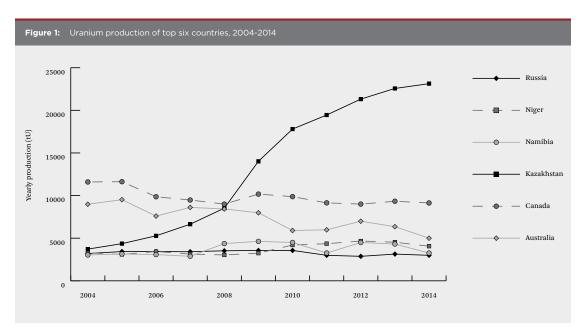
By combining these two general trends in scholarship—the understudied nature of the impact of Chinese engagement in African uranium extraction on one hand, and the prevailing lack of appreciation for African agency within bilateral relationships with China on the other—our guiding research questions are these: How has the entrance of Chinese investment impacted the agency of host African states to pursue strategies of economic and social statecraft in the context of their uranium sectors? More specifically, to what extent has Chinese investment in Africa's uranium industries engendered or frustrated new forms of African agency in statecraft for Africa's two largest uranium-producing countries, Niger and Namibia?

To answer these questions, this working paper proceeds in four parts. First, we provide a detailed outline of the research question and the criteria by which we assess the entrance of the Chinese on African agency in both economic and social issues. Second, we offer two in-depth case studies of the uranium industries of two countries: Niger in section two, and Namibia in section three. Finally, we present the findings from our in-country research, with particular attention to eight predetermined criteria on the impact on African agency over economic and social matters. We find that the impact has been complicated and uneven. While Chinese investment in Niger was widely regarded as failure—and thereby broadly reduced Niger's agency on these dimensions of statecraft—we find the opposite to be true in Namibia, where Chinese investment at the Husab Mine has broadly improved Namibian agency in statecraft.

METHODS

THE MOTIVATING RESEARCH QUESTION IS THIS: how has the entrance of Chinese investment in the uranium sector in two African countries—Niger and Namibia affected the ability of these latter states to exert agency for statecraft over their natural resources? In this regard, we leverage Chinese investment in the uranium sector as the "treatment," or independent variable, and changes to African state agency over economic and social aspects of statecraft over their uranium industries as the "outcome," or dependent variables. By focusing exclusively on one industry (uranium) and on one investor (China) in two broadly comparable African countries (Niger and Namibia), we argue that we are able to hold numerous variables constant to obtain a robust understanding of the impacts of Chinese investment on local dynamics of statecraft.

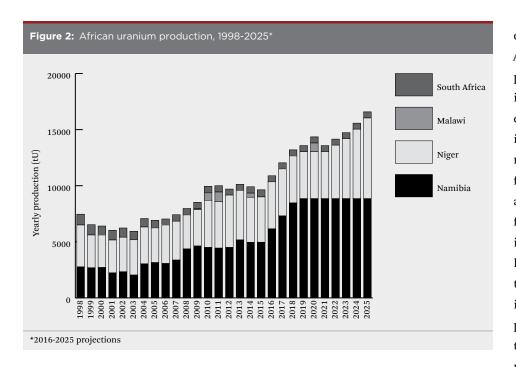
We have elected to divide the impact of Chinese uranium entrance on African state agency for statecraft into the two following categories: economic impacts and social impacts. We define "statecraft" as the capacity of a state to effectively pursue its stated goals. Therefore, we understand priorities of statecraft in the uranium industry as those articulated in Niger and Namibia's primary source documents related to their mining industries broadly and their uranium industries specifically, including, for example, those statements forwarded by each country's constitution, or documents from relevant ministries. This division into African state agency for economic and social statecraft accurately captures the breadth of strategic considerations that Nigerien and Namibian policymakers are confronted with in their relations with Chinese (and other non-local) participation in their uranium industries, as is evidenced by guiding policy documents from each country, including those from Niger and Namibia.⁴



As relates to agency for economic statecraft, we focus on the impact of the Chinese entrance into African uranium industries on: state control over uranium resources; capacity to levy taxes on uranium extractors; capacity to levy royalties on uranium; and capacity to negotiate prices of uranium with uranium companies. As concerns African state agency over social statecraft, the most pertinent indicators of

potential impact from the arrival of Chinese companies appear to be African states' capacity to exert agency over labor regulations; environmental regulations; as well as to shore up its perceptions of legitimacy from citizens and to allow and respond to civil society participation in the mining industry. Put succinctly, we are concerned with the two following sets of questions:

- How has the entrance of Chinese uranium mining companies impacted the agency of Niger and Namibia over their uranium sectors in relation to four phenomena related to economic statecraft:
 - a. Control over uranium resources
 - b. Taxes on mining companies
 - c. Royalties on uranium
 - d. The negotiated price between uranium companies and the government
- 2. How has the entrance of Chinese uranium mining companies impacted the agency of Niger and Namibia over their uranium sectors in relation to four phenomena related to social statecraft:
 - a. Labor regulation
 - b. Environmental regulation
 - c. State legitimacy/citizen confidence in government
 - d. Level of civil society participation in governance



To answer these questions, we examine the trajectories of Sub-Saharan Africa's first and second largest uranium producing countries-Niger and Namibia-both of which have recently experienced significant injections of Chinese investment into the uranium sector. Both rely on uranium production revenue to fund their governments, and both have also historically relied on a single, large foreign-owned uranium company; Areva in Niger and Rio Tinto in Namibia. In the late 2000s, with the precipitous rise of the global price of uranium, Chinese investors targeted large investment projects in both countries, challenging the singular dominance of pre-existing, non-Chinese mining companies. Despite

the similarities of how and when Chinese investors entered the uranium sector in both Niger and Namibia, there has been significant variation on the impact of that investment on the agency for statecraft in the aforementioned economic and social factors.

