From the Washington to the Beijing Consensus: How China’s Economic Rise Has Altered International Development and Undermined the IMF

By
John Tyler Knoblett

Thesis
for the
Degree of Bachelor of Arts
in
Liberal Arts and Sciences

College of Liberal Arts and Sciences
University of Illinois
Urbana-Champaign, Illinois

2016
Table of Contents:

I. Prologue: Trouble at the Equator 3

II. Introduction 6

III. Background on Chinese Investment 8

IV. Literature Review 14

V. Theoretical Framework 25

VI. Defining Terms 28

VII. Hypotheses 30

VIII. Research Design 36

IX. Regression Results and Analysis 41

X. Discussion: Why these Results? 50

XI. Implications 55

XII. Acknowledgements 62

XIII. Bibliography 63
**Prologue: Trouble at the Equator**

In December of 2008 the Republic of Ecuador did something that it had threatened to do for years: it defaulted on its foreign debt obligations to the tune of $3.2 billion.\(^1\) Normally when a country is such a situation, it would turn towards the IMF to enter a program providing the needed funds to restructure its debt. Not so for Ecuador who just a year earlier under the direction of President Rafael Correa, had cut of its ties from Western financial institutions, going so far as to expel World Bank Envoy Eduardo Somensatto.\(^3\) Correa’s bombastic statements declaring that Ecuador “Won’t put up with blackmail from this international bureaucracy” and that Ecuadorians “don’t want to have anything to do with the [IMF]” \(^4\) perfectly describe his anti-western foreign policy which eventually led to his tactic of defaulting on “illegitimate and illegal” \(^5\) bonds which Ecuador owed to foreign creditors. As a result of this intentional and avoidable default, Ecuador quickly faced severe financial difficulties. Its foreign currency reserves plummeted and it was unable to print new money as Ecuador is a dollarized economy. With the IMF and WB ostracized, Ecuador was forced to look elsewhere to cover its financing.

In July of 2009, just a few months after default, Ecuador entered into its first loan agreement with the People’s Republic of China. Ecuador received $1 billion in immediate


\(^2\) Rafael Correa is University of Illinois at Urbana-Champaign graduate who earned a masters and PHD in economics in 1999 and 2001 respectively. His advisor was the late Werner Baer, whom I also studied under and considered an academic inspiration.


financing to be paid back in oil shipments over two years with an interest rate of 7.25%. By 2014, Ecuador had borrowed $11 billion from China, nearly tripling the size of its debt holdings. To put this in perspective, it’s estimated 61% of Ecuadorian financing in 2013 was covered by funds borrowed from Beijing. As recently as January of this year (2016) Ecuador has indicated that it intends to borrow an additional $7.5 billion from Beijing in order offset low oil prices. In order to repay these loans, Ecuador has promised China nearly 90% of its oil exports over the next decade, which effectually severs a significant revenue stream for the government. More shocking still is a secretly negotiated “sovereignty immunity waiver” which allows China to seize Ecuadoran assets if it fails to repay its loan obligations, an arrangement which is unprecedented in the modern era. Ecuador has even begun to sell off oil-exploration rights in protected areas of the Amazon Forrest to Chinese corporations. This auctioning off exploration rights circumvents Ecuador’s constitution, infringes upon the rights of local indigenous people, and violates a previous agreement made with the United Nations.

---


8 QZ. Ecuador’s Unhealthy Dependence on China is about to get $1.5 Billion Worse


13 Amazon Watch Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon

14 This U.N. treaty was part of a pledge by Ecuador to prohibit the exploitation of large sections of the Amazon rainforest in exchange for funding from the United Nations. There is significant evidence that Ecuador was negotiating the sale of exploration rights with China before it officially pulled out of the agreement. Hill, David.
Rafael Correa was elected on a platform of Ecuadorian nationalism and anti-imperialist (read anti-American) rhetoric, but his policies over the past decade have effectively sold Ecuador away to the highest bidder: China. Beijing’s “no-strings attached” loans seemed to be the better alternative to the IMF’s strict conditions, but the current state of Ecuador, which is tittering on economic collapse brought upon by low oil prices, mounting debt, and overdependence on exports to China, paints a quite different picture. Now that Chinese demand for Ecuadoran resources has begun to fade, so too has Ecuador’s economic boom. Correa’s refusal to deal with the IMF—whose help he still rejected as recently as October 2015—has led to his country’s loss of sovereignty and over-reliance upon an imperialist foreign power; this is the exact opposite of what he pledged to do when he took office in 2007.

Unfortunately, Ecuador is not unique case. Angola, Argentina, and Venezuela have all received tens of billions of dollars in loans from China over the last decade. Caracas alone has borrowed more than $45 billion since 2006, all the while its economy has continued to deteriorate.\textsuperscript{15} China’s sudden appearance as a major lender and investor in developing nations should not necessarily cause alarm, but given what has happened in Ecuador, more attention should be directed towards the consequences of China’s overseas activities. This thesis attempts to begin that effort by analyzing this phenomenon on a global scale.

Introduction

In June 1944, as the chaos of the Second World War still raged across the world, delegates from the world’s free market economies met in Bretton Woods, New Hampshire to create a new economic world order. The agreement signed at the end of the twenty-two days of negotiations established many of the world’s most important financial institutions. The International Monetary Fund (IMF), the World Bank (WB), and the World Trade Organization (WTO) all find their origins in the Bretton Woods Agreement. Though the Bretton Woods system ended in 1971 when the United States left the gold standard, the institutions of the system remained. The United States effectively controls these three organizations as it maintains the largest share of votes in the IMF and WB, determines the presidency of the WB, has de-facto veto power in IMF, and hosts the headquarters of the three aforementioned economic institutions. The United States’ overly dominant role made sense in 1945 when it accounted for nearly half the world’s economy, but in 2015, the system is beginning to show its age. The United States is still the globe’s leading economy, but the rest of the world is starting to catch up.

The meteoric rise of the People’s Republic of China in the late 20th century and early 21st century has had tremendous impact on the global economy and international politics. As China’s economy has expanded it has also become more integrated into the international community, which can be seen Beijing’s growing contributions to the IMF, WB, and U.N. In recent years, China has begun to aggressively invest abroad in order to acquire the rights to natural resources, develop markets for its goods, and foster political goodwill. This has not gone unnoticed within the West. Every day there is a new article about rising real estate prices in Vancouver as the
result of immigrating Chinese Yuppies\textsuperscript{16} or a new book analyzing the effects of Chinese investment in Africa.\textsuperscript{17} One article in particular published by the New York Times sparked my curiosity to research further. Titled “China’s Global Ambitions, Cash and Strings Attached” looked at China’s growing level of investment in developing countries, specifically Ecuador.\textsuperscript{18} Attached to the article was an interactive map demonstrating just how high the proportion of Chinese investment was in many countries. At one point, the article states that “China’s money has made it harder for Western-led institutions like the World Bank to demand economic reforms…”\textsuperscript{19} I felt this was quite a strong definitive statement and quickly began to research whether it was true. Though I found significant amounts of research studying the effects of Chinese Investment as well as the effects of World Bank loans and IMF programs, there was no research looking at the overlap between the two topics. Upon this discovery I set out to conduct the research on my own, the result being this thesis.

The structure of the paper is as follows. Preceding the literature and the main body of the thesis is a short background section that summarizes the recent phenomenon of Chinese investment. Following this is an extensive literature review that looks at a number of different topics. The first section reviews works covering the role and effects of the IMF and WB, the second section delves into general foreign direct investment, and the third section covers Chinese foreign direct investment. The paper then moves into the theory section in which terms are defined and hypotheses presented. Following the theoretical framework is the research design


\textsuperscript{19} “The World According to China” The New York Times
which details the dataset, variables, and measurements used. The next unit details and analyzes the results of the various regression models before moving onto a discussion of the results. A final section discusses implications of the paper’s findings. Potential recommendations based on the results of the model and any questions raised during the thesis project will be included in this conclusion section.

**Background on Chinese Investment**

China's economic rise has driven world growth for decades, led hundreds of millions of people out of poverty, and reshaped the power structure within the international order. It is this last point that this research seeks to expand upon. The West has been investing hundreds of billions of dollars overseas for several decades, but Chinese outward foreign direct investment (OFDI) is a fairly recent phenomenon. Throughout the Cold War, under the guidance of Maoist policies, China invested in various developing countries across the world, primarily to support communist regimes and gain political leverage that could be used against the United States or the Soviet Union; the level of investment during this era was paltry. Even after the opening up of China’s economy under Deng Xiaoping, overseas investment was still quite limited, because though Beijing now began to look outward, it focused its efforts inward. It is not until the turn of the 21st century that China began to invest abroad in substantial quantity.

Towards the beginning of the last decade, China began to aggressively invest overseas,

20 Economy, Levi (2014); Quick side note: At the time, China was extremely poor and the policy of propping up communist-regimes abroad was highly controversial. Much of this aid and investment went to specifically to African countries. There is some evidence that Chinese citizens deeply resented their government sending money abroad while they were themselves in extreme poverty. As such, discrimination and hostilities towards Africans and others with darker skin pigmentation was widespread. These prejudices first developed under the Nationalist governments in the early 20th century, but the Communist Party did little to dispel such views. This was augmented by the fact that African students were given education grants in China that sometimes outsized those given to native Chinese. These attitudes persisted after Mao’s death, culminating in the 1989 Nanjing Riots. Kristof, Nicholas. 1989. “AFRICANS IN BEIJING BOYCOTT CLASSES.” *The New York Times.* http://www.nytimes.com/1989/01/05/world/africans-in-beijing-boycott-classes.html?pagewanted=1 (April 2016).
specifically in developing countries. Due to its large trade surplus with many countries, especially the United States, China began to build up its foreign reserves of currency. This made it difficult for Beijing to keep its currency, the renminbi (literally “The People’s Currency”), at a depreciation—in a policy pursued to increase exports. By 2000 China held $165 billion in foreign reserves, increasing to $818 billion in 2005, $2.847 trillion in 2010 and $3.843 trillion in 2014. In 1999, faced with rising levels of foreign reserves and an appreciating currency, Beijing announced the “Zouchuqu Zhanlue (走出去战略)” or the “Go Out Policy.” This policy encouraged Chinese corporations to invest in foreign countries using dollars acquired through its trade surpluses that would otherwise be funneled into its foreign currency reserves. The public objective of the investment strategy was to increase the competitiveness of Chinese corporations. Other objectives included the acquiring of natural resources, technologies, and the exploitation of developing markets for Chinese goods.

The effect of this policy was immediately noticeable. In 1999 China’s OFDI amounted to only $1.774 billion. In the same year the United States led the world with $209.391 billion. 16 years hence, this has drastically altered. As of 2014, China invested more than $116 billion overseas, making it the world’s third source of investment behind Japan and the United States.

---

21 Economy, Levi (2014)
24 Amighini, Cozza, Rabellotti, Sanfilippo (2014)
25 Cui, Mayer, Hu 2013; Kolstad, Wiig (2012); Drogendijk Blomkvist (2013); Cheung, Haan, Qian, Yu 2012
27 UNCTAD World Investment Report 2015
who lead the world with $336.943 OFDI.\textsuperscript{28} China’s nearly 100 factor jump in investment in only 15 years—seen in Figure 1 below—which shows no signs of slowing down, is shocking and deserves attention. China is on track in 2016 to invest more abroad then other states invest in China—see Figure 2. This signals a shift in China’s role in the economic order, from a destination to source of investment. Despite the recent economic slowdown in China, Beijing’s outward investment flows are likely to continue to rise into the future, though it will take some time before China surpasses the United States as the top investor worldwide.

