

**THE EFFECTS OF CHINA'S OFDI RELATED POLICIES ON
CHINA'S OFDI**

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Abstract

China's Outward Foreign Direct Investment (OFDI) flows reached 183 billion USD in 2016 (UNCTAD, 2017), causing China to become the second largest source of OFDI. China's OFDI has been growing quickly in recent years, boosted by policies such as the Open Door policy, the Go Global policy and the One Belt One Road policy.

The literature on the determinants of OFDI is extensive, however, only a small part of it has examined the role of policies using quantitative methodologies. We believe that in the case of China the role of the central government, and thereby of its policies, are likely to have had some – if not great – effects on Chinese OFDI. Besides, throughout China's economic reform in the past 40 years, policies have always been important tools to steer the domestic economy.

To capture the effects of policies, we created policies indices for China's OFDI at the national level. By adopting an econometric methodology with national level and provincial level secondary data, we found that regulatory policies, service policies and the attitude of government did have significant effects on China's OFDI. In addition, policies and the development of the economy had joint effects on China's OFDI. To our knowledge, this is the first time that China's government policies toward OFDI are examined in a quantitative analysis.

To my parents

致我敬爱的父母

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List of abbreviations

2SLS: Two-Stage Least Squares;

ACFIC: All-China Federation of Industry and Commerce

AMNE: Advanced Market Multinational Enterprise;

AQSIQ: General Administration of Quality Supervision, Inspection and Quarantine;

CBRC: China Banking Regulatory Commission;

CCCPC: Central Committee of the Communist Party of China;

CECIC: China Export and Credit Insurance Corporation;

CGIT: China Global Investment Tracker;

CIRC: China Insurance Regulatory Commission

CMNE: Chinese Multinational Enterprises;

CNOOC: China National Offshore Oil Corporation;

CSA: Country Specific Advantage;

CSRC: China Securities Regulatory Commission;

EBIC: Export-Import Bank of China;

EMNE: Emerging Market Multinational Enterprise;

FDI: Foreign Direct Investment;

FSA: Firm Specific Advantage;

GAS: General Administration of Customs;

GASU: General Administration of Safety Supervision.

GDP: Gross Domestic Product;

GDPPC: GDP Per Capita;

IDP: Investment Development Path theory;

IT: Institutional Theory;

JV: Joint Venture;

LLL: Linkage-Leverage-Learning theory;

MEP: Ministry of Ecology and Environment;

MFA: Ministry of Foreign Affairs;

MIIT: Ministry of Industry and Information Technology;

MOC: Ministry of Commerce;

MOF: Ministry of Finance;

MOFTEC: Ministry of Foreign Trade and Economic Cooperation;

MOHURD: Ministry of Housing and Urban-Rural Development;

MPS: Ministry of Public Security;

NBS: National Bureau of Statistics;

NCRC: National Development and Reform Commission;

NPFPC: National Population and Family Planning Commission;

OEM: Original Equipment Manufacturer;

OFDI: Outward Foreign Direct Investment;

OLI: Ownership, Location and Internalization paradigm;

OLS: Ordinary Least Square;

PBC: People's Bank of China;

PC: Personal Computer;

RBV: Resource Based View;

SAFE: State Administration of Foreign Exchange;

SAIC: State Administration for Industry and Commerce;

SAT: State Administration of Taxation;

SASAC: State-owned Assets Supervision and Administration Commission of the State Council;

SAWS: State Administration of Work Safety;

SBCOFDI: Statistical Bulletin of China's Outward Foreign Direct Investment;

SC: State Council;

SETC: State Economic and Trade Commission;

SME: Small and Medium Enterprise;

SOE: State Owned Enterprises;

WTO: World Trade Organization.

CHAPTER 1

INTRODUCTION

In the last two decades, scholars have been studying Foreign Direct Investment (FDI) from emerging economies because multinational enterprises from emerging economies (so called emerging markets multinational enterprises, or EMNEs) have been ‘taking off’. FDI was thought as an expansion of multinational enterprises from advanced economies (so called advanced market multinational enterprises, AMNEs) with firms either setting up new activities abroad or acquiring/merging with firms in host countries. International theories have unpacked firms’ benefits from internationalisation in terms of accessing international markets, overcoming trade barriers, accessing cheap labour in host countries and saving on transport costs. Mainstream FDI theories have been created to explain the activities of AMNEs, which had dominated between the 1960s to about the early 2000s. Recently, however, EMNEs have started to play a very important role that remains still largely unexplained. The special characteristics of EMNEs have kicked off a debate on whether we need a new theory to explain FDI from emerging markets.

Among studies on EMNEs, the focus is on China’s EMNEs (Paul and Benito, 2018). China, as the largest emerging market and the second largest source of outward FDI (OFDI) (UNCTAD, 2017) in the world, is ideal for studying this topic. By and large, studies on China’s OFDI fall into two categories: what determines China’s OFDI and what are the effects of China’s OFDI on host and home economies? At first, scholars tried to explain China’s OFDI by using mainstream FDI theories such as the Investment Development Path (IDP) theory (Liu et al., 2005; Gao et al., 2013), the Resource Based View (RBV) (Cui and Jiang, 2010; Lu et al., 2011; Deng, 2012; Liang et al., 2012) and Institutional Theory (IT)

(Luo et al, 2010; Wang et al., 2012), as some scholars believed that China's OFDI could be explained by mainstream FDI theories and new theories were not needed. Other scholars, though, started to think that new theories were needed or that at least mainstream FDI theories had to be extended.

Therefore, new theories such as Linkage, Learning and Leverage (LLL) (Mathew, 2006) and the Springboard Perspective (Luo, 2007) were brought up. With a more and more comprehensive framework of theories, we can see that each theory has its own advantages and disadvantages. Increasingly, scholars believe that China's OFDI can and should be explained by several theories combined; for example, RBV and IT theories are often used to study China's OFDI. We agree that China's OFDI – as well as its other economic activities – should be explained by considering both economic and non-economic factors such as the institutional environment and policies, because the Chinese government always plays an important role in the economy (Luo, 2010). Take as an example a recent policy published by the National Development and Reform Commission (NDRC) and four other ministries and departments jointly in 2017 on '*Circular on further guiding and standardizing the Direction of overseas Investment*' to prevent unhealthy investment. The effects of this policy can already be observed; total OFDI dropped sharply afterwards as early as 2017 (UNCTAD, 2017). It was the first time since the early 2000s that China's OFDI decreased. Using mainstream FDI theories, this drop could not have been explained with only economic variables. Knowing that, scholars have started to study how the government's policies can affect China's OFDI, with discussions about the effects of policies on activities touched on in almost every paper. The effects of strategic and political policies are widely discussed, and in fact many scholars (Voss et al., 2008; Luo et al., 2010; Shen and Mantzopoulos, 2013) have divided the trend of China's OFDI development into stages drawing on the publication of such policies. The first strategic policy steering Chinese OFDI was the Open Door policy in the late 1970s, when

China started to allow state owned enterprises (SOEs) to invest abroad. Then, in 1992, Deng Xiaoping's Southern Journey, which was a landmark political event coinciding with Deng Xiaoping's trip to major cities in southern China where he gave speeches to clear doubts about whether further opening up would have occurred and promoted China's OFDI. The Go Global policy in the early 2000s contributed to the even faster growth of China's OFDI. In 2013, the One Belt One Road Policy (or the Belt Road Initiative) was launched, which contributed to re-directing the quantity and the structure of China's OFDI.

In order to take strategic policies into consideration in their econometric models, scholars used year dummies. Considering how many scholars have stressed the importance of such important strategic policies, it is quite surprising that the dummies were found to be insignificant. Strategic policies are released over a very long period of time, probably say years: in fact, before the formal documents are published, informal documents are circulated, and even when the formal documents are published, the policy might not have been kicked off immediately because it needs to be followed by more specific and implementing policies. In contrast, in other cases, the central government may start publishing specific policies before the formal documents for the strategic policies are actually published. In other words, even for strategic policies, the publication of the formal documents might not mean much without specific policies also being published, so that it is unclear when strategic policies start having a significant effect on OFDI. Therefore, just using strategic policy dummies in a model to control for the effects of such policies might not be appropriate.

Scholars started studying specific policies (Luo, 2010; Voss et al., 2008) and the mechanisms of how policies work to address this gap. Thanks to these studies, we now have a clearer picture of the impact of policies on China's OFDI, although mostly relying on qualitative methodologies.

So far, however, scholars have not succeeded in studying the effects of specific policies using quantitative methods, which would deliver more robust findings. Scholars have used dummies to represent strategic policies and added them into their models, however, the problems are that either the way strategic policies were used was doubted or the results generated by the models were not as expected. In terms of specific policies, as far as we know, no quantitative work has been done. Sometimes, specific policies were also able to change the volume of OFDI dramatically, such as in the example above.

Using a robust quantitative way of studying the effect of policies on China's OFDI will push the research in this area a step forward. Our research will fill this gap and push the debate on the determinants of Chinese OFDI by means of a more rigorous methodology. The meaningfulness of this is twofold. Firstly, compared to qualitative methods, quantitative methods are able to show the effect of policies more clearly. By using empirical data, we can test the effects of policies, and the number and their signs of coefficients can directly show whether the effects are positive or negative and can demonstrate the magnitude of the effects. Secondly, using quantitative methods to study the effects of different types of policies are more rigorous. So far, only strategic dummies had been added into regression models, and specific policies have not been used in them. These methods are too simplistic and inadequate to capture policy changes, so it therefore is important to quantify specific policies.

In this research, we constructed a series of new and more reliable indices that capture policies, and we see this as one of our main contributions. Our research fills the gaps of existing literature on EMNEs' OFDI, especially on China's OFDI from the perspective of IDP theory (Dunning, 1981) and Institutional Theory (North, 1990; Scott, 1995).

China has engaged in OFDI since 1981. Therefore, we studied China's OFDI related policies published from 1981 to 2015 and we translated every OFDI related policy into specific indices with a three-step-methodology we designed. Firstly, we used a keyword

search and a thorough literature review to identify as many policies as possible. Secondly, we read the policies one by one and found that there were some noise policies which were less directly related to OFDI, and as a result we removed such noise policies layer by layer. Thirdly, we carefully coded these policies according to the functions of each policy. To do so we had to resolve a number of challenges. We managed to create a framework of China's OFDI related policies, divide all direct policies into four types (regulatory policies, services policies, supervisory policies and promotional policies), and code them with different methods. Moreover, the total number of policies published each year was used as a proxy to capture the attitude of China's government towards OFDI. As a result, we identified five different indices. Drawing on Liu et al. (2005), we designed a model that contained both economic and non-economic variables (policies indices). We found that the IDP theory was still valid for China's OFDI and we found also that China's OFDI was positively related to IFDI. In terms of policies, releasing restrictions to investing abroad did encourage OFDI. Service policies helped firms access more information and this again impacted on OFDI. Finally, government's attitudes were also important as firms' investments substantially require governmental approval.

To make our conclusions more robust, we used both national and sub-national data to study the effects of Chinese government's policies on China's OFDI. Geographically, China is a large territory and treating China as a single unit could cause problems because of the unbalanced development across areas. Therefore, we studied the effects of policies at the province level. We analysed the panel data of 31 provinces in mainland China from 2003 to 2014. We chose two regional policies and two regulatory policies to test the effects of those policies in the different provinces. We found that regional policies did not have any significant effect on OFDI because they are strategic policies and cannot be captured directly in the model. In terms of regulatory policies, policies that relax restrictions only had effects in high

income provinces which were also more economically advanced. Therefore, the results supported our hypothesis that economic power and policies had a joint effect on China's OFDI.

The thesis is structured as follows: Chapter 2 is the literature review on FDI theories and on China's OFDI. From the literature review, it has emerged that China's OFDI is featured as resource seeking, market seeking and asset seeking. We analyse the patterns of China's OFDI in Chapter 3 from these perspectives. Chapter 4 looks at the determinants of China's OFDI at the national level and Chapter 5 at the province level. Finally, Chapter 6 presents some concluding remarks.

CHAPTER 2

LITERATURE REVIEW ON INTERNATIONALISATION OF EMERGING MARKET MULTINATIONAL ENTERPRISES AND CHINA'S FOREIGN DIRECT INVESTMENT

2.1 Introduction

China has become the second largest source of outward foreign direct investment (OFDI) (UNCTAD, Ministry of Commerce (MOC), 2016) as of 2015. China's OFDI has caught the attention of scholars because of its rapid growth, especially since 2000 when the Go Global strategic policy was launched and added in the tenth Five-Year plan in 2001. In 2013, the One Belt One Road policy was introduced. China's OFDI has the potential to grow even faster because policies have been pushing it and policies have been always one of the most important determinants of China's OFDI in the past few decades (Luo, 2010). With the growth of China's OFDI activities, data availability has increased and have made studies on this topic more realistic.

