

IS CHINA'S OUTWARD FDI POLITICALLY DRIVEN?

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ABSTRACT

To capture the invisible political considerations underlying China's outward foreign direct investment in the new millennium, this study embeds a new component – the bilateral diplomatic relationship, into the traditional FDI empirical framework. Rigorous evidence unveils the fact that Chinese government is influential not only in encouraging, but also in shaping China's outbound investments through directing the investments to countries having more friendly diplomatic relationship with the country. Meanwhile, market-access and resource-seeking motives are proved to be strong drivers as well. These empirical results support the economic diplomacy argument that the new type of diplomacy under current context of globalization, no longer fully relies on political considerations, but also takes country's economic benefits into account, as China's outward FDI tried to balance both economic and political interests.

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TABLE OF CONTENTS

INTRODUCTION & MOTIVATION.....	1
LITERATURE REVIEW	5
CONCEPTUAL FRAMEWORK AND HYPOTHESIS	12
EMPIRICAL METHODOLOGY – AUGMENTED GRAVITY MODEL	15
DATA SOURCES AND VARIABLE SPECIFICATIONS.....	17
EMPIRICAL EVIDENCE	22
MAIN FINDINGS	25
POLICY IMPLICATIONS.....	27
FURTHER RESEARCH	27
BIBLIOGRAPHY.....	28

INTRODUCTION & MOTIVATION

China has been one of the most popular destinations for transnational direct investment in the world since the once-sleeping giant started its economic reform in 1978. China became the largest FDI recipient among developing economies in 1993 and then the largest FDI recipient in the world in 2003 (Cheng and Ma 2007). The large influx of foreign investment has been hailed as a substantial success of the country's reform strategy. However, the efficiency of FDI in China was increasingly questioned on the ground that it has more to do with labor-intensive and export-oriented industries. The inward FDI has been described as "not to bear much fruit" since it has less to do with the transfer of technology and management know-how, or access to overseas markets. Based on this logic, the Chinese government initiated the "Going-out Strategy" in 1999 to encourage domestic enterprises to invest overseas. As elaborated by Vice Minister of Commerce Zhang Zhigang, "urging competent businesses to 'go out' stands out as an inevitable option for China to adapt for globalization and further liberalize its economy, given the new development stage for China to open its market which is marked by the country's newly acquired WTO membership since 2001" (Zhang 2004). Zhang further stressed the government's new position in global economic cooperation: "On one hand, to improve the quality and level of China's inward foreign investment. On the other hand, it should also encourage domestic enterprises to 'go out' more actively and enforce their own competitiveness in international economic cooperation, by using their comparative advantages."

As a result of the "Going-out" strategy, China's outward FDI has reached a commercially and geographically remarkable level since the beginning of the new millennium.

China's outward FDI has achieved the level of 68.8 billion US dollars in 2010 compared to only 2.2 billion in 2002 (Statistical Bulletin of China's Outward Foreign Direct Investment, 2010). China's FDI inflow to outflow ratio experienced a sharp decline to 1.6 to 1 in 2010 from 5.9 to 1 in 2005 (World Investment Report 2011). According to World Investment Report 2010, outward FDI (OFDI) from Hong Kong SAR (China) and mainland China increased by more than \$10 billion each, reaching historic highs of \$76 billion and \$68 billion respectively. China's total FDI outflows ranked the 5th in 2010 rising from the 6th in 2009 among worldwide home economies. Meanwhile, China also surpassed Japan in both outward FDI flow and total GDP for the first time in 2010. Outward FDI is now becoming an important feature of China's economic engine where exports have been the primary contributor over the last three decades.

The Chinese government has identified 7 specific goals for Chinese businesses to invest overseas (Zhang 2004):

- (1) Develop overseas processing and assembling trade;
- (2) Transfer China's technology in resource exploitation to other developing ones, assisting those economies to convert their resource endowments into comparative development advantages;
- (3) Outsource engineering and consulting projects via service outsourcing to support domestic projects;
- (4) Strengthen cooperation in agricultural development to fully utilize China's advantages in agricultural production techniques and equipment;
- (5) Set up R&D centers in high-tech cluster regions to enhance innovative and technical capacity of domestic firms;

- (6) Explore more diversified cooperation in foreign labor services;
- (7) Be more engaged in service trades such as trade distribution, banking, insurance, securities, fund management, telecommunications, logistics, shipping and intermediary services.

The seven concrete measures could be summarized as to pursue more diversified international trade and achieve a mutually-beneficial economic cooperation by means of China's outward FDI.