Of note, especially for this thesis, is the type of countries China invests in. It is often assumed that the majority of Chinese investment is destined for developing countries, this is not

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{China_Outward_FDI_Flows.png}
\caption{China’s Outward FDI Flows}
\end{figure}

\textit{Figure 1: Chinese Outward Foreign Direct Investment took off in the mid-2000s, its rise only temporarily halted by the Global Recession in 2008.}

\textit{Figure 2: Investment Inflows and Investment Outflows were almost the same in 2014 (measured in $bn)}

\textsuperscript{28} UNCTAD World Investment Report 2015
true. Between 2001 and 2012, only 28.1% of Chinese outward investment found itself in developing countries. This means that the majority of Chinese investment is in developed countries, not developing ones. What is true though, is that Chinese investment comprises a large proportion of total foreign investment in developing countries, i.e. China invests more in most developing nations than western countries do. For example, during the same time period, 24.1% of U.S. OFDI, 18.8% of United Kingdom OFDI, and 14.5% of German OFDI was destined for developing markets. To be even more specific, China tends to invest in riskier developing countries than the West does. In some nations, this percentage approached 100% of total investment. Hong Kong alone accounted for 55% of investment during this period, though the special administrative zone likely acts as a way point before the investment funds move to their final destination. Source: "UNCAD World Investment Report 2015: Annex Tables.” 2015. unctad.org. http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx.

In this measure, Hong Kong, Macao, South Korea, and Taiwan (Republic of China) are included in developed countries. Cui, Meyer, Hu (2014); Drogendijk, Blomkvist (2013); Kolstad, Wiig (2012); Davis (2012), etc… This concept will be further analyzed in the literature review.
foreign investment. Figure 3 best demonstrates the staggering share of investment China had in number of developing countries between 2005 and 2013. One extreme example was an oil refinery built and financed by a Chinese company in Niger during 2008, the cost of which was more than Niger’s entire gross domestic product. What’s more, the quantity of Chinese

Figure 4: In some states, the quantity loans provided by the IMF pales in comparison to Chinese investment.
Source: Business Insider http://tinyurl.com/gv4w2yf

---

investment in many nations dwarfs the loans disbursed by the IMF—see Figure 4.

The tremendous rise in Chinese investment over the last decade is noteworthy of itself, what is more significant though for the United States and policy makers is how it is being invested and who is choosing where it is invested. Unlike investment flows from the United States, Japan, or other developed states, nearly all the investment flowing from China originates from state owned enterprises (SOEs).\textsuperscript{33} This distinction is important for a number of reasons, but the most paramount being that the vast majority of outward investment is at some point approved by an official in Beijing. One can easily allude from this that investment by SOEs is at least somewhat politically motivated. These SOEs—and by extension their investments—can be effective tools controlled by Beijing. Unlike western companies whose goal in investing is return on investment through profit, this is not the top priority for SOEs. As these SOEs are nationalized, they are subsidized by the government, do not have to turn a profit, and potentially have far advantages and resources at their disposal than privatized companies—one example being low interest rates offered by Chinese state owned banks.\textsuperscript{34} These factors allow Chinese SOEs to invest in countries for the long-term: profitability could be forgone for years or even decades.\textsuperscript{35} Due to lack of concern for profit and an emphasis on long-term planning, risky and unstable countries that are generally ignored by Western companies, may be ideal targets for Chinese investment. Given that much of this Chinese investment is in developing countries, many of whom resent the West and look to throw off the chains of American influence, the political motives behind these investments should concern policymakers in Washington. Never

\textsuperscript{33} Cui, Meyer, Hu 2014
\textsuperscript{34} Ramasamy, Yeung, Laforet 2012
\textsuperscript{35} SOEs are discussed further in the literature review.
before has there been investment of this magnitude so closely directed by an authoritarian government.

**Literature Review**

One of the goals of this thesis is to follow a line of inquiry that has not previously been widely researched. I believe this has been accomplished to a large degree. Previous literature analyzes many of the topics closely related to the question that lays at the center of this thesis, but not one addresses it directly. Foreign direct investment (FDI) flows, the effect of IMF conditionality, and the interaction between the two are widely studied and discussed. There is a voluminous literature on China’s OFDI, but few, if any, directly study the relationship between these investments and the IMF. I attribute this primarily to the recent nature of this topic being of any interest to political science and economics scholars. This thesis seeks to answer questions that arise from this relationship and help fill the gap in research that exists.

To accomplish this task, the literature review will cover a number of related topics. Two areas of research will be discussed: the IMF and WB’s lending practices—including their effect on growth and the role of conditionality—and the general pattern of OFDI with a focus on the unique aspects present in China’s OFDI flows. The literature review will first begin with an overview of the literature involving the IMF and WB before continuing on to research about general OFDI and Chinese OFDI.

The International Monetary Fund and World Bank have long been the lenders of last resort for the world’s least developed nations and countries on the verge of financial collapse. To whom these International Financial Institutions (IFIs) lend is widely discussed in the literature. Scholarly works show that the World Bank usually avoids investing in unstable and
poorly governed countries, especially recently (Winters 2010; Easterly 2007). The IMF is quite different though; the literature largely agrees that the IMF tends to loans more heavily to countries with lower levels of political stability and less rule of law (Dreher 2006; Jensen 2004; Ivanova et al. 2003). Some show that political regimes do not matter (Jensen 2004), while other show that less democratic regimes are more likely to have programs in effect (Dreher 2006; Vreeland 2003; Edwards, Santeaella 1997; Bird 2005). The reason for the IMF’s seemingly hypocritical and illogical loaning practices is because most of the world’s corrupt, authoritarian, and politically unstable countries are also some of the least developed and economically unstable countries. In this context, the IMF fulfills its role as lender of last resort as it is difficult for these countries to attain financing through traditional avenues such as private banks, venture capitalists, and sovereign wealth funds. Thus the IMF has traditionally held a huge amount of influence over these countries; in a sense the IMF has been one to extend a hand to the countries that are hanging off a proverbial cliff.

This leads one to question whether the IMF & WB are effective; does investment flow in and do economies grow? The literature is largely inconclusive, with many saying that IMF programs increase FDI inflows (Bauer, Cruz, & Graham 2012; Edwards 2005; Dhonte 1997; Woo 2012) others saying it has no effect (Bird and Rowlands 1997, 2001; Rodrik 1995) and still others demonstrating that IMF programs negatively affect FDI flows (Benelli 2006; Barro & Lee (2005); Butkiewicz & Yanikkaya (2004); Jensen 2004). Nathan Jensen (2004) finds that countries signing agreements with the IMF tend to see approximately 25% less FDI inflows than countries that do not sign IMF agreements. He theorized that this is partly due to the initial financial situation that pushed them into signing the agreement; countries in crisis are more likely to sign on to IMF loans. When Jensen (2004) controls for these financial crises, he finds
that FDI flows actually fall further, which implies that IMF programs are bad news regardless of the original economic situation—at least in the short-term. Others demonstrate that it largely depends on the correct implementation of the conditions of the IMF loans. Bauer, Cruz, and Graham (2012), utilizing a two-stage model to control for endogeneity bias and large sample of 142 countries from 1977 to 2008, show that IMF program participation increases FDI, but only in contexts where promised readjustment policies are expected to be implemented. In this instance, the IMF serves as a “delegated monitor” which increases investor’s confidence in reforms, falling corruption, and increased stability which all encourage the inflow of private investment. They further find that the credibility of reform implementation is stronger with democracies than autocracies; Slantchev (2005) has validated this assumption by showing that democracies are indeed more likely to implement reform. Byungwon Woo (2012) comes to a similar conclusion in that IMF programs with more structural or politically sensitive conditions, in that they are politically controversial, tend to attract more foreign investment than programs with fewer structural conditions.

In regards to growth, the literature is also split. Scholars generally find lost economic growth given IMF program participation (Abbott, Andersen, Tarp 2010; Barro & Lee 2005; Butkiewicz & Yanikkaya 2004; Jensen 2004; Marchesi & Sirtori 2011; Przeworski & Vreeland 2000). Though others show increased growth, this seems to be true predominantly when a country effectively implements reforms, has strong underlying economic factors of production, and or is politically stable (Woo 2012; Bauer, Cruz, Graham 2012). There are also authors that find no effect at all (Easterly 2005). Butkiewicz and Yanikkaya (2004) show a .1% loss of growth for every 1% increase in IMF lending. Similarly Dreher (2005) shows that IMF programs reduce economic growth—at nearly 1.7% a year on average—but that increased compliance
partly offsets this lost growth in the long run. This is likely due to increased investment flows associated with effective reform, while negative growth in the short-run is due to structural reforms such as tax increases and privatization that can exacerbate recessions. Moral hazard is also an issue that can lead to negative growth (Butkiewicz & Yanikkaya 2004; Dreher 2004; Montinola 2010) When economies are in a financial crisis and in need of a loan, they are more likely to implement reforms to fix the underlying economic problems, but the influx of IMF, financial aid, or WB funding gives them buffer room to delay and even de-incentivize the need for reform (Dreher 2006).

What about the World Bank? Overall the literature is not as well developed compared to research on the IMF, but it is more unified in its findings. The literature concludes that inflows of investment and growth are positively correlated with the presence of World Bank loans (Butkiewicz & Yanikkaya 2004; Marchesi & Sirtori 2011; Mallick & Moore 2005; Winters 2010) Butkiewicz and Yanikkaya (2004) find that whereas the IMF acts as a substitute for FDI, WB lending tends to act as a complement to FDI. Marchesi and Sirtori (2011), drawing on data from 128 developing countries from 1982-2005 and employing a two least square model, again to control for endogeneity, build on these findings by showing that when the IMF and WB are both present in a country at the same time, though the IMF is still negatively correlated with growth, the WB lending coefficient becomes more positively correlated with economic growth. That is, the WB is more effective when the IMF is present. Selaya and Sunesen (2012) look at foreign aid, within which WB lending is often included, and conclude that aid utilized in sectors of the economy that would normally attract private investment leads to the crowding out of FDI. However, when foreign aid is directed towards complementary factors of production, such as infrastructure or education, it leads to rising rates of FDI; these are areas where private
investment would not go as they are typically public goods. WB loans are principally for infrastructure projects, so it makes sense that they would promote growth.

When the IMF pulls a nation back from the edge, there is always a catch. The IFI programs always come with a set of conditions that stipulate required reforms countries must implement in order to receive financial assistance. Over time, the IMF & WB have tightened, loosened, and reformed the conditions they tie to their loans. Loan conditionality is incredibly unpopular in many developing countries largely due to the structural reforms that, in the short run, cause economic hardship and in the long run do not necessarily guarantee improvement. Literature on conditionality shows that historically, a large minority of countries never actually implement reform (Dreher 2006; Blackman, Unigovskaya 2004; Kilby 2007). Between 1987 and 1999, only 57% of structural benchmarks were actually met and privatization goals were only met by 47% of countries (IMF). Unsurprisingly, countries with lower levels of political stability and higher levels of corruption saw the lowest rates of conditionality implementation (Ivanova, Mayer, Mourmouras, Anayiotos 2003). Recidivism, countries repeatedly participating in programs, is also very common. (Butkiewicz & Yanikkaya 2004; Kilby 2007) Many countries fail to comply with conditions which eventually leads to another financial crisis and their participation in another IMF conditional program.

Even though the IMF&WB is more likely to target these corrupt, authoritarian, and unstable regimes, the fact that a large portion of them do not implement reforms—meaning they will likely see falling FDI inflows and negative growth—does not bode well. So why do these countries sign up for these programs in the first place? Some claim that governments use conditionality as a scapegoat; they actually want to reform their countries, but they do not have

---

36 As of 2016, the conditions are probably the least strict they have been since they started to become attached to IMF programs. The 1990s are the era in which conditions were the “strictest”.  

18
the political capital to do so (Jensen 2004). The programs allows leaders to paint their country as a victim of neo-imperialism perpetrated by the IMF & WB—which as shown above may be more true than many realize. Others say that authoritarians use IMF, WB, and aid programs to prop up their regimes rather than improve the country (Montinola 2010). The general consensus is that countries participate in IMF programs because they have no other options; the IMF truly is the lender of last resort and the countries have exhausted all other options. This can be seen in Argentina and South Korea in the 1990s and Greece today.