The rapid growth of OFDI from emerging market multinational enterprises (EMNEs) also has drawn scholars' attention. Scholars are studying the reasons for EMNEs' rapid expansion and the motivations of OFDI together with the effects on the host economies.

A number of theories have been brought up: the Resource Based View and its extension Linkage-Leverage-Learning theory (LLL); the Investment Development Path (IDP) Theory; Institutional Theory (IT); and Industry-Based Views (IBV). Nowadays, scholars tend to study the determinants of OFDI by combining different theories. In this thesis, we aim to study policies as a type of determinant of OFDI. Therefore, a review of the research on the different theories of OFDI are useful.

In this chapter, we review FDI theories, including why we should study the determinants of OFDI from EMNEs including China, and what the determinants of China's OFDI are from different perspectives.

2.2 Why do the determinants matter?

According to OECD (2008), the definition of FDI is:

“Foreign direct investment (FDI) is a category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor.” (p. 14)

From this definition, we can see that one of the motivations for carrying out FDI is to establish a lasting interest in foreign countries rather than a temporary one. It can be regarded as an international business strategy that firms would choose when they are at an advanced level of internationalisation.

Different determinants of FDI could have different impacts. Inward foreign direct investment (IFDI) from foreign countries could bring benefit to host countries, including both direct and indirect effects. The direct effects of FDI are straightforward: FDI can bring capital, technology and know-how (Hanousek et al., 2011). The stable capital inflow would enlarge the tax base and increase the efficiency of resource allocation; other indirect effects include possible FDI. Some scholars have studied whether the presence of FDI could increase the productivity of domestic firms (Eapen, 2013; Zhang et al., 2010; De Propris and Driffield, 2006; Meyer and Sinani, 2009; Javorcik, 2004; Barrios et al., 2011; Audretsch and Feldman, 1996; Fu, 2012; Jabbour and Mucchielli, 2007). The relationship between FDI and productivity has been found to be positive. FDI increases productivity by introducing advanced technologies, market techniques and management skills (Javorcik, 2004). Benefits

could also include productivity gains, technology transfers, the introduction of new processes, managerial skills, information about the domestic market, employee training, international production networks, as well as access to markets, a better regulatory environment and lower business costs (Alfaro et al., 2004). Other studies have found a positive effect on the environmental stewardship of host country firms (Zeng and Eastin, 2012) and technological and managerial knowledge transfer (Fu, 2012). Zhang et al. (2010) concluded that there were four major mechanisms generating benefits for the host economy: these are demonstration effects (Fu et al., 2012; Meyer and Sinani, 2009), building linkages with domestic firms effects (Javorcik, 2004; Barrios et al., 2011), employee turnover effects (Fu, 2012) and competition effects (Borensztein et al., 1998; Meyer and Sinani, 2009; Fu et al., 2012).

However, concerns were brought up when considering FDI from emerging economies to advanced economies. This kind of FDI was believed to bring up problems such as immature regulations, corruptions and have negative effects on environment (Zeng and Eastin, 2012). Moreover, firms from emerging economies were considered too small and weak and faced barriers to entry in advanced countries (Barnard, 2008).

Scholars have believed that whether the FDI brings benefits or problems depends on the motivations and determinants of OFDI. Driffield and Love (2007), who took the UK as an example, found that FDI spillover always came from countries that had higher R&D levels. They divided FDI into four types according to different motivations: type 1 is technology sourcing/location advantage; type 2 is technology sourcing; type 3 is efficiency seeking; and type 4 is ownership advantage. They found that only type 3 and type 4 can produce positive spillover effects. According to their criteria, FDI carried out by firms from emerging economies can be considered as type 2 (technology sourcing) because the labour cost in home countries tends to be lower than that in host countries and R&D intensity is higher in host countries than in home countries (criteria of type 2 FDI, Driffield and Love (2007)).

According to this study, this type of FDI would not have a positive impact on host economies. In addition to this, the type of ownership of foreign firms who invest in host economies also determines whether the FDI would bring benefits or problems. In terms of China's OFDI, state-owned firms were the dominant actor and they are directly controlled by the Chinese government (Cui and Jiang, 2012; Wang et al., 2012; Kolstad and Wiig, 2012) and more likely to build a joint venture with local firms in order to carry out resource seeking OFDI. Considering this motivation, positive spillover effects are unlikely to occur.

Therefore, studying the determinants of OFDI could help us understand the effects of FDI on host economies.

2.3 Internationalisation of EMNEs

The rapid internationalisation of EMNEs has drawn scholars' attention over the last two decades. Some scholars believe that conventional theories, such as the Ownership, Location and Internalisation paradigm (OLI) (Dunning, 1980), could be used to explain EMNEs internationalisation, while others believed new theories were needed to explain it. At the beginning of the 2000s, new theories were brought up. The new theories included Linkage-Leverage-Learning (LLL) (Mathews, 2006) and the Springboard Perspective (Luo and Tung, 2007). Some scholars would rather call these theories as extensions of the mainstream FDI theories such as OLI and Resource-Based View (RBV) rather than completely new theories. To understand whether such theories are indeed different than mainstream FDI theories, it is worth looking at how EMNEs have indeed pursued internationalisation, with advantages and disadvantages, as well as possible differences between EMNEs and advanced economy multinational enterprises (AMNE).

2.3.1 Ways to be international

According to Child and Rodrigues (2005), there are three modes of internationalisation of EMNEs. They used case studies to study how EMNEs from China have internationalised. The first mode is through original equipment manufacturers (OEM) and joint ventures (JV) with foreign firms; they referred to this model as inward internationalisation and used the example of Galanz. Galanz is a white goods manufacturing enterprise. It firstly made white goods for famous foreign brands. Then, with the accumulation of the reputation of their brand, they started to use their own brand. Child and Rodrigues (2005) said that this kind of internationalisation was a good way to acquire advanced technologies from foreign firms at low cost. But the foreign firm's dominance could be a risk for local firms to go further on the road of internationalisation.

The second mode is acquisition. The large number of acquisitions that took place in East Asia in the early 2000s characterised the fast internationalisation of EMNEs (Mathews, 2006). Child and Rodrigues (2005) used the example of Lenovo – the largest personal computer (PC) manufacturing enterprise in China – acquiring the PC production line (ThinkPad) from IBM. This acquisition helped Lenovo acquire one of the most famous PC brands in a very short time. However, acquisitions may have problems: for instance, customers may lose confidence in the brand because the acquirer is from a developing country. Fast internationalisation may also cause management problems due to limited experience and less knowledge about the local market (liabilities of foreignness) (Zaheer, 1995). EMNEs such as Lenovo may face other difficulties such as overpaid risk and failing to select the correct brand.

The third mode of internationalisation for EMNEs is a greenfield investment. This is the strongest way to internationalise. A greenfield investment helps firms to be more independent and to strengthen their own brand. Child and Rodrigues (2005) used the example

of Haier, which is a white good enterprise. However, greenfield investments can take longer and be riskier. They found that this mode was uncommon for Chinese EMNEs.

Scholars have tried to explain Chinese and, more generally, EMNEs' internationalisation by using existing theories, such as RBV (Cui and Jiang, 2010; Lu et al., 2011; Deng, 2012; Liang et al., 2012) and the OLI paradigm (Buckley et al, 2007; Kolstad and Wiig, 2012), developed from the studies of AMNEs.

Two of the three modes (ibid) can be explained by these conventional theories. OLI can be used to explain FDI patterns. The first mode of internationalisation, which is OEM and JV, can be regarded as firms exploiting an ownership advantage. The advantage that EMNEs had – which is different from AMNEs – was lower labour costs. EMNEs exploited this advantage to participate in international business and it was less risky. Firms used the lower cost to participate in international business with foreign firms in a least risky way. The third mode of internationalisation, which is greenfield investment, was the traditional way of internationalisation, which was also used by AMNEs. It was a way of exploiting ownership, internalization and location advantages. However, the second mode, which is via acquisitions, cannot be fully explained by conventional theories. As implied by Child and Rodrigues (2005), internationalisation via acquisition can be explained by conventional IB theories but was uncommon for China. In China, most cases of acquisition as the mode of internationalization cannot be explained by conventional IB theories. The conventional IB theories such as OLI focused on firm specific advantages (FSA). AMNEs could explore country specific advantages (CSA) with FSA, but EMNEs do not have FSA and do not have any ability to explore CSA in advanced host countries. Hence, according to conventional theory, EMNEs usually faced huge risks of losing profits. Some scholars believed that EMNEs were relatively weak and would not survive. Even if there was a temporary success, they believed that it was not due to good business operations and would not be sustainable

once an EMNE went into the global market without the help of the home country government. EMNEs had disadvantages in lots of aspects such as weak competitiveness, less FSA, liability of foreignness, regulation voids, low R&D levels, low brand reputation and lack of management skills.

Despite this, Child and Rodrigues (2005) thought that EMNEs used different internationalisation modes from AMNEs, and they also believed that the situation was in evolution. EMNEs in China in the 1990s faced many challenges such as strict regulations from government, short sighted management and less international business experience. In the 2000s, they believed that, although state-owned firm purely pursued natural resources, which cannot be explained by normal business theory, Chinese EMNEs in particular were becoming more experienced. EMNEs regarded internationalisation as an important part of their long-term growth strategy. This perspective also came from the theories of conventional IB theories. To see whether Chinese Multinational Enterprises (CMNEs) were really stronger, we should have a look at the special characteristics of EMNEs.

2.3.2 Characteristics of EMNEs' internationalisation

Most work on EMNEs has focused on CMNEs' internationalisation (Paul and Benito, 2018). Recently, Ramamurti and Hillemann (2018) analysed the characteristics of CMNEs and whether these characteristics are true for other EMNEs. They assert that CMNEs have four characteristics. Firstly, the development of CMNEs was still in the early stages despite the rapid growth in the last few decades. EMNEs at this stage depended heavily on country specific advantages (CSA). CMNEs could not succeed without successful exploitation of home country advantages. Foreign firms that invested in China could not perform as well as CMNEs regarding exploiting China's CSA. Bhaumik, Driffield, and Zhou (2016) did empirical tests using firm level data. Their results showed that the advantage of EMNEs'

internationalisation was CSA rather than FSA. Moreover, CSAs were better exploited by EMNEs compared to local firms who were not internationalised. They also said that, in terms of the CSA of an emerging market, AMNEs from other advanced economies could not exploit such CSA as well as EMNEs from this emerging market. Hence, CSA became exclusive to EMNEs just as FSA became exclusive to AMNEs when they first engaged in OFDI.

The second characteristic was that the environment of global investment had changed. EMNEs face less barriers compared to the situation in 1980s. This advantage contributed to the rapid internationalisation of EMNEs. According to Mathews (2006), the friendlier investment environment made it easier for firms to be linked to each other. Cardoza and Fornes (2011) used data from firms in underdeveloped parts of China to study whether barriers (environment) were important for EMNEs' internationalisation. Their results showed that internal and external barriers were important factors that discouraged CMNEs' internationalisation. Their results indicated that a better environment was an advantage that EMNEs had to expand their business, especially considering that the firms were from less developed areas. EMNEs started to overcome these barriers even before the accumulation of FSA had been done.

The third characteristic was the support from government. Government could be helpful in different ways that we can summarise into a direct way and an indirect way. The direct way related to the fact that the government internationalised through its state-owned enterprises (SOE). Indirect ways, however, tended to vary. Firstly, government was able to produce a supportive and friendly growth environment, the so called macro-level effect of government. As mentioned above in connection with the first characteristic, early stage EMNEs had higher dependence on CSA. The support from government at the macro-level provided better CSAs. There were also micro-level effects of government. Government was clear about which industries had a priority to develop and therefore helped firms in these

industries develop. Moreover, as pointed out by Ramamurti and Hillemann (2018), government also helped raise national champions and support them to invest abroad. Deng (2013) also believed that China's OFDI provided a good opportunity to study the role of state and government on firms' internationalisation. There are empirical studies that studied whether government played an important role in supporting OFDI. For instance, Lu, et al. (2011) used survey data and concluded that government did support OFDI, especially asset seeking and market seeking OFDI. Wang et al. (2012) also found the evidence to support the importance of government by using firm level data and a random effects model.

The fourth characteristic of CMNEs' internationalisation was latecomer advantages, or leapfrogging advantages. (Ramamurti and Hilleman, 2018; Child and Rodrigues, 2005; Deng, 2013). This advantage can be leveraged in mature, declining and sunrise industries. In mature and declining industries, CMNEs were able to adopt the latest technology while AMNEs were stuck in old technologies. AMNEs could not do it easily because they had invested heavily in old technologies and were therefore locked in. In sunrise industries such as the smartphone and renewable energy industries, CMNEs had four types of advantages: 1) they had not invested in the industries that were going to be replaced by the new industry; 2) customers could easily accept the new technology before getting used to the old technology; 3) the regulatory framework was not locked in as well; and 4) with a large and fast growing economy the government encouraged firms to use more advanced technologies. Li, Liu, Yuan and Yu (2017) noted that latecomer advantages can also be associated with EMNEs' asset seeking strategies to enhance their competitiveness.