It is obvious that the seven publicly claimed policy intentions of "Go-out Strategy" were planned out of commercial and economic interests to strengthen the international competitiveness of Chinese enterprises. On the other hand, the Chinese OFDI is characterized by a distinct feature – the deep involvement of state-owned enterprise (SOEs). As of 2010, 66.2% of China's outward FDI stock came from Chinese state-owned enterprise. It seems to signify a substantial role played by Chinese governments not only in encouraging, but also in actually shaping China's outbound investments. The question then arises: is China's outward FDI motivated by economic interests or political considerations, or both?

To explore the real motivation lying behind OFDI from China – a fast-growing transitional economy that undergoes radical changes from the central-planned system to market economy, it remains in question that whether or not general and stylized theories and conclusions can be directly applied to China's case. Limited existing research yields controversial arguments on the resource and market seeking incentive of China's OFDI. Some even conclude that China's outward FDI is attracted to more corrupt countries (Fung 2010) and economies with poorer labor quality (Fung 2009). If this is the case, what drives Chinese firms to take risks by investing

in more corrupt countries with larger political uncertainty, which their foreign counterparts typically try to stay away from?

This paper attempts to systematically explore the possible motivations behind China's OFDI by empirically examining characteristics of its destination countries. In particular, is China's OFDI decision driven by political considerations, such as using foreign investment to improve its diplomatic relationship with other countries?

LITERATURE REVIEW

Classic Economic Theories for Industrialized Economies

Early literature developed two separate strands of models to explain foreign direct investment motives in terms of multinational corporations' business considerations. Vertical models (Helpman 1984) explained that firms should locate different stages of production in different countries based on different endowments the host country possesses. Horizontal models (Markusen 1984), in contrast, predicted that multi-national corporations would be more likely to conduct foreign investment in countries with similar factor abundances. Horizontal and vertical models are also named after market access and comparative advantage motives respectively. More recent work, knowledge-capital model (Markusen 2002) started to incorporate horizontal and vertical motives into one unified general equilibrium framework so as to weigh their relative importance. In general, the bulk of empirical research built largely on outward FDI from developed countries provided more support to market access than to comparative advantage motives (Brainard 1993; Carr, Markusen, Maskus 2003; Hanson, Mataloni, and Slaughter, 2001; Markusen and Maskus 2002; Blonigen, Davies, and Head 2002).

Third World Multinationals

The term "Third World Multinationals" has been employed widely for literature studying outward FDI from developing countries. Due to the severe constraints in data availability, existing literature on "Third World Multinationals" uses either individual case study or qualitatively comparative analysis, generating a mixture of observations and findings. Distinct from their counterparts in developed countries, investments from third world countries display

following characteristics: (1) Government seems to play an influential role in directing or aiding outward FDI from developing countries (Riedel 1975, Kumar 1995, Narula and Dunning 1997); (2) These multinationals tend to prefer resource abundant destinations and export markets of home countries which seem to support market access motives (Riedel 1975, Lecraw 1993, Kumar 1995, Dunning, Hoessel Narula 1997); (3) Comparative advantages might account for part of the story due to firm-level advantages in areas of low labor costs, access to capital, technology, and management expertise (Lecraw 1993, Kumar 1995, Waldkirch 2010); (4) Neighboring countries with ethnic or cultural proximities are among preferable destinations (Lecraw 1993, Yeung 1994, Kumar 1995). However, with insufficient data for empirical study, above findings do not carry the same theoretical rigor as those focusing on investment from developed countries. Hence, there is no existent coherent framework that builds up casual linkages between various factors and outward FDI from developing countries.

Mixed Empirical Evidence

Interested in poor institutional and labor quality countries?

A small but growing body of research focused on the motives that drive China's overseas investment. Some empirical studies showed mixed results. The widely-cited study by Buckley (2007) was the first attempt to model the determinants of China's OFDI. Unsurprising results were found for market size, geographic proximity, and market openness as significant determinants. However, it was challenging for the author to explain the unprecedented finding that China tended to invest in countries with higher political risks. One possible reason provided was that Chinese multinational firms which are predominantly state-owned enterprises may be more equipped to compete in highly regulated or controlled environment than their peers from

more industrialized economies. Hence, state ownership may possibly form a firm-specific advantage for Chinese overseas investment. If this reasoning is sound, Chinese state-owned enterprises should be encouraged to invest more in countries with higher political risks so as to leverage their unique comparative advantages.

In 2009, Fung, Herrero, and Siu firstly estimated a traditional model including a full set of variables measuring comparative advantage and market access variables. Due to the substantial missing data on control variables, other stepwise regressions were then conducted, dropping variables either sufficiently significant or with largely missing observations. Both approaches concluded that only specific characteristics of destination countries such as market size, skilled labor pool, and transportation costs are effective determinants of China's OFDI. The only unconventional finding came from the negative sign of skilled labor variable, suggesting that China tend to go to countries with poorer labor quality. However, the credibility of this result is largely undermined by the lack of sound strategy to address the missing data problem on the skilled labor and other variables.

