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THESIS

**A COMPARATIVE ANALYSIS OF UNITED STATES
AND CHINESE ECONOMIC ENGAGEMENT IN
SUB-SAHARAN AFRICA**

by

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March 2016

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ECONOMIC ENGAGEMENT IN SUB-SAHARAN AFRICA**

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ABSTRACT

Much has been written about Chinese enterprise in sub-Saharan Africa, most bad and some good, which is mainly due to the profit-driven approach, where aid distribution is tied to trade, directly or indirectly. The United States' relationship to the region is fundamentally different, following a Western model of conditional aid attached to structural and social reform. The U.S. trade relationships with sub-Saharan Africa are separate from its aid levers, representing only 1% of total foreign business, within the time frame of this study. The literature is divided as to which of the two countries' economic engagement is best for sub-Saharan nations. Based on the analysis, which appears to be most instructive for the United States' and sub-Saharan African countries' mutual development goals, this research supports a trade model, in general, and appears to be most informative for the United States' version that separates trade and aid. China implicitly links aid to trade, which is found to benefit sub-Saharan Africa more so than U.S. aid alone, but its results are not measurable by normal foreign aid standards. The goal of this paper is to inform the broad economic engagement approach, which best achieves U.S. stated goals in the region.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank
AGOA	African Growth and Opportunity Act
AWEP	African Women’s Entrepreneurship Program
BRAC	micro-lending organization (formerly the Bangladesh Rural Advancement Committee)
CAD	China-Africa Development
CDC	Center for Disease Control
DAC	Development Assistance Committee
FDI	foreign direct investment
GAO	Government Accountability Office
GDP PPP	gross domestic product purchase power parity
GDP	gross domestic product
IDA	International Development Association
IFIs	international financial institutions
LDC	least-developed countries’
MBA	Masters of Business Administration
MISTOWA	Market Information Systems and Traders Organizations in West Africa
NGO	non-governmental organization
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
OOF	other official flows
OPIC	Overseas Private Investment Corporation
PRC	People’s Republic of China
UN	United Nations
USAID	United States Agency for International Development
USD	U.S. dollars

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I. INTRODUCTION

Increasingly, the world's two greatest economies engage with 49 of the least greatest. Sub-Saharan Africa has some of the world's most resource-rich, youthful countries, but also experiences, by far, the largest amount of human suffering.¹ The contrasts between the countries of sub-Saharan Africa, the United States, and China are sharp. In 2014, gross domestic product purchase power parity (GDP PPP)² per capita for the United States was \$54,629, and for China \$7,590, while for the countries in sub-Saharan Africa, it averaged \$1,776.³ The respective purpose and style of U.S. and Chinese economic engagement with sub-Saharan Africa has been greatly debated. Rigorous discussion surrounds questions of which economy has greater positive economic impact on sub-Saharan Africa economies. This study compares U.S. and Chinese economic impact on sub-Saharan Africa GDP growth data. Of particular interest is the form and style of that economic engagement to discern best practices to yield the greatest GDP growth. Throughout this study, Chinese aid and trade, when considered together, are interchangeable with the term "economic engagement" and is categorically equivalent to U.S. trade. Those methods are examined qualitatively and quantitatively in this work, as both the United States and China intensify their focus on the subcontinent.

The past two decades have seen a dramatic shift in thinking toward the strategic importance of sub-Saharan African countries and the continent as a whole. The United States considers that sub-Saharan Africa economic stability is directly linked to its own national security.⁴ Some U.S. officials view China's economic interests and the way the country conducts itself on the African continent as a possible existential threat to that

¹ Population Crisis Committee, *The International Human Suffering Index for 141 Countries* (Washington, DC: Population Crisis Committee, 1992).

² When referring to gross domestic product (GDP), this paper will mean gross domestic product purchase power parity (GDP PPP) unless otherwise specified.

³ "GDP per Capita (Current US\$)," last modified February 10, 2013, <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>.

⁴ David E. Brown, *Hidden Dragon, Crouching Lion: How China's Advance in Africa Is Underestimated and Africa's Potential Underappreciated* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2012), 2–56.

stability, and thus, a threat to American interests.⁵ Chinese-African economic activity in sub-Saharan Africa has grown rapidly over the past several decades and is a controversial topic as to type, participants, purpose, amount, and effects. Simply, Chinese methods are changing the sub-Saharan landscape.⁶

China, for its part, recognizes the region's vast resource wealth and focuses on those countries rich in commodities. Analysis of the Chinese model may inform alternative methods of sub-Saharan economic engagement for the United States, including broadening current models and future development possibilities. Studies in this area could also have important implications for U.S. global foreign policy strategies in developing nations. Therefore, increased importance should be placed on quantitatively understanding Sino economic engagement methods as compared to those of the United States. Before the empirical examination, historical and scholarly literature lenses best frame the issue.

⁵ Richard Shultz, Douglas Farah, and Itamara Lochard, *Armed Groups: A Tier-One Security Priority* (INSS Occasional Paper 57) (USAF Academy, CO: USAF Institute for National Security Studies, 2004), 53–71.

⁶ Deborah Brautigam, “Chinese Development Aid in Africa: What, Where, Why, and How Much?,” in *Rising China: Global Challenges and Opportunities*, ed. Jane Golley and Ligang Song (Canberra: Australia National University Press, 2011), 203.