Prior to departure for in-country fieldwork, our strategy to understand the impacts of China's entrance on these eight aspects of African agency in statecraft rested on a combination of qualitative research—in the form of fieldwork and

interviews—and some light quantitative research in tracking economic and social trends both before and after the entrance of the Chinese. To compare the differential impacts, our ex ante approach was to rely on this combination of firsthand knowledge derived from interviews with those intimately familiar with the industry, augmented by evidence of statistical trends. Yet, as we were aware that our final analysis would ultimately be descriptive in nature, we departed for research open to adopting comparative analytics as they presented themselves.

In order to investigate these differences, we undertook intensive field research in both Niger and Namibia in August and October 2016. Combined, we conducted 33 interviews in both French and English with government officials, civil society leaders, and diplomats (see Appendix). Our requests for interviews at Areva—both within Niger and in France—went unanswered. Our request to meet with personnel at the Chinese Embassy in Niamey was also declined. Both Chinese uranium companies similarly declined interviews. For the purposes of gaining greater insight into the dynamics of the internal politics of the uranium industry in both countries, we granted anonymity to our interviewees when requested.

LIMITATIONS

THIS STUDY HAS INHERENT LIMITATIONS. Given practical constraints, our fieldwork time spent between the two countries was only around one month in total; more time in both countries would have been ideal. Second, we were also faced with restrictions around access to the mines. Especially in Niger, security concerns prevented us from visiting Areva's mines or Azelik, where the Chinese mine was located. Third, despite our best efforts, we were unable to speak with Chinese mining officials, their embassy, their corporations, or their workers directly. All requests went unanswered or were declined.

Fourth, and perhaps most importantly, we recognize the somewhat unavoidable issues associated with comparing Niger to Namibia. While Niger ranked very last on the UN's Human Development Index in 2014, Namibia, for its part, was designated an "upper middle-income" country in 2013.⁵ Beyond the different levels of economic development, Namibia is also known as a robust democracy; is located in a more stable geographic neighborhood; and enjoys a greater abundance of natural resources than does Niger. Nevertheless, the selection of these two countries was based on their statuses as the top two uranium producing countries on the continent with a similar sudden and large investment from China. Despite these issues, we are confident that the subsequent study will prove to be illuminating.

NIGER A BRIEF HISTORY OF THE URANIUM INDUSTRY IN NIGER

NIGER IS CURRENTLY THE LARGEST PRODUCER OF URANIUM in Africa, and the fourth largest in the world (See Figures 1 and 2).6 At 409,000 tU (tons Uranium), Niger possess 7 percent of all proven global uranium reserves, and yet, as of 2015, Niger is simultaneously ranked last in the UN's Human Development Index. With virtually no other resources, uranium remains the central hope for economic development. Niger has four main uranium mines, but only two of which are currently operational (see Table 1). The first and oldest is the SOMAIR mine, established in 1968. The second is the COMINAK mine, established in 1974. Importantly, both of these mines were created as joint ventures between the Nigerien government and its former colonizer, France, in addition to sundry smaller investors. Today, both mines fall under the operations of the majority French state-owned nuclear company Areva. Areva owns 63.4 percent and 34 percent of the mining rights of SOMAIR and COMINAK, respectively, with the remainder held primarily by the Nigerien state-owned mining company SOPAMIN, but also a few other smaller investors as well. A third mine, at Imouraren, is also under development by Areva. When opened, Imouraren is expected to be one of the most productive in the world, with estimated reserves of 109.1 million tons of ore grading 0.06 percent uranium. However, the mine has been beset by delays, most prominently because of the sustained low global price for uranium. The fourth of Niger's mines is Azelik. Operating under the joint-venture SOMINA, the Azelik mine is the country's lone Chinese-run uranium mine. It is this mine, and the activities that

Table 1: Overview of Nigerien uranium mine ownership

Mine name	Primary company	Primary ownership	Years of operation	Production (2015, tU)
Arlit (SOMAIR)	Areva	63.4 percent Areva, 36.6 per- cent Nigerien Government	1971-present	2,500
Akouta (COMINAK)	Areva	34 percent Areva, 31 percent SOPAMIN, 25 percent OURD (Japan), 10 percent ENUSA (Spain)	1978-present	1,500
Imouraren	Areva	56.6 percent Areva, 33.3 percent SOPAMIN, 10 percent Korea Electric Power Corp	Inactive	0
Azelik (SOMINA)	China National Nuclear Corporation (CNNC)	37 percent CNNC, 33 percent SOPAMIN, 25 percent ZXJoy Investment, 5 percent Korea Resources Corporation	2012-2015, currently inactive	38

occur within it, that serve as the case study for how Chinese entrance into the uranium sector has impacted Niger.

Since its independence from France in 1960, Niger has always placed a premium on the strategic leveraging of its uranium sector for its national statecraft. Understanding the importance that the French state placed on its nuclear program as a means to retain global prominence, former president Hamani Diori played France's game of signing often-opaque deals with the heads of state of its former African colonies in exchange for access to raw materials, in a phenomenon of alleged "neo-colonialism" known as "francafrique."⁷ Both the SOMAIR and COMINAK mines began production in the 1970s and 1980s, and the Nigerien state remained focused on attempting to extract maximum concessions. The 1970s were marked by a new Nigerien boldness regarding uranium pricing vis-a-vis France, engendered by Niamey's admiration for OPEC's capacity to set oil prices on the global market. Niger began to argue that by virtue of uranium's "nuclearity," its pricing need not reflect global prices on more anodyne materials. Moreover, Niger also increasingly recognized the important psychological and geopolitical roles that uranium held for France, and thus pushed

Although uranium accounts for 70.8% of all Nigerien exports, it only contributes 5.8 percent to GDP. Paris's hand by demanding greater concessions and improvements around the SOMAIR and COMINAK mines—including the construction of roads, schools, and medical clinics—to which Paris generally acquiesced.⁸ During the 1980s, Niger struck a deal with neighboring Moammar Qaddafi of Libya who served as middleman to sell Nigerien uranium to interested global states, including Iran, Pakistan, and the Philippines. However, these

potential partners proved to be unreliable purchasers.⁹ In an attempt to legislate greater control over the uranium industry, the government promulgated its first Mining Law in 1993, though this was largely ignored by Areva during negotiations for the next decade.¹⁰