One interesting aspect of this is that countries that conditionality is less likely to be enforced or implemented in have been found to be more politically aligned with the United States (Barro & Lee 2005; Biglaiser & Derouen Jr. 2010; Dreher 2009; Kilby 2007). To make matters worse, Barro & Lee (2005) find that these countries tend to receive larger and more frequent loans, ceteris paribus. Biglaiser & Derouen (2010) postulate that IMF program conditions favor US companies. These findings not only reinforce, but validate the notion that the IMF and WB are neo-imperialist tools to serve the needs of the West. This favoritism and the ever present influence of the Washington Consensus has breed resentment amongst many developing nations. They have in turn searched for another hand to help lift them over the cliff. As will be shown in this thesis, Beijing has been eagerly helping these countries out with their needs.

Keeping the research outlined above in mind, I’ll move onto foreign direct investment. One of the areas I wanted to focus on is what factors influence the inflow of foreign direct investment. John Dunning (1993, 2000) is largely credited with outlining the determinants of general foreign direct investment: market seeking FDI, efficiency or cost reduction seeking FDI, and resource seeking FDI. His eclectic paradigm has been the standard for decades, but does not
fully explain developing countries motives for OFDI. As China is a developing country, research articles that take this into account were focused on. One area of interest is the effect of political stability on the flow of FDI. Most studies find that there is a positive correlation between political stability and FDI inflows. (Blanton, Blanton, 2007, Kolstad & Wiig 2012, Ramasamy, Yeung, Laforet 2012, Winters 2010) Much of the reason for this is that political stability tends to promote economic stability and vice versa. Stability is attractive as it ensures the safety of any large investments made into a country and increases the likelihood of short term and long term growth; this lack of stability in the majority of countries with IMF programs likely explains their lack of FDI inflows. Building on this logic, Shannon and Robert Blanton show a positive relationship between human rights and FDI (Blanton and Blanton 2007). They postulate that increased levels of human rights signal increased stability, higher levels of education, and a more skilled labor pool all of which encourage investment.

Multiple studies examine how regime type affects investment inflows. Increased levels of democracy are shown to both encourage and discourage FDI (Li and Resnick 2003). Democracy is associated with the factors mentioned above, political stability and human rights, but it also increases the likelihood of strict property right laws and decreased crime rates which encourage investment inflows (Li, Resnick 2003). The other side of democratic societies is that their governments often restrict what foreign firms are allowed to invest in and generally regulate these firms to a greater degree; this discourages FDI inflows. Foreign investment can also affect the development of democratic institutions. Past research shows that FDI from developed countries can spread democratic ideals (Rudra 2005, Sun 2014, Schulz 2009). Feng Sun shows that different types of FDI have dissimilar results. FDI from developed countries tend to contribute to democratic development while FDI directed towards the primary sector (natural
resources) tends to have the opposite effect (Sun 2014). The negative effect of primary product investment is two-fold as GDP growth from natural resources helps prop up undemocratic regimes—this is known as the resource curse—and a significant portion of investors in the primary sector are developing countries, i.e. not democracies (Sun 2014, Schulz 2009). The sum of all of this is that FDI is inclined to flow from authoritarian regimes to authoritarian regimes. As Chinese investment supplants Western and IFI investment in many countries, this spread of democratic ideals wanes and authoritarian regimes are increasingly reinforced.

Most of the established patterns outlined above are thrown out the window once one looks specifically at Chinese OFDI. The first major difference is in regards to political stability and risk. Numerous studies conclude that political instability and Chinese investment are positively correlated (Cui, Meyer, Hu 2014; Drogendijk, Blomkvist 2013; Kolstad, Wiig 2012; Ramasamy, Yeung, Laforet 2012; Davie 2012; Buckley, Clegg, Cross, Liu, Voss, Zheng 2007; Sanfilippo 2010). This is the exact opposite of FDI flows from other countries, but mirrors what is seen with IMF programs. The primary factor is what type of firm is investing. The vast majority of investment coming from the developed world is from private firms whereas nearly all FDI coming from China is from state owned enterprises (SOEs) (Ramasamy, Yeung, Laforete 2012; Cui, Meyer, Hu 2014; Buckley et al. 2007). Due to their nationalized nature, SOEs are not singularly focused on profit, unlike Western firms which must report to shareholders (Cui, Meyer, Hu 2014). As they are state owned, Chinese SOEs are heavily subsidized, have access to below market rate capital, and at no risk of bankruptcy (Ramasamy, Yeung, Laforet 2012; Buckley et al. 2007). The end result is that these SOEs have the “financial slack” to take on riskier investments than their Western counterparts (Cui, Meyer, Hu 2014). These SOEs carryout

---

37 The “Resource Curse” is discussed further in the models discussion section.
38 There’s actually a verb for this act: Defenestration
riskier investments for long term rewards that benefit China as a whole; these are outlined in Beijing’s five year plans which these companies are bound to follow (Buckley et al. 2007).  

Natural resources also play a role in China’s investment in unstable countries. As Chinese OFDI has grown over time, there has been increased emphasis on “strategic asset seeking,” which is a fancy way to say “investing in oil and ore” (Drogendijk, Blomkvist 2013; Kolstad, Wiig 2012; Cheung, Haan, Qian, Yu 2012, Buckley et.al 2007). In fact, China has made substantial investments in natural resources abroad to the point that in many countries, increased investments tend to go almost entirely towards oil and other natural resources (Kragelund 2009; Cheung, Haan, Qian, Yu 2012). So, it may be that China not only is interested in investing in unstable countries, but that they are also investing in natural resource rich countries and it just so happens that these two sets of countries largely overlap. Countries with substantial amounts of natural resources often have weak political institutions and high levels of corruption, a phenomenon known as the resource curse (Ramasamy, Yeung, Laforet 2012). There is even evidence that the “degree of attraction to natural resource countries depends on institutions;” the poorer the institutions, the more attractive natural resources are for Chinese FDI (Kolstad, Wiig 2012). Chinese FDI also seems to be attracted to more corrupt countries (Cheung, Haan, Qian, Yu 2012; Buckley et al. 2007). This makes sense as one would expect resource rich and less stable countries to be more corrupt as this is the central tenet of the resource curse. Chinese SOEs are effectively encouraging politically weak and corrupt governments to remain so; in line with the ideas expounded in the resource curse theory, Beijing’s resource seeking investments

---

39 “Bound” is probably a strong term. Legally speaking they are bound to follow the five year plans, but due to political wheeling and dealing, the SOEs are not really bound by anything, just heavily encouraged to act in a certain way. Just as the SOEs can be used as political tools to serve the needs of Beijing overseas, they can also serve as political tools to serve the needs of politicians and Chinese Communist Party members within China. The head of many of these SOEs are also in government or related to officials in government.
prop up corrupt and exploitative regimes while doing little to develop the host countries themselves.\footnote{It should be stated that China may not intend to prop up these regimes in this manner, but it is occurring nonetheless. China needs to purchase the resources its economy needs from somewhere, it may just so happen be that these resources purchases are having unintended consequences. On the other hand, China and the countries they trade with likely see these arraignments as mutually benefiting, at least in the short-run. I doubt China is intentionally trying to inhibit these countries from making needed fixes; it is much more likely that Beijing is largely apathetic.} This runs contrary to the goals of the WB and IMF and the West in general.

Why are Chinese SOEs attracted to these corrupt countries? This lure may not depend upon stability or resources, but upon the firm’s familiarity with a corrupt, complicated, and heavily regulated system. I will not detail the intricacies of corruption within the Chinese economy and government, but needless to say, Chinese firms’ experiences navigating the complicated and corrupt systems within their home country gives them a competitive advantage over Western firms in other corrupt countries (Cheung, Haan, Qian, Yu 2012). This concept is also found with firms from countries other than China (Cuervo, Cazurra 2006). Western firms are also discouraged from investing in these corrupt countries, not only because of the Chinese firm’s operational advantages, but because their shareholders would be averse to working within a corrupt system. Another advantage that Chinese SOEs have over Western firms is that they are not constrained from ethical or governance obligations expected of Western firms (Buckley et al. 2007; Jauch 2011; Kragelund 2009). Chinese firms can invest where they need operate as they please and pay the wages they want, without regard to the laws of the host country. Kragelund (2009) argues that Western encouragement to African countries to liberalize their investment policies is what allowed China to swoop in, though in many cases Western firms never invested in these countries in the first place despite their liberalization. Another way to look at this is that Western companies have already acquired all the natural resources in the non-corrupt, stable countries, previously liberalized countries. China is left with the short end of the stick and must
invest in what is left (Cheung, Haan, Qian, Yu 2012).

This may all explain the types of countries China invests in, but where exactly are they? Though the majority of Chinese investments are in developed nations, as Chinese investment grows overall, increasingly larger shares of finance is going to developing countries in Asia, Latin American, and Africa. It is in these regions where we find these corrupt, unstable, and resource rich countries to which Chinese investment is attracted. A large subsection of the literature on Chinese OFDI focuses specifically on China’s involvement in Africa (Drogendijk, Blomkvist 2013; Cheung, Haan, Qian, Yu 2012; Kragelund 2009; Jauch 2011; Sanfilippo 2010). The conclusions of these articles reinforce what has already be outlined above, but some relationships, such as Chinese OFDI attraction to corrupt countries or politically unstable countries, reach higher levels of statistical significances. (Drogendijk, Blomkvist 2013). China’s investments in many African and Latin American nations, by far outpace any other country or institution. This has raised concern in many circles within the West; Chinese investments have superseded Western sources of finance, namely the IMF and WB.

Theoretical Framework

The literature review covers a wide range of topics, but they are intertwined with the core purpose of this thesis: the intersection of Chinese Investment and Western International Finance Institutions. As discussed in the literature review, one of the biggest criticisms of the IMF and the WB are their terms of conditionality. In order to accept loans, investments, or bailouts from the IMF or WB, a country must agree to meet certain conditions. These conditions are often

---

41 UNCTAD
reforms in a country’s markets, fiscal budgets, and monetary policy. To maintain good standing with the IFIs, governments often have to make deep cuts in their discretionary budgets, which leads to less money for education, welfare, and other social programs. These economic reforms, notoriously called “shock therapy” in the 1990s, have led to deep resentment in many developing nations and accusations that the U.S. uses the IMF and WB to exploit poorer nations for its own benefit. Where does China fit in all of this? Though Chinese loans and investments do come with certain stipulations, such as natural resource rights, they generally have fewer strings attached than similar arrangements with the Western financial institutions. This has created a situation where countries may be incentivized to take money from China and not the IMF or WB.

Many of the countries China has given loans and contributed direct investment in are developing, economically unstable, and in general, risky. Whereas previously, international financial institutions (IFIs) like the IMF and the WB were the primary sources of finance for many developing nations as well as countries in financial difficulty, today they can find an alternative source of investment in China. Though it still invests less than the United States and Japan, China’s increased lending and investment capability exceeds that of the IMF & WB combined. This development has effectively reduced the leverage that these IFIS held over these countries. As the literature shows, China is not afraid to invest in and provide loans to many of these low developed countries that have in the past relied upon the IMF or other IFIs for a lion’s share of their financing. It is logical to expect that these countries, who already resent the West, the IMF, and the WB will be less likely to participate in conditional programs or implement required reforms when they can easily get the financing they need from China with

---

fewer strings attached.

If this is true, then Beijing, regardless of its true intentions, is possibly supplanting the IMF and WB as the lender of last resort in the developing world. Whether this is a positive or negative development depends on your point of view. From one perspective, alternative forms of finance for such countries breaks the monopolistic hold the West has had on global development strategy and financial bailouts. On the other hand, Beijing’s investment and loan regime undermines the international economic system established and led by the United States; Beijing’s interests in many ways inherently run contrary to Washington’s.