II. CONTEXT

Most of sub-Saharan Africa spent much of the 20th century either under colonial authority or in a struggle for independence. During the Cold War and after independence, many world powers treated sub-Saharan African countries as “convenient pawn[s] on the global chessboard.”⁷ Since then, the literature acknowledges that the United States and China have had different purposes and goals in sub-Saharan Africa. U.S. economic engagement with the subcontinent is traditionally based on the Western aid model, while the Chinese form is historically trade-centered. The trend continues positively after norming for strategic interests in support of national goals; the United States usually pairing aid with conditions of demonstrated structural improvement within a given state and Chinese policy forbidding any conditionality beyond the terms of the transaction.⁸

The literature underscores a division between support and rejection for the conditional structural adjustment model. Typically, foreign aid in Africa is largely based on shared ideology between the donor and aid recipient. Since numerous countries compose the sub-Saharan Africa continent, these ideological mindsets are linked to the varied historical contexts in which they have developed. Add to that, the many varied existing donors for equally different backgrounds and goals. Among the differences are some distinct positions between two approaches, the United States’ and China’s. An enthusiast’s camp for the Western model is Claggett, Munemo, and Zhang. They argue the Western model works well at improving human rights, reducing corruption, and encouraging good government.⁹ Sachs et al. posit that conditioning aid on governance for state development, alone, changes few fundamental issues. They assert initial large surges of development assistance are required to break out of the poverty cycle; only then, can a

⁷ Michael Klare and Daniel Volman, “America, China, and the Scramble for Africa’s Oil,” *Review of African Political Economy* 33, no. 108 (June 1, 2006): 297.

⁸ E. Tylor Claggett, Jonathan Munemo, and Lijuan Zhang, “Determinants of Foreign Aid to Africa: A Comparison of the United States and China,” *The Journal of Global Commerce Research* 2, no. 4 (Fall 2010): 40–50.

⁹ *Ibid.*

developing nation achieve meaningful change.¹⁰ Alternatively, Easterly regards “big push” aid narratives defunct in Africa. With simple regression analysis, he argues that poverty traps are not overcome by large surges of foreign aid, no matter the quality of governance. He also illustrates that “*takeoffs* are not associated with aid investment or education spending.”¹¹ Despite this analysis, the aforementioned aid myths dominated Western literature and practice since the 1950s, only to return to this century no more successful. The contrast of economic engagement through aid versus trade is stark. Englebert and Tull argue the legacy of external conditions, through traditional Western-style aid flows, post-conflict, is a type of market competition of its own that disincentivizes recipients.¹² Essentially, the need for aid becomes the market response for more aid. They further contend indigenous state creation is indeed possible, as found in Somaliland and Uganda.¹³

Today, the region bustles with Chinese economic activity. Recent scholarly activity surrounding this Chinese version of foreign aid is equally robust, with two divisions of thought predominating; some offer measured praise, while others supply sharp criticism. Those in the pro camp suggest any direct foreign investment on the continent helps those affected economies, and ultimately, the locals.¹⁴ They contend it is almost impossible to imagine that sub-Saharan African regimes would not prefer China’s unfettered aid without structural or humanitarian pre-conditions. Moreover, these scholars say that China’s version is the perfect formula for developing desperately needed infrastructure throughout the region.¹⁵ They continue that it is only right that sub-Saharan leaders decide the fate of their own countries’ precious resources in the global

¹⁰ Jeffrey Sachs et al., “Ending Africa’s Poverty Trap,” *Brookings Papers on Economic Activity*, 2004, 117–216.

¹¹ William Easterly, “Reliving the 1950s: The Big Push, Poverty Traps, and Takeoffs in Economic Development,” *Journal of Economic Growth* 11, no. 4 (2006): 289–318.

¹² Pierre Englebert and Denis M. Tull, “Postconflict Reconstruction in Africa: Flawed Ideas about Failed States,” *International Security* 32, no. 4 (Spring 2008): 107–123.

¹³ *Ibid.*

¹⁴ James Reilly and Bates Gill, “The Tenuous Hold of China Inc. in Africa,” *The Washington Quarterly* 30, no. 3 (2007): 37–52.

¹⁵ *Ibid.*

marketplace. Although it is not clear whether the economic success China has established in sub-Saharan Africa can withstand significant financial crisis. Despite world trends, sub-Saharan Africa is in the beginnings of economic renaissance.¹⁶ A fact not unnoticed by a country already intimately familiar with an emerging market.

Brown reveals that Mao Zedong initiated and significantly increased aid on the African continent.¹⁷ Furthermore, his thesis is that a modified form of Chinese-style economic engagement with sub-Saharan Africa will do more for development than any other form to date.¹⁸ Raine notes the changing relationship of China with Africa over the last 30 years. According to her, the Mainland has developed the most recent engagement style since the 1990s, when soft power increasingly became the currency for resources without political precondition. She continues, saying it is just this sort of economic engagement that will ultimately redeem sub-Saharan African countries.¹⁹ Yin and Vaschetto also report that Chinese strategy in Africa is based on a not-to-interfere-with government approach to aid, which, they say, is used to gain soft power, build national trust, and develop long-term trade plans.²⁰ Gill et al. believe China's expanded method of aid through mutually beneficial trade is a net-positive for sub-Saharan African countries. They assert their strategic approach is about to takeoff in Africa, developmentally speaking.²¹

Indigenous populations, according to Alden, welcome the increased Chinese presence. He describes China as a new source of revenue without traditional reform strings attached and that Africans prefer such an arrangement, despite any resulting unbalanced relationship. For these reasons, a barrage of Chinese diplomatic-led trade

¹⁶Antonio Guerrero, "In from the Cold," *Global Finance* 24, no. 2 (2010): 24–26.

¹⁷ Brown, "Hidden Dragon, Crouching Lion: How China's Advance in Africa Is Underestimated and Africa's Potential Underappreciated," 2–56.

¹⁸ Ibid.

¹⁹ Sarah Raine, *China's African Challenges* (New York: Abingdon, Oxon 2009), 23–24.

²⁰ Jason Z. Yin and Sofia Vaschetto, "China's Business Engagement in Africa," *Chinese Economy* 44, no. 2 (2011): 43–55.

²¹ Bates Gill, Chin-hao Huang, and J. Stephen Morrison, *China's Expanding Role in Africa: Implications for the United States* (Washington, DC: Center for Strategic and International Studies, 2007), 6–7.

may overtake Western economic engagement efforts on the African continent.²² Finally, Weisbrod and Whalley describe Chinese foreign direct investment (FDI) in Africa as impacting respective economies by one-half a percentage point growth. They conclude Chinese aid is relatively effective. According to their study, China contributed over 10% of the total FDI flows to those same economies.