Throughout the 2000s, Niger underwent a series of contentious negotiations with Areva to wrest more control of, and revenue from, its uranium. As Anne-Sophie Simpere (2013) of Oxfam emphasized, while uranium accounts for 70.8 percent of all Nigerien exports, it only contributes 5.8 percent to GDP.¹¹ In 2006, Niger renegotiated its contracts with Areva, though Niger continued to grant the French company significant financial and regulatory exemptions. The most recent renegotiations between Areva and Niger commenced in 2013, and were fraught with similar difficulties, including a temporary shutdown of both the COMINAK and SOMAIR mines between December 2013 and February 2014 as negotiations between Niger and Areva stalled when Niger sought to decrease French tax breaks and increase Nigerien royalties. In the end of the 2013 renegotiations, Niger was able to extract certain concessions, getting an additional payment of 35 million euros over three years due to Areva's delays in its development of the (now-closed) Imouraren mine.¹²

Multiple problems lie at the heart of Niger's inability to profit from its uranium sector. First and foremost of these issues is a lack of transparency regarding the nature of the contract with Areva: legally, the Nigerien government is required to release the terms of the contract with any mining company, yet the terms of the Areva contracts have never been released. Second, the Nigerien government largely lacks the capacity to effectively bargain with foreign companies. Ali Idrissa of ROTAB, a Nigerien civil

Compared to other African countries, China's 21st century engagement in Niger has been a more recent and limited phenomenon--Chinese investment in the uranium sector was the first large-scale investment by a Chinese company in Niger. society organization, lamented: "I condemn the Nigerien government for its weakness and for the positions in the negotiations. Who should be the enforcer of the work codes? The government of Niger. Who should make sure that people respect the laws? The government of Niger. Who should enforce environmental regulations? The government of Niger. Because it isn't effective, it just allows the groups that come here to work to do whatever they want to do."¹³ Third, unlike negotiating with a standard multinational enterprise, Areva is backed with the full diplomatic power of France. The one Nigerien leader to refuse strict adherence to the French was President Mamadou Tandja, who refused direct negotiation with then President Sarkozy of France; suspiciously to many in Nigerian civil society, Tandja was later deposed in a military coup in 2010 that France did not work to prevent. As one

interviewee remarked, "There is no competition with France here. If it wants to do something, it will. There is no competition."¹⁴

Despite mild improvements on the Nigerien state's capacity to manage its uranium, there have also been substantial challenges. Since 2000, there has been a precipitous rise in activism from Nigerien civil society around the uranium sector and more attention to workers' rights, especially around public health.¹⁵ The state has experienced setbacks as sites around mines have often turned violent in Niger, with insurgencies from Tuareg nomads based in the Sahara frequently invoking their lack of benefit from the country's uranium as justifications for their attacks on the state in the form of full out insurgencies waged throughout the late 2000s.¹⁶ To that end, the uranium mining regions of the country are presumed to be inhabited by members of al-Qaeda in the Islamic Maghreb, and thus are increasingly costly to the Nigerien government and have become no-go zones for some European nationals.¹⁷

THE ENTRANCE OF THE CHINESE IN THE NIGERIEN URANIUM INDUSTRY

AS OPPOSED TO THE LONG-STANDING TIES between Namibia and China, the entrance of China into Niger has been a far more recent phenomenon. There have been a few high-profile investments, such as the Pont d'Amité (Friendship Bridge) and a petroleum refinery, but in comparison with other African countries, China's 21st century engagement has been limited. When announced, the Chinese investment in the uranium sector provided the first large-scale investment by a Chinese company in Niger. The China National Nuclear Corporation (CNNC) gained access to the Azelik mine in 2007, and by 2009, had committed to investing approximately US\$300 million into the project. Importantly, this development in 2007 broke the nearly 40-year monopoly that Areva had held over the uranium sector in Niger, and was the first investment concluded following the revamping of the Nigerien 2006 Mining Law that significantly reduced tax breaks for foreign mining corporations. At the time, civil society received the news positively, as it was hoped that this would allow the Nigerien government to better negotiate with Areva. The new mining operation, called SOMINA, was also demonstrated as a successful joint venture between CNNC and the newly-reformed state-owned mining company.

Despite initial hopes that SOMINA would be a game-changing Chinese investment, the project is instead widely regarded as an unmitigated failure. Although the mine officially began uranium production in 2012, it was halted indefinitely in mid-2015. It has been estimated that the mine only produced around 500 tU, a fraction of the total annual output of Areva.¹⁸ One part of the delay was that the intended \$300 million investment promised by the Chinese never fully materialized, both because of a slumping domestic Chinese economy and the attendant decline in global uranium prices. This created enormous losses for the Chinese company from which it could not recover. One interviewee critiqued the Azelik mine for both its small nature and lack of institutionalization, saying, "China is really disastrous [at Azelik]. It's not even large-scale industrial mining. It's just artisanal mining. It's large-scale artisanal mining."¹⁹ The Chinese investment at Azelik was also blamed for widespread environmental and labor infractions. There have been reports of radiation contamination of groundwater; labor activists have noted that Chinese employees often take managerial and engineering positions, preventing low-skill Nigeriens from learning more valuable employment skills; and the living conditions of the workers were also reportedly substandard, with some workers living in shipping containers without adequate water and hygiene.²⁰

Observers are further split on how SOMINA impacted the Nigerien government's ability to negotiate with Areva. According to a US Embassy official, "I can't imagine that the presence of China had much of an effect on the nature of [future] negotiations."²¹ This sentiment was corroborated by a Nigerien government official, who also directly expressed that there was no impact on Areva.²² On the other hand, some interviewees expressed some acknowledgment that China and SOMINA's presence did have an impact in improving Nigerien bargaining. One official at the Ministry of Mines asserted that "The entrance of China in Niger was very important. The partners had to think about it a bit more. I would say that it did make an impact. If there is another player in the game, it would help. It's difficult to discern exactly, but yes, it helped."²³ For his part, Ali Idrissa of ROTAB summarizes the unclear change in this way: "The best thing that the Chinese presence has done has been to threaten Areva. At the very least, it has given us another partner. That said, the relationship with the Chinese has not necessarily been win-win, in the same way that it hasn't been win-win with Areva. We are still on the same terms of cooperation."²⁴