The Washington Consensus is a common phrase used to describe the policies advocated by the IMF, WB, and the United States in respect to free-market reforms and democratization in a variety of countries. This policy was for many decades the only game in town, but with rising Chinese investment, an alternative which focuses on state-led investment, high-speed growth, and development at all costs (often coupled with political repression) has emerged: The Beijing Consensus. Many argue whether there is such an international development strategy formulated by China. At a minimum it is simply investment with no neo-liberal strings attached and at the other end of the spectrum, the Beijing Consensus is a direct challenge to the economic principle which the United States and Europe hold so dear.

---


This brings one to question, given this overlap and the potential moral hazard created by Chinese investment, whether there is a relationship present between Chinese Investment, the IMF, and WB programs. Unfortunately, due to more limited datasets involving conditions as well as time constraints, the remainder of the thesis will focus primarily upon the IMF, though it is important to note that many of the theories put forward here can and should be extended to the WB as well.

This thesis seeks to analyze the effect of China’s economic rise on the international financial regime. More specifically, it asks the question: How has the influx of Chinese money in developing countries, through loans and direct investments, affected the influence and power of the International Monetary Fund? More simply put, how has the flood of few-strings-attached Chinese finance altered the foreign direct investment (FDI) and international financing regimes present within developing countries. What this paper suggest is that increased Chinese investment in developing countries has reduced the influence of the IMF and—by extension—the West.

Moving from the core question presented above to a workable model is no easy task. Though the question itself is fairly straight forward, it contains many different parts, each of which much be transformed in a manner which is testable. Though the ultimate goal is to establish a link between Chinese Investments and the influence of the IMF, we must first begin with a more basic framework. This involves defining terms present in the research question in order to better understand exactly what the question is and how it can be answered. Only then can hypotheses be presented and tested.

**Defining Terms**

**Developing Countries**
By “developing countries” I mean those that are not considered developed or advanced economies. There are a number of various measures of whether a country is “developed.” For the sake of simplicity, the IMF’s definition of advanced economies will be used plus Macau; this comprises 37 political entities, including Taiwan and Hong Kong which are not normally included in developed country due to their unique political status. The inclusion of these three economies is important as they are both top destinations of Chinese investment and thus their inclusion in a regression model may skew the results. These advanced economies will not be included in the regression models.

**Investment and Loans**

The meaning of loans and direct investment may seem straight forward, however, there are multiple ways to measure each. Loans could include financial assistance in the form of development aid, direct currency transfers from China’s Central Bank, or even infrastructure loans from one of China’s major four banks. Unfortunately, the structure of China’s banking system precludes any way to accurately measure the true amount of money being lent abroad; this is largely due to China’s massive shadow banking industry as well as the many offshore accounts through which Chinese funds are transferred. Reliable data is hard to come by and recognizing this, Chinese loans will not be analyzed in the regression model.

As for investments, data is widely available, but there are multiple and differing sources from which to draw upon. The two most widely used data sets of Chinese OFDI are those

---

48 World Economic Outlook: Adjusting To Lower Commodity Prices. 2015. World Economic Outlook: Adjusting to Lower Commodity Prices Washington D.C: IMF.
49 Think Panama Paper type off-shore companies.
published by the United Nations Conference on Trade and Development (UNCTAD) and the Heritage Foundation. The U.N. tracks official investment into a country based on data released by the source country, in this case China through the National Bureau of Statistics of the People’s Republic of China. Once removing advanced economies from the dataset, the UNCTAD data covers aggregate investment by China in 145 countries from 2003-2014. The Heritage Foundation instead tracks individual investments made by Chinese companies and construction contracts; the result is that the Heritage foundation data includes a much larger monetary sum of investments. After removing the advanced countries from the data, the Heritage Foundation data covers 1110 investments and construction contracts in 113 countries. The Heritage Foundation tracks several billion dollars more in investment in the time of overlap between the two datasets.

**Power and Influence**

The last two terms that need defining are “Power” and “Influence.” Take on their own, these two words are very vague, especially when considering how they would fit into a workable regression model. What I mean by “Power” and “Influence” is the capacity of the IMF to coerce countries to accept the economic principles advocated by the Washington Consensus. For the sake of this thesis, the IMF’s power and influence will be measured in three distinct ways. As “power” and “influence” are the central terms in the research question of this thesis, the three methods presented below also reflect the general theories put forward in this paper. The theories

---


associated with the measures of “power” and “influence” are explained and ultimately result in a series of hypotheses which form the core of this thesis.

**Hypotheses**

**Chinese Investment and Economic Freedom**

The first method of measurement is the level of economic freedom as compared to proportions of Chinese Investment. In short, what correlation, if any, is there between Chinese investment levels and economic freedom levels? Measuring the “Power” and “Influence” of the IMF with economic freedom levels is admittedly confusing as “Economic Freedom” is itself an ambiguous phrase. A quick explanation is in order to clarify what I mean by this.

Though the short-term goal of an IMF program is to stabilize the financial and economic situation within a country, the ultimate goal is to ensure that a country does not return to financial calamity that requires further bailouts. The overall aim of the conditions tied to program funds is to open up a country’s market, minimize the state sector, eliminate corruption, and curtail waste. In short, the goal is to push a country towards a capitalist free-market economy—to make their economies “more free”. The idea behind this is that free-market economies are more prosperous, stable, strong, and generally superior to less free economies.

As we now understand what economic freedom means, I will now approach how it is relevant to this thesis. Looking back to the earlier discussion of China’s tendency to invest in less-democratic, more corrupt, and politically unstable countries, one could venture to guess that China also heavily invests in less economically “free” countries which would pose a direct challenge to the IMF. To use a metaphor, Chinese investment may act as a life vest keeping these “less free” economies afloat without which they would drown in economic difficulties. Whereas China only helps in the short run, i.e. the life vest will eventually break or China will stop
supplying them, the IMF programs help both in the short term and long term: they provide the life vest (loans) and they offer swimming lessons (Conditions/Mandated-Reforms).

Countries with the “least free” economies are also the most in need of the reforms provided by the IMF programs. If one were to find that economic freedom is negatively correlated with Chinese investment levels, then the countries that most need to institute free-market reforms—to be IMF program participants—would also be the most dependent upon Chinese investment. Though this would not necessarily mean that these countries would be less likely to participate in IMF programs, it would confirm that the counties with characteristics most akin to IMF program participants are also the most likely to have large proportions of Chinese investment, a concept that forms the underlying basis of which this entire thesis arises from.

How is economic freedom measured quantitatively? The concept is easy enough to understand, but seemingly impossible to quantify as a single number on a scale. Luckily, the Heritage Foundation, which also publishes one of the estimates of Chinese investment used in this thesis, also publishes the Economic Freedom Index ©. As explained on their website, the index is based on 10 quantitative and qualitative factors that can be broken down into four categories: Rule of Law (Property Rights and Freedom from corruption), Limited Government (fiscal freedom and government spending), Regulatory Efficiency (business freedom, labor freedom and monetary freedom), and Open Markets (trade freedom, investment freedom, and financial freedom).\textsuperscript{52} Within the models presented in this thesis, the dependent variable of

economic freedom will represent a single country in a given year. Here we have our first set of hypotheses:

H1a: Countries with higher proportions of Chinese investment in a given year have lower levels of economic freedom

H1b: Countries with higher proportions of Chinese investment stock have lower levels of economic freedom

**Chinese Investment and IMF Program Participation**

The second approach of measuring influence and power is through participation rates in IMF programs. Essentially, a country participates in an IMF program due to it being in a position where it cannot attain adequate finance from more preferred sources. Following on the logic of the previous hypotheses, one would expect to see falling participation in IMF programs given rising levels of other sources of finance. It would be reasonable to assume that these countries would also be less likely to participate in these programs in the first place. In many states, Chinese investments and loans now comprise the majority of foreign sources of finance. A number of these countries have also been participants in IMF programs, but the size of these loan programs pales in comparison to the amount of financing China has provided. It would make sense then if these countries, where China may already comprise the vast majority of investment, were to forgo IMF programs all together. Why sign on to comparatively small loans with high costs in the form of conditions when you have other options?

Participation rates can be measured simply by looking at IMF data and seeing which countries are party to an arrangement in any given year. Another way to look at this is that measuring participation rates will help shed light onto whether Chinese investment is acting as a compliment to IMF financing or a substitute. This measure is reflected in the hypotheses:
H2a: Countries with higher proportions of Chinese investment in a given year are less likely to participate in an IMF program

H2b: Countries with higher quantities of Chinese investment stock are less likely to participate in an IMF program

**Chinese Investment and Conditionality**

The third method of measurement is the conditionality success rate in countries with Chinese investment. In other words, how well are countries fulfilling the conditions of the IMF programs to which they are participants? Along with lower levels of economic freedom, one would expect countries with higher proportions of Chinese investment would increasingly fail to implement reforms outlined in conditionality agreements made with the IMF. As discussed in the literature review, a large number of countries do not actually follow the conditions of the programs in which they participate (Dreher 2006; Blackman & Unigovskaya 2004; Kilby 2007). Recidivism is also very common, especially in corrupt and unstable countries. Most importantly though, the influx of funds to a country in a crisis or in need of economic reforms can lead to moral hazard (Dreher 2006). I will not rehash what has already been explained, but if

---

53 The accuracy of these authors’ measurements are questionable. The measure of conditionality implementation used in this paper is from the IMF MONA dataset which directly lists which specific conditions were met or not. This dataset has only recently become available within the last few years. Previous studies that looked at IMF conditionality primarily looked at loan disbursements. A country is given a portion of the total program financing at certain review periods. If enough conditions are met, then more money is released to the country. Given this, previous authors have measured conditionality implementation by looking at what proportion of the total program funds were used by the participant country. This is indirect and a questionable method of measurement. The IMF is inherently a political institution and therefore it makes certain decisions on a case by case basis. We have no real knowledge of whether the same amount of funds is released to each country based on the amount of conditions they fulfilled. A quick example would make this clear. Country A may have only completed 40% of expected conditions at the first review time. Country B may have completed 50% of expected conditions at its first review time. We would expect Country B to be given access to a large proportion of the program funds, but this may not be true. Country A could be a U.S. ally and Country B could be a neutral or somewhat unfriendly country. As the United States holds considerable influence within the IMF, Country A could actually get more financing than Country B. This path of logic becomes more validated when considering past scholarly research that indicates the United States unduly uses its influence within the IMF for political aims (Barro & Lee 2008; Biglaiser & Derouen Jr. 2010; Dreher 2009; Kilby 2007)
it can be postulated that if the influx of IMF funds creates moral hazard, then surely funds from other sources would do the same. In fact, one would not be amiss to think that the moral hazard would be greater with non-IMF funds as they are not tied to conditionality whatsoever. We should see then that increased access to non-IMF funds, especially Chinese funds and investments, would lead to falling rates of conditionality implementation. If Chinese investments in a country outnumber IMF loans by a large degree, why would a country bother to actually implement reforms demanded by the IMF? Once you consider that many of these countries that have both inflows of Chinese investment and participation in IMF programs—i.e. corrupt, underdeveloped, and politically unstable—have historically failed to implement reforms, then influxes of new investment would likely not increase the probability of executing IFI conditions.