This study raises some potential issues. As previously stated, the Chinese approach to sub-Saharan Africa differs from the American model in many ways related to its social, economic, and political strategies. Chiefly, Chinese aid is focused on commercial cooperation. Those lines are blurred between aid, economic, and political relationships. The interconnection makes separating specific issues surrounding aid and trade impossible. Also, the general incompleteness of Chinese economic data on sub-Saharan African aid further obscures the matter. Since they do not conform to the international donor standard, the available information is difficult to assimilate in accordance with the Organization for Economic Cooperation and Development (OECD). Much of what is known about China's aid actually comes through speeches, conferences, news releases, and recipient countries.²³

²² Chris Alden, "China in Africa," *Survival* 47, no. 3 (2005): 147–164.

²³ Sven Grimm et al., *Transparency of Chinese Aid: An Analysis of the Published Information of Chinese External Financial Flows* (Stellenbosch, South Africa: Stellenbosch University Center for Chinese Studies, 2011), 1–12.

III. HYPOTHESIS

Despite challenges, it is possible to present a comparative analysis of the effectiveness of the U.S. and Chinese models using statistical data of the two national approaches and their measured effectiveness according to sub-Saharan Africa GDP growth. A review of the literature informed the following two research hypotheses tested in this work:

- Hypothesis (H1): U.S. trade with sub-Saharan Africa demonstrates greater positive correlation to sub-Saharan African GDP growth than U.S. aid in the same economies for the time period from 2001 to 2010.
- Hypothesis (H2): U.S. trade with sub-Saharan Africa demonstrates a greater positive correlation to sub-Saharan African GDP growth than Chinese trade in the same economies for the time period from 2001 to 2010.

Using these hypotheses as a basis for study, this work intends to compare U.S. and Chinese economic engagement in sub-Saharan Africa. Through research of available data, this study endeavors to draw conclusions from relative successes and failures of U.S. and Chinese programs, and identify broad factors explaining respective influence on sub-Saharan African countries' GDP growth. The objective is to critically consider how the United States can further develop its own approach to sub-Saharan African engagement according to observed Chinese methods, perhaps allowing greater understanding of how to achieve U.S. economic and strategic goals for the region. This study assumes natural correlations between economic growth and societal development.

First, the paper provided quantitative context of the current debate from the available literature. Next, the work drills down to U.S. and Chinese practices from 1990 forward, when the nature of the aid relationships shifted in sub-Saharan Africa.²⁴ The researcher finally reviews the available and relevant data in an effort to illuminate both

²⁴ Raine, *China's African Challenges*, 23.

national approaches by correlating data populated from U.S. Government Accountability Office (GAO) reports and the World Bank database.²⁵

Some argue that donor aid props up poor governance and intensifies corruption, which thereby creates false markets and distresses real ones.²⁶ Those who support the idea of developed nations providing foreign aid argue the process results in a greater positive net effect, despite irregularities.²⁷ Empirical and statistical tools can test both hypotheses according to shared measures. Among those, the GDP is the most common. This work endeavors to evaluate U.S. and Chinese economic engagement impacts on GDP growth in sub-Saharan Africa to allow greater understanding of China's economic engagement with Africa, in order to impact the region most positively and achieve U.S. strategic and economic goals. Based on the analysis, this body of research should make a case for a model instructive to the U.S. economic engagement strategy in sub-Saharan Africa.

²⁵ David Gootnick, *Sub-Saharan Africa: Trends in United States and Chinese Economic Engagement* (GAO-13-199) (Washington, DC: United States Government Accountability Office, 2013); "The World Bank GDP Growth (Annual %)," accessed February 12, 2013, <http://data.worldbank.org/indicator/ny.gdp.mktp.kd.zg>.

²⁶ Easterly, "Reliving the 1950s: The Big Push, Poverty Traps, and Takeoffs in Economic Development," 289–318.

²⁷ Gill, Huang, and Morrison, *China's Expanding Role in Africa: Implications for the United States*, 6–7.

IV. WESTERN MODEL CHALLENGED

The Western model is generally made up of four types of foreign aid that Africa receives: emergency relief, financial, technical labor, and military. Emergency relief aid is typically distributed in the form of food or non-food items (e.g., emergency packages to families) or medical resources and services during natural disaster situations. Financial aid is usually distributed in the form of loans or grants that do not have to be repaid. Technical labor tends to come through volunteer programs or commissioned by governments to assist with agricultural needs, such as enhancing farm efficiency and productivity. Lastly, military aid comes in the form of military hardware and training.²⁸

The literature review reveals no apparent combined aid and trade strategy for the United States. Various aid programs and trade initiatives, without linkages or a cogent overarching plan, hallmark the policy of the past several decades. Although not a former colonizing country, a brief overview of the traditional aid architecture reveals the United States does coordinate its aid flows with the international aid standard bearer, the OECD. In keeping with that organization's 2005 Paris Declaration on Aid Effectiveness, in fact, no ties exist between aid and U.S. products or services.²⁹ The Development Assistance Committee (DAC), the main organ of the OECD, organizes "rules and norms" of foreign aid standards. The membership consists of donor countries and is self-regulating. China is not an OECD member, although its donor behavior is of great interest to the DAC. Normally, foreign aid or official development assistance (ODA) is defined as concessional loans comprised of 25% grant monies for the purpose of welfare and development. It can be bilateral or multilateral and channeled from donors through international banks to recipient countries.³⁰ Debt relief and technical assistance are not ODA. Development economists traditionally see these areas as a way to bridge the savings gap of countries to allow them to break out from the poverty trap using the big

²⁸ Military engagement is excluded from this analysis.

²⁹ Gootnick, "*Sub-Saharan Africa: Trends in United States and Chinese Economic Engagement*, 6.