In 2010, Fung and Herrero restructured their model based on the FDI gravity model that has been repeatedly proved to be empirically significant. In agreement with Buckley (2004), they found that China's FDI is attracted to more corrupt countries. Their paper attributed this idiosyncratic result to China's investments in African countries with more corrupt institutions than the rest of the world on average. China's interests in investing in Africa were widely believed to use infrastructure investment in exchange for resource access. However, this argument could be problematic since China's investment in Africa, though increase substantially in absolute terms, stayed constantly as around only 3% throughout 2003 to 2010. Again, the

unsolved missing data problem could remain the source of estimation bias and the reason to generate the unconventional result in this study.

Sound approaches to fix missing data?

Noticing this consequential missing data effect from the use of World Development Indicators database (World Bank), more recent literature strives to address the problem in two ways. Bhaumik and Co (2009) worked out an imputation strategy which employs data from the most recent year available to substitute for the missing ones. Due to the imputation, they were only able to run regressions for 133 countries and every two year period of time. The relatively short timeframe significantly reduces the number of observations available to be regressed. With reference to panel data, regression results can merely be obtained based on observations having non-missing value for all variables. Therefore, for the panel data of 133-country and 2-year time series, only 110 observations were still present and valid in the final regression meaning that more than half of the observations were gone. In contrast, the analysis showed that China is inclined to do business with less corrupted countries, which is in sharp contrast with previous findings.

In the end, Zhang and Daly (2011) tried to avoid the missing data issue by selecting 23 countries out of the total of 162 countries/regions for modeling but without much justification in the representativeness of selected sample. The research reconfirmed the substantial role played by market size, trade openness, and resource endowments.

Yet, neither way (Bhaumik 2009, Zhang 2011) is satisfactory enough in fixing the missing data issue without either compromising the sample size or resulting in self-selection sample bias.

Summary

In a word, previous empirical research provided consistent findings only in the role of market size. Significance of resource endowments and transportation costs variables are not always obtained across different models. Institutional and labor quality of host countries generated mixed effects, which is sensitive to the effective sample used for modeling. Apparently, different approaches of treating missing data are related to dramatically different estimations results. A cautious approach with respect to the data issue would be required in the first place in the following analysis. Secondly, the hidden political incentives, implied by significant control of China's state-owned enterprises in its OFDI, could be the culprit that distorts the empirical estimations in the case that conventional FDI models are not able to capture the key political consideration of Chinese government in the globalization context of the new millennium. This paper works to advance the literature on both of these fronts.

A New Thinking - Economic Diplomacy

What is economic diplomacy?

With advancing globalization, a new term “economic diplomacy” has emerged to account for the type of international economic activities that might not be fully based on market efficiency, but also based on certain political and diplomatic considerations. According to Bayne and Woolcock (2011), economic diplomacy, going beyond the classic “diplomacy” in

international politics, is carrying much broader scope of purposes and implemented by more diversified players. The contents could be shaped not only by foreign service officers in terms of diplomatic missions, but by a variety of government agencies and non-governmental actors such as business community and civil society. Increasing economic inter-dependence of countries brings economic diplomacy to be more concerned by domestic policy makers so as to respond to more complex global challenges. As a result, this new type of economic diplomacy not only creates more obscurity in understanding related policy intention, but also makes it more proactive than traditional stereotype of “patient” diplomacy. As globalization advances, the trend that governments are more likely to resort to economic tools in seeking national interests where the legitimacy of traditional foreign policy tools fades, has been recently studied in cases of top economic powers such as European Union, United States, Japan, and China (Woolcock 2011, Levy 2011, Pekkanen and Solís 2007, Alao 2010). One step further, three investment vehicles are recognized to carry on economic diplomacy: FDI, portfolio investment, and other assets like intellectual property or licences (Chapter 8, Woolcock 2011).

Given the large share of China’s outward FDI controlled by state-owned enterprises (66.2% in 2010), it is reasonable to surmise that the FDI from China is being pushed by certain political considerations. If the assumption holds, the theory of economic diplomacy might help bridge the theoretical gap between international politics and global trade.