After comparing CMNEs and EMNEs, Ramamurti and Hillemann (2018) concluded that, except for the role of government, CMNEs seemed to behave similarly to other EMNEs, so more work looking at the role of China's government was needed.

2.4 Determinants of China's OFDI

In this section, we present a discussion of the recent research on the determinants of China's OFDI. This will help us understand the current literature on OFDI, which has developed from OFDI from advanced economies and extended to explain OFDI from emerging economies, including China.

At the early stage of the studies, scholars tried to use the main economic and business theories, such as Dunning's (1980) eclectic theory (OLI) and the Investment Development Path (IDP) theory to explain the determinants of China's OFDI. Wei et al. (2014) summarised the literature of China's OFDI by the topics, theory foundations and research methods. The topics included determinants, patterns and entries, etc. In terms of the determinants, the theory foundations included IDP, RBV, and Institutional Theory (IT).

Recently, the rapid growth of OFDI from emerging countries has drawn scholars' attention. Scholars have found that these mainstream FDI theories needed extensions (Lu et al., 2014). On one hand, the specificity of China's OFDI made mainstream international business theories less convincing. Some scholars such as Liu et al. (2005) and Buckley et al. (2007) started to take the uniqueness of China into consideration when they studied the determinants of China's OFDI. On the other hand, other scholars tried to explain the determinants by combining more than one theory. Meanwhile, another stream of scholars tried to expand current theories by including other aspects such as political perspective and psychic distance. More and more scholars realized that OFDI, especially China's OFDI, was not only driven by economic factors but also driven by other aspects such as policies.

Scholars used different theories and different variables to study the determinants of China's OFDI. Determinants can be both from host countries or home countries. The studies can be country level, province level, sector level or firm level. Research methods included case studies, qualitative or quantitative research. The determinants considered were both

economic factors (Liu, 2005, Goldstein and Pusterla, 2010; Huang, and Chi, 2014; Zhang and Daly, 2011) and non-economic factors such as psychic distance (Blomkvist and Drogendijk, 2013; Drogendijk and Martin, 2015).

Buckley et al. (2007) is probably the most cited paper about the determinants of China's OFDI. They studied the determinants of China's OFDI before the Go Global policy at the country level. They included 14 independent variables from both host countries and China, including aspects such as economics, culture, politics and geography. They found that all 14 variables could explain China's OFDI. They also took three special characteristics of China into consideration - capital market imperfection, ownership advantages of MNEs and institutional factors. They found that both the mainstream FDI theories and the special characteristics of China contributed to the growth of China's OFDI. In terms of mainstream FDI theories, the significant relationship between Gross Domestic Product (GDP) in host countries and China's OFDI indicated that China's OFDI was mainly market seeking. The most surprising finding was that China's OFDI was attracted to high political risk countries.

In the following sections, we review studies on China's OFDI according to two FDI theories: IDI theory and Institutional Theory.

2.4.1 Investment Development Path

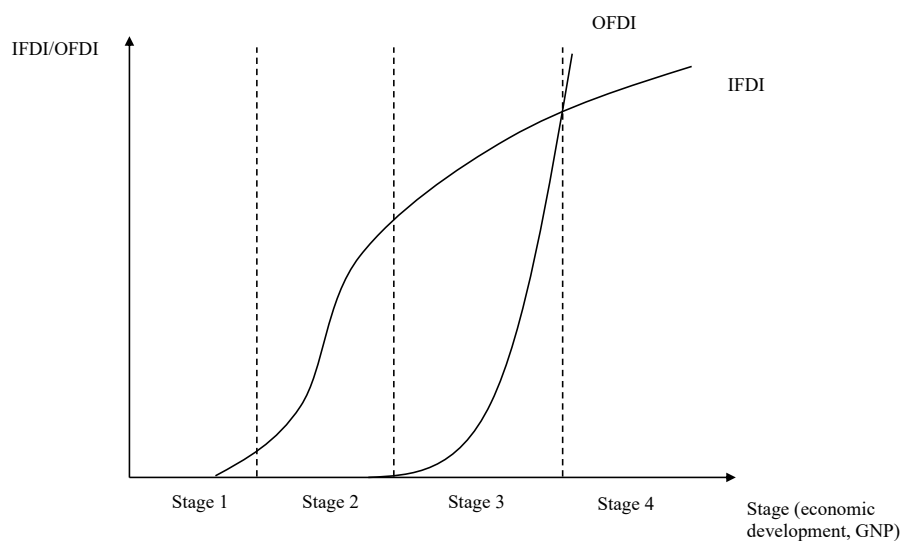
John Harry Dunning, who is widely called the father of the field of international business, extensively contributed to this field. Dunning (1981) created the IDP theory, which describes a country's position of FDI (both IFDI and OFDI). He found that the position of FDI depended on its economic development. He used Gross National Product (GNP) as a measure of economic development and divided the development path into four stages and found empirical evidence to support this theory. Different countries would fall into different stages. The reasons can be explained by the eclectic theory (Dunning, 1980). According to

Dunning's (1980) eclectic theory (which also is called the OLI paradigm), OFDI is used by multinational firms to look for opportunities to exploit location advantages in host economies based on firms' ownership advantages and internalisation advantages. Firms need all three advantages to engage in OFDI. The first advantage is ownership advantage, such as intangible assets, but only possessing this resource without the ability to use it does not allow firms to invest in a foreign country. If they do not have the other two advantages, they can exploit ownership advantages by selling their valuable assets to firms in other countries. To benefit from internationalisation, firms should be able to internalise their ownership advantage, which means they should know how to use their intangible assets and the access to market (an internalisation advantage). One way to exploit an internalisation advantage is through exports, i.e. producing goods domestically to be sold in foreign markets. Although exporting to foreign markets will increase costs such as transport costs and trade conflicts, it is initially less risky and requires less of a commitment than OFDI; indeed, investing in a foreign country would need a large amount of fixed costs and is seen as part of a long term strategy. Furthermore, exporting to foreign countries would help firms accumulate experience and knowledge when doing business in foreign markets. The experience and knowledge of the host economy would be important when firms start carrying out OFDI. Finally, the location advantage suggests that firms carefully chose where to invest abroad depending on, for instance, cheap labour or access to foreign markets. Location advantages should be able to compensate for the risk of investing in foreign countries.

According to IDP theory (Dunning, 1981), countries in different stages possessed different advantages. In the first stage, there is not any IFDI or OFDI. In this stage, domestic firms do not have any ownership advantages, which are a pre-condition of OFDI based on Dunning's (1980) eclectic theory. Therefore, domestic firms would not invest in other countries. Meanwhile, due to small domestic markets, incomplete legal frameworks or other

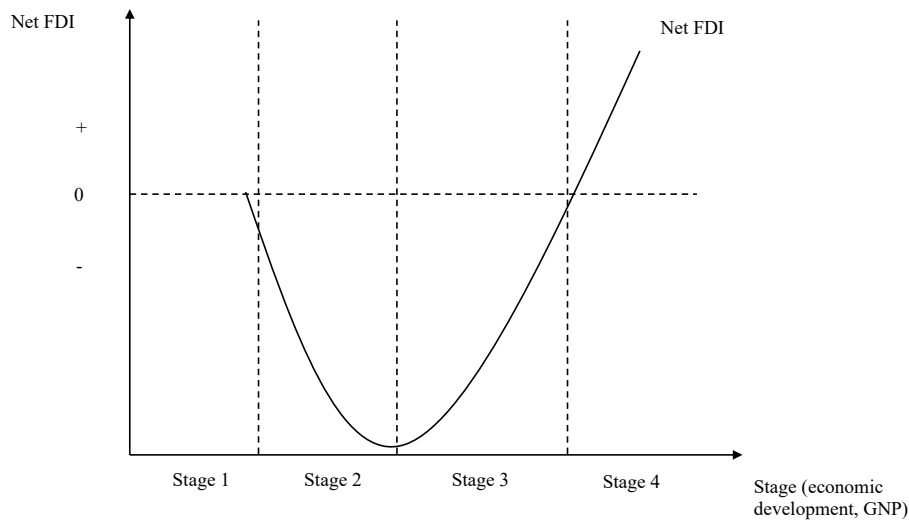
disadvantages, foreign firms cannot exploit location advantages in these countries. Therefore, there is not any IFDI. In the second stage, IFDI starts to increase because of an increasing domestic market or a better investment environment. However, the volume of OFDI could still be ignored because of a lack of ownership advantages. In the third stage, in which the development of an economy continues to increase, OFDI starts to increase due to domestic firms gaining ownership advantages and thus more able to internalise their ownership advantages, i.e. be more competitive. OFDI increases faster than IFDI, hence, negative net FDI starts to increase to zero. In the fourth stage, compared to stage three, the ownership advantages of domestic firms become stronger and stronger and OFDI increases dramatically; the net investment is positive and increasing. The dynamic progress of OFDI, IFDI and net FDI can be summarized by the diagrams below.

Diagram 2-1 Relationship between Economic Development and OFDI/IFDI



(Dunning, 1981)

Diagram 2-2 Relationship between Economic Development and Net FDI



(Dunning, 1981)

In terms of China, the recent fact is, according to a 2014 UNCTAD database, that China's IFDI flow was USD 128500 million, and the OFDI flow was USD 123120 million. Although OFDI was still less than IFDI, the trends were converging, and the speed of convergence was much quicker than IDP theory would have predicted, and that China's OFDI path soon would reach stage four.

The IDP theory gives us an overview on the overall trend of how OFDI develops. Scholars were trying to find whether this theory can be used to explain the determinants of China's OFDI. Based on IDP, scholars focused on the macro-determinants such as GDP, export and IFDI.

Firstly, scholars examined the relationship between China's OFDI and GDP. Scholars tried to apply this theory to China's OFDI by using econometric models. The results were usually positive and significant. Liu et al. (2005) was an early work that applied econometric models to examine the validity of IDP by using China's country level data from China's statistical yearbook. They assumed that the special characteristics of Chinese development, such as the presence of large state own enterprises, the heterogeneous intra-country

development, the underdevelopment of capital market and labour immigration, might impact on the result of applying IDP to China. They used the Generalized Method of Moments (GMM) method to examine China's OFDI from 1979 to 2002, which just covered the beginning of the Go Global policy. They confirmed that the IDP theory was an appropriate theory to explain China's OFDI because their model, which is based on IDP theory, can explain most of China's OFDI. But they also said that China's OFDI followed IDP theory only in part. Gao et al. (2013) used country level data from UNCTAD and China's Statistical Yearbook, and used OLS and GMM methods, to examine China's OFDI over a longer period (from 1979 to 2009). They also found evidence that economic growth was a determinant of China's OFDI. Other scholars also supported this theory when they analysed the OFDI from other emerging countries. Stoian (2013), using data from 20 Eastern and Central European countries, and Stoian and Mohr (2016), using data from 29 emerging countries from 1995 to 2001, both support this conclusion.

Apart from GDP, other macro-economic variables used to test Dunning's IDP theory have been exports. When scholars used exports to explain OFDI in the model by using IDP theory, some of them (Yao et al., 2016, for example) found a complementary relationship. Others (e.g., Gao et al., 2013) found that there was a substitution effect. For example, Sun and Shao (2017) believed that exports could promote OFDI via economic cooperation. However, Liu et al. (2005) found that the relationship between export and OFDI was ambiguous: a possible reason for this was that China's exports and China's OFDI were from different sectors. Exports would not provide experience or a platform for OFDI; OFDI was not the tool China's exporting firms used to exploit location advantages in host countries.

IFDI was used as a determinant in the models tested by scholars (Stoian, 2013; Liu et al., 2005; You, 2015; Stoian and Mohr, 2016; Dunning, 1981; Gao et al., 2013; Wang et al., 2012). IFDI could promote OFDI in two ways. Firstly, IFDI in emerging countries could

generate spillover effects. Local firms could improve their ability by acquiring technologies and management skills from foreign firms, hence improving their ownership advantages. According to Dunning's eclectic theory, this could promote firms to invest in other countries to exploit location advantages. Secondly, foreign firms in host countries would be more likely to invest in other countries by using their profits. This activity also, in turn, increased the OFDI of the original host countries.

Scholars would either use IFDI flows or stocks in their models to study the effects of IFDI on OFDI. Wang et al.(2012) used a different method. They used the foreign presence in a sector to represent the effects of IFDI. They found that IFDI had a negative relationship with OFDI, which was contradictory to IDP theory. They explained that IFDI would generate spillover effects which allowed firms in host countries to access technology and skills and which discouraged firms from investing in other countries to carry out asset-seeking OFDI.