³⁰ Brautigam, "Chinese Development Aid in Africa: What, Where, Why, and How Much," 203–223.

push theory.³¹ The other type of OECD aid is termed other official flows (OOF). As mentioned, the former are concessional loans and grants defined by the OECD. The latter (OOF) are not concessional and do not include export credits. The OECD defines OOF as funds for firms from the donor country to subsidize or guarantee foreign business transactions to protect investor risk.³² The United States goes through international organizations to deliver a bulk of its assistance advancing U.S.-African foreign aid policy.

The U.S. sub-Saharan African goals include, “strengthening democratic institutions, supporting human rights, improving health and education, and helping sub-Saharan African countries build global trade.”³³ The U.S. model works by distributing aid dollars through U.S. agencies, international development banks, and non-governmental organization (NGOs). Most U.S. aid has governance and humanitarian stipulations attached. Currently, the United States provides billions in annual, indirect aid to Africa through international financial institutions (IFIs) and United Nations (UN) agencies. According to a U.S. congressional brief, the monies are loaned through the World Bank’s “soft loan affiliate,” the International Development Association (IDA), Africa’s largest aid source.³⁴ Many in the traditional aid community applauded the findings of a UN report that claims the United States is one of the “least generous donors” (when contribution level is considered in proportion to national GDP).³⁵ It argues that even by matching the expected giving percentage level, the U.S. model will not do enough to transform sub-Saharan African countries into sustainable economies,³⁶ despite the fact that U.S. aid dollars total more than all the other countries combined.

³¹ Sachs et al., “Ending Africa’s Poverty Trap,” 117–216.

³² Brautigam, “Chinese Development Aid in Africa: What, Where, Why, and How Much?,” 203–223.

³³ Gootnick, “Sub-Saharan Africa: Trends in United States and Chinese Economic Engagement,” 12.

³⁴ Ted Dagne, *Africa: U.S. Foreign Assistance Issues* (RL33591) (Washington, DC: Congressional Research Service, 2011), 8–13.

³⁵ Celia W. Dugger, “U.N. Report Cites United States and Japan as the ‘Least Generous Donors,’” *New York Times*, September 8, 2005.

³⁶ Sachs et al., “Ending Africa’s Poverty Trap,” 118–239.

More is not always better. Easterly offers strong criticism of Washington's continued support of past methods. Some in his camp describe the results of various levels of American conditional aid over the last 40 years as a frustrating story of stagnation with little to show for the billions of U.S. aid dollars spent.³⁷ The late economist and author Lord Peter Bauer perhaps best summarized criticism of this U.S. approach to foreign aid as "an excellent method for transferring money from poor people in rich countries to rich people in poor countries."³⁸ He made that statement in 1972. Many voices have since joined his plea for reform.

In an effort to adjust to the changing environment, the United States is working on alternate strategies to tackle the systemic issues. Joining with sub-Saharan African countries, they are focusing on problems of transparency and good governance to promote a positive business culture and tackle financial corruption and terrorism.³⁹ The United States has intensified focus on sub-Saharan trade in recent years. The U.S. Commerce Department is organizing African global business summits and officially cooperating with the African economic communities and other organizations to promote U.S. business expansion in those countries. U.S. ambassadors are leading similar changes in cooperation with sub-Saharan African countries to facilitate host-nation business leader delegations to the United States to meet American business leaders. The current administration describes its future vision of American and sub-Saharan African growth, intermingled, and seeking local partnerships in support of their mutually beneficial success.⁴⁰

Putting White House plans into action, *The Africa Entrepreneur Facility* was promptly created. It is a United States Agency for International Development (USAID)

³⁷ Easterly, "Reliving the 1950s: The Big Push, Poverty Traps, and Takeoffs in Economic Development," 289–318.

³⁸ Peter Bauer, *Dissent and Development: Studies and Debates in Development Economics* (Cambridge, MA: Harvard University Press, 1972), 326.

³⁹ Neal S. Wolin, "Deputy Secretary Wolin to Visit Central and Southern Africa November 10–12, 2012" (press release, Federal Information & News Dispatch, Inc., 2012), <http://search.proquest.com.libproxy.nps.edu/docview/1150133169/13C689B48E167B57CE1/17?accountid=12702>.

⁴⁰ Rebecca Blank, "Expanding Access to New Markets in Sub-Saharan Africa for American Businesses," Guest Blog on *Commerce Blog* (November 30, 2012), <http://search.proquest.com.libproxy.nps.edu/docview/1221234039/13C685EF7DF5F2DD339/10?accountid=12702>.

and African Development Bank (ADB) collaboration. The enterprise is helping sub-Saharan African entrepreneurs present successful business proposals to private investors through the Overseas Private Investment Corporation (OPIC) and attaching loan guarantees to resulting deals.⁴¹ It is through these types of partnerships the U.S. government is engaging entrepreneurial potential in sub-Saharan Africa from the bottom-up.

That potential is evidenced by efforts like the USAID mandate to execute the *Congressional African Growth and Opportunity Act* (AGOA), designed to “grow economies, stability, and reduce poverty.”⁴² First, trade hubs were established in Accra, Nairobi, and Gaborone. The initial iteration worked with more than 234,000 firms and 660,000 entrepreneurs in Africa, putting two billion U.S. dollars (USD) put into infrastructure, and it connected 650,000 new African users to the Internet.⁴³ It is also through public-private entrepreneurial partnerships that the United States engages sub-Saharan business. With initiatives like the *Innovation Summit and Mentoring Partnership*, the State Department facilitates some of America’s most successful companies and public organizations to come alongside high-potential African youth, especially women.⁴⁴ The State Department, along with partner NGOs and corporations, further promotes female entrepreneurship through the African Women’s Entrepreneurship Program (AWEP). It is a program that focuses on strategic planning and significant barriers to African businesswomen. The first conference in 2012 attracted 120 aspirants from 44 African countries and has grown in successive years.⁴⁵

Private organizations partner with local entrepreneurs and sub-Saharan African economies in other ways. Micro-lending is one method that provides a “seedbed” for

⁴¹ Henrietta H. Fore and Panel, “Partnership to Support Entrepreneurs in Africa” (moderated speech, in Washington, DC, April 15, 2008).