UN Vote

To conceptualize the diplomatic consideration for empirical analysis, we turn to voting records at United Nations General Assembly (UNGA). The UNGA is deemed as the primary

polycymaking organ for a wide range of international affairs to be discussed and voted in UN, functioning just like the global parliament where resolutions are voted to deliver views of states. Because UN resolutions do not have legal authority over states, it is generally perceived that states are voting to report their political considerations rather than legal views. Some even argued that such lack of legal obligation makes states vote more honestly in UNGA than in other institutions. One thing has to be noted is most resolutions at UNGA are adopted without votes. Hence, the remaining small proportion of resolutions voted is usually concerning morally controversial issues that can have significant political impacts. Hence, voting behavior at UNGA is believed to be an effective measure that reveals the underlying political considerations of its member states on various issues. There has been abundant literature using the consistency of UN voting record between countries to represent their bi-lateral common interests or diplomatic “friendship” (Mann-Bosch 1987, Wang 1999, Alesina 2000, Kuziemko 2006, Hosli 2010). Given that different countries could have different policy agenda of foreign affairs, UNGA voting records are conventionally classified into different categories (human rights, security, Middle East-related, and other issues) when they are used in empirical research. Therefore, the coincidence of UNGA voting record between the host country and China is applied here in following analysis to probe the assumption that whether China’s outbound FDI has been used as an instrument of economic diplomacy by its government.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS

Basic model of FDI Determinants

Market access

Market characteristics of host economies are widely identified as vital determinants in attracting FDI inflows. Economies with larger market size are believed to present more opportunities for the efficiency of worldwide resources allocation through FDI (UNCTAD, 1998). Transportation cost is often used to evaluate the accessibility of a foreign market. As for market-oriented FDI, tons of empirical evidence shows that international investment or trade volume is inversely associated with transportation costs to get to the market (Helpman, 1984, Horstman & Markusen, 1987; Brainard, 1997; Markusen & Venables, 1998).

Comparative advantages

Abundant research has shown that FDI is attracted to different locations or countries on the basis of the natural resources the country possesses. Natural and human resources are the two most important resource advantages. Natural resources (usually raw material and energy type), especially those for exports, are considered as the primary factor for location-specific advantage (Cai 1999; Wu and Sia 2002). The availability of human capital and skilled labor, on the other hand, generates positive spillover effects for foreign investment (especially knowledge and technology-seeking FDI) to strengthen their competitiveness elsewhere (Zhang and Markusen 1989, Yoffie 1993). The rationale for FDI to acquire natural and human resources mainly comes from the difficulty and complexity to produce both kinds. Natural resource are exogenously

endowed and cannot be changed through efforts of either policy or market, while establishing relevant human resource responding to economic development is a long-term process.

Political risks

Market access and comparative advantage factors are related to the magnitude of investment returns, whereas political risks are presumed to determine the certainty of eventually obtaining the returns. Political risks of host countries are projected to be negatively related to the FDI inflow. Such risk would easily discourage foreign investors if host government tends to change the rules of doing business unexpectedly (Jensen 2003, Bussea and Hefeker 2006). Even worse, political risks could go on to impact the macroeconomic stability of the host countries which directly affect investment activities of a country (Clark 1997). More corrupt host countries are believed to have poorer institutions and thus higher political risks for FDI inflow.

Extended Specification – Diplomatic relationship

Hypothesis I: the more “friendly” diplomatic relation, the more outward FDI inflows from China

Adding bilateral diplomatic relationship into the conventional FDI conceptual framework allows for the analysis of political considerations to extend from national to inter-national dimension. Based on the economic diplomacy theory mentioned above, the paper first hypothesizes that the Chinese government has utilized the outward foreign direct investments by means of state-owned enterprise to induce voting outcome in UN General Assembly to be more favorable to China’s national interests. This means that the more consistent UN voting record the

country has, the more FDI would flow in from China. The hypothesis can also be stated as whether China is using FDI to “buy” votes in UN General Assembly.

Hypothesis II: corrupted countries are more easily to cooperate in “UN vote-FDI” deal with China

If the first assumption tested to be true, the analysis then proceeds to see what kind of countries are more likely to be “bribed”. Generally speaking, more corrupted countries have larger autonomy over policy making (including foreign policies) as they are subject to less election pressures. It is thus hypothesized that more corrupted countries are more easily to be bribed in UN since they encounter less political pressure in determining their foreign and economic policies.

EMPIRICAL METHODOLOGY – AUGMENTED GRAVITY MODEL

Empirically, the gravity model is considered the best fitted model in explaining bi-lateral trade flows between countries as a function of relative economic size, and transportation costs captured by geographic distance between two countries. The strong empirical validity has won the gravity model much popularity in various FDI literatures with each study introducing relevant variables of interest. These variables are selected based on shared core factors which prove to be significant throughout the history, in spite of occasional complaints regarding the lack of theoretical foundations under the gravity model. However, recent literature has gradually established theoretical foundations for gravity model. Anderson and van Wincoop (2003) derived gravity equations based on a general equilibrium framework. Furthermore, Helpman, Melitz and Rubinstein (2008) generalized the Anderson and van Wincoop equation by accounting for firm heterogeneity, fixed trade costs, and asymmetric trade flows.