How is conditionality implementation measured? The IMF releases data on the various conditions within arrangements and whether or not they were met. The IMF arrangements themselves can be direct loans to a government or financing for specific projects. The IMF MONA data set series detail the conditions present in each IMF arrangement; details include the type of condition, a short description, and whether or not the condition was met. A condition’s status is measured as met, not met, partially met, delayed, or remains outstanding. Each IMF arrangement contains anywhere from a handful to several hundred conditions. Overall, these conditions are divided into Quantitative Performance Criteria (QPC) and Structural Benchmarks (SB). QPCs are generally short-term and small-scale reforms whereas SBs are long-term and more large-scale reforms. The arrangements also run over a period of time. More specifically, an arrangement may begin in 2006 and conclude in 2009; over these three years, the country is given access to IMF financing in exchange for the expectation that all the conditions of the agreement will be met by the end of the arrangement. For this model, the percentage of
conditions met, not met, etc…. for an entire arrangement will be calculated. This measure of conditions implementation for each arrangement will act as a dependent variable within each of the regression models. Depending on the model, the independent will vary in how it is measured, though it will always be Chinese investment. One model will look at Chinese investment during a given year and another will measure Chinese investment as a stock in a given year. The dependent variable of IMF conditions met will stay the same through all these measures given the same IMF arrangement number. This measure is reflected in the following hypotheses:

H3a: Countries with higher proportions of Chinese investment in a given year are less likely to implement IMF program conditions

H3b: Countries with higher proportions of Chinese investment stock are less likely to implement IMF program conditions

**Research Design**

**Regression Model**

I will test the hypotheses presented above with a standard ordinary least square regression analysis. This is similar to what has been used by many studies covered in the literature review (Drogendijk & Blomkvist 2013; Buckley et al. 2007). More specifically it will be:

\[ y_i = \alpha + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_k x_k + \epsilon \]

where \( y_i \) is the dependent variable, \( x_i \) to \( x_k \) are the various independent or explanatory variables, \( \epsilon \) is the residual and \( \alpha \) is a constant. Data will be drawn from a variety of resources, but will cover the years 2003 to 2014 (UNCTAD) or 2005 to 2014 (Heritage) depending on the data use for
Chinese Investment. Investment will be measured a number of different ways including flows in a given year and the stock value in a given year. All the models will use a “country, year, program” unit of observation.

Data Sets

A number of datasets were compiled for use in the various regression models. A single master dataset was constructed, combining data from a myriad of resources. This master dataset was manipulated, mostly through rounding, to produce further datasets. This was largely done due to slight errors in data resulting from contradictions or non-congruency across or within data sources. Though some of these datasets included developed countries, all model results presented in this thesis exclude these developed economies. For the sake of brevity, the results of only one of these datasets will be explained in detail for each set of models, as the same general trend in results is present regardless of which dataset is used. Within this dataset, data points

54 Due to errors that resulted across or within datasets, the proportion of Chinese investment in some countries was calculated at more than 100% or below 0%. Logically this makes no sense, but upon closer inspection it becomes obvious why this occurs. In some nations, Chinese investment accounts for more than 100% of total investment because while China may have invested significant quantities in the country while most nations pulled out investments. If a country withdraws its investments from a foreign country, the UN registers this as negative investment. Thus, while total positive investment in a country would obviously exceed the value of what any one country invested, if one were to add together the positive investment numbers and the negative investment numbers (countries withdrawing investment) then the total investment in a country may be a value that is lower than a single country. To give an example, Let us say there are three countries investing in a country X. China invests 100 dollars in country X, India invests 30 dollars in a country X, and the United States withdraws 50 dollars of investment from country X. The total amount of positive investment was $130, but if one were to subtract the amount of money the United States withdrew, we come $80 of total investment. According to the data, China still invested $100 but as the total investment is shown as $80, it appears that China was 125% of all investment in Country X. This type of error can also result in Chinese investment being a negative percentage of the total investment. This can happen for two reasons: China’s investment in a country is positive while total investment is negative (more investment was withdrawn than put in); China’s investment in a country was negative (it withdrew investment) while total investment was positive.

55 The datasets can be divided into four groups: data points were not manipulated at all (Full Data Set); Data points were dropped if above 1 or below 0 (Data Drop); Data points above 1 were rounded to 1 and data points below 0 but greater than -.01 were rounded to 0 (Data rounded); Data points above 1 were rounded to 1, data points below 0 but greater than -.01 were rounded to 0, and data points less than -.01 were rounded to 1 if the monetary value of Chinese investment was positive and rounded to 0 if the monetary value of Chinese investment was negative (Data Heavy Rounded). These datasets were further divided into those including all values, those excluding developed countries, and those including only countries with IMF programs in a given year.
measuring the proportion of Chinese investment present in a country were rounded so that they reflected a value between 0 and 1 (0% and 100%). This dataset was selected out of the variety constructed as I feel it best reflects the reality on the ground without compromising the original data points through over-manipulation.

**Variables**

Chinese foreign direct investment is the primary independent variable. Yearly flows and stock value are the two measures of Chinese investment. Further, two data sources will be used for each of the measures, resulting in four distinct measures of Chinese investment as an independent variable. Multiple methods of measuring Chinese investment were used in order to obtain a better conceptualization of the relationships various variables may have with Chinese investment. Data for Chinese investment was drawn from the UNCTAD and the Heritage Foundation. Multiple data sources were used as the accuracy of either is in question. Though widely used in many research articles, data from the United Nations is self-reported by China through its National Bureau of Statistics. As Beijing holds many incentives to mask the true levels of its outward investment flows, the genuine investment numbers are likely much higher. As a result, some scholars have turned to other sources in order to more accurately measure Chinese investment levels, the Heritage Foundation being the most widely used. The Heritage Foundation collects its data through analyzing public announcements by Chinese companies and

---

56 Cheung, Haan, Qian, Yu (2012); Drogendijk, Blomkvist (2013); Kragelun (2009); Buckley, Clegg, Cross, Liu, Voss, Zheng (2007); Huang, Wang (2011). The list continues on as nearly every study looking at Chinese investment uses data either from the UNCTAD or the Chinese government institution that releases that same data.  
57 What incentives? As discussed earlier, many of these investments have political aims behind them. As such, Beijing may not want to reveal where all their investments are and their political aims lay. If China were to release accurate data on their OFDI, the United States would quickly know which countries China relies upon for certain goods as well as which countries it may be assisting for political means. Obviously the United States can determine these countries through other methods, but Beijing does not necessarily need to hand it to them in a nice government report.  
58 Amighini, Cooza, Rabellotti, Sanflippo (2014);
government officials concerning new investments and contracts. It should be noted that they only track investments and contracts valued at more than $100 million, so smaller levels are missing from their data. Due to the Heritage Foundation’s conservative leanings, the organization’s Chinese Global Investment Tracker may be biased against China. I believe that the true level of Chinese investment is likely somewhere in between the data presented within these two data sets, however I have no way to know this. As the exact level of investment is impossible determine, I compromised by running the same models using both data sources. This is reflected in the result tables below where each column is a different measure of Chinese investment.

A number of dependent variables will be tested in various models using both sets of Chinese investment data. Multiple dependent variables must be used in the models in order to assess the validity of the various hypotheses. Economic freedom, IMF program participation and IMF conditionality implementation comprise the dependent variables for each respective model. H1a & H1b use economic freedom as the primary dependent variable. Economic freedom is a continuous variable measured in an index from 0-100 with 0 being the least free and 100 being the most free. Program participation is measured as a binary variable (0, 1), either a country is in a program in a given year or it is not. H2a and H2b use IMF program participation rate as the primary dependent variable. Conditionality implementation is a continuous variable measured from 0-1 with 0 being no conditions were met and 1 being all conditions were met. H3a & H3b use conditionality implementation as the primary dependent variable. The dataset used covers a

---

59 Note: These are proportion of conditions met on time based on the original program agreement. The measure presented here is what the IMF lists as the proportion of conditions met during their state review time, which generally at a specific point in the program. What this means is that the IMF stipulates that certain conditions should be met at specific times within the programs existence. The IMF allows for delays, modification, etc… of conditions, but this is a change from the original agreement between the IMF and the state in question. These modified condition requirements are not reflected in this model.
range 184 countries (145 of which are developing and thus included in the dataset), 169 IMF programs, and 84 unique IMF program countries over the time period of 2003-2014.

A number of controls are included in the various regression models in order to improve the accuracy of the results. When choosing which controls to integrate into the regression models, numerous factors were considered. Many control variables would have been disregarded or overlooked had it not been for their use in the many models that were discussed in the literature review.\textsuperscript{60} It was also important to control for specific phenomenon that might be closely related to investment. Significant experimentation was conducted through trial and error in order to determine which variables would be most useful to include in the models; extraneous variables were not desired and those that closely correlated with others (leading to multicollinearity issues) were also excluded.\textsuperscript{61} A Variance Inflation Factor test was run on the remaining variables to check for multicollinearity with the results proving satisfactory (See Table 1). Measures for specific controls were also selected or excluded due to their data coverage; larger data coverage was selected over narrow coverage.\textsuperscript{62} The following controls were decided upon for model inclusion—Data Sources will be listed in parentheses: Political Rights (Freedom House), Rule of Law (World Bank), GDP Growth Rate in a given year (World Bank), GDP Per Capita (World Bank), Trade Openness (World Bank), Natural Resources as a percentage of GDP

\textsuperscript{60} Natural Resources as a percentage of GDP was not originally included as a control until I reviewed “The Determinants of Chinese Outward Foreign Direct Investment” (Buckley, Clegg, Cross, Liu, Voss, Zheng (2007))

\textsuperscript{61} Political Stability and Corruption levels, which had multicollinearity issues with the Rule of Law control, were excluded for these reasons despite their significant correlation with Chinese Investment.

\textsuperscript{62} One example of this is the selection of Freedom House for measuring political rights. Originally this measure was for regime type using Polity IV as the data source. However, the inclusion of Polity IV led to several hundred data points dropped due to its more limited data coverage. As such, the measure switched from regime type to political rights. It is hoped that these measures largely measure the same concepts, this seems to be largely backed up by the results of the various experimentation models I conducted to determine which controls to use. I.E. Freedom House and Polity IV were generally both significant, held the same sign values, and roughly the same slope across the various tested models.
Economic freedom is utilized as a control for all the models except for those in which economic freedom acts as the dependent variable.

**Results and Analysis**

<table>
<thead>
<tr>
<th>Collinearity Statistics for OLS Regressions Models (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Developing Countries</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Political Rights</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Rule of Law</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP Growth Rate</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP Per Capita</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Trade Openness</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Economic Freedom</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Note: General cut-off points are around 5*

Despite pilot regressions demonstrating significant validation of the three sets of hypotheses, the final regression models did not deliver an across the board rejection of the various null hypotheses. Though this is unfortunate in the sense that my hypotheses did not pan out as

---

predicted, it does raise some important questions as to why the results turned out as they did. The results of the economic freedom models will be presented and discussed first, after which I will present the results of the program participation and conditionality implementation models. Analysis of these latter two models will be combined into a single section due to their similar results. This will be followed by a general discussion of the models as a whole.

**Economic Freedom Models**

I will begin by relaying the results of the economic freedom models, which can be seen in Table 2. These models proved to be the most statistically significant of the three models. Regardless of the form of data used, economic freedom was found to be negatively correlated with Chinese investment, i.e. countries with higher proportions of Chinese investment tend to score lower on the economic freedom index. As a reminder, a lower score indicates a less free economy (North Korea tends to score below 10). All four measures of Chinese investment were statistically significant and therefore the predictions made in hypotheses H1a and H1b seem to be well supported; we can reject the null hypotheses of H1a and H1b. The correlation between Chinese investment and economic freedom is demonstrated visually in Figure 1. Here Chinese investment is measured in stock value and with Heritage Foundation data. This result is noteworthy as it supports the general notion within political science that China invests heavily in countries more in line with its own economic structure, i.e. State Capitalism. To my knowledge, it is one of the first studies to directly research, test, and
In regards to this specific figure and coefficient, a one percent increase in the proportion of Chinese investment stock is matched by a .32046 point fall in economic freedom. Of particular importance, the coefficients for Chinese investment stock are more negative. If one were to compare two graphs, one using a stock measure and one using a yearly flow measure, the graph plotting stock against economic freedom would have a comparatively steeper downward sloping line of best fit. This suggests that Chinese investment stock may have a more significant relationship with economic freedom than yearly flows of Chinese investment.