⁴² Ibid.

⁴³ Ibid.

⁴⁴ African Press Organisation, “Africa: State Department in Collaboration with Meridian International Center Hosts Innovation Summit and Mentoring Partnership with Young African Leaders” (news release, African Press Organisation, June 12, 2012).

⁴⁵ African Press Organisation, “United States Department of State Announces Follow-on Training for the African Women Entrepreneurs Program” (news release, African Press Organisation, October 6, 2012).

growth.⁴⁶ It is a well-documented and proven concept that has transformed some of the poorest individuals from receiving handouts into those earning sustainable above average livelihoods. The Entrepreneurial Finance Lab is using this tool through sub-Saharan African banks to distribute small-to-medium business loans.⁴⁷ The “BRAC” organization, once called Bangladesh Rural Advancement Committee, is now a micro-lending organization for many other developing regions. It, too, has successfully invigorated entrepreneurial classes through micro-finance. The committee trains entrepreneurs and then aids their launch among a value-chain-network of BRAC assisted entities, which thus creates an entrepreneurial ecosystem at the grassroots level. The program inspires smart commerce where it is needed most, from the bottom rungs of the social ladder. It provides the information and opportunity while local entrepreneurs bring the rest.⁴⁸ Another good example of partnering is found in Ghana. Social entrepreneur Esoko assisted the country’s agro-business access markets guided by USAID.⁴⁹ Together, they developed the Market Information Systems and Traders Organizations in West Africa (MISTOWA) system and increased agricultural information exchange in 13 West African countries. The system leveraged available cellphone technology to give food producers real-time, agro-market information, which allowed them to better “time” the market. The result was an increase in efficiency and commodity prices at the producer level that grew the entire industry and boosted the local economy.⁵⁰

The list of new entrepreneurial engagement activity continues. The U.S. Center for Disease Control (CDC) is also in the fight. It is attacking the intersection of public health and economic wellbeing by sending out “business missionaries” with Masters of Business Administration (MBA) degrees to the least developed countries (LDCs). Its job

⁴⁶ Barbara Grosh and Gloria Somolekae, “Mighty Oaks from Little Acorns: Can Microenterprise Serve as the Seedbed of Industrialization?” *World Development* 24, no. 12 (December 1996): 1879–1890.

⁴⁷ Greg Larson, “A Needle in a Haystack: How a New Tool Is Unlocking Entrepreneurship in Africa,” *Kennedy School Review* 12 (2012): 77–80.

⁴⁸ Susan Davis, “Enabling Entrepreneurial Ecosystems,” *Innovations: Technology, Governance, Globalization* 7 no. 2 (2012): 3–10, <http://muse.jhu.edu/journals/innovations/v007/7.2.davis.html>.

⁴⁹ *Ibid.*

⁵⁰ Mark Davies, “Fertilizer by Phone,” *Innovations Case Narrative*, ed. Iqbal Quadir, *MIT Press* 7, no. 4 (2012): 5–15.

is to advise micro to medium size companies, with the intent of bridging them to global markets.

Some sub-Saharan African countries remain resistant to expansion and the globalization of local industry. The development of Africa's LDCs requires an educated and effective entrepreneurial class, with supporting government structures.⁵¹ Small to medium companies are crucial investment targets for those too small for commercial lending and too large for microfinance. The U.S. State Department now encourages innovation in American foreign aid methods, going further to facilitate African business with the public-private partnerships through initiatives like the Partnership to Support Entrepreneurs in Africa. The centerpiece of the strategy is attracting the U.S. corporations and international development partners who envisage African entrepreneurial growth as the part of their own future organizational growth. Access to capital is highlighted as the chief obstacle to business success.⁵²

Another approach comes from Julius Gatune. He developed three pillars to development aid that more resemble trade, which he describes in his article, "Africa's Development Beyond Aid: Getting Out of the Box." Knowledge, entrepreneurship, and governance are his bedrocks to developing a new business class, facilitated through diaspora and faith-based organizations. He makes a strong case that this approach will transform aid recipients into trade generators, and thus, partners better able to negotiate with foreign interests.⁵³

The U.S. form of aid and trade is still developing. As theories evolve, U.S. methods should look beyond its borders to others, especially competitor practices. What the United States lacks, may be found in China's style of sub-Saharan Africa economic engagement, which may have a much larger impact on increasing respective GDPs than traditional forms of aid or trade, alone, something that may become evident, further on.

⁵¹ Zuzana Brixiova, "Unlocking Productive Entrepreneurship in Africa's Least Developed Countries," *African Development Review* 22, no. 3 (September 2010): 441-451.

⁵² Ibid.

⁵³ Julius Gatune, "Africa's Development beyond Aid: Getting Out of the Box," *Annals of the American Academy of Political and Social Science* 632 (November 2010): 103.

V. CHINA IN CONTRAST

The China-Africa relationship is troubling for many in the West, but some believe that it is a good match for both developing regions.⁵⁴ Mao's aid policy beginning in the 1950s purported to help other developing countries.⁵⁵ In fact, China was the first developing nation to have a policy. Then, the 1960s brought "China's Eight Principles of Economic and Technical Aid." From these, the "Five Principles of Peaceful Coexistence," espousing equality and symbiosis among countries, were born.⁵⁶ This mutual relationship crystalized Beijing's view of aid, not as a handout, but as an exchange between sovereigns. As such, China is able to respect all recipient countries' sovereignty and places no conditions on its aid.⁵⁷ Lenient low or no-interest loans are one of the ways in which China accomplishes this goal. Although their methods are not exempt from criticism, scholars increasingly acknowledge that Chinese methods are successful for Africans in the sub-Saharan region.⁵⁸ The Chinese work with existing political structures, acknowledging a countries' sovereign right to function without intervention.⁵⁹ The Chinese use their soft-styled aid tactics with the expressed goals of mutual economic benefit and no political interference, which is referred to as the Beijing Consensus.⁶⁰

Some scholars contend that China's efforts have proven to be effective and are producing results in Africa.⁶¹ The country differs from the United States on its sub-Saharan Africa policy in significant ways. Evidence suggests that Chinese foreign policy

⁵⁴ Gatune, "Africa's Development beyond Aid: Getting Out of the Box," 103.