Education can be also used to explain China's OFDI. Education can affect the level of OFDI in several ways. Firstly, education, sometimes called human capital, may improve the ownership advantages of firms, which encourages firm to carry out OFDI (Liu, et al, 2005; Wang et al., 2012). Gao et al. (2013) have different results when they studied the effects of knowledge development on China's OFDI. They said that capital accumulation was more important than knowledge development in the case of China because of the asset-seeking motivation. Education can also promote OFDI via human mobility. This is also related to how IFDI affects OFDI via spillover effects. Human capital in host countries also attracts IFDI, which in turn promotes OFDI.

Secondly, Blomkvist and Drogendkj (2013) used education as a measure of psychic distance. They believed that the larger the difference in education between host countries and home countries, the more difficult it was to communicate. Therefore, the education gap had a

negative relationship with OFDI. However, their empirical analysis did not support this hypothesis.

2.4.2 Institutional Theory

The second strand of theory about the determinants of OFDI is Institutional Theory (IT). Institutions, including formal and informal institutions, are rules of games (North, 1990; Scott, 1995). Institutions, including national or subnational, both in the home countries and host countries can play a very important role by promoting or hindering investment.

2.4.2.1 *Institutions in host countries*

For Chinese OFDIs, having a good institutional environment in host countries was not always necessary. Buckley et al. (2007) used a political risk index to investigate the relationships between host countries' institution environment and China's OFDI. They found that, contrary to their hypothesis, China's OFDI was attracted to countries with higher political risk. They said the reasons could be that China's firms had ownership advantages compared to firms in countries with higher risk institutional environments. Kolstad and Wiig (2012) also found evidence to support this viewpoint by using a Rule of Law index as the institution variable in their model. They found that Chinese OFDI was more likely to invest in countries with poor institutions but which were rich in natural resources. The reasons were that, firstly, most of the firms that invested abroad were SOEs which had a dominant position in China regardless of quality and quantity. As a result, political factors should be taken into consideration. This was consistent with the analysis of the effects of the state owned structure on OFDI. Political factors were indeed an important factor in terms of Chinese OFDI. Kolstad and Wiig (2012) said that investing in countries with poor institutions was consistent with Chinese foreign policies which tended to help less advanced economies. Secondly, they said

that the institutional environment in China was not as good as that in a developed country. The institutional environment of home countries and host countries have always tended to be at the same level. Blomkvist and Drogendijk (2013) also found that China's OFDI was more likely to go to countries which had a similar political system to China. As a result, Chinese OFDI was always attracted by countries with poor institutions. Urdinez et al. (2014) used a public institution strength score from the World Economic Forum to represent the institution variable in host countries. They also found the China's OFDI was attracted to countries with poor institutions. They believed that higher risk would bring higher profit.

2.4.2.2 *Institutions in home countries*

The second type of the studies on IT looked at the effects of institutions in home countries. Alfaro and Chen (2010) said that not only host institutions but also home institutions had an impact on OFDI expansion.

One institution that scholars have focused on is government, and China, since it operated through SOEs, was a good example scholars used to study to see the effect of government on OFDI. According to the Ministry of Commerce (MOC) et al. (2015), over 55% of Chinese OFDI was invested by SOEs in 2013 (although the percentage has decreased in the past ten years). Changes in Chinese OFDI were driven by government policies such as the Open Door policy in the early 1980s and the Go Global policy in the early 2000s.

Scholars believed that governments play an important role in OFDI. In general, government can motivate firms by giving them fiscal benefits such as tax deductions, help firms deal with complex situations such as economic and political factors in host countries and being an assistant to firms (Luo et al, 2010). In terms of economic factors, governments promote a country to be more competitive internationally and domestically (Sauvant and Chen, 2014). More specifically, government published policies to achieve macro-economic,

strategic development and industry goals. Moreover, governments promote OFDI to support foreign policies (Yeung et al., 2008).

Firms with less experience in investing abroad may have either home government support or good host country institutional environments. Li et al. (2014) found that the lack of experience can be complemented by choosing a host country with good institutional conditions. Li et al. (2014) also discovered how the government has affected Chinese outward FDI. They focused on the performance of Chinese firms. Most previous studies based on the knowledge-based view (KBV) were conducted at the firm level and proposed that knowledge accumulation, such as prior experience and knowledge acquisition through vicarious learning, was the cornerstone of firm internationalisation (Li et al., 2014). Government support would reduce the importance of having experience of investing abroad, especially for the FDI from emerging economies to developing economies. Government support therefore would encourage Chinese firms to invest abroad.

Wang et al. (2012) explained how government influence operates in two ways. Firstly, governments help firms overcome difficulties such as lack of information. Therefore, state-owned firms are likely to invest in developing countries, which is riskier. Secondly, governments also showed their informal and formal influences on firms and got involved in firms' decisions. This was consistent with the conclusion of Li et al. (2014). If firms were state-owned, governments will have more channels and power to influence firms.

SOEs were directly influenced by the Chinese government on OFDI. In 2013, investment by Chinese SOEs accounted for 55.2% of all OFDI (MOC et al., 2014). SOEs were usually considered to be influenced by political factors. Cui and Jiang (2012) argued that SOEs may rely less on host country institutions. They used data on 132 FDIs made by Chinese firms and found that firms with state-owned stakes tended to have joint ownership structures with local firms because this kind of structure was more helpful to get natural

resources and advanced technology, which was encouraged by home economies' governments. The higher the share of state-owned the more likely it was that OFDI took the form of a joint structure. This type of FDI was considered to be a type of sourcing OFDI by Driffield and Love (2007) and would not provide a positive spillover for host countries. Therefore, the characteristic of being state owned may prevent firms from investing in developed countries as this kind of firm may face political barriers in host countries (Wang et al., 2012).

2.4.2.2.1. Literature on the effects of policies on OFDI

When scholars study China's OFDI, almost every one of them mentions policies. Publishing policies is one of the ways that a government can affect OFDI, and for China, OFDI policies particularly have been very important determinants (Gu and Han, 2011). Caseiro and Masiero (2014) compared the FDI policies in China and Brazil and concluded that, compared to Brazil, China's OFDI policies were more aggressive and that China's government was very efficient in promoting Chinese OFDI.

Scholars have also studied the effects of government by studying the effect of China's policies on OFDI. Policies were studied in three ways.

The first group of scholars, which was the largest, would only mention the importance of policies in the introduction and background. They said that China's OFDI had been increasing quickly since the Go Global policy was published and that more and more attention should be paid to it. These studies mainly focused on strategic policies such as the Open Door policy, the Go Global policy and the One Belt One Road policy (Blomkvist, and Drogendijk , 2013; Chou et al., 2011; Kolstad and Wiig , 2012; Liang et al., 2015; Tan, 2013; Wei et al., 2014; Xia et al., 2014; Yao, and Wang, 2014; You, and Solomon, 2015).

Voss et al. (2008) divided the history of the development of China's OFDI from 1979 to 2008 into three stages and five sub-stages. Stages were marked by several strategic policies. In the first sub-stage, because of the Open Door Policy, OFDI was kicked off from zero. In the second sub-stage, China started to publish new policies to support Chinese firms, especially SOEs, to invest abroad. The first two sub-stages were part of the first stage called 'Testing the Water', which lasted from 1979 to 1991. The next two sub-stages were part of the second stage called 'Finding the Stepping Stones'. According to Voss et al. (2008), the next two stages were influenced by Deng Xiaoping's journey to the South and the Go Global policy, lasting from 1992 to 1998. Sub-stage four was from 1999 to 2001, when China adjusted its policies in order to join the World Trade Organization (WTO). During this period, the Go Global policy started to be rolled out and was added to China's Five-Year Plans. In the fifth sub-stage (after 2002), the Go Global policy still remained effective. Meanwhile, joining the WTO prompted a dramatic increase of China's OFDI.

Luo et al. (2010) agreed with these three stages, but had slightly different timing - 1984 to 1990, 1991 to 2000 and after 2002. Shen and Mantzopoulos (2013) also divided China's OFDI into stages by strategic policies, including the latest Go Global policy.

The second group of scholars used descriptive and qualitative methods to study the effect of policies. This type of scholar studied policy effects in more depth compared to the first group. They described China's OFDI development path and illustrated how the policies and government have worked in its progress. Luo et al. (2010) built a comprehensive framework of China's institutions on OFDI and collected some of the key OFDI policies, although we do not know what the collection criteria were. They thought that policies could be divided into two groups: promotional policies and monitoring policies. They used a descriptive method to discuss China's institutional and approval progress on China's OFDI and inferred that governments in emerging markets can promote OFDI. Stoian (2013) pointed

out that previous literature did not study the effects of country institutions on OFDI. She used several indirect proxies such as trade and foreign exchange liberalisation indicators as independent variables. Although she had extensive results, they were not directly related to policies and government. Sauvant and Chen (2014) reviewed all changes in regulatory framework since the beginning of 2000 and concluded that changes in policies coincided with a shift from restricting to promoting OFDI. Despite this, they believed that the current policies were still complicated and inefficient. Freeman (2013) reviewed the changes of policies since the end of the 1970s when China first started to invest abroad and found that policies played an important role; the regulatory framework was eased as the Government kept removing restriction to invest abroad. A very important factor that determined the freedom of policies was foreign exchange.

The third group of scholars – a small one so far – took policy into consideration in their quantitative analysis. For example, Gao et al. (2013) added a dummy control variable for the Go Global policy. The dummy variable corresponded with 2002, the year after the Go Global policy was formally launched. However, none of these scholars investigated how exactly such policies affected OFDI. They regarded them as control variables in their model and few of the dummies' coefficients were found to be significant. Buckley et al. (2007) also introduced a time dummy, 1992, for institutional liberalisation. That was the year in which the second significant strategic policy (in this case, it was political activity, Deng Xiaoping's Southern Journey) promoted OFDI. They found that this dummy was significantly positively related to China's OFDI. However, one flaw of this paper was that they did not take home country variables into consideration. If we look into OFDI related policies, we find that the State Council (SC) published a policy that discouraged OFDI in 1991. Meanwhile, Deng's Southern Journey assured China's openness only in economic terms and for export, and that the economy transitioned from a planned to a market economy to kick off economic growth.

The mainstream international business theories explain that economic growth promotes OFDI. Thus, Deng's Southern Journey cannot be used to represent the liberalisation of OFDI related policies but can only be used as a dummy for economic growth. Hence, this paper actually did not take a policy aspect towards OFDI into consideration.

2.4.2.2.2. Other studies on government

Other factors can be also used to study the effect of government on OFDI. Political factors contain other aspects such as policies, tax, bilateral relationships, state owned firms and political risk. Rios and Brennan (2010) used data from the National Bureau of Statistics of China (NBS) to study China's OFDI in Europe. They found that Chinese OFDI was influenced by political factors from both host and home countries. This is consistent with Buckley et al. (2007), who explained several determinants of China's OFDI including economic and political factors in home countries and host countries. They found that political risk in home countries and policy liberalisation are both important determinants of China's OFDI. They used a dummy for Deng's Southern Journey to represent the policy liberalisation of China and found that it was positively and significantly related to China's OFDI. Zhang et al. (2014) also confirmed that bilateral diplomatic activities promoted FDI from China. They used the number of friendly visits of leaders among countries to represent the political factors and did find that it was positively and significantly related to China's OFDI. They also found a substitution effect between bilateral diplomatic activities and the quality of local institutions. That meant that a better bilateral relationship can compensate for the low quality of local institutions.

2.4.3 Other views

There are other view on the determinants of OFDI, such as the role of industry, or the Industry-Based View (IBV). Certain characteristics of industries are helpful to attract investment from overseas and also may be a motivation for firms in an industry to invest abroad. The industry's environment in home and host countries affects firms' internationalisation decisions. Industries with low level entry barriers are more likely to have foreign investment (Wei, et al., 2014). Economics of scales and the level of R&D also could influence FDI from this perspective.

Firms' ownership structure also can be a determinant of OFDI. Compared to the ownership of SOEs which we have discussed in the previous section, a family controlled ownership structure also had its own influences. Family control is one of the popular ownership structures in developing countries, including China. Bhaumik, et al. (2010) extended this literature by investigating how the family controlled firms behaved and found that these firms invested less than firms with other kinds of ownership structures, even though FDI became an efficient way to find new resources and markets. If firms' ownership structure was less concentrated and if firms had relationships with foreign investors, they were more likely to invest abroad. They explained that the reasons were that investing in foreign markets may take too much capital and require more advanced management skills. This was consistent with international business theory, which notes that risk is an important factor when considering internationalisation, especially for small and medium enterprises (SME).

2.5 Conclusion

Advanced economies have always been treated as the source of OFDI, and mainstream international business theories have developed from studies on OFDI from AMNEs. Recently, the rapid growth of OFDI from EMNEs has drawn the attention of scholars. They have found

that EMNEs carried IFDI via OEM/JV and OFDI via acquisition and greenfield investment. EMNEs' internationalisation was still in an early stage even though EMNEs were usually supported by government and a supportive investment environment. EMNEs could use their latecomer advantages.