NAMIBIA a brief history of the uranium industry in namibia

NAMIBIA IS THE WORLD'S SIXTH LARGEST PRODUCER of uranium, and Africa's second largest producer after Niger, producing nearly 3,000 tU annually.²⁵ Like Niger,

Table 2: Overview of Namibian uranium mine ownership

Mine name	Primary company	Primary ownership	Years of operation	Production (2015, tU)
Rössing	Rio Tinto	69% Rio Tinto, 15% Iranian Foreign Investment Company, 10% Industrial Development Corporation of South Africa, 3% GRN, 3% local	1976-present	3,000
Langer Heinrich	Paladin Energy	75% Paladin Energy, 25% China National Nuclear Cor- poration	2007-present	1,962
Trekkopje	Areva	100% Areva	2012-2013, currently inactive	0
Husab	Swakop Uranium (China General Nu- clear Power Group)	90% Swakop Uranium, 10% Epangelo	2016, projected	0

the three operating mines in Namibia are all majority-owned by foreign corporations (see Table 2, below). Uranium was first discovered in the Erongo region by geologist Captain Peter Louw in 1928, yet it was not until the 1950s that any substantial interest was taken to explore the extent of Namibia's uranium reserves. In 1966, the British-Australian mining conglomerate Rio Tinto secured the mineral rights to the uranium deposit, and 10 years later in 1976, the Rössing mine, the country's largest and oldest uranium mine, became operational. Since the Rössing mine opened, it has produced a cumulative total of nearly 130,000 tU.²⁶

In the mid-2000s, as the price of uranium began to soar, Namibia witnessed a substantial increase both in the number of mines and in the number of exploration permits, and in 2006, Namibia's second uranium mine, the Langer Heinrich Mine, opened under the operation of Paladin Energy of Australia. Langer Heinrich is reported to have one of the greatest potential reserves in uranium in the world. Its output now outpaces the declining production of the Rössing mine, though due to the sustained low global price of uranium, the Langer Heinrich Mine too has announced production cuts.²⁷ The third major uranium mine in Namibia is the Trekkopje Mine. The French nuclear company Areva conducted an initial two-year operational test phase from 2011-2013 in the Trekkopje Mine. However, the project has since been put on hold until global uranium prices rise to a more sustainable level.²⁸ Finally, the Canadian firm Forsys Metals is constructing the Norasa/Valencia mine, which is located near the Trekkopje Mine.²⁹ However, low uranium prices have likely delayed this project as well.

Much like Niger, the historical experience of Namibia with uranium mining has been colored by unequal relations with foreign actors. For the first 15 years of Rössing's operations (1976-1990), the mine was overseen by apartheid-dominated South Africa's State Atomic Agency. Consequently, the Rössing mine quickly developed a reputation of serving the interests of white South African colonial powers, and became a potent symbol of the abuses of global racism and neocolonialism. In response to the growing outrage, the United Nations Council for Namibia (UNCN) issued its first decree on September 27, 1974, stating that "any permission, concession or license previously granted, including any granted on behalf of the Republic of South Africa, is null, void and of no effect."³⁰ However, these restrictions were easily circumvented by importing the uranium through shell companies or through firms in Switzerland in what was known as "flag-swaps."³¹

For the next decade, pressure continued to mount against South African-led Namibian uranium production. The Campaign Against the Namibian Uranium Contracts (CANUC) actively lobbied for the complete banning of Namibian uranium as part of the Namibian liberation movement as well as the dismantling of racial apartheid. Tactically, both the UNCN and other NGOs began to publish documents exploring the abuses of South Africa, and to a lesser extent Britain, in exploiting Namibian uranium and denying Namibians authority over managing the mines.³² Despite the support from global trade unions, anti-nuclear activists, and environmental NGOs, Rössing's mining operations continued essentially uninterrupted for the remainder of the 1980s.

When Namibia gained independence in 1990, there was hope that the newly formed government could regain authority over uranium production. The resistance-turned-governing-party SWAPO, however, quickly settled their differences with the operators of the Rössing mine, allowing uranium production to continue.³³ Shortly thereafter, the UN conducted a study on its recommendations for the new Namibian government, which argued for the creation of a state-owned mining entity to bolster Namibia's finances. Although a state-owned mining company was envisioned at the dawn of Namibian independence, it would not emerge until 2008, in the form of Epangelo, a Namibian state-owned mining company that has shares in both the Husab mine as well as the Langer Heinrich mine. Yet even to this day, Epangelo suffers from a lack of legislation that grants it clear authority over Namibian mining activities and has insufficient funding to make large investments in the mining sector.³⁴

Although the Namibian government certainly has asserted its authority over the development trajectory of the uranium industry, the results have been mixed. On the one hand, the Namibian government has still not been able to effectively control the physical trade of uranium, and existing investments have also received mild criticism from labor rights activists, environmental NGOs, and anti-nuclear watchdogs.³⁵ However, particularly in comparison with Niger, these violations have not been nearly as severe, and largely in line with labor disputes in other Namibian mining sectors.³⁶ There have not been significant cases of environmental degradation, even as the government and industry has embarked on a plan to more thoroughly assess the

impact.³⁷ The Namibian government has also been successful in legislating a tax and royalties regime on all mining sectors. Royalties on uranium were established at 3 percent, and was the consequence of an extended consultation between the Namibian government and mining corporations, through the Namibian Uranium Association (NUA), a trade organization that represents the interests of the companies.³⁸