⁵⁵ Brown, "Hidden Dragon, Crouching Lion: How China's Advance in Africa Is Underestimated and Africa's Potential Underappreciated," 2-56.

⁵⁶ Chris Alden and Daniel Large, "China's Exceptionalism and the Challenges of Delivering Difference in Africa," *Journal of Contemporary China* 20, no. 68 (2011): 21.

⁵⁷ Reilly and Gill, "The Tenuous Hold of China Inc. in Africa," 37-52.

⁵⁸ Alden, "China in Africa," 148-162.

⁵⁹ Yin and Vaschetto, "China's Business Engagement in Africa," 43-55.

⁶⁰ Barry Sautman and Yan Hairong. "Friends and Interests: China's Distinctive Links with Africa." *African Studies Review* 50, no. 3 (2007): 83-111.

⁶¹ Reilly and Gill, "The Tenuous Hold of China Inc. in Africa," 37-52.

presumes a strong link in overall economic engagement strategy on the continent. In “Determinants of Foreign Aid to Africa: A Comparison of the United States and China,” Claggett, Munemo, and Zhang show that while U.S. interests are focused on countries’ needs for the development of populations and governing institutions, Chinese strategic economic interests are the determining factors in their foreign aid distribution.⁶² China’s version of ODA comes in four types: grants, zero-interest loans, concessional (fixed-rate, low-interest) loans, and debt relief. They use these forms for many things including African student scholarships to China, medical aid, infrastructure, technological and architectural projects, agricultural assistance, training and youth programs, and material goods relief (made in China).⁶³ Normally, OECD donations are ODA-type monies and generally do not do much OOF funding. China is the opposite with the bulk of their funds coming through other official flows. Its OOF funding comes in many forms: export credits, market-rate export buyer’s credits, commercial loans from Chinese banks, and equity loans for private Chinese businesses through the China-Africa Development (CAD) fund. The CAD was established with one billion USD for Chinese enterprises in Africa.⁶⁴

Since China releases few details on its foreign assistance, observers must carefully watch public announcements. For instance, the *New York Times* reported that China doubled its sub-Saharan African foreign aid lending based on President Hu Jintao’s 2012 speech, where he pledged \$20 billion in funds to be distributed over the following three years for infrastructural and agricultural needs. In that speech, Jintao also announced that his country would mount programs to increase training and education opportunities for aspiring sub-Saharan Africa leaders, improve drinking water, and protect forests—all of which is an interesting foreign aid twist for China. Of course, the normal trade concessions are attached to any recipient country. All Chinese aid monies

⁶² Claggett, Munemo, and Zhang, “Determinants of Foreign Aid to Africa: A Comparison of the United States and China,” 40–50.

⁶³ Brautigam, “Chinese Development Aid in Africa: What, Where, Why, and How Much?,” 203–223.

⁶⁴ *Ibid.*

are tied to trade in some way.⁶⁵ Tying monies to trade is not necessarily bad for the sub-Saharan or elsewhere. In his study, Ali Zafar notes the growing relationship between China and Africa, “China’s economic ascendance over the past two decades has generated ripple effects in the world economy,” and “China’s search for natural resources to satisfy the demands of industrialization initially led it to Africa.”⁶⁶ Clearly, sub-Saharan Africa has been the largest beneficiary of China’s own remarkable growth. The resulting network of trade established within that region has consistently increased commodity prices and surplus revenues. Managed correctly, sub-Saharan African countries are potentially able to reinvest this money into infrastructure, such as schools and roads. Zafar highlights, “trade between China and Africa in 2006 totaled more than \$50 billion, with Chinese companies importing oil from Angola and Sudan, timber from Central Africa, and copper from Zambia.”⁶⁷ The same alliance has led to growth in other sub-Saharan countries, which thus demonstrates China’s growing involvement in the continent.⁶⁸ In a Center for Strategic International Studies speech, Mr. Li Ruogu, chairman and president of China’s Ex-Im Bank, clearly expressed a key aspect of the Chinese foreign aid policy for Africa:

China’s foreign aid caters to the long-term development of the recipient countries. It believes that [economic] development is the best way to eradicate ignorance, terrorism and turbulence and the most viable option to social progress and democracy. China’s aid thus focuses primarily on infrastructure development and assists recipient countries to set up free trade areas and export processing zones.⁶⁹

China does not just invest and then walk away; rather, it personally ensures that local infrastructure projects are completed for future growth and expansion. The dual effect of China’s establishing trade ports is that the country obtains access to Africa’s rich

⁶⁵ Jane Perlez, “With \$20 Billion Loan Pledge, China Strengthens Its Ties to African Nations,” *New York Times*, July 19, 2012.

⁶⁶ Ali Zafar, “The Growing Relationship between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment, and Aid Links,” *The World Bank Research Observer* 22, no. 1 (2007): 115–120.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ Li Ruogu, “China-Africa Relations: Thoughts on China’s Foreign Aid” (speech, Center for Strategic International Studies, April, 12, 2007).

resources while generating new streams of revenue that allow the region to prosper. The end result is a rise in commodity prices leading directly to a rise in GDP growth, as noted in a recent World Bank report, “with commodities dominating their exports, most African countries benefitted from the surge in commodity prices in the earlier half of 2011, particularly oil exporters.”⁷⁰ Simply, Chinese-style aid focuses on economic potential.