The *traditional gravity model* is:

$$FDI_{ij} = AY_iY_j/D_{ij}$$

Where:

FDI_{ij} represents bilateral foreign direct investment between home country i and host country j ;

Y_i and Y_j are relevant economic sizes (GDP, GDP per capita, population);

D_{ij} represents the transportation costs as captured by distance between countries;

A is a constant.

For ease of reading, we rewrite the model by taking the log of both sides, and then augment this basic form with more characteristics of the host country, including various resource

endowments, human resources, institutional quality, and the voting pattern in UN General Assembly. The *augmented gravity model* then becomes:

$$\ln FDI_{ijt} = \beta_0 + \beta_1 \ln GDP_{jt} + \beta_2 \ln Population_{jt} + \beta_3 \ln ChinaGDP_t + \beta_4 \ln ChinaPopulation_t + \beta_5 Distance_j + \beta_6 Fuel_{jt} + \beta_7 Food_{jt} + \beta_8 Steel_{jt} + \beta_9 Skill_{jt} + \beta_{10} Corruption_{jt} + \beta_{11} Vote_{jt} + \beta_{12} Vote_{jt} * Corruption_{jt}$$

In the extended model, GDP and population of both the home countries and of China are used to capture the relative economic size; Fuel, Food, and Steel indicate the corresponding type of export as the percentage of the total merchandise export of the country, representing resource endowments of the host country; Skill is designed to measure the development of human resource in the host country; Corruption captures institutional quality; finally, Vote, the variable of interests to test the first hypothesis, depicts the similarity or coincidence of voting record between China and the host country in UN General Assembly. The interaction term between vote and corruption is to test the second hypothesis.

DATA SOURCES AND VARIABLE SPECIFICATIONS

The official data source for China's OFDI comes from the Annual Statistical Bulletin on China's Outward Direct Investment, which is compiled by the Chinese Ministry of Commerce (MOFCOM) and published with the State Administration of Foreign Exchange (SAFE) and the National Bureau of Statistics (NBS) annually. The MOFCOM statistics started to provide data on China's OFDI by destination country and region from 2003. Buckley et al (2007), Cheung and Qian (2008) have argued that the official dataset is potentially biased, as it only captures the investment approved by the Chinese government, which may deviate from the actual investment. For example, as Ivar Kolstad and Arne Wiig explained, non-approved flows may reflect private investment decisions based on different objectives than government approved flows, or public investment decisions reflecting motives a government may be reluctant to reveal, such as a drive for natural resources, or exploitation of host countries with poor institutions. However, from 2003 onward, Ministry of Commerce's FDI statistics have been recorded and compiled in accordance with OECD definitions and IMF guidelines. Hence, the discrepancies between MOFCOM statistics and actual value from 2003 should be much smaller than before.

We define variables as follows and discuss their constructions. The data consists of a panel of country-year observations over the period of 2003-2010. The data set includes 162 countries in total with 49 of them in Asia, 59 in Africa, 59 in Europe, 48 in Latin America, 4 in North America and 25 in Oceania. On the list of variable below, subscript j refers to the host country and subscript t to the specific year. All currency-related data is transformed to billions US dollars using the same base-year value for the purpose of consistency and normalization.

Table 1: Variable specifications & data sources

Variable	Specification	Expected Sign	Data Source
<i>FDI</i>	Annual China's outward FDI flows	n.a.	Statistical Bulletin of China's Outward Foreign Direct Investment
<i>GDP_{jt}</i>	Host country GDP	+	World Bank Indicators
<i>Population_{jt}</i>	Host country population	+	World Bank Indicators
<i>ChinaGDP_t</i>	China's GDP	+	World Bank Indicators
<i>ChinaPopulation_t</i>	China's population	+	World Bank Indicators
<i>Distance_j</i>	Distance between capital city of host country and China	-	Google Earth
<i>Fuel_{jt}</i>	Share of fuel/food/steel exports in total exports from host country <i>j</i> at the given year	+	Compiled from World Trade Organization database
<i>Food_{jt}</i>			
<i>Steel_{jt}</i>			
<i>Skill_{jt}</i>	Enrollment rate of secondary/territory education	+	United Nations Educational, Scientific and Cultural Organization
<i>Vote_{jt}</i>	Coincidence index between China and the given country	+	Coded from voting record of UN General Assembly resolutions
<i>Corruption_{jt}</i>	Corruption estimate (take the inverse value for easier interpretations; higher the value indicates more corruption)	+	Worldwide Governance Indicators