THE ENTRANCE OF THE CHINESE IN THE NAMIBIAN URANIUM INDUSTRY

CHINA'S CURRENT RELATIONSHIP IN NAMIBIA is a reflection of the historical ties between the Chinese Communist Party and the ruling SWAPO party in Namibia. China has long been viewed in favorable terms by Namibians, primarily because of the cordial support that it provided for SWAPO's fight for independence in the 1970s and 1980s.³⁹ This affinity for China is especially pronounced among the so-called "old guard" of SWAPO, who have acute memories of Chinese assistance during the liberation struggle, though less so among the so-called "Born Free" generation, or those Namibians born post-independence in 1990. Indeed, despite some negative perceptions of Chinese by Namibia - as being poachers; as setting up illegal "China shops;" as colluding with Namibian "tender-preneuers;" and as importing Chinese workers to do low-skill tasks despite Namibia's high unemployment rate - the general perception is more amity than enmity.⁴⁰

Similar to Niger, Namibia has also been the target of ambitious Chinese investment in the uranium sector: as mentioned, the Husab Mine is the single largest Chinese investment in Africa to date.⁴¹ Beginning in 2013, Taurus Minerals, which is a subsidiary of China's CGN-Uranium Resources and partially funded by the China Development Bank's China-Africa Development Fund, began to develop the Husab Mine, which is located only 5 kilometers from the existing Rössing mine. The Chinese mining interests were later reorganized into Swakop Uranium, a company that is 90 percent owned by Taurus and 10 percent owned by the Namibian state-owned mining corporation Epangelo. As of this writing, the total investment in the Husab Mine has exceeded US\$2 billion, with additional costs for operations and financing. When fully operational it will be second largest uranium mine in the world, catapulting Namibia to the second largest uranium producer in the world.

In addition to the large investment at Husab, two other Chinese companies have taken an interest in other foreign-operated uranium projects. In 2011, the same CNNC through its subsidiary Zhonghe Resources conducted a feasibility study and environmental impact report on another mine close to Rössing. The bid has been largely shrouded in secrecy, and questions were raised as to how mining licenses were obtained.⁴² As of yet, this investment has not come to fruition. Additionally, in 2014, CNNC Overseas Uranium Holding Limited bought a 25 percent joint venture equity stake in the Langer Heinrich Mine, an amount worth US\$190 million. Sustained low uranium prices have also caused financial problems for the Langer Heinrich Mine, which recently announced reductions in uranium output.⁴³ In July 2016, Paladin

Energy announced it would be selling an additional 24 percent stake in the mine, with speculation that CNNC will purchase the share.⁴⁴

RESULTS HAV

HAVING RECOUNTED THE BROAD HISTORIES of the uranium sectors in both Niger and Namibia, we now address our central question: how does the Chinese entrance into uranium sectors impact African agency for statecraft? We have organized the following section according to our eight criteria, four in the economic sphere and four in the social sphere (see Table 3, below). We offer brief discussions on these phenomena in a comparative perspective. In short, we find that the entrance of China has been complicated and uneven as it impacts agency for statecraft in Niger and Namibia.

AGENCY IN ECONOMIC STATECRAFT IN THE URANIUM SECTOR

CONTROL OVER URANIUM

Niger: Unclear. The announced entrance of the Chinese in the uranium sector brought plaudits from domestic actors that the monopoly of Areva could be broken and, consequently, more Nigerien control over the domestic uranium production could be established.⁴⁵ However, to the disappointment of the Nigerien government and civil society, Chinese investment has unclear impacts on Nigerien control over uranium.

Chinese investment in the Husab Mine provided the Namibian state with more control over its resources. On one hand, the Chinese production at SOMINA was minimal; the mine only operated from 2012 to 2015, and at its height produced less than 300 tons of uranium annually, significantly less than the approximately 4,200 tons produced by Areva during the same period.⁴⁶ Moreover, unlike Namibia, Niger was granted uranium selling rights in 2007 via the state-owned company SOPAMIN, though this was entirely unrelated to Chinese entry or exit. On the other hand, having the Chinese invest with SOPAMIN did improve the standing of the state-owned mining company.

According to a government official, "From the point of view of the government of Niger, I don't think that there was really any impact [of the Chinese]. However, there was a positive consequence, and that was the fact that SOPAMIN came about to manage the new relationship with SOMINA."⁴⁷

Namibia: Improved. In contrast to Niger, the Chinese investment in the Husab Mine provided the Namibian state with more control over its resources. The Husab Mine is distinguished from other uranium investments in Namibia along two dimensions. For one, it marks the first equity participation in the uranium sector of the state-owned mining company Epangelo, established in 2009 expressly to increase the state presence in the Namibian mining industry.⁴⁸ Importantly, Epangelo's 10 percent stake in the Husab Mine was achieved without Epangelo directly investing in the project, nor did it receive a government guarantee. Instead, the Chinese company financed the

entire loan of the mine, and allowed Epangelo to repay its stake with future dividends from the project.⁴⁹ Second, the uranium produced in the Husab Mine will be mostly used for China's domestic energy needs, rather than be tendered on the global market.⁵⁰ While the non-sale on international markets means that Namibia risks receiving an uncompetitive price, it also insulates the Chinese investment during times of low uranium prices. The 2011 Definitive Feasibility Study on the Husab Mine