Scholars have tried to explain the rapid growth of OFDI from mainstream theories or by exploring new theories. Mainstream theories include RBV, IDP and IT, while the new theories included LLL and the springboard perspectives.

However, the new theories were essentially the extension of mainstream theories. The LLL and springboard perspectives were both resource focused. More and more scholars have realized that the government plays an important role in China's OFDI. Even though scholars have started to analyse the relationships between AMNEs and government since the last century (Bailey, Harte and Sugden, 1994), studies on the impact of government on ENMEs, in particular CMNEs, are still inadequate. Scholars have tried to study the effects of government by using indirect ways (studying state owned firms, political risk, etc.), however direct forms of government influence are still understudied. Most papers have been descriptive. Some scholars have used dummies to control the effects of policies, but either the methodology was problematic or the coefficients of the year dummies in their models were insignificant, contradicting most of the descriptive studies. The reasons that this aspect has been understudied could be that the history of China's OFDI was short, hence there is a data shortage problem. Moreover, OFDI related policies were scattered. In order to study the policies, they should be nested into a more comprehensive framework. With the growth of China's OFDI and the reform of China's government, a robust quantitative study on the effects of China's OFDI related policies on China's OFDI is more and more realistic, and will bring a richer understanding of the effects of policies on it.

CHAPTER 3

BACKGROUND OF CHINA'S OFDI

3.1 Introduction

In Chapter 2, we reviewed the most relevant literature on the determinants of China's Outward Foreign Direct Investment (OFDI). From the literature review, we know that there are several theories that have analysed the determinants of China's OFDI. According to Investment Development Path (IDP) theory, China's OFDI can be related to its Gross Domestic Product per capita (GDPPC), exports, Inward Foreign Direct Investment (IFDI) and education. China's OFDI has also been regarded as natural resource seeking, asset seeking and market seeking. According to Institutional Theory (IT), China's government and policies influenced firms' investment choices. However, because most studies have been qualitative, there is a lack of and need for quantitative studies on the effect of China's policies on OFDI.

In this chapter, we will discuss the patterns of China's OFDI from different theoretical perspectives. Section 3.2 introduces how each type of policy works. Section 3.3 introduces the patterns of China's OFDI from the perspective of resource seeking OFDI and what is the impact of policies on OFDI patterns. Finally, Section 0 discusses the patterns of China's OFDI history and its relationship with strategic policies.

3.2 Policy background of China's OFDI

When we talk about China's OFDI policies, we can divide them into three categories: Strategic policies, specific policies and Five-Year Plans.

1. Strategic policies are guides for making specific policies and are the most comprehensive kind of policies. They are usually published several years or decades apart.
2. Specific policies are made according to the strategic policies. They are powerful because they can affect many aspects of the development of China and are both doable and operational.
3. In the middle of strategic and specific policies are the Five-Year Plans that can be regarded as connecting the links between strategic policies and specific policies. Putting strategic policies into Five-Year plans is an important sign that a strategic policy will be fully applied, which then can cause ministries and departments to make specific policies according to the Five-Year Plans.

In this section, we will introduce these three policy types one by one in order to understand what the roles of these policies are.

3.2.1 Strategic Policies

From its history, we can see that China's OFDI has been boosted and accelerated by several strategic policies. As we presented above, there were six stages of China's OFDI from 1982 to 2016, with each stage being marked by a set of policies. Some of these policies are presented below.

The **Open Door Policy** was one aspect of China economic reform. China kicked off this policy during the Chinese eleventh Communist Party of China Central Committee Third Plenary Session in December 1978. It had inward and outward aspects. The outward aspect was the Open Door policy. The inward aspect was that China's economy transitioned from a

planned to a market-oriented economy. This strategy helped China to start driving the economy on a motorway.

Deng Xiaoping's journey to the South occurred from January to February of 1992. Deng Xiaoping, the designer of China economic reform, travelled to some big cities in the south of China and gave speeches to underline the importance of the Open Door policy. These speeches further strengthened the people's confidence in carrying out China's economic reform.

Strategic policies are macro policies. They are normally published every more than five years apart and are guides for other policy-making decisions. Strategic policies usually do not just involve OFDI but also other economic activities and non-economic activities. These kind of policies do not have to be raised necessarily in important meetings such as that of the National People's Representative Meeting or National Congress of the Communist Party of China; the concept could be brought up by a Chinese leader in a forum. But eventually, they have to be reflected by more specific actions via Five-Year Plans.

The **Go Global policy** was first brought up in 1979, but was not clarified until the year 2000 when The Third Session of the Ninth National People's Congress was held. This policy was used to promote Chinese firms taking full advantage of domestic and overseas markets and resources to realise the goal of the sustainable development of the country. The tools were FDI, foreign project contracting and foreign labour cooperation.

The latest strategy was the **One Belt One Road**, which was first brought up in 2013 and was added into the thirteenth Five-Year Plan in 2016. It was a very important strategy. From its name, we infer an ambition to recreate the ancient Silk Road and an aim to build a close connection between Western Europe and China, as well as all countries along the road. Although it was just brought up, many activities showed how important it was. For example, China is arranging to build the Asian Infrastructure Investment Bank, which will have

members mostly from Asia but also countries from other areas such as the UK. The General Administration of Customs also published ten rules to simplify cross border trade. In October 2015, during a state visit to the UK, the Chinese President Xi Jinping promoted cooperation in many fields which were worth 40 billion pounds (Gov.uk, 2015). The One Belt One Road policy will be discussed in detail in the next section.

Among those four strategic political activities, the Go Global policy is a good tool to understand how strategic policies have affected China's OFDI. Because, with the development of China's legal system more information about the Go Global policy can be acquired, and the policy process has become more transparent compared with the Open door policy and Deng's Southern Journey. Therefore, we will analyse the effect of the Go Global policies on China's OFDI.

3.2.1.1 *Go Global Policy and China's OFDI*

The Go Global policy was first published in 1979 but entered the Five-Year Plan in 2001. The title of this section was Implement Go Global Policy. It said that

*Encourage foreign investment that could take **advantage** of China's comparative advantage. Expand fields, ways and approaches of international economic and technology cooperation. Continue to develop foreign contracted projects and labour cooperation. Encourage firms that have competitive advantage to develop overseas processing and trade in order to drive product, service and technologies exports. Support overseas cooperation and exploitation of domestic shortage resources in order to promote domestic industrial structure adjustment and resource substitution. Encourage enterprises to use foreign intellectual resources, establish overseas research and development institutions, and design centres. Support competitive enterprises' transnational operations, and achieve international development. Improve service systems for overseas investment, for the implementation of the*

'going out' strategy to create the conditions in the financial, insurance, foreign exchange, taxation, human resources, legal, information services, immigration and so on. Improve the foreign investment enterprise corporate governance structure and internal restraint mechanism to standardise the regulation of foreign investment.

The Go Global Policy was fully applied during the eleventh Five-Year Plan. Many specific measures were applied such as simplifying approval procedures¹. In the eleventh Five-Year Plan, the title of this section was still the Implement Go Global Policy, which was the same as in the previous Five-Year Plans. It said that:

*Support qualified enterprises to conduct foreign direct investment and transnational business. Focus on the **advantage** industry, and guide enterprises to develop overseas processing trade, and promote diversification of product origin. Through cross-border mergers and acquisitions, equity participation, listing, restructuring joint, etc., nurture and develop China's multinational companies. In accordance with the principles of complementary advantages, equality and mutual benefit, expand the joint exploitation of resources. Encourage foreign enterprises to participate in infrastructure construction, improve the level of project contracting, and steadily improve labour cooperation. Improve the foreign investment promotion and protection systems; strengthen co-ordination, risk management and supervision of overseas investment made by state-owned assets abroad.*

In the twelfth Five-Year Plan, the title changed, becoming the Accelerate Implement Go Global Policy, which said that:

In accordance with the principles of market-oriented and autonomous decision-making enterprises, guide enterprises with various types of ownership to orderly conduct overseas investment and cooperation. Deepen mutually beneficial cooperation of

¹ This will be introduced in Chapter 4 and 5.

*international energy resources development and processing. Support overseas technical cooperation in R&D investment, encourage manufacturing enterprises with **advantages to** investment abroad efficiently, create an international marketing network and well-known brands. Expand international cooperation in agriculture, develop overseas project contracting and labour cooperation, actively carry out project cooperation that helps to improve local people's livelihood. Progressively develop our large transnational corporations and financial institutions to improve the level of international operations. Do a good job of research on overseas investment environment; strengthen scientific assessment of investment projects. Improve overall co-ordination, improve cross-sectoral coordination mechanisms to strengthen the implementation of macro guidance and service on the "Go Global" policy. Accelerate the improvement of foreign investment laws and regulations system, actively signing of investment protection, avoid double taxation and multilateral bilateral agreements. Improve the foreign investment promotion system, improve the degree of foreign investment facilitation, safeguard China's overseas interests, and prevent all kinds of risks. The enterprises and cooperation projects that "Go Global" should fulfil their social responsibility and benefit local people.*

The three Five-Year Plans that mentioned the Go Global Policy have something in common. They all encourage or support firms which have advantages to investment abroad. They all mentioned the improvement of promotion and protection systems. Policy makers were aware of the lack of Chinese firm experience and information. From the above, we can see that one of the motivations for China to invest abroad was to solve the shortage of domestic resources. In the tenth Five-Year Plan, we can see that China supported firms to develop domestic shortage resources from abroad. The twelfth Five-Year Plans clearly encouraged access to international energy resources. This was consistent with the literature review and data.

They also have differences. From the titles of each sections, we can see that the Go Global Policy was gathering pace, moving from ‘Implement Go Global Policy’ to ‘Accelerate Implement Go Global Policy’.

3.2.1.2 *One Belt One Road Policy*

3.2.1.2.1. *Contents and Actions*

The One Belt One Road policy can be regarded as an extension of the Go Global policy. By analysing what effects the Go Global policy was expected to achieve, we can anticipate how One Belt One Road is expected to change world economy in the future.

The ancient Silk Road can be dated back to between 138 BC and 126 BC during the Han Dynasty, when Zhang Qian, an ambassador, discovered a road to the West in order to promote trade and cultural communication. After centuries of development, it became a very important path connecting Asia and Europe and played an important role in trade at that time.

China’s president, Xi Jinping, brought up this concept again in September 2013. He first brought up the concept of Building the Silk Road economic belt and the 21st-century maritime Silk Road (One Belt One Road) when he visited Middle Asia and Southeast Asia. On 28th March 2015, the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs and Ministry of Commerce (MOC) of the People’s Republic of China jointly issued the *vision and actions on jointly building the Silk Road economic belt and the 21st-century maritime Silk Road*. From the title we can recognize that the primary goal of this policy is to develop the Chinese economy and, meanwhile, to promote cultural communication among countries along the Silk Road. Two years after this concept was first brought up, strong and effective actions such as the foundation of the Asian Infrastructure Investment Bank (ongoing) and the Shanghai Free Trade Zone were taken. These actions gave

the opportunity to cooperate internationally effectively. However, there is still a long way to go. This policy is still at an early stage and about to move to more of an implementation stage.

The targets of this policy were to build an active belt and road to connect East Asia and Europe and to promote communication between and among these areas. This policy contained several aspects, including cultural, political and economic, but the core aspect was economics. The aim of the Silk Road Economic Belt was to make the world more integrated and open to each other, to promote the efficiency of the allocation of resources, and hence get rid of the bad effect of the financial crisis as soon as possible and have high economic growth rates.

The policy contains eight chapters - Background, Principles, Framework, Cooperation Priorities, Cooperation Mechanisms, China's Regions in Pursuing Opening-Up, China in Action and Embracing a Brighter Future Together. This strategic policy strategy involves several countries, including countries from Asia, Africa and Europe, and it is meaningful to investigate not only how this strategy would affect the global economy, but also how it would promote China's OFDI. The most obvious characteristic of this policy is that it is very general; it brings up an attractive future, based on cooperation as a comprehensive framework, but still is very general. There is no specific action or clear target, but the reason why is reasonable. Firstly, it is a country level policy; three departments jointly published it. One of the roles of this policy is to act as a guide to make other relevant policies. Secondly, this policy will be run over a long period of time. The measure of the development of the economy will vary since there is not any single policy that can steer economic development. It is not strange to have a policy without clear targets. Thirdly, China publishes a Five-Year Plan every five years. These Five-Year Plans provide the overall guidance for economic development. Economic tasks should be made by this plan. As can be seen, the latest version of the Five-Year Plan has the One Belt One Road policy included.