As discussed, datasets on resources (fuel, food, steel export of total merchandise export) universally employed by previous literature from World Development Indicators have substantial missing data if we need to run regression on all 162 countries. Through reviewing relevant literatures, the paper has just concluded that conflicting estimations may be potentially biased under different approaches of addressing the missing data problem. We do not adopt imputation strategy here because substituting values using other year's observation still strays from the real values. Besides, imputing missing data with previous-year-value would either create less

variance in control variables than desired to generate significant results, or lead to a sample with shorter time series which also produces more noises in estimates. A better strategy of addressing the problem in this case is to apply other proxies. We resort to another similar datasets of resource exports from the World Trade Organization database. Raw data such as the absolute value of export volumes including different merchandise categories were recorded, as well as the total merchandise export volume. The new resource dataset compiled from the WTO raw data is found to be as high as 90% correlated to the available data from WDI database, with much fewer missing values.

Another notable missing variable problem in earlier research pertains to *the share of labor force with secondary education*. We turned to another proxy to measure the skilled labor of a country - *school enrollment rate of secondary education* obtained from the UNESCO databases. Again, this new proxy greatly contracts the amount of missing values.

Table 2: Missing data proportion of problematic variables

Variable	Conventional data source	Missing data proportion	New data source	Missing data proportion
Fuel export (% of total merchandise export)	WDI	33.5%	WTO (compiled)	16.5%
Food export (% of total merchandise export)	WDI	31.7%	WTO (compiled)	16.1%
Metal export (% of total merchandise export)	WDI (ore & metal)	32.1%	WTO (iron and steel, compiled)	20.8%
Secondary education level	WDI (Labor force with secondary education)	81.6%	UNESCO (Enrollment rate of secondary education)	26.4%

It can be easily recognized that new data sources alleviate the missing data problem to a large extent, yet the missing data still accounts for more than 10% of each variable. The key issue in verifying data quality is to identify whether the data is missing randomly or systematically. If the data is missing for some systematic reason, the estimates of all other related variables would also be distorted. We therefore apply the t-test to check whether the sub-group means of the key variable are statistically different from each other; the groups are divided by the missing and non-missing control variables. The larger the t-statistics suggests the more statistically different between the mean of key independent variable categorized by missing/non-missing control variables. Ideally, small absolute value of t-statistics is expected. We conduct the test for our variables of interest – *UN vote coincidence*. If the t-statistics is lower than the critical value (e.g. 2.58 at 99% confidence level), it shows that mean of *Vote* within the missing group of certain control variable is not statistically different with the mean of *Vote* within the non-missing group of the *same* control variable, then the reason for missing value in that control variable would be irrelevant to the distribution of *Vote* and thus have no bias on the estimate of *Vote*.

Table 3: t-test of variable of interest – Vote by missing & non-missing groups of control variable

	t-test (New data source)		t-test (Conventional data source)	
Fuel export (% of total merchandise export)	Missing data	1.22	Missing data	3.70
	Non-missing	-0.63	Non-missing	-2.81
Food export (% of total merchandise export)	Missing data	0.54	Missing data	2.71
	Non-missing	-0.27	Non-missing	-2.02
Metal export (% of total merchandise export)	Missing data	-1.86	Missing data	2.98
	Non-missing	3.51	Non-missing	-2.23
Secondary education	Missing data	3.10	Missing data	6.54

level	Non-missing	-1.89	Non-missing	-12.31
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From above table, we can see that t-statistics of the new data source provide a much smaller t-statistics than those by the conventional WDI database. It means almost all the missing data from new source are unlikely to cause bias to the estimate of the variable of interest – *Vote* at 99% confidence level (critical value of t-statistics equals to 2.58), except for the non-missing group of metal export and missing group of secondary education level. However, the mere two out of 8 sub-groups are not going to affect the estimate to a large extent, and both groups are not causing substantial bias on their own since value 3.10 and 3.51 do not stray from 2.58 very much.

Finally, the missing proportion of other control variables is as few as less than 5% and the effective sample size is larger than 1250. Thus missing data is not a concern for these control variables.