Table 3: Summary of Results

Sphere	Criteria	Niger	Namibia
Economic agency over uranium sector	Control over Uranium	Unclear: Short duration of the Chinese operation of the mine in Niger did not fundamentally change the Areva monopoly, but it did spur the legitimacy of SOPAMIN.	Improved: Allowed Epangelo Mining to control 10 percent without guarantees/ financing.
	Taxes	Worsened: The realization that the Chinese were not a viable competitor likely allowed Areva to take a harder bargaining position.	No effect: The tax policy of Namibia has been established across the mining sector, with no exceptions for specific mining investments.
	Royalties	Unclear: While the Chinese did not provide a viable alternative to Areva, the Nigerien government did increase the amount of royalties paid. It is unclear whether the Chinese investment had an impact on this outcome.	No effect: The royalty policy of Namibia has been established across the mining sector, with no exceptions for specific mining investments.
	Price	No effect: Unlike Namibia, the Nigerien government does not receive payment based on uranium prices.	Improved: Swakop Uranium is suspected to pay a rate that is higher than the global market spot price, benefiting Epangelo's stake.
Social agency over uranium sector	Labor Regulation	Worsened: French viewed as superior to Chinese as regards labor standards, making Niger more dependent on Areva.	No effect: Unions and SWAPO already fairly strong, resolved issues in ways similar to other mining operations.
	Environment Regulation	Worsened: French viewed as superior to Chinese as regards labor standards, making Niger more dependent on Areva.	No effect: Have followed the regulations, though there is uncertainty about whether these regulations are strong enough.
	State Legitimacy/ Citizen Confidence in Govt	Worsened: Public viewed government as less competent, having bad negotiation outcomes and perception of corrupt deals.	No effect: On one hand, citizens gained more confidence in the government to negotiate beneficial deals, though on the other, there is the belief that some corruption was involved in the deal.
	Level of CS Participation in Governance	Increased: Poor conditions around Chinese labor standards have galvanized Nigerien civil society groups, though impact of those groups has remained minimal.	No effect: Civil society was already relatively weak, since the Chinese investment at Husab has presented no major problems, no mobilization has occurred.

noted that projected cost per pound of uranium was US\$32, yet still significantly higher than current market prices.⁵¹

TAXES

Niger: Worsened. Chinese investment likely worsened Niger's capacity to levy taxes. Niger first implemented a Mining Code in 1993, which laid out rules for prospecting, exploration, exploitation and transport, yet laws contained therein gave international mining partners substantial tax breaks for development and exploration. These rates have been widely perceived to be unfair and too low.⁵² While the contracts between the Nigerien government and Areva have never been officially released, documents obtained by Reuters show that in 2004 Areva received substantial tax breaks on royalties, export duties, and corporate profits.⁵³ Moreover, Areva has been accused of inflating prices to artificially reduce its profits, thereby decreasing its taxable income.⁵⁴ The impact of the Chinese investment at SOMINA is unclear, though it is likely to have had a slightly negative impact. The departure of the Chinese demonstrated to Niger that it only has one viable business partner, thereby reducing the bargaining power during the 2014 contract renegotiations with Areva.⁵⁵ It is suspected that Niger did not receive any demands with regards to tax payment from either the Chinese or French. Moreover, the Chinese deal was shrouded in even more secrecy than that of Areva, only reinforcing calls from civil society to increase the transparency of contracts.⁵⁶

Namibia: No effect. The Namibian tax regime is stable and legislated, and the entrance of the Chinese in Husab has had no impact on the 37.5 percent rate. To our knowledge, the Namibian government has provided no exemptions for Swakop Uranium.⁵⁷ There are also no official tax holiday provisions, and the only tax exemption has been granted to Areva's Trekkopje project. In the future, however, there is a risk that when--and if--the price of uranium recovers, Swakop Uranium will be able to avoid paying these corporate profit taxes through transfer pricing to its parent company. Namibian officials are aware of this potential problem, but there is no indication that the Chinese uranium corporation has engaged in these practices, and will only have the potential to become a problem after production begins.⁵⁸

PRICES

Niger: No effect. Unlike Namibia, Niger is not directly involved in negotiating a price between a uranium company and the government or the state-owned mining company SOPAMIN. The only impact is the global market spot price, but this independently acts on both the Nigerien government and Areva. Therefore, the introduction of Chinese investment had no discernible impact on the price of uranium, particularly because the production of SOMINA was miniscule relative to global production.

The introduction of Chinese investment had no discernible impact on the price of uranium in Niger. Namibia: Improved. Chinese Swakop Uranium's Husab Mine is coming online during a period of sustained low uranium prices, providing a substantial financial boost for Namibia. While this investment raises questions about the profitability of such an investment—since the uranium industry has argued that uranium prices ranging from US\$50 to US\$80 are necessary to justify investing in new mines—prices which are two to three times the current market spot price.⁵⁹ Currently, China has the most number of nuclear reactors planned and under construction, and the contract for the Husab Mine already arranges for uranium production to go to China.⁶⁰ Moreover, it is strongly suspected that the contract between Swakop Uranium and the Namibian government will pay more than market prices, or at least enough to cover the costs of the loan repayments required by Epangelo. If true, this investment not only benefits Namibia because of a higher-than-market price, but also because the Husab Mine will continue to generate royalties and taxes during a low-investment environment.

ROYALTIES

Niger: Unclear. The impact of the Chinese investment on royalty payments has been unclear. According to the revised 2006 Mining Code, the new formula for royalties ties royalties to profitability, and this percentage can range from 5.5 percent to 12 percent. It is currently unknown whether Areva or the Chinese SOMINA operation were exempted from these royalties, or whether they have been forced to fully pay them. More importantly, the decline in Chinese uranium production began during the Nigerien government's 2014 contract renegotiations with Areva, and so some suspect that the Chinese departure also had negative effect on Niger's bargaining power vis-a-vis royalty payments.⁶¹ While the French ultimately agreed to the formula, there are still numerous loopholes that can reduce royalty payments.

Namibia: No effect. Similar to the tax regime, the royalties for minerals has been clearly legislated by the Namibian government. Since the Chinese purchase of the rights to the Husab Mine occurred in 2012, years after the consultation, Swakop Uranium is legally bound to 3 percent.⁶² While there has been speculation that Areva has received royalty exemptions on its mothballed Trekkopje Mine, and EPZs are purportedly exempt from royalties, there is no definitive proof.⁶³ Moreover, there is zero indication that Swakop Uranium has received preferential treatment with regards to royalties.