Actions had been taken to support this policy even before it was added into the Five-Year Plans. As we discussed before, actions were mainly focused on supportive policies and infrastructure. Firstly, in terms of supportive policies, lots of departments had issued new policies. In terms of the central government, a “One Belt One Road” leading group had been established to coordinate policy conduction. The leader of this group was a member of the Politburo Standing Committee, and also the Vice Premier, Zhang Gaoli. This showed that the central government took this policy seriously. The State Administration of Taxation also issued ten measures to support this policy, such as to build a country tax information centre and explore new approaches to cross-border tax risk management. As revealed by the literature, state-owned firms played a very important role in cross boarder investment. Firms in different areas had been taking actions.

As can be seen, this policy has been productive. Although the ultimate goal would not appear until years later, the direct goal was obvious: to encourage investments in infrastructure.

3.2.1.2.2. How does the policy affect China?

The “One Belt One Road” is also called “Belt Road Initiative”, and it helps to build a strong bond between China and relevant areas, with China as the main stakeholder. This indicates that this policy could not succeed without the cooperation among countries, and that the effects of the policy could also be the motivation for China’s OFDI.

This policy brought advanced technologies which were needed for changing the type of China’s industry from labour intensive and resource intensive to capital intensive and knowledge intensive. Advanced technologies were accessed via spillover effects and reverse spillover effects (Driffield and Love, 2003, Chen et al, 2012). When firms from developed countries invested in China, advanced technology and knowledge spread by spillover effects

(the foreign presence increases the productivity of firms in the same sector and in the backward and forward linkage sector). When Chinese firms invested in developed countries such as the UK, they transferred the advanced technology to their parent company, which was located in China.

Another benefit was that it was a good opportunity for western China to develop its economy. China is a country with a long coast and broad mainland, and there was an economic gap between west and east China. According to the National Bureau of Statistics, in 2014, the average income of people in East China was 64239 Yuan, compared to 51204 Yuan for West China, or 20.3% less. The new Silk Road provided an opportunity to connect West China, which is rich in terms of natural resources, with Europe. It also provided a better connection between East and West China. For example, wind power in West China is plentiful, but it cannot be transported to the East, where power is much more needed. This policy, then, would help develop a more efficient resource allocation. This policy would, on the one hand, provide an opening to Western firms in the Chinese market, and, on the other hand, alleviate the energy constraints of East China.

Other than China, countries located in Europe can be all stakeholders. As the terminal station of “One Belt One Road”, Europe would have much more influence compared to roadside countries. Considering the background of the financial crisis, the price of high technology and famous brands were much cheaper in the crisis area. Other than countries, it also considered firm level stake-holders, such as infrastructure companies. Because of One Belt One Road, investments in the infrastructure sector have been increasing dramatically. According to the Asian Development Bank, from 2010 to 2020, there would be a need for 800 billion USD every year for infrastructure investment. This policy would help fill this gap. An example is high-speed railways. As a result of One Belt One Road, China’s high-speed

railway technologies became better and gave China's high-speed railway companies -such as train manufactures and railway builders- access to a potential huge market.

This policy would also affect local citizens. FDI would bring stable capital and provide more jobs. If infrastructure and manufacturing firms expand, they would need more employees. FDI from developed countries to developing countries would also have spillover effects. Advanced technologies would be spread in host countries. This would increase the need for skilled employees.

Each province in China can be also stakeholder. China has a broad territory and each province has its own characteristics: Eastern provinces, for example, developed fast, have convenient transport, labour and research centres. With these advantages, they could play the leading role in industry transition and OFDI. Western provinces had the advantages of natural resources and was the key part of the land road. With these advantages, they would develop fast in the future.

3.2.1.3 *Made in China 2025*

Made in China 2025 is not a direct strategic policy that promotes OFDI directly, but instead gives firms incentives to go out. It (http://www.gov.cn/zhengce/content/2015-05/19/content_9784.htm) was designed by the Ministry of Industry and Information Technology, NDRC, the Ministry of Science and Technology, the Ministry of Finance, the Chinese Academy of Engineering and another 20 departments of the State Council. It was the first ten-year strategy to improve China's manufacturing sectors. In the next three decades, China plans to become the top world manufacturing country.

This strategy has four parts. Firstly, it briefly analyses development situations and environments and points out that the task to build a top classic manufacturing sector is urgent. Secondly, it states the guiding ideology, basic principle, and strategic goal. The guiding

ideologies are Innovation-Driven, Quality First, Green Development, Structure Optimization, and People-Oriented. The basic principles were market-led, government guidance, based on current and long-term perspectives, overall progress, key breakthroughs, and self-development, openness and cooperation. Thirdly, it states that the main tasks, including improving national manufacturing innovation capability, promoting the depth of integration of information technology and industrialization, strengthening the industrial base capacity, enhancing the quality of brand building, full implementation of green manufacturing, vigorously promoting the development of breakthrough in key areas, further promoting the restructuring of the manufacturing sector, actively developing service-oriented manufacturing and producer services, and improving the level of international development of manufacturing. Finally, it points out the strategic support and protection which relate to reform institutional mechanisms, create a fair competitive market environment, improve financial support policy, increase fiscal policy support, improve multi-level training system, perfect small micro-enterprise policy, further expand opening-up manufacturing, and improve the organization and implementation mechanism.

China's OFDI plays important roles in Made in China 2025. The importance is twofold. Firstly, from Dunning's (1980) eclectic theory, OFDI allow firms to exploit location advantage with their ownership advantage and internalization advantage. Investment in host countries would help firms access local markets (Wei et al., 2014). The success of firms in host countries usually means a stronger ownership advantage. It is what this policy anticipates. Secondly, one of the characteristics of EMNEs' OFDI is that EMNEs use OFDI as a springboard to access superior strategic assets (Luo and Tung, 2005). The strategic asset such as advanced technology could be transferred to a parent company through the linkage (Mathew, 2006). This is a reverse spillover effect which would promote the productivity of the parent company (Driffield and Love, 2003; Chen et al., 2012). If firms aim to get more

advanced technology via reverse spillover effects, they would engage in OFDI to countries and sectors with high R&D levels. In this case, OFDI is one of the means to achieve upgrading of the manufacturing sector and the success of Made in China 2025.

3.2.2 Five-Year Plans

Five-Year Plans is the shortened form of the People's Republic of China National Economic and Social Development Five-Year Plan. They are an important part of China's national economy and they are published every five years. Their main task is to make plans for major national construction projects, productivity distribution and resource distribution to parts of the economy and to take a long vision and mission for the national economy. China started to make Five-Year Plans in 1953 and has continuously made twelve Five-Year Plans, except for two interruptions, with the latest one the 13th Five-Year Plan in 2016.

The definition of China's Five-Year Plans explains the functions:

The Five-Year Plans ... are used to illustrate national strategic intention, clarify government priorities, and guide the behaviour of market players. It is a grand blueprint for the next five years of China's economic and social development, the common program of action for people of all nationalities, and the important basis of government to fulfil economic regulation, market supervision, social management and public service responsibilities.
(People's Republic of China National Economic and Social Development Twelfth Five-Year (2011-2015) Plan)

The Five-Year Plans can be regarded as the first step for the government to do its jobs at the country level; they reflect the will of the country. They also can be regarded as the connection between strategy policy and other specific policies such as approval policies which are made by ministries and departments. The strategic policies are normally applied during several decades. For example, the Go Global policy was being applied during the three

Five-Year Plans that followed after it was introduced. The length of every plan is usually five years. Strategic policies are not normally first brought up in the Five-Year Plans, but are eventually added in subsequent Five-Year Plans. For example, in the latest and Thirteenth Five-Year Plan (2016), the One Belt One Road policy, which was brought up two years before, was first added. The Five-Year Plans are also the guidelines for ministries and departments. For example, the Go Global policy was first brought up in the Tenth Five-Year Plan. Then, in the following few years, MOC published several policies to loosen regulations and raise the line above which FDI need to be approved by several departments such as MOC and the State Administration of Foreign Exchange (SAFE).

From the following *Table 3-1*, we can see that, in each Five-Year Plan, there were different main jobs and situations. The strategic policies are listed on the right. Each strategic policy went through several Five-Year Plans.

Key words in *Table 3-1* are not the titles of policies but the key characteristics that would come into people's mind when people discuss them. Keywords could be slogans when the Five-Year Plans were first brought up and summaries when the Five-Year Plan finished and were reviewed years later. China Five-Year Plans cover every aspects of the development of economics and society. It is difficult to name and characterise it with just a single sentence.

Most of the tasks involved multiple institutions of government including the central government and local government. For example, OFDI is regulated by both MOC and the NDRC. The firm also needs foreign exchange, so it is also watched by SAFE. Each policy plays its unique role in the progress of the development of China's OFDI and cooperates with other policies. The effect of some policies can be direct and easily observed. In contrast, other policies cannot be observed. For example, China's macro policy stimulated China's OFDI increase dramatically. The Go Global policy in early 2000s kept up OFDI at an average rate of

growth of 160% for the following five years. The overall effect of policies cannot be directly observed, but we would argue that a new index should be found or created.

Table 3-1 China National Plans since 1949

National Plans	Period	Key Words	Strategy Policies		
First Plan	1953 – 1957	Increase the growth rate of industry. Overtake UK and Catch up with US			
Second Plan	1958 – 1962	Great Leap Forward. Retrogression			
Third Plan	1966 – 1970	Three-line construction. Preparing against natural disasters			
Fourth Plan	1971 – 1975	Seriously out of control. Strategic adjustment			
Fifth Plan	1976 – 1980	A new leap forward. The Great Transformation	Open Door Policy (1978)		
Sixth Plan	1981 – 1985	To reform and opening up			
Seventh Plan	1986 – 1990	Pass through the reform. Rectification			
Eighth Plan	1991 – 1995	Xiaoping's Southern Journey. The tide of reform			
Ninth Plan	1996 – 2000	Macro-control. The economy to a soft landing			
Tenth Plan	2001 – 2005	Orders and command out. Market allocate resources			
Eleventh Plan	2006 – 2010	Continue reform and opening up			
Twelfth Plan	2011 – 2015	-		Go Global Policy (1999)	One Belt One Road (2013)
Thirteenth Plan	2016 – 2020	-			

Source: People's Daily Online (<http://dangshi.people.com.cn/GB/151935/204121/>)

3.2.3 Specific policies

In terms of specific policies, the analysis will be more complicated. Firstly, the number of specific policies is greater than that of strategic policies. Secondly, specific policies are published for different purposes. Therefore, specific policies need to be further divided into different types. Because of the large number of policies and the different types of policies, a framework should be built before analysing specific policies. In our next chapter, we will develop a framework to analyse and quantify OFDI-related specific policies. Within the framework, OFDI-related specific policies are divided into four types: regulatory policies, service policies, supervisory policies and promotional policies. We will introduce the evolution of specific policies in the next two chapters.

3.3 The changing motives of China's OFDI

China's OFDI was regarded as resource seeking OFDI until very recently (Child and Rodrigues, 2005; Sanfilippo, 2010; Biggeri and Sanfilippo, 2009; Zhang et al., 2014; Wang et al., 2012; Wei et al., 2014; Shi et al., 2017). In this section, we will review the patterns of China's OFDI from this perspective. In particular, we use two datasets – which will be introduced later – to provide evidence that China's rationale for OFDI has shifted from being natural resource seeking OFDI, to market seeking and asset seeking OFDI.

3.3.1 Natural resource seeking OFDI

In this part, we will use two datasets to analyse China's OFDI from the perspective of natural resource seeking OFDI. The two datasets are the Statistical Bulletin of China's Outward Foreign Direct Investment (SBCOFDI) and China Global Investment Tracker (CGIT). We will have a look at the distribution of natural resource related sectors among all sectors at the country level.

The SBCOFDI is a series of annual reports published by the Ministry of Commerce (MOC), the National Bureau of Statistics (NBS) and SAFE, with data on China's OFDI since 2003 at country, province and sector levels. From this dataset, we can see the patterns of China's OFDI in terms of natural resource seeking by using the sector level data. In this dataset, there are 19 sectors: Agriculture Forestry, Animal Husbandry and Fishery; Mining; Manufacturing; Production and Supply of Electricity, Gas And Water; Construction; Wholesale and Retail Trade; Transport Storage and Post; Lodging and Catering Services; Information Transmission, Computer Services and Software; Banking, Real Estate; Leasing and Business Service; Scientific Research and Technical Service; Management of Water Conservancy Environment and Public Facilities; Residents Service Repair and Other Service; Education; Health Social Works; Culture Sports and Entertainment; Public Management Social Security and Social Organizations. **Mining** is the sector related to natural resource seeking OFDI. According to *Industrial classification for national economic activities* (General Administration of Quality Supervision, Inspection and Quarantine and Standardization Administration, 2017), the mining sector includes coal exploitation and washing, exploitation of petroleum and natural gas, extracting and dressing of ferrous metal mines, extracting and dressing of non-ferrous metal ores, extracting and dressing of non-metal ores, and other mining industries.