One could postulate, based on this strong Chinese investment stock-economic freedom relationship, that the build-up of Chinese investment over time is bolstering this theory. In regards to this specific figure and coefficient, a one percent increase in the proportion of Chinese investment stock is matched by a .32046 point fall in economic freedom. Of particular importance, the coefficients for Chinese investment stock are more negative. If one were to compare two graphs, one using a stock measure and one using a yearly flow measure, the graph plotting stock against economic freedom would have a comparatively steeper downward sloping line of best fit. This suggests that Chinese investment stock may have a more significant relationship with economic freedom than yearly flows of Chinese investment.

Table 2: Correlation with Economic Freedom

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>U.N. Flow</th>
<th>U.N. Stock</th>
<th>Heritage Flow</th>
<th>Heritage Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Investment</td>
<td>-3.5183</td>
<td>-5.4100</td>
<td>-2.2650</td>
<td>-3.2046</td>
</tr>
<tr>
<td></td>
<td>(1.1295)**</td>
<td>(1.4731)***</td>
<td>(0.7836)**</td>
<td>(1.6114)***</td>
</tr>
<tr>
<td>Political Rights</td>
<td>-1.1070</td>
<td>-1.1299</td>
<td>-1.1180</td>
<td>-1.0976</td>
</tr>
<tr>
<td></td>
<td>(0.1277)***</td>
<td>(0.1267)***</td>
<td>(0.1389)***</td>
<td>(0.1274)***</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>0.1128</td>
<td>0.1165</td>
<td>0.1101</td>
<td>0.1124</td>
</tr>
<tr>
<td></td>
<td>(0.0099)***</td>
<td>(0.0098)***</td>
<td>(0.0110)***</td>
<td>(0.0099)***</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>-0.0346</td>
<td>-0.0115</td>
<td>-0.0195</td>
<td>-0.0094</td>
</tr>
<tr>
<td></td>
<td>(0.0340)</td>
<td>(0.0318)</td>
<td>(0.0335)</td>
<td>(0.0319)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.2336</td>
<td>0.2192</td>
<td>0.2501</td>
<td>0.2275</td>
</tr>
<tr>
<td></td>
<td>(0.0210)***</td>
<td>(0.0203)***</td>
<td>(0.0243)***</td>
<td>(0.0203)***</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>-0.2248</td>
<td>-0.2984</td>
<td>-0.1192</td>
<td>-0.2615</td>
</tr>
<tr>
<td></td>
<td>(0.4750)</td>
<td>(0.4747)</td>
<td>(0.5207)</td>
<td>(0.4767)</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>-6.5021</td>
<td>-6.4718</td>
<td>-7.1019</td>
<td>-6.5983</td>
</tr>
<tr>
<td></td>
<td>(1.2406)***</td>
<td>(1.2171)***</td>
<td>(1.3427)***</td>
<td>(1.2227)***</td>
</tr>
</tbody>
</table>

Notes: Standard errors are shown in parentheses.
*p<.05; **p<0.01; ***p<0.001

Table 2: Chinese investment is statistically significant and negative as predicted in Hypotheses H1a & H1b

Figure 2: As the proportion of Chinese Investment increases, countries tend to have lower levels of Economic Freedom

64 There may possibly be research in this area, but I did not encounter it in my literature review process. There were studies that looked at trade openness (Kolstad, Wiig 2012, Huang, Wang 2011) and economic risk (Sanflippo 2010), but not at economic freedom. As such, I believe I am also the first to use the Heritage Foundation’s Economic Freedom Index as a dependent variable in a model where Chinese investment was the independent variable.
economically un-free nations, allowing them to kick economic downturns, financial troubles, and needed-reforms down the road. Where there is no financial calamity, there is no need for an IMF program. If we connect the dots, Chinese investment is allowing states that would otherwise find themselves in IMF programs due to financial difficulties, instead prop themselves up with inflows of Chinese cash. Thus, Chinese investment prevents countries from becoming participants in IMF programs. One could even take this argument further to point out that the greater magnitude of correlation associated with Chinese investment stock could imply a causation effect. This would mean that not only is Chinese investment propping up regimes allowing them to delay becoming program participants, but the build of Chinese investment is itself making these countries less economically free. Though this is somewhat of a stretch given what results are available, I believe the underlying logic and reasoning is sound and fits within the framework presented here.

I also find that the political rights, rule of law, GDP per capita, and natural resource variables were also statistically significant given each measure of Chinese investment. The coefficients of all these variables are as expected given what was discussed in the literature review as well as the general concept in political science that free market economies are associated with more political rights, greater rule of law, higher levels of wealth, and lower levels of natural resource extraction. On the note of political rights, this measure is closely associated with democracy, i.e. a lower score on the Freedom House index is correlated higher levels of democracy. The results seem to confirm the widely discussed modernization theory which links higher levels of wealth with democratization.\(^65\) Also of note is the significant and

\(^{65}\) This theory, first put forward by Seymour Lipset in his 1960 *Political Man: The Social Bases of Politics*, has been challenged as of late (see Carothers, Thomas. 2002. “The End Of the Transition Paradigm.” *Journal of Democracy* 13(1): 5–21.) with the counter examples of a developing China that is moving away from democracy. Despite this, the modernization theory is still very popular amongst both economists and political scientists.
negative coefficient of the natural resource variable falls in line with the “resource curse” theory. As discussed in the literature review, China disproportionately invests in certain countries in order to extract their natural resources. Sit has been suggested that China’s demand for natural resources is exacerbating the prevalence of the “resource curse”. Before a country may have been sitting on its natural resources, unable to fully develop them. With increased Chinese demand and Beijing’s willingness to finance resource extraction, states which previously did not export large quantities of natural resources may now be doing so.

**Program Participation Model**

The Economic Freedom Models had clear and distinct results, the same cannot be said of the Program Participation Models. In regards to the Chinese investment variables, only the Heritage Foundation flow measure was significant and even then just barely so—results can be seen in Table 3. The coefficient does have a negative sign indicating that as levels of Chinese investment rise, the likelihood that a country will be a participant in an IMF program falls. Due to only one measure of investment being significant, I’m not comfortable assessing the result as

---

66 Countries more dependent upon natural resource extraction tend to be more authoritarian and less diversified economically. The revenue from these natural resources are often used to prop up corrupt regimes and delay free market reforms, which would logically result in lower levels of economic freedom. Why does this happen? Investment directed towards natural resources often has little effect upon the local economy. Foreign workers, materials, and companies are used to build the facilities and extract the primary products. Little of the investment money flows into the local economy and the majority of the resources extracted are shipped overseas. Countries such as Venezuela and Nigeria are often listed as examples of resource cursed nations. See Ross (2015)’s What Ross, Michael L. 2015. “What Have We Learned About the Resource Curse?” Annual Review of Political Science Annu. Rev. Polit. Sci. 18(1): 239–59.

validating H2a; we cannot reject the null hypotheses of H2a or H2b. The non-conclusive results bring forward the question of whether the logic presented in the hypotheses is sound. Yes, it would make sense that countries with high levels of alternative investment (China) would simply refuse to participate in IMF programs, but another perspective would be that these countries would not see any change in their likelihood to be program participants (They seek all the financing they can), though their behavior during the program may change. Both of these arguments inherently deal with some aspect of causality. A third possibility that has no causal component is that participation rates would rise with higher levels of Chinese investment. I have previously established that China tends to invest in countries with characteristics similar to those of IMF program participants. As such, it would make sense if we found that countries with higher levels of Chinese investment—and thus more likely to hold those program participation characteristics—were also more likely to be program participants. However, the results do not

<table>
<thead>
<tr>
<th>Table 3: Regression Analysis: Correlation with IMF Program Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Chinese Investment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Political Rights</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Rule of Law</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP Growth Rate</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>GDP Per Capita</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Trade Openness</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Economic Freedom</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Notes: Standard errors are shown in parentheses.
*p<.05; **p<.01; ***p<.001
point towards either way, especially when considering that the signs across the measures of investment are not uniformly negative or positive.

GDP per capita, trade openness, and natural resources are negative and significant across almost all measures of Chinese investment. This matches what would be predicted given past research. The results show that richer countries (Higher GDP per capita) are less likely find themselves in financial difficulties that require bailout from the IMF. Similarly, countries more dependent upon trade tend to be more free-market oriented—ease of trade is a component of the economic freedom index. The negative coefficient of natural resources is a tad more difficult to explain. The resource curse would seem to suggest that countries reliant upon natural resources are less economically free which would imply an increased likelihood of program participation. What may be happening instead is that natural resource dependent states have steady streams of revenue allowing for the continuance of overspending, inefficiency, and they delay of financial difficulties. This revenue stream may also allow states to better meet IMF program conditions. This would be especially true if a state were to build up cash reserves from natural resource sales.

Surprisingly, the economic freedom coefficients have no significance. One would expect less economically free countries to be more likely to participate in IMF programs. Political rights are also negative and significant for both measures using UN data. The coefficients show that rising levels of political rights are matched by falling program participation rates. This would fit in line with general expectations that states with fewer political rights tend to be less economically developed and thus more prone to financial difficulties.

Conditionality Implementation Model
Moving onto the conditionality models, the results—shown in Table 4 and Table 5—were somewhat disappointing.\textsuperscript{68} Whereas Chinese investment was significant through all measures in the economic freedom model, here we see that only four of twelve measures are statistically significant—two of these measures just barely reaching the threshold of significance. Of the coefficients that are statistically significant, every single one demonstrates a positive correlation between Chinese investment and conditionality implementation. This is the \textit{opposite} of what was predicted in H3a and H3b; we cannot reject the null hypotheses of H3a and H3. This is a confounding result, but as the results of the economic freedom models were quite conclusive, it follows that given this uses the same data, it is a fairly accurate result. Exactly why the results turned out as they did will be discussed in the next session in depth.

One striking result is the across the board significance of the natural resources and economic freedom coefficients in the SB models. This remarkable results becomes ever more conspicuous when contrasted with the significance of only one of the measures in the QPC model. As mentioned earlier, Quantitative performance criteria (QPC) are short-term conditions related to monetary and budget issues such as fiscal balances, credit reserves, and borrowing, whereas Structural Benchmarks (SBs) are seen more as long-term conditions intend to reform large sectors of the state or economy such as privatization of companies, the creation of safety nets, or improving financial security.\textsuperscript{69} QPC are specific and measurable while SB are often non-quantifiable. SBs attempt to rectify large, structural, and deep-seated faults within an economy. Economic freedom in a sense is a measure of the underlying foundation of a national economy.

\textsuperscript{68} Remember that there are two types of conditions (QPC & SB), two total ways of measuring Chinese investment in relation to conditionality (yearly flows and stock value), and two data sources (U.N. & Heritage Foundation). This results in a total of eight regression models ran to measure any correlation between Chinese investment and conditionality implementation.