Sub-Saharan African leaders seem to support this kind of economic partnering (receiving aid to provide public works in exchange for resource access). Julius Anyu, in “Friends and Interests: China’s Distinctive Links with Africa,” offers cautious support of these Chinese tactics in Africa, saying they bring exploitation, as well as opportunity. It is up to Africans, he says, to temper the foreign involvement to best suit themselves, and if they do this well, their countries could be significantly improved.⁷¹ China claims that its unconditional aid is more than an attractive marketing strategy, and actually, is the natural consequence of a reciprocal partnership approach pursuing success for both entities.⁷² It argues that both China and the sub-Saharan African states it is supporting are each mutually leveraging economic and political gains from the other. Sarah Raine adds in “China’s African Challenges,” that African diplomacy aids Chinese diplomatic status.⁷³ Certainly, it is evident in the way the Chinese have gathered developing world votes before world governance bodies, as in the UN assembly.⁷⁴ Those same supporters believe that despite localized problems, the strategic Chinese relationship also amplifies African clout in a historical context of Western dominance.⁷⁵

Despite purported Chinese successes, author Horace Campbell finds in his work, “China in Africa: Challenging U.S. Global Hegemony,” that one of China’s biggest

⁷⁰ The World Bank Group, *Global Economic Prospects January 2012 Sub-Saharan Africa Annex* (Washington, DC: The World Bank Group, 2012).

⁷¹ J. Ndumbe Anyu and J. P. Afam Ifedi, “China’s Ventures in Africa: Patterns, Prospects, and Implications for Africa’s Development,” *Mediterranean Quarterly* 19, no. 4 (2008): 92–109.

⁷² Brautigam, “Chinese Development Aid in Africa: What, Where, Why, and How Much?,” 216–218.

⁷³ Raine, *China’s African Challenges*, 10–18, 158–171.

⁷⁴ Anyu and Ifedi, “China’s Ventures in Africa: Patterns, Prospects, and Implications for Africa’s Development,” 92–109.

⁷⁵ Stephanie Rupp, “Africa and China: Engaging Postcolonial Interdependence,” in *China into Africa: Trade, Aid, and Influence*, ed. Robert I. Rotberg (Washington, DC: Brookings Institution Press, 2008), 66–85.

challenges is keeping its flow of capital into Africa from flowing off the continent. He observes that state-to-state arrangements will usually result in this sort of problem. He proposes a grassroots solution of civil society engagement between Africans and partners as a basis for aid or trade to stem “off-shoring.”⁷⁶

Other observers charge that China’s politically unconditional, but economically tied aid, is only a tool for its ultimate goal of monetary gain at the expense of others that tramples all other considerations for development transitions, human rights, and the environment they leave behind.⁷⁷ Some critics assess China as having a conqueror mindset regarding the African continent, even perpetuating the systemic regional weakness of sustainability and governance. They note that predatory actions on the scale of China could destabilize fragile structural reforms amounting to a form of neo-colonialism, which fundamentally captures political systems.⁷⁸ Despite critics’ claims, China enjoys economic success in sub-Saharan Africa, and many sub-Saharans have positively benefited. As Weisbrod and Whalley assert, “Chinese investment has resulted in modest but significant GDP growth in African countries.”⁷⁹ Members of the international community charge that the People’s Republic of China’s (PRC) partners with those in power, without any ethical consideration, enabling human-rights abuses.⁸⁰ Also, Chinese influence is growing in modalities: economic, security, and governmental. Given its methods without Western ethics attached, it could end up endangering the advancement of democratic reform and harm U.S. interests.⁸¹ Another downside is highlighted in “Friends and Interests: China’s Distinctive Links with Africa,” by Sautman, Barry, and Yan. They describe the “Beijing consensus” model as diplomatically

⁷⁶ Horace Campbell, “China in Africa: Challenging U.S. Global Hegemony,” *Third World Quarterly* 29, no. 1 (2008): 90–100.

⁷⁷ Marucs Power and Giles Mohan, “Towards a Critical Geopolitics of China’s Engagement with African Development,” *Geopolitics* 15, no. 3 (2010): 463–494.

⁷⁸ Rupp, “Africa and China: Engaging Postcolonial Interdependence,” 66–85.

⁷⁹ Aaron Weisbrod and John Whalley, *The Contribution of Chinese FDI to Africa’s Pre Crisis Growth Surge* (Cambridge, MA: National Bureau of Economic Research, 2011), 2–29.

⁸⁰ Marucs Power and Giles Mohan, “Towards a Critical Geopolitics of China’s Engagement with African Development,” *Geopolitics* 15, no. 3 (2010): 463–494.

⁸¹ Brown, “Hidden Dragon, Crouching Lion: How China’s Advance in Africa Is Underestimated and Africa’s Potential Underappreciated,” 2–56.

brokered investment and infrastructure exchanged for Chinese trade concessions (usually) supporting substantial resource flows out of Africa and back to mainland China, absent reciprocal China-to-sub-Saharan Africa imports, which thus creates massive trade imbalances.⁸²

Despite the aforementioned problems, sub-Saharanans increasingly believe that the Chinese model is more appropriate and effective at changing both their national economies and lives. A 2007 Pew poll found that, overwhelmingly, “most African nations view China as a more helpful foreign investor than the United States.”⁸³ In fact, the governments of Sudan, Ethiopia, South Africa, Senegal, Rwanda, and Angola have all publically stated their preference for Chinese over Western aid.⁸⁴ This preference reflects China’s swelling presence on the continent and underscores that sub-Saharan countries are choosing different relationships with the United States and China.