To have a better understanding of the pattern of OFDI from China, we can also use the CGIT; this is a database published by the American Enterprise Institute and The Heritage Foundation. It is the only database open to the public where FDI can be broken down by destination country and sector for each destination country beside the official data published by China's government (SBCOFDI).

Both official datasets - SBCOFDI and CGIT- have advantages and disadvantages. Firstly, the dataset CGIT has data by sector in each country; it tracks all of China's OFDI

valued over 100 million USD. This dataset started in 2005 and update every season. With CGIT, we could look at OFDI by sector, time period and country. Whereas SBCOFDI only has integrated data that shows data either by destination country or by sector; it is published data annually with data available from 2004 to 2016. It has three sub-datasets; there is data on China's OFDI flows and stocks at the country level, province level and industry level. Secondly, the investment destinations of CGIT were ultimate destinations rather than direct destinations. CGIT did not take tax havens as destinations. This is the biggest advantage of CGIT compared with SBCOFDI. The destinations in SBCOFDI were direct destinations. According to SBCOFDI, in 2016, the biggest recipient was Hong Kong. It accounted for almost 74% of all OFDI, however, a large percent of investment that was invested in Hong Kong was then transferred to other countries with Hong Kong playing a key role only as a transfer station. In SBCOFDI, the vast majority of FDI destined for tax havens were booked under the *Leasing and Business Service* sector rather than their ultimate sectors. For example, as one of the largest acquisitions in 2012, China National Offshore Oil Corporation (CNOOC) spent USD 15.1 billion on acquiring Nexen. It was made by first using Hong Kong as a transfer station then reinvesting in Canada. From SBCOFDI (MOC et al., 2013), the total amount of FDI from China to Canada was only 0.8 billion USD. From this example, we can see that the database published by MOC may not reflect the real China's OFDI.

On 17th September 2015, a press conference was held by the State Council (SC) Information Office in which the deputy representative of MOC International Trade Negotiations, Mr. Xiangchen Zhang, and deputy director of the NBS, Miss Nan Jia, explained several issues raised about this dataset (SBCOFDI). They said that the current statistical system cannot solve the problem that is caused by using direct destinations rather than ultimate destinations, and it was true that Hong Kong was a transfer station because of its convenience for financing. To complement this formal data, they had information from local

embassies and embassies' commercial offices in host countries; but as informal sources, they cannot be integrated in the official reports.

Thirdly, the selection criteria were different. CGIT collected data by values and it covers only deals with investment greater than USD 100 million. The database published by MOC of China only reported FDI that took an ownership share of more than 10% of target firms. Take OFDI in 2013 as an example. CGIT counted a total OFDI of USD 86.010 billion, whereas, in contrast, the database published by MOC had 107.84 billion. CGIT counted about 20.2% less than MOC. It may neglect a large part of the volume of OFDI, especially the OFDI made by small and medium enterprises (SMEs). Compared to state-owned firms, the volume of OFDI made by SMEs were relatively small. Meanwhile, FDI from SMEs had been dramatically increasing. According to MOC (2014), the majority of firms that invested in Europe were SMEs. Moreover, the methodology used by MOC was consistent with the general FDI definition that requires at least 10% ownership to be accounted for. CGIT collected data from unofficial channels such as media; so, it might be inaccurate when we analyse the patterns and trends of OFDI, especially in Europe.

Therefore, both SBCOFDI and CGIT can be used for sector analysis, while SBCOFDI is more appropriate when analysing China's OFDI at the country and provincial level. Data from both datasets were deflated by using deflators from World Development Indicators of World Bank. The base year is 2015.

3.3.1.1 *Using SBCOFDI*

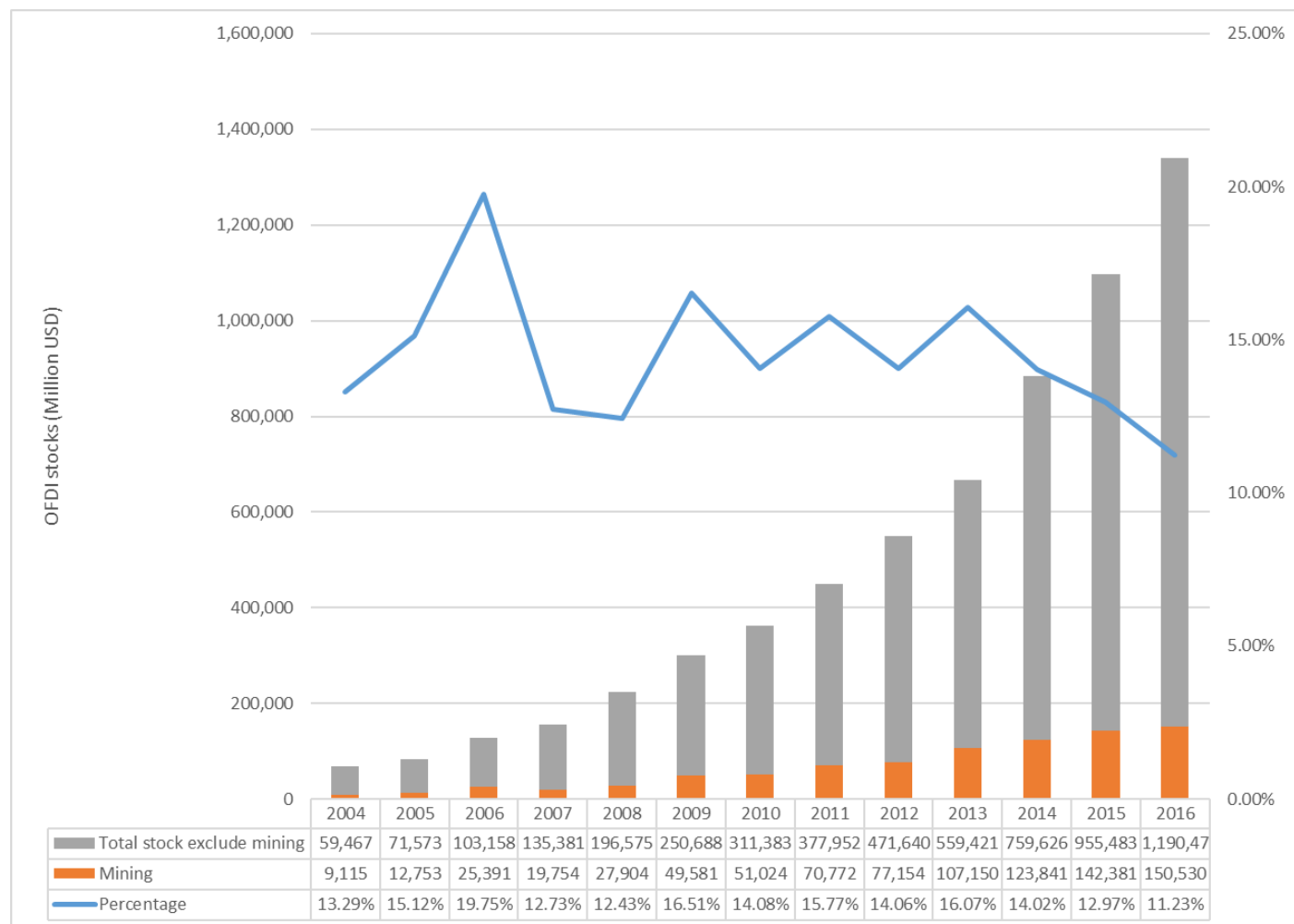
From the dataset SBCOFDI, natural resource seeking OFDI was still an important part of China's OFDI. But its importance is decreasing. From *Figure 3-1*, we can see that mining accounts for 11% of the stocks of China's OFDI in 2016. It is ranked fourth, following leasing and business services, banking and wholesale and retail trade sectors. This confirmed that

mining was an important part of China's OFDI. However, in terms of flows of China's OFDI, *Figure 3-2* shows that mining only took 1% of the total volume in 2016.

By looking at the trend of the share of China's OFDI flows in mining, we can see that the trend can be divided into three stages: the first stage was from 2004 to 2008, the second stage was from 2009 to 2012 and the third stage was from 2013 to 2016 (see below *Figure 3-2*). These stages coincided with a decrease, fluctuation and decrease again in OFDI. There used to be a large percent of mining flows in the early 2000s. In 2006, the share of mining reached its peak, accounting for 40.35% of China's OFDI and becoming the largest sector engaging in OFDI. After 2006, OFDI activities fell to 10.42% in 2008 and kept fluctuating until 2013. From 2013 to 2016, OFDI in mining sector dropped again dramatically from 23% to 1%.

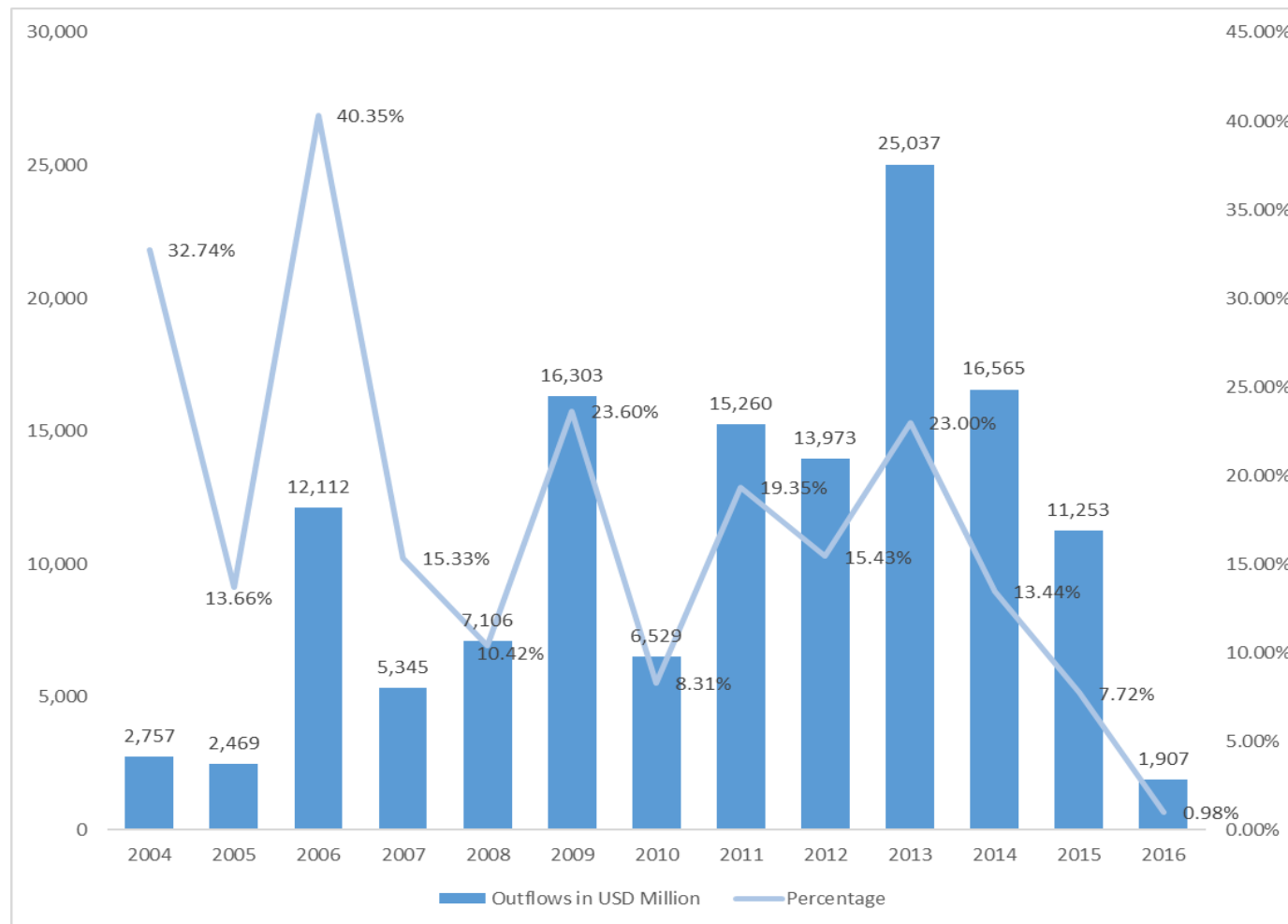
In terms of values of flows, the pattern looks quite different, with the actual value of OFDI in the mining sector increasing, fluctuating and again decreasing. It increased from 2.76 billion USD in 2004 to 16.3 billion USD in 2009. Then it fluctuated from 2009 to 2012 to a peak of 29.04 billion USD in 2013, and then fell dramatically in the next three years to 1.9 billion USD in 2016. In the end, OFDI in the mining sector in 2016 was at the same level as in 2004. Although the value increases in the first stage, the percentage drops. This was because of the dramatic increase of China's total OFDI flows. In the third stage, both values and the percentage drops which indicates that the importance of the mining sector, i.e. natural seeking OFDI, was decreasing.