Likewise, natural resource exploitation, depending on its level, is an indirect measure of an economy's diversification. Many of the issues that SBs are meant to fix are reflected in low-economic freedom scores and over-reliance on natural resources. From this, it makes perfect sense why we see significance in Table 4, but not Table 3: the former deals with pushing free-market reforms while the latter is concerned with quick fixes.
### Table 4: Regression Analysis: Correlation with IMF Program **QPC** Compliance

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>U.N. Flow</th>
<th>U.N. Stock</th>
<th>Heritage Flow</th>
<th>Heritage Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Investment</td>
<td>0.2136</td>
<td>0.2012</td>
<td>0.0457</td>
<td>0.1127</td>
</tr>
<tr>
<td></td>
<td>(0.0786)**</td>
<td>(0.0808)*</td>
<td>(0.0407)</td>
<td>(0.0580)</td>
</tr>
<tr>
<td>Political Rights</td>
<td>-0.0192</td>
<td>-0.0180</td>
<td>-0.0154</td>
<td>-0.0159</td>
</tr>
<tr>
<td></td>
<td>(0.0086)*</td>
<td>(0.0086)*</td>
<td>(0.0089)</td>
<td>(0.0086)</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>0.0012</td>
<td>0.0010</td>
<td>0.0010</td>
<td>0.0011</td>
</tr>
<tr>
<td></td>
<td>(0.0006)*</td>
<td>(0.0006)*</td>
<td>(0.0006)</td>
<td>(0.0006)</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>0.0040</td>
<td>0.0044</td>
<td>0.0033</td>
<td>0.0039</td>
</tr>
<tr>
<td></td>
<td>(0.0022)</td>
<td>(0.0022)*</td>
<td>(0.0043)</td>
<td>(0.0028)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>-0.0033</td>
<td>-0.0034</td>
<td>-0.0061</td>
<td>-0.0037</td>
</tr>
<tr>
<td></td>
<td>(0.0022)</td>
<td>(0.0028)</td>
<td>(0.0043)</td>
<td>(0.0028)</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>-0.0575</td>
<td>-0.0408</td>
<td>-0.0497</td>
<td>-0.0460</td>
</tr>
<tr>
<td></td>
<td>(0.0276)**</td>
<td>(0.0277)</td>
<td>(0.0284)</td>
<td>(0.0276)</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>-0.0802</td>
<td>-0.1179</td>
<td>-0.1264</td>
<td>-0.1039</td>
</tr>
<tr>
<td></td>
<td>(0.0811)</td>
<td>(0.0802)</td>
<td>(0.0789)</td>
<td>(0.0800)</td>
</tr>
<tr>
<td>Economic Freedom</td>
<td>-0.0029</td>
<td>-0.0022</td>
<td>-0.0035</td>
<td>-0.0026</td>
</tr>
<tr>
<td></td>
<td>(0.0016)</td>
<td>(0.0016)</td>
<td>(0.0016)</td>
<td>(0.0016)</td>
</tr>
</tbody>
</table>

Notes: Standard errors are shown in parentheses.

*p<.05; **p<0.01; ***p<0.001

Table 4: Few variables are significant. Chinese investment coefficients are positive instead of negative as predicted

### Table 5: Regression Analysis: Correlation with IMF Program **SB** Compliance

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>U.N. Flow</th>
<th>U.N. Stock</th>
<th>Heritage Flow</th>
<th>Heritage Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Investment</td>
<td>0.0836</td>
<td>0.1514</td>
<td>0.0193</td>
<td>-0.0150</td>
</tr>
<tr>
<td></td>
<td>(0.0570)</td>
<td>(0.0585)**</td>
<td>(0.0317)</td>
<td>(0.0422)</td>
</tr>
<tr>
<td>Political Rights</td>
<td>0.0084</td>
<td>0.0069</td>
<td>0.0144</td>
<td>0.0091</td>
</tr>
<tr>
<td></td>
<td>(0.0062)</td>
<td>(0.0062)</td>
<td>(0.0069)*</td>
<td>(0.0062)</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>-0.0003</td>
<td>-0.0005</td>
<td>-0.0008</td>
<td>-0.0004</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>0.0018</td>
<td>0.0021</td>
<td>0.0025</td>
<td>0.0018</td>
</tr>
<tr>
<td></td>
<td>(0.0016)</td>
<td>(0.0016)</td>
<td>(0.0017)</td>
<td>(0.0016)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.0014</td>
<td>0.0017</td>
<td>0.0049</td>
<td>0.0012</td>
</tr>
<tr>
<td></td>
<td>(0.0020)</td>
<td>(0.0020)</td>
<td>(0.0033)</td>
<td>(0.0021)</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>0.0160</td>
<td>0.0226</td>
<td>0.0127</td>
<td>0.0160</td>
</tr>
<tr>
<td></td>
<td>(0.0200)</td>
<td>(0.0200)</td>
<td>(0.0221)</td>
<td>(0.0200)</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>-0.1325</td>
<td>-0.1482</td>
<td>-0.1579</td>
<td>-0.1292</td>
</tr>
<tr>
<td></td>
<td>(0.0589)*</td>
<td>(0.0580)*</td>
<td>(0.0615)*</td>
<td>(0.0581)*</td>
</tr>
<tr>
<td>Economic Freedom</td>
<td>-0.0053</td>
<td>-0.0047</td>
<td>-0.0052</td>
<td>-0.0052</td>
</tr>
<tr>
<td></td>
<td>(0.0011)**</td>
<td>(0.0011)**</td>
<td>(0.0012)**</td>
<td>(0.0011)**</td>
</tr>
</tbody>
</table>

Notes: Standard errors are shown in parentheses.

*p<.05; **p<0.01; ***p<0.001

Table 5: Chinese investment is significant in only one measure. Natural Resources and Economic Freedom are significant across every measure.
Discussion: Why the contrary results?

This results of the program participation models are disappointing and the conditionality implementation results run contrary to what would be expected given previous literature referencing moral hazard and IMF programs as well as the general theories posited in this paper. I find five distinct possibilities for why the program participation and conditionality implementation models produced these results:

1. Chinese investment does not act as a substitute for IMF program loans.
2. Chinese investment encourages rather than discourages compliance.
3. Lack of historical consequences for non-compliance.
5. The recent phenomenon of Chinese investment.

First, it should be noted that these are merely suggestions and are largely based on assumptions given the results. In regards to the first theory, Chinese investment may very well be acting as a compliment to rather than a substitute of IMF program financing, in the sense that countries in financial difficulties look for any finance available, especially cash that they can use in any manner they choose. Butkiewicz and Yanikkaya (2004) found that IMF lending and foreign investments are substitutes whereas domestic lending and World Bank lending are complements. This would seem to contradict my findings, however this may be due to looking at the issue from the wrong perspective. Much of the research discussed in the literature review looked at the effect of IMF programs upon foreign direct investment flows. In my model, I’m trying to determine the effect of Chinese foreign direct investment upon IMF programs, which is a similar, but not identical task. We know that China acts differently from other countries when it
invests (i.e. it invests in states that are unstable, undeveloped, corrupt, etc.….) so it is likely that the effect of that investment may also be different. In this case, Chinese investment may be acting as a compliment to IMF programs. This makes sense given that China tends to invest heavily in infrastructure and natural resource extraction. Generally speaking, loans disbursed by the IMF are used to prop up state budgets, replenish currency reserves, and service debt—it is in a more fluid form than the Chinese investment, i.e. it can be used in a variety of ways. These funds may indirectly allow for infrastructure or natural resource projects, but it is unlikely that there is a direct linkage. As finance from Chinese investment and the IMF are channeled into different parts of the economy, there may be little direct interaction between the two, and thus no substitution effect. In fact, what interaction that exists, could be complementary which leads into the second theory.

As discussed, Chinese investment in countries likely to be IMF program participants tends to be concentrated in infrastructure and natural resource extraction. Infrastructure provides the foundation to a strong economy that leads to long-term economic development. Likewise, natural resources can provide a state with a steady stream of revenue (given no slump in global prices). In regards to countries likely to fall into financial difficulties and thus join IMF programs, having a better infrastructure system gives them a better basis from which to reestablish growth and economic expansion. A revenue source (oil and ore exports) that does not fluctuate given local economic troubles, provides the state with more resources to deal with those

---

71 I theorized that the lack of direct links or interaction did not matter due to the massive scale of Chinese investment. In many states, Chinese investment dwarfed the financing provided by the IMF and thus it was logical that states would be much more beholden to China than to the IMF. It’s the classic, can’t have the cake and eat it too situation. However, the results of the conditionality models show that maybe these states are able to both have and eat their cake.
financial difficulties, or even to implement conditions as stipulated by the IMF. Chinese investment may perhaps be strengthening the underlying basis of many states through the building of infrastructure and also providing them with a stable revenue through resource exports.\textsuperscript{72} As a result, Chinese investment could be fostering conditions which allow states participating in IMF programs to better implement reforms.

The third theory builds on the findings in other scholarly research that indicates that historically, a significant amount of countries do not implement IMF program conditions anyways.\textsuperscript{73} This would suggest that a new factor (Chinese investment) may not have any effect at all. If countries have historically put placed little importance on IMF program conditions, why would that change with the addition of Chinese investment? This lack of implementation is reflected within my own dataset. Of 169 programs, the average proportion of QPC conditions met was only 50.6\% and the average proportion of SB conditions met was only 42.3\%.\textsuperscript{74} Yet, low priority for complying with program conditions does not explain the positive sign of the coefficients. This brings us to the fourth theory of data limitations.

Given any topic, a researcher will undoubtedly run into problems regarding data, my research is no different. I ran into a number of data issues, specifically in three areas: dropped data values, lack of data on Chinese loans, and a limited time span. The dropping of observations in the regression models is regrettable, but largely unavoidable. The inclusion of several control variables leads to more accurate modeling, but due to their varying data coverage, a sizable

\textsuperscript{72} In regards to revenue streams, this may not be entirely true in the case of China. In many cases, China will provide investment or loans for natural resource development with the stipulation that they be repaid in natural resources (Economy, Levi 2014; Anyu, Ifedi 2008; Garcia-Rodriguez, Garcia-Rodriguez, Castilla-gutierrez, Major 2015). In these cases, it may be some time before these countries are able to really profit from this natural resource development as they first may pay off their debts to China. Only then can they sell their oil, ore, or other primary products directly onto the global market.

\textsuperscript{73} (Dreher 2006; Blackman, Unigovskaya 2004; Kilby 2007).

\textsuperscript{74} These measures are the percentage of conditions met at the stipulated review time. Many of these conditions may have been altered or delayed, leading to their implementation at a later date.
amount of observations are lost. Within the conditionality regression models, the number of deleted observations ranged from 127 (21.2%) to 260 (43.5%). This considerable dropping of observations almost certainly skewed the final results. I experimented with different combinations of controls in order to minimize dropped observations. Even when dropping every single control (leading to no dropped observations), the coefficients for Chinese Investment never became negative as predicted.

At the onset of this project, I intended to conduct statistical analysis on Chinese loans as well as Chinese investment. What I soon came to find was that accurate measures of Chinese loans are nowhere to be found. Though some organizations do publish estimates of Chinese disbursed loans, they tend to be regionally focused and their reliability is questionable as they are based on public announcements by Chinese banks. Measuring Chinese loans is made more difficult by the existence of off-shore shell companies in Hong Kong, the Cayman Islands, and the British Virgin Islands, through which tens of billions of dollars is funneled before reaching its final destination. China’s enormous “shadow-banking” industry also masks a sizable amount of capital movement. One aspect of shadow-banking called entrusted loans are essentially company-to-company loans which initially was limited parent-to-subsidiary relationships, but overtime companies began lending money to non-related companies and even foreign

---

75 Observations were also dropped in the Economic Freedom models and the Participation models, but in both cases the percentage dropped was comparatively minimal. As such, I do not believe the dropped observations effected the results of these two set of models. On the whole, the observations dropped were generally small island nations or countries such as Cuba or North Korea for which little data is reported.


77 This movement of funds through off-shore companies is true of investment as well. Kolstad, Wigg (2012), Davies (2012), and Droendijk, Blomkvist (2013) all specifically make note that the majority of Chinese investment in the early to mid-2000’s first traveled through financial centers such as these, before presumably ending up somewhere else, though it is difficult to measure where. The recent Panama Papers data leak ties into this theme of off-shore accounts, though it primarily focused on individuals who “owned” off-shore companies as opposed to the dealings of corporations.
companies. The prevalence and magnitude of such loans is difficult if not impossible to discern. Had such data been obtainable and included into the regression models, I firmly believe that the results would have matched those predicted in the hypotheses for two prominent reasons. First, capital loans from China more closely mirror IMF loans in that they are actual transfers of money as opposed to investments in projects. Second, though the amount of investments made by China in many countries dwarfs the size of IMF loans, the quantity of Chinese loans to these same countries is even larger. The lack of this data leads to a less robust model that captures only a sliver of China’s true financial clout.