EMPIRICAL EVIDENCE

Table 4: Results for determinants of Chinese OFDI

	OLS Regressions				Fixed Effects
	Gravity		Augmented Gravity		
	(1)	(2)	(3)	(4)	
<i>Variables of Interests – Political risks</i>					
Corruption	-0.99*** (0.15)	0.045 (0.07)	-1.14*** (0.17)	-1.35*** (0.19)	-1.35*** (0.19)
Vote Coincidence	1.24*** (0.22)		1.33*** (0.26)	1.18*** (0.31)	1.12*** (0.31)
Corruption * Vote Coincidence	1.25*** (0.18)		1.61*** (0.21)	1.46*** (0.23)	1.47*** (0.23)
<i>Market Access Variables</i>					
In GDP	0.20*** (0.04)	0.21*** (0.06)	0.17*** (0.06)	-0.11 (0.07)	-0.12* (0.07)
In Population	0.17*** (0.04)	0.22*** (0.06)	0.23*** (0.06)	0.54*** (0.08)	0.56*** (0.08)
In ChinaGDP	4.65* (2.79)	5.23* (3.03)	5.60* (2.97)	6.18** (3.10)	
In ChinaPopulation	-14.07 (55.50)	-31.37 (60.65)	-39.22 (59.42)	-45.35 (61.95)	
In Distance	-0.76*** (0.06)	-0.94*** (0.07)	-0.77*** (0.07)	-0.81*** (0.08)	-0.81*** (0.08)
<i>Natural Resource Variables</i>					
% of Fuel Export				1.00*** (0.19)	0.99*** (0.19)
% of Food Export				-0.18 (0.28)	-0.16 (0.28)
% of Iron & Steel Export				-4.26*** (0.95)	-4.39*** (0.95)
<i>Human Resource Variable</i>					
Secondary Enrollment Rate		-0.003 (0.002)	0.003 (0.002)	0.009*** (0.003)	0.009*** (0.003)
Year Fixed effects					Yes
Prob > Chi2	0.00	0.00	0.00	0.00	0.00
Adjusted R-square	0.29	0.29	0.30	0.34	0.34
N	3302	2495	2454	2145	2145

Note: Robust standard errors are in parentheses. A single asterisk denotes significance at the level 10% level. A double asterisk denotes significance at the 5% level. A triple asterisk denotes significance at the 1% level; estimates for variables - In China GDP and In China Population are automatically omitted in fixed effects regression.

Consistent magnitudes and signs throughout models on key variable of interest

Except for Model (2) that does not include key variable of interest, estimates of independent variables are showing generally consistent results in both magnitudes and signs throughout the different models. Percentage of food export of total merchandise export and China's population size are consistently highly insignificant. The significance of the association between China's GDP and its outbound investments is low. Results obtained from OLS and fixed effects regressions are close to each other.

Table 5: Results for determinants of Chinese OFDI with UN vote coincidence disaggregation

	OLS Regression	Fixed Effects
<i>Variables of Interests – Political risks</i>		
Corruption	-1.51*** (0.20)	-1.49*** (0.20)
Human Rights Vote	1.40*** (0.36)	1.29*** (0.37)
Security Vote	1.46*** (0.37)	1.38*** (0.37)
Middle East Vote	1.33*** (0.33)	1.25*** (0.33)
Other issues Vote	1.31*** (0.32)	1.24*** (0.32)
Corruption * Human Rights Vote	1.79*** (0.30)	1.81*** (0.30)
Corruption * Security Vote	1.78*** (0.29)	1.79*** (0.29)
Corruption * Middle East Vote	1.62*** (0.25)	1.62*** (0.25)
Corruption * Other issues Vote	1.53*** (0.25)	1.53*** (0.25)
<i>Market Access Variables</i>		
ln GDP	-0.10 (0.07)	-0.11* (0.07)
ln Population	0.53*** (0.08)	0.54*** (0.08)
ln ChinaGDP	6.16** (3.10)	
ln ChinaPopulation	-45.06 (62.0)	

In Distance	-0.80*** (0.08)	-0.80*** (0.08)
<i>Natural Resource Variables</i>		
% of Fuel Export	0.96*** (0.19)	0.96*** (0.19)
% of Food Export	-0.18 (0.28)	-0.17 (0.28)
% of Iron & Steel Export	-4.00*** (0.95)	-4.15*** (0.96)
<i>Human Resource Variable</i>		
Secondary Enrollment Rate	0.009*** (0.003)	0.010*** (0.003)
Year Fixed effects		Yes
Prob > Chi2	0.00	0.00
Adjusted R-square	0.34	0.34
N	2145	2145

Note: Robust standard errors are in parentheses. A single asterisk denotes significance at the level 10% level. A double asterisk denotes significance at the 5% level. A triple asterisk denotes significance at the 1% level.