AGENCY IN SOCIAL STATECRAFT IN THE URANIUM SECTOR

LABOR REGULATIONS

Niger: Worsened. The inauguration of the SOMINA mine has had an overall negative impact on workers' rights. Workers have complained that the SOMINA mine's labor standards are far from meeting national guidelines on worker safety, from issues

ranging from very poor worker pay to unsafe working conditions.⁶⁴ As one Nigerien relayed: "China is notorious for skirting the rules [at SOMINA]. If you go to Ingall [the major town near Azelik], you will hear lots of things...In fact, the government of Niger was glad that the mine shut down because Azelik was having lots of problems: worker protests, lack of good payment, and human rights abuses."⁶⁵ Indeed, Rosen (2015) notes that whereas Areva has turned the city of Arlit into a desirable place to live within Niger, the same has not materialized around Azelik.⁶⁶ Interviewees were particularly critical of the adherence to proper safety standards in the Chinese SOMINA mine in Azelik. Ali Idrissa articulated: "The Chinese are not using local people [at Azelik], and so no one from the local community is benefiting...The mine is never clean...The workers are underpaid...The work conditions do not compare with those of the French and Areva."

Namibia: No effect. Overall, the impact of China's entry on workers' rights has been minimal. Various interviewees have suggested that during the construction and development phase of the Husab mine, Namibian workers' complaints were generally focused on workplace safety and fair compensation for hours worked, and some short-lived and generally quiet strikes occurred.⁶⁷ However, these complaints were seemingly rare and were seemingly minor, and were in line with low-level infractions at other mining sites.⁶⁸ Importantly, nearly all respondents relayed that when workers have complained about insufficient labor standards, the Namibian government has been quick to react. This reality is at least partly attributable to the very close relationship between Namibian labor unions and the ruling SWAPO party, as well as the efforts the Namibian government has taken to ensure that Chinese workers understand its laws, such as its decision to have the Namibian Labor Act translated into Mandarin.⁶⁹ A representative from the government has asserted that "with safeguards around the mines, the Chinese are exactly the same [as other companies]," while a member of the Namibian Uranium Association says that it when it comes to the uranium industry "the Chinese have shown themselves to be very good citizens."⁷⁰

ENVIRONMENTAL REGULATION

Niger: Worsened. Perhaps one of the most detrimental impacts at Azelik has been the poor stewardship of the environment around the mine. Journalists and civil society activists have brought at least three issues to the fore. First, complaints have been rife that the groundwater near Azelik has been contaminated by radioactive runoff from the mine, which has led to a second impact of the killing off of local cattle.⁷¹ Third, others discussed air quality around the mines deteriorated.⁷² Combined, these facets highlight the inabilities of the Nigerien government to robustly monitor the environmental impacts around mines.

Namibia: No effect. The Namibian government has shown capacity to adequately monitor the environmental impacts on its mines. Namibia has placed a premium on

ensuring high environmental standards for its mining sector since independence, both to attract international mining capital but also due to the importance of tourism to its economic goals. In a joint project with the German Federal Institute for Geosciences and Natural Resources, the Namibian government has also produced a Strategic Environmental Assessment for the uranium industry—the first its kind in the world to establish a baseline for environmental management, particularly in dust and groundwater contamination.⁷³ Moreover, as all contracts for uranium mining must be approved by both the Ministry of Mines and Energy and the Ministry of Environment and Tourism, the relatively limited cases of environmental hazards resulting from the mine is largely unsurprising.⁷⁴ However, since the Husab Mine, as well as all of the other Namibian uranium mines, are remotely located in the Namib Desert, the lack of outcry regarding environmental impact is perhaps as much the result of a lack of citizen voice as anything else.⁷⁵ It also remains to be seen whether there are any future negative environmental impacts of the Husab Mine.

CITIZEN CONFIDENCE IN GOVERNMENT

Niger: Unclear. The Nigerien government's handling of the Azelik mine had an unclear impact on citizen perceptions of government legitimacy; expectations were low prior to the entry of the Chinese, and remained low thereafter. In addition to inadequate transparency, a lack of faith in the government's capacity to effectively bargain with uranium companies was a pervasive trope. While members of civil society have long bemoaned the Nigerien government's inability to effectively bargain with France, this was also a theme expressed by those within the Nigerien government.⁷⁶ Respondents particularly cited the government's lack of well-trained negotiators capable of high-level bargaining; its subservient bargaining position due to its profound reliance on uranium; its longstanding arrangements with Areva and perceived diplomatic influence of Areva; and Nigerien government corruption, both when dealing with China and France.⁷⁷ Yet importantly, given that Areva predates SOMINA by almost fifty years, citizens' perceptions of state capacity for negotiation were premised nearly exclusively on relations with Areva.

Namibia: No effect. Our research revealed no instances of systematic citizen discontent with the nature of the Namibian government's handling of the Husab mining procurement or bargaining process, thus we view China's presence to have had no impact on citizen perceptions of government legitimacy. Though Namibian citizens largely remained aloof to the new role of the state-owned Epangelo company, those who did expressed pride in the development.⁷⁸ Even watchdog groups have relayed that they have heard of no irregularities from government handling of the Husab contract. Interviewees have suggested that this confidence is derived from most citizens' continued respect for the ruling SWAPO party, which they believe to genuinely care for their well-being, even despite the fact that Namibia gained the dubious distinction as the most inegalitarian country on earth in 2015.⁷⁹

CIVIL SOCIETY PARTICIPATION IN GOVERNMENT

Niger: Improved. The one arguable upside about the failure of the Azelik mine is that the very poor conditions have seemingly galvanized civil society activists. The failures of Azelik compelled new or renewed forms of advocacy, especially around the role of women in the uranium industry and demands for government transparency. The impact of Nigerien civil society activism around uranium reached its apogee during the 2013-2014 renegotiations with Areva: "People were outraged that the details of the [2013-2014] agreement [with Areva] were not made public...The uranium sector has been a huge flashpoint, because it touches upon all other sectors of society: health, environment, education, infrastructure."80 For its part, the Ministry of Mines concurred that civil society was heavily involved in the negotiations, even, as an official said, "to a fault." As one respondent relayed: "We didn't understand these [strident] reactions [from civil society]: we don't simply negotiate in the street. Even if the negotiations are held in private, the law isn't hidden: everyone can see it, and know if we applied it."⁸¹ Indeed, though it is impossible to causally assert that Chinese presence causally led to such a robust civil society response, it is reasonable, we think, to expect that it had a part in informing it.