The fifth and final notion of why the results were contrary to predictions is simply the limited time-range of the data. Though I did all I could to expand the data range, an eleven year span is not ideal and more than likely led to less than perfect results. Beyond simply the small time-frame, I suspect that as large-scale Chinese investment is a recent phenomenon, any long term effects it may have on IMF programs may have not yet emerged. High rates of investment in a given year may have some effect, but the build-up of investment over time is more significant, as was shown in the economic freedom models. In regards to investment and trade, China has recently become a major player, but in some regions such as Latin America, the United States is still the dominant foreign actor. This is slowly shifting, but it will be sometime

---


80 UNCTAD data online only runs from 2003-2012. After searching online, I was able to order an official investment statistics report from the Ministry of commerce of the People’s Republic of China which publishes official investment data. This extended the data range to 2003-2014. “年度中国对外直接投资统计公报” *Ministry of Commerce of the People’s Republic of China, National Bureau of Statistics of the People’s Republic of China, State Administration of Foreign Exchange.*

before China completely supplants other sources of foreign investment. As time passes and more data is collected, research into the effects of Chinese investment will become more informative and trends predicted in this paper may indeed emerge.

**Implications**

When approaching this thesis, it was my intention to look at how China’s rise has affected the geo-political and geo-economic structures which govern this world. In my eyes, this is one of the most important areas of study within modern economics and political science. At no time in history has a country has such strong interrupted growth—more than thirty years of double digit growth. The sheer scale of China’s economic growth is reflected in the country’s achievement in pulling 680 million people out of abject poverty since in 1981.82 In just over thirty years, China has transformed itself from a third-world country of peasant farmers to the world’s factory, from a nation barely able to feed itself to an economic power surpassed only by the United States (though some would argue China is already second to none 83), and most importantly from a nation focused only on itself to one that looks outward beyond its borders. This is why research involving China is important as its reemergence has had and will continue to have enormous consequences (both good and bad) for the rest of the world.

The themes presented in this thesis are representative of the underlying shift in the economic and geo-political power structures within the International Community. China’s meteoric ascent has implications far beyond simply the viability of IMF programs to areas such

---


as military defense, climate change, human rights, globalization, economic development, and geo-politics. All of these policy topics are of upmost concern to officials in Washington. The actions taken by Beijing within each area can have profound effects upon American interests as well as the livelihood of everyday citizens. In some regards, the United States has responded to China’s rise in calculated and tactful ways. The recent signing of the Trans-Pacific Partnership signals Washington’s continued ability to set the rules of the game when it comes to trade, the hope being that the agreement’s provisions will someday be applied to China.\textsuperscript{84} The climate accord announced by China and the United States in 2014 is another instance where the United States moved forward with good policy.\textsuperscript{85} By moving together as one, Beijing and Washington were able to set the stage for the Paris Climate Conference in 2015 which successfully resulted in a global climate agreement.\textsuperscript{86}

**The Asian Infrastructure Investment Bank**

Not everywhere has the United States moved with grace and intent. Congress has for too long blocked meaningful reform of the IMF, ironically because they fear handing China too much power within the institution. Though China did not gain voting shares in the IMF, it did

---

\textsuperscript{84} The TPP is interesting as U.S. politicians do not want to give off the impression that they are attempting to “contain China”, but in some ways that is exactly what the TPP does. It pushes China into a corner where it will have to accept the rules formulated by the United States and its allies. At least that is what it theoretically will do. Many have doubts that the TPP will be able to really force China to do anything. Beijing is currently negotiating a trade deal with many of its neighbors. Even if this does not go through, the country’s size and trade connections make it difficult for the U.S. to hold significant leverage over it. Further, China’s “One Belt, One Road” will likely have more a immediate economic impact in many states than the TPP. Naughton, Barry, Arthur R. Kroeber, Guy de Jonquieres, and Graham Webster. 2015. “What Will The TPP Mean for China?” *Foreign Policy*. http://foreignpolicy.com/2015/10/07/china-tpp-trans-pacific-partnership-obama-us-trade-xi/ (April 2016).


establish its own development financing institution called the Asian Infrastructure Investment Bank (AIIB). Proposed in 2013, the bank quickly picked up steam after China invited India to be a founding member, leading to twenty-two more states agreeing to join in late 2014. By early 2015, Australia and South Korea applied to join the AIIB and in March the United Kingdom announced its intent to join. After 10 Downing Street’s announcement, nearly every western country decided to join the bank, much to the distress of the United States who actively lobbied its allies against joining. As of this writing, the only major developed economies not a part of the AIIB are Canada, Japan, and the United States. What is the big deal about this bank? Its purpose is effectively the same as the IMF and WB, but rolled into one institution. The main difference being that China, not the United States, holds veto power. What worries the United States is that with Beijing behind the driver’s seat, funds will be disbursed with lower standards and few conditions—similar to what China does with its own investments and loans. The ultimate result of this being that the AIIB would undermine the effectiveness of current institutions such as the World Bank, IMF, and the Asian Development Bank. As may be obvious, this is very similar to the theories outline in this thesis, except instead of investment and

92 Perlez, Jane New York Times 2015
loans from China, the financing is coming from a Chinese-dominated IMF of sorts. The implications of all of this should be lost amongst the clutter and it certainly has not been lost in Washington.

The U.S. has since come to terms and accepted the existence of the AIIB—at least for the sake of maintain positive relations with China. However, there does not appear to be any indication that Washington will be willing to join the bank anytime soon, nor should they given they lead the AIIB’s chief competitors. One of the key principles of capitalism is that through competition, prices will fall and quality will improve. The IMF and WB previously held a monopoly, now they have competition with the entrance of China and the A.I.I.B. The Western IFIs can no longer act as if they are the only players in the game. As such, the United States and the West should move towards reforming the traditional international development regime to better reflect the modern economy. The IMF, WB, and the A.I.I.B. do not have to be competitors, they instead can be partners that work in unison to reach common goals. If the recent past is any indication, China looks far more favorably upon cooperation than confrontation, something policymakers in the West should keep in mind.

**Summarizing Results**

When beginning initial work on this thesis, I looked at many different ways to measure China’s growing influence, whether that was through UN-voting records, international organization creation, foreign aid, military alliances, or any number of other methods. I decided upon looking at how Chinese investment may influence IMF programs, because there seemed to be a considerable overlap between the two phenomenon, but little research concerning that

---

intersection. As with nearly every research project, not all of the predictions were corroborated by the model results. This was fully expected, but I nonetheless was left somewhat disappointed. That does not mean that the model results were worthless, quite to the contrary. The models both supported and contradicted the presented hypotheses. I will not rehash what has already been said in regards to why the program participation and conditionality implementation models turned out the way they did, but it should be restated that neither model validated hypotheses H2a & H2b or H3a & H3b. More specifically, the program participation model was significant in only one measure of Chinese investment leading to an inconclusive result. The conditionality implementation models were significant in four measures of Chinese investment, but the coefficients held the opposite sign of what was predicted. These results do little to support the theories posited by this thesis, but they do not necessarily contradict them either.

In regards to the Economic Freedom models, the predictions in hypotheses H1a & H2b were validated: Chinese Investment is more prevalent in “less-free” economies. This result confirms what political scientists and economists already knew, but had not truly tested; Chinese investment is going towards countries with economic systems similar to its own. It also suggests that China is indeed disproportionately investing in countries with characteristics most associated with IMF program participants, not-withstanding whether this investment actually has any influence upon those programs. Further, it can be drawn from these results that China’s heavy investment in these countries is bolstering regimes whose economies are in need of reform, but are able to delay due to easy capital offered by Beijing. All of this backs the primary theory that underscores this thesis: that China’s growing economic influence overseas is adversely affecting the influence of the IMF and by extension the West. It underscores the rise of the Beijing Consensus as a direct competitor to the western ideology of free-markets best described as the
Washington Consensus. A strategy of development at all costs, regardless of the political, environmental, or social consequences runs perpendicular to what the Washington Consensus stands for, but it also may be the more attractive option to regimes across the developing world.

**Future Research**

Looking into the future, I fully expect research regarding Chinese investment and its effects on the global economy to become more prevalent and widespread. As I discussed earlier, this thesis was beset by data issues regarding limited ranges of time, dropped observations, and questionably accurate data sources (in regards to true investment numbers). As time moves forward, many of these issues will hopefully be resolved and more robust and accurate modeling can be conducted. The results presented here may be further validated or disproven, but nonetheless I suspect that research on this topic will continue and its importance further recognized.

In regards to how future researchers may build upon my findings, I present a number of suggestions. First, I would attempt to create models that include estimates of Chinese loans to foreign countries and companies. This additional dependent variable would better reflect the true financial presence China has in the developing world and thus the results would likely be far more representative of reality.

Second, the World Bank should be included in research, specifically in regression modeling. World Bank loans and disbursements are a popular area of research amongst political theorists\(^{95}\), but due to time and dataset constraints I was unable to include World Bank data into my modeling. One could simply replace “IMF” with “WB” in the hypotheses presented above,

\(^{95}\) Winters (2010); Kilby (2009); Marchesi, Sirtori (2011); Dreher (2004); etc…
the addition of a model comparing monetary quantity of disbursements would also be wise.

Third, the effects of Chinese investment beyond the World Bank and IMF should be tested. As stated, the original goal of this thesis was to determine whether China’s rise is resulting in the loss of power and influence for the West and specifically the United States. As such there are numerous ways one could measure this, using only Chinese investment and loans. Specifically one could construct a model determining possible correlations between Chinese Investment & loans and U.N. voting records or arms sales.

Fourth, future research should factor in the Asian Infrastructure Investment Bank. Are its loan disbursements correlated with Chinese investment levels? Are its programs in the same countries as IMF programs have been historically? Is the A.I.I.B directly competing with the IMF and WB? Is it undermining the power and influence of the IMF and WB? These questions cannot be answered today, next year, or even in a decade, but their answers will be crucial to policymakers nonetheless.

Conclusions

My primary question is what next? With China’s recent economic downturn, many of the ideas put forward in this thesis may soon fall flat. Yes, Chinese investment abroad is and will continue to be sizable, but much of its purpose has faded. China no longer demands an every growing supply of natural resources. As it transitions from an export-focused manufacturing economy to a consumer and service driven market, it will no longer require the quantity of natural resources from the numerous developing countries it has invested so heavily in. The effects of the slowdown are already visible. Latin America fell into a recession in 2015 after years of strong growth, attributed primarily to diving ore and oil prices as well as decreased
demand from China.  

I have no doubt that China will remain a dominant economic and political force for decades if not centuries to come, but the days of double digit growth are likely over. The ripples of this change will resound across the global economy for some time to come and may even result in change within China itself, though even the best minds are divided on that issue. Beijing’s intentions have been and will continue to be difficult to discern. What is certainly true is that China’s growing stature in the global economy is here to stay and its political influence certain to grow. For the first time since the end of the Cold War, the United States is faced with a true competitor on the geopolitical stage and the implications of this should not be understated, nor should they be feared. Instead, careful research, analysis, and deliberation should be conducted in order to determine how to navigate this new world. I hope my research contributed to this process. Though the models did not fully support all the theories put forward in this thesis, the results did shine a light upon the topic and helped substantiate the findings of others.

Acknowledgments

I would like to thank Professor Xinyuan Dai for her advice, knowledge, and help during the course of this thesis project. Without her guidance, I would have surely lost myself along the way. I would also like to thank Clifford Krauss, Keith Bradsher, Gregor Aisch, Josh Keller, and K.K. Rebecca Lai at the New York Times as their article and graphic were the primary inspiration for selecting this research topic.

---

Bibliography


Li, Quan, and Adam Resnick. 2003. “Reversal Of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries.” International Organization Int. Org. 57(01).


Schulz, Heiner. “Political Institutions And Foreign Direct Investment in Developing Countries: Does the Sector Matter?” *University of Pennsylvania*.