The fact is that indigenous markets existed both before and throughout the colonial period, writes Bruce Bartlett in his article, “The State and the Market in Sub-Saharan Africa.” It has been argued that the introduction of the colonial state system actually interfered with these natural capitalistic enterprises. Thus, ironically, states were the obstacle not capitalism.⁸⁵ That reasoning asserts Africa’s future is not related to aid, but rather to education, entrepreneurship, and structural reform, expanding from traditional patrimonial networks. According to Gatune, those governments can complete this expansion through cultivating social networks across ethnic boundaries and thereby precipitating larger indigenous markets. Thus, the solution is to increase sub-Saharan owned trade.⁸⁶

⁸² Sautman and Hairong, “Friends and Interests: China’s Distinctive Links with Africa,” 75–105.

⁸³ “How the World Sees China,” 2007, <http://www.pewglobal.org/2007/12/11/how-the-world-sees-china>.

⁸⁴ Rupp, “Africa and China: Engaging Postcolonial Interdependence,” 66–85.

⁸⁵ Bruce Bartlett, “The State and the Market in Sub-Saharan Africa,” *The World Economy* 12, no. 3 (September 1989): 293.

⁸⁶ Gatune, “Africa’s Development beyond Aid: Getting Out of the Box,” 104–109.

VI. DATA ANALYSIS

Recalling that little reported aid or trade distinction exists among the various types of Chinese-African economic activity for the years studied, and that it is intended to benefit the Chinese, either directly or indirectly, this study only considers it comparable to U.S. trade. No equivalent to U.S. aid exists, and therefore, is not compared to Chinese activity in this paper. U.S. aid is only correlated with sub-Saharan Africa GDP percent change alone. Drawing from the GAO and World Bank data, H1 and H2 are calculated and the results are compared in Figure 1 and Table 1 using the following formula.⁸⁷

Figure 1. Formula for Finding the Correlation

$$r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

Table 1. Sub-Saharan Africa GDP Growth Correlated with U.S. and Chinese Economic Engagement

Calendar Year	SSA GDP Growth (% change)	Chinese Economic Activity (billions)	United States Trade (billions)	United States Aid (billions)
2001	5.5878	8.6	29.1	1.45
2002	4.4636	9.8	24.7	2.3
2003	3.0337	15.1	33.6	4.54
2004	6.4250	24	46.1	3.8
2005	5.2298	32.2	62.4	4.9
2006	5.6819	44.9	73.2	6.5
2007	6.1183	59	83.4	6.9
2008	4.6429	86.8	106.7	10
2009	3.1237	70.6	63.1	9.4
2010	5.5899	100.7	83.3	9.3
Invest Totals:		451.7	605.6	59.09
GDP Growth Correlations:		0.0257	0.2111	- 0.1804

⁸⁷ Gootnick, “Sub-Saharan Africa: Trends in United States and Chinese Economic Engagement”; “The World Bank GDP Growth (Annual %).”

- **The data analysis supports H1: $0.211124334 > -0.180466983$**

Total U.S. trade with sub-Saharan Africa demonstrates greater positive correlation to GDP growth than U.S. aid in the same economies for the time period from 2001 to 2010.

- **The data analysis supports H2: $0.211124334 > 0.025736156$**

U.S. trade demonstrates a greater positive correlation to sub-Saharan African GDP growth than total Chinese trade in the same economies for the time period from 2001 to 2010.

U.S. development assistance to sub-Saharan Africa underperforms trade in both cases by significant margins, and while Chinese methods outperform U.S. aid, it is roundly underperforming when compared to U.S. trade alone. The fact that U.S. aid competes so poorly against trade from both countries is significant. Considering China conflates its form of aid with trade and yet is still outdone by U.S. trade further supports that the trade argument is a second significant finding.

VII. CONCLUSION

Solid evidence purports that Chinese interests in Africa are purely economic and exploit natural resources and improve its strategic global position, while the U.S. method aims to foster sustainability and a real future for Africa.⁸⁸ Of course, each viewpoint has supporters and critics. The tension and importance of the debate substantiates the need for an objective analysis of U.S. and Chinese models of economic engagement on the subcontinent. China implicitly links aid to trade. Its result is not measurable by normal foreign aid standards, which could benefit sub-Saharan Africa more so than U.S. aid alone.

Based on the analysis, this research supports a trade model, in general, which appears to be most instructive for the United States' and sub-Saharan African countries' mutual development goals, continuing the trend towards increased U.S. investment in African business. This conclusion assumes the data captured reflects reality and the idea that a country's social wellbeing is generally related to its economic wellbeing. Of course, a necessary long-term corollary of trade is sustained profitability of all parties engaged in a transaction. Therefore, the United States must simultaneously pursue its own economic interests in Africa, while directly advancing security goals and partnering equitably with host nation countries and companies. Taking a few notes from China, increased official U.S. focus on sub-Saharan trade over aid may have the effect of positively influencing sub-Saharan Africa GDP growth.

The assertion is matched by a recent uptick in U.S. business initiatives in sub-Saharan Africa. If anything more is to be learned from China's policy, it is that strategically linking both aid and trade could possibly increase the United States' impact by raising its aid correlation to positive numbers. The United States' trade correlation outperforms U.S. aid and all Chinese economic activity. Again, this assertion indicates that trade is superior and should be a country's primary focus.

⁸⁸ Englebert and Tull, "Postconflict Reconstruction in Africa: Flawed Ideas about Failed States," 107–123.

Finally, although China is often dubbed a U.S. economic competitor in sub-Saharan Africa, any objective success that China has had on the African continent should continue to be studied to see whether the United States should further incorporate some of their methods, with the caveat that the use of such means does not ultimately compromise U.S. values. Therefore, creating shared market opportunities for sub-Saharan African and U.S. entrepreneurs may be the best method to achieve this result. The prioritization of trade and the linking of aid may naturally encourage African partner conformity to ethical U.S. practices. Perhaps, the United States should some face hard truths with regard to aid effectiveness and GDP growth, rather than to continue smothering, through aid dependency, those it is intending to save. In the future, successful economic sustainability may best resemble select portions of both the U.S. and Chinese engagement styles with, importantly, empowered sub-Saharan African trading partners.

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