Namibia: No effect. The entrance of the Chinese in the uranium sector appears to have had no impact at all on civil society participation in government. As was mentioned frequently in interviews, civil society in Namibia is weak, partly due to the resistance to challenge SWAPO patronage networks, and partly due to reduction in foreign funding as Namibia's categorization as a middle income country and thus has never been eager to engage in the mining sector.⁸² The ability to routinely air grievances to the government, which has been reasonably responsive in the past, also has diminished the urgency of having established civil society organizations.⁸³ Moreover, given that there as of this writing in October 2016, there have been no major complaints leveled against the nature of the operations at Husab, the lack of civil society activism is to be expected.

CONCLUSION THIS WORKING PAPER HAS SOUGHT TO highlight how the entrance of the Chinese companies in the uranium sector has impacted African state agency in two uranium-rich countries: Niger and Namibia. By separating out impacts on African state agency in two domains - economic and social - this study has detailed the impact of the Chinese entrance. Overall, we find that the impact of Chinese uranium investment has been complex. On the one hand, Chinese investment in SOMINA in Niger has had a generally negative impact--it demonstrated to both the government and civil society that Areva was Niger's only viable partner, thereby reducing the bargaining power during future renegotiations, and further emphasizing the relative impotence of the Nigerien government capacity to fully manage its industry. SOMINA was also beset with problems in the labor and environmental sectors, though this did provoke a stronger response from the NGO community to lobby for stronger transparency requirements. On the other hand, Chinese investment in the Husab Mine in Namibia has been generally positive. Swakop Uranium has abided by environmental and labor regulations, positively engaged with the Namibian state-owned mining corporation, and provided significant financial investment during a weak economic period. While this study has offered empirical suggestions as to what variations have occurred on the ground, what remains to be fully understood is just why the Chinese entrance into these two African uranium sectors have affected African agency for statecraft so differently. Among other phenomena that we believe to likely be at play in explaining these varying outcomes in Niger and Namibia are: government capacity; history of trade unions; nature of colonial relationships; nature of population size and distribution; and nature of resource diversity and geographical distribution, among others. Future research could more systematically detail the conditions under which uranium investments have produced positive and negative impacts on state agency. Yet, for the time being, this study offers what we believe to be the most comprehensive study to date on the impact of Chinese investment on agency in African statecraft. **★**

APPENDIX

List of interviews				
#	Interviewee	Affiliation	Date	Location
Niger				
1	Nigerien citizen #1		August 6, 2016	Niamey, Niger
2	Nigerien citizen #2		August 6, 2016	Niamey, Niger
3	US Embassy Niamey Official #1	US Embassy, Niamey	August 8, 2016	Niamey, Niger
4	US Embassy Niamey Official #2	US Embassy, Niamey	August 8, 2016	Niamey, Niger
5	Nigerien Citizen #3		August 9, 2016	Niamey, Niger
6	US Embassy Niamey Official #3	US Embassy, Niamey	August 9, 2016	Niamey, Niger
7	US Embassy Niamey Official #4	US Embassy, Niamey	August 9, 2016	Niamey, Niger
8	Nigerien Official #1	Nigerien Government	August 10, 2016	Niamey, Niger
9	Nigerien Official #2	Nigerien Government	August 11, 2016	Niamey, Niger
10	NGO Worker #1		August 11, 2016	Niamey, Niger
11	Ali Idrissa	ROTAB	August 15, 2016	Niamey, Niger
12	Solli Ramatou	GREN	August 16, 2016	Niamey, Niger
13	Amadou Abba	SWISSAID	August 16, 2016	Niamey, Niger
14	Nigerien Labor Official #1		August 17, 2016	Niamey, Niger
15	EC Employee #1	European Commission	August 18, 2016	Niamey, Niger
16	EC Employee #2	European Commission	August 18, 2016	Niamey, Niger
17	EC Employee #3	European Commission	August 18, 2016	Niamey, Niger
Namibia				
18	Namibian Official #1	Namibian Government	October 18, 2016	Windhoek, Namibia
19	Namibian Official #2	Namibian Government	October 18, 2016	Windhoek, Namibia
20	US Embassy Windhoek Official #1	US Embassy, Windhoek	October 18, 2016	Windhoek, Namibia
21	US Embassy Windhoek Official #2	US Embassy, Windhoek	October 18, 2016	Windhoek, Namibia

22	US Embassy Windhoek Official #3	US Embassy, Windhoek	October 18, 2016	Windhoek, Namibia
23	US Embassy Windhoek Official #4	US Embassy, Windhoek	October 18, 2016	Windhoek, Namibia
24	Mike Akuupa	LaRRI	October 19, 2016	Windhoek, Namibia
25	Ludwig Feldhaus	BGR	October 19, 2016	Windhoek, Namibia
26	Namibian Official #3	Namibian Government	October 19, 2016	Windhoek, Namibia
27	Namibian Official #4	Namibian Government	October 19, 2016	Windhoek, Namibia
28	IPPR Employee	IPPR	October 20, 2016	Windhoek, Namibia
29	Dr. Wotan Swiegers	Namibian Uranium Institute	October 24, 2016	Swakopmund, Namibia
30	Dr. Gabi Schneider	Namibian Uranium Institute	October 24, 2016	Swakopmund, Namibia
31	Uranium Company Employee #1		October 26, 2016	Swakopmund, Namibia
32	Laura Davidson	Chamber of Mines	October 27, 2016	Windhoek, Namibia
33	Uranium Industry Expert #1		October 27, 2016	Windhoek, Namibia

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AUTHOR BIOS

PETER VOLBERDING:

JASON WARNER:

Peter Volberding is a Ph.D. candidate in the Government Department at Harvard University. His dissertation focuses on the evolving role of national development banks in international development finance.

Dr. Jason Warner is an assistant professor at U.S. Military Academy in the department of Social Sciences, and an associate and director of the Africa profile in the Combating Terrorism Center. He holds a Ph.D. from Harvard University.

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