China's GDP and population are omitted since values of both variables do not change across countries per year. Conclusions of significance and magnitude are similar to results in Table 4. From Table 6, it can be seen that estimates of both OLS and fixed effects models are very close to each other, re-confirming the reliability of our data quality as well as the model specifications. Fixed effect models are sensitive to invisible endogenous factors that are caused by using data of different units. It suggests that certain time-related characteristics controlled in fixed effects model could affect China's outward FDI into a country at the given year. However, omitting these factors will not affect the estimation of other independent variables in the OLS model. The specification of both models is valid to make conclusions.

MAIN FINDINGS

The results suggest that China's outbound FDI tend to go to countries that vote more consistently with China in UN General Assembly resolutions. Before we control the impacts of UN voting record, China's outward FDI seemed to go to more corrupted countries as previous peer literature has found. However, once the political alliances effects (represented by coincidence of UN vote record between the country and China) was added into the empirical model, it suggested that China's outward FDI tends to go to less corrupted countries, which goes opposite to prior result but stays in line with conventional foreign investment wisdoms. Furthermore, given the same voting record, the more corrupted the country is, the more China's outward FDI will flow to the host country. The interaction effects support our second hypothesis that China is using its outbound FDI to buy the UN General Assembly votes with more corrupt countries. The security and human rights votes carried a bit larger weights in attracting China's outward FDI, as compared to Middle East and other votes (economic development, energy, and environment) in UN General Assembly.

The state's role in China's outward FDI is also implied by the weak association between China's GDP and its outward FDI flow. The rise of the country's wealth does not necessarily lead to the increase in its outward foreign investments, which means the rapid growth in China's OFDI is more attributed to the push from government. Yet, the state-driven investments could also be market-targeted.

Going through the market access variables, it is found that only geographic distance and population size of a destination country significantly and consistently matter. Overall speaking, China's OFDI favors closely located destinations with larger population size, regardless of the

economic scale. It only gives some support to the classic market-access argument. Market-access motive could still work in explaining China's case without all statistics go align with theories since "made-in-China" products are relatively low-end and well-known for their competitive prices. It makes sense if Chinese investors value the market size in terms of population more than the purchasing power of a host economy.

Both natural and human resource-seeking motives are significantly confirmed. Comparing model (3) with (4) in Table 4, we find one more interesting story that without controlling resource seeking motive, China appears to invest in countries with higher GDP level. But the sign of GDP turns from highly significant positive to insignificant negative right after natural resource variable are added to the model. It shows that the real motive for China to go relatively large economies is not due to potential business opportunities the host country might have (suggested by classic market-access argument), but the country's willingness to trade its natural resources with China for rapid GDP growth (since resource export also contributes to a country's GDP). Omitting resource export variables in this model will cause significant bias and make spurious conclusion on the GDP of host country.

In sum, the result evinces significant state's role in directing China's outbound investment to countries that have more similar voting patterns with China in UN General Assembly. As hypothesized, more corrupt institutions with higher voting coincidence will receive doubling FDI "rewards" from China. However, factors driving China's outbound FDI still include economic returns. Controlled for political alliance effects, China's outward FDI favored to go to countries with larger population, lower transportation costs and less corruption.

POLICY IMPLICATIONS

It was stated by Chinese central government that “Going Out policy” was seeking to strengthen the competitiveness of domestic firms by equipping them with more international experiences. The commercial interests of the policy are evidenced to be effectively pursued since our results reveal the “market seeking” initiative in China’s outgoing FDI. Meanwhile, it unveils the fact that the government is also looking to expand the country’s international political influences through leveraging its massive foreign reserves without public claims. Our finding suggests that the policy is effective in realizing state’s political considerations combined with the economic interests. Finally, this result exhibits rigorous support for the theory of economic diplomacy that the new type of diplomacy no longer fully relies on political considerations, but also takes country’s economic benefits into account, as China’s outward FDI tried to balance both economic and political interests.

FURTHER RESEARCH

This paper explores the determinants of China’s outward FDI behaviors from the international political perspective by looking at UN General Assembly vote records. There are limitations in using the UN data because issues like human rights, security, and Middle East are overwhelmingly more important than others in UN voting. We cannot measure impacts of the state-oriented international economic cooperation (for example, regional economic treaties) on affecting FDI flows from using the UN data.

The model can be further developed by including variables (like host country’s regime type, political ideology, public deficit, infrastructure development level, etc.) to probe factors that motivated the host countries to be China’s political ally in UN in exchange for China’s outbound

FDI.

Finally, since UN voting data is used a lot in explaining the incentives of developed countries in giving foreign aid. It will be interesting to further confirm that whether China's using outward FDI as one substitute of its foreign aid. If yes, will state-oriented FDI be more economically effective in helping developing countries than foreign aid?

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