Figure 3-1 Stocks of China's OFDI in mining sector



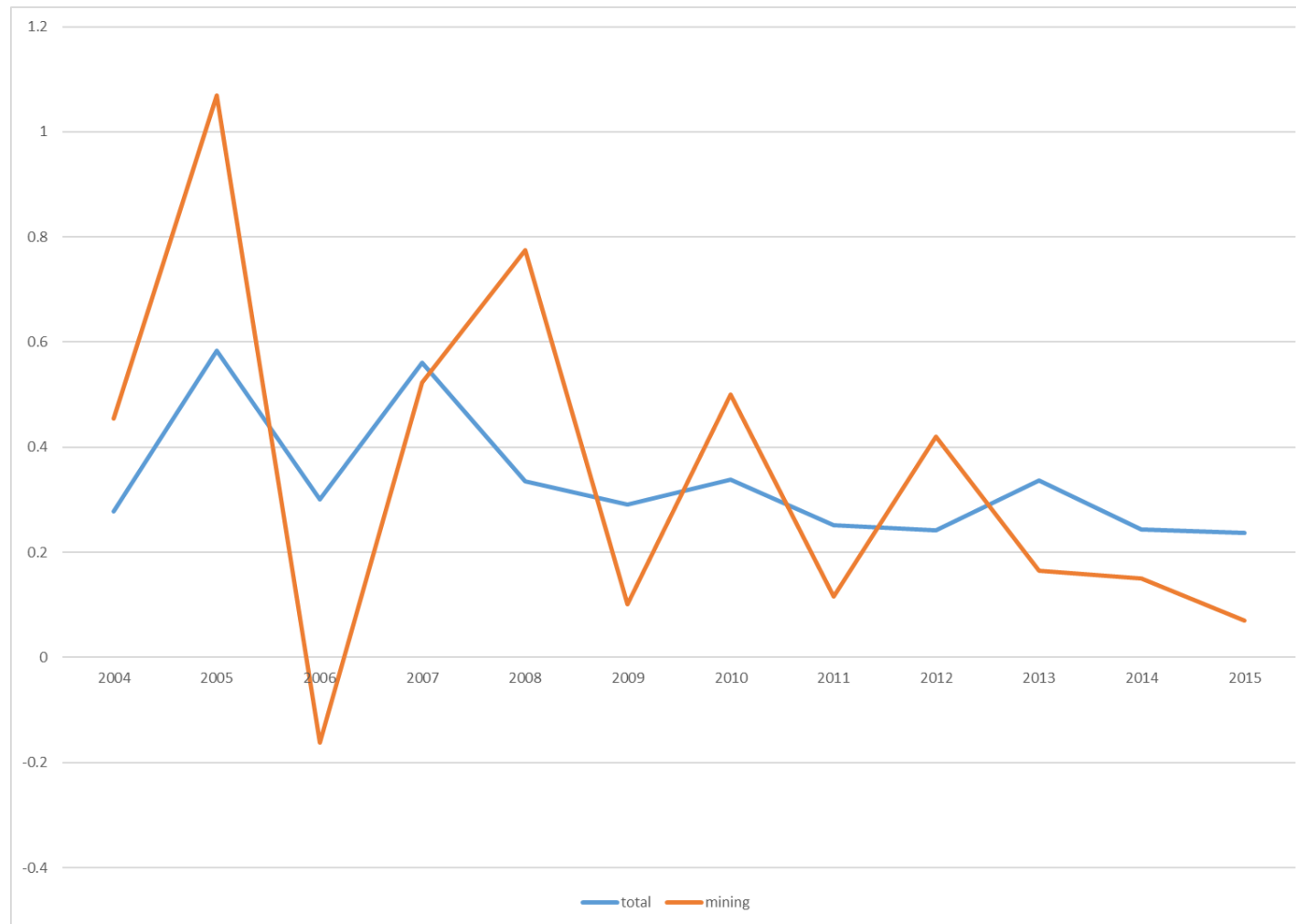
Source: SBCOFDI

Figure 3-2 Trends of China's OFDI flows in mining sector from 2004 to 2016



Source: SBCOFDI

Figure 3-3 Rates of China's OFDI in total and mining sector



Source: SBCOFDI

Despite the overall decreasing trend of flows, the stocks of mining remained stable. The share of stocks of China's OFDI in the mining sector, as can be seen in *Figure 3-2*, was stationary at around 13% during the last 13 years. In terms of the value, the stock was increasing gradually. The increase of mining stocks may be due to the increase of China's OFDI overall. Compared to the annual increase rate of total OFDI (1.94%), the increase speed of OFDI in the mining sector (1.92%) was similar, but the rate of increase in OFDI in the mining sector fluctuated more than the increasing rate of total OFDI (*Figure 3-3*).

We want to link the patterns of OFDI in the mining sector from 2004 to 2016 with China's internationalisation strategies. The overall decreasing share of OFDI flows shows that natural seeking OFDI was important at the beginning of the 2000s but less important recently. In 2016, both the value and share of natural seeking OFDI dropped to its lowest level since 2004. The increase of the values of OFDI in the mining sector was the result of an increase in total OFDI. But after 2013, the value of outflows of OFDI in the mining sector also decreased while the total OFDI outflows increased. Meanwhile, the share of OFDI stocks in mining remained stable. Considering both flows and stocks, the data is telling us that China's overseas mining sector stocks increased gradually even if OFDI outflows in the sector fell sharply. This suggests two things: one is that China's overseas mining sector remained stable even though the outflow decreased sharply. There was not any significant change of the share of stocks of mining sector; maybe Chinese firms in this sector performed well, perhaps as a result of a better investment environment without issues such as the liability of foreignness or bad performance that could make firms retreat or find new destinations. Secondly, the global positioning of China in the mining sector was sufficient to satisfy the country's economic development needs, so active OFDI in mining could come to an end. Considering that many firms in this sector were large SOEs, the overseas stocks met the demands of the country's development and the government's expectations. There was not any new motivation to seek

more resources. A possible future increase in the mining sector would be the result of a further overall increase of China's economy. Natural resource seeking OFDI is still an important part of China's OFDI, albeit decreasing. Therefore, we can predict that the stocks of OFDI in the mining sector will remain important in the future and will keep a relatively large share of China's OFDI. The outflows will not disappear.

There is also another sector related to natural resource seeking OFDI. This sector is called *Production and Supply of Electricity, Gas and Water*. According to *Industrial classification for national economic activities* (General Administration of Quality Supervision, Inspection and Quarantine and Standardization Administration, 2017), this sector has three subsectors: electricity, heat production and supply industries, gas production and supply and the production and supply of water. SBCOFDI only have integrated data for this sector. Using this data, we can see that the share of this sector was very small from 2004 to 2016. The highest share was 2.51% in 2011. The share of stocks was quite small with the highest percentage being 1.7% in 2013 and 2014. Therefore, the data of this sector is not evident compared to the data of mining sector in terms of the perspective that China's OFDI is natural resource seeking. (Data of this sector can be found in Appendix A.)

3.3.1.2 *Using CGIT*

To analyse the patterns of China's OFDI from the perspective of natural resource seeking, we can use the data of sector metals and energy among the total 13 sectors, which includes: Agriculture, Chemicals, Energy, Entertainment, Finance, Logistics, Metals, Real Estate, Technology, Tourism, Transport, Utilities and Other. Although this dataset is updated to June 2018, to make these two datasets comparable, we used the data from 2005 to 2016.

CGIT gave us a different picture in terms of China's OFDI in the mining sector and energy sector. In terms of energy sectors, SCBOFDI said that this sector was called the sector

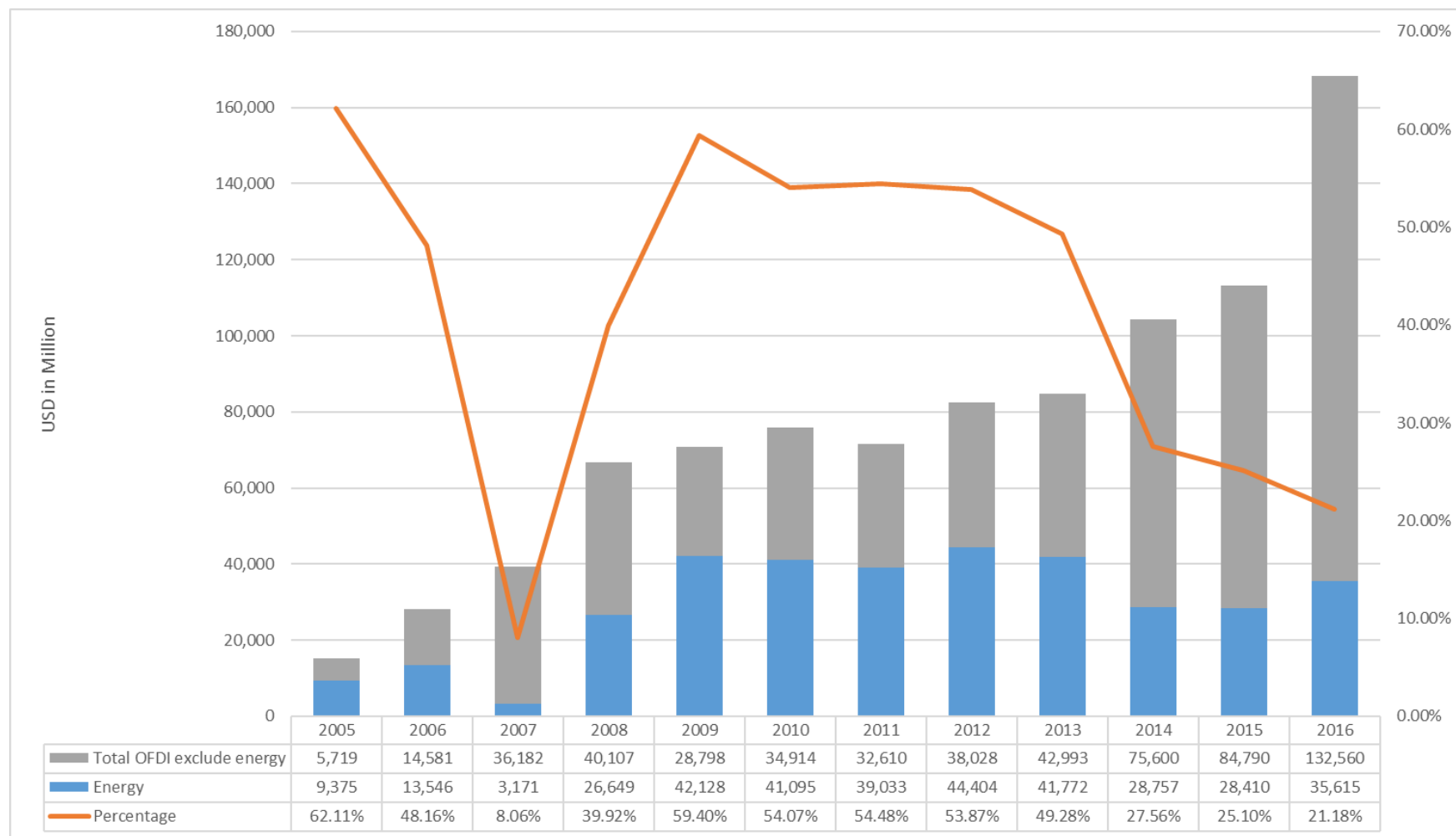
of production and supply of electricity, gas and water, which took only 1.8%, while CGIT said that energy sector took 21% of total OFDI in 2016 (*Figure 3-4*). In terms of the mining sector, SCBOFDI said that it took only 1% of total outflows while CGIT said that mining, which can be represented by the metals sector, only took 4% (*Figure 3-5*). In 2016, energy was more important than metals according to CGIT.

In terms of trends of outflows in the energy sector, as can be seen in *Figure 3-4*, the overall trend was increasing-fluctuating except for 2007 and 2014. It reached a peak at 44.4 billion USD in 2012. The share of the energy sector's OFDI from 2005 to 2013 was more than 50% except for the year 2007. In 2014 the share decreased dramatically to 27.56% and continued falling over the following three years to 21.18% in 2016. The conflicts in these two datasets regarding the energy sector may be because of the definition of the sectors of each dataset and the ultimate destination of the *Leasing and Business Service* sector in the SBCOFDI.

The patterns confirm that the energy sector was actually an important driver of OFDI. The highest percentage share was once reached around 60% of the total OFDI in 2005 and 2009. With the dramatic increase of total OFDI, the share of the energy sector has been decreasing since 2009, albeit remaining at about 21.18% in 2016. The pattern of the metals sector was similar, peaking in 2008 at 39.64 billion USD, to then fall from 2008 to 2016, except 2011 and 2014. In terms of share, it reached 40.61%, which was the highest from 2005 to 2016. It only took 4.26% of total China's OFDI in 2016 (*Figure 3-5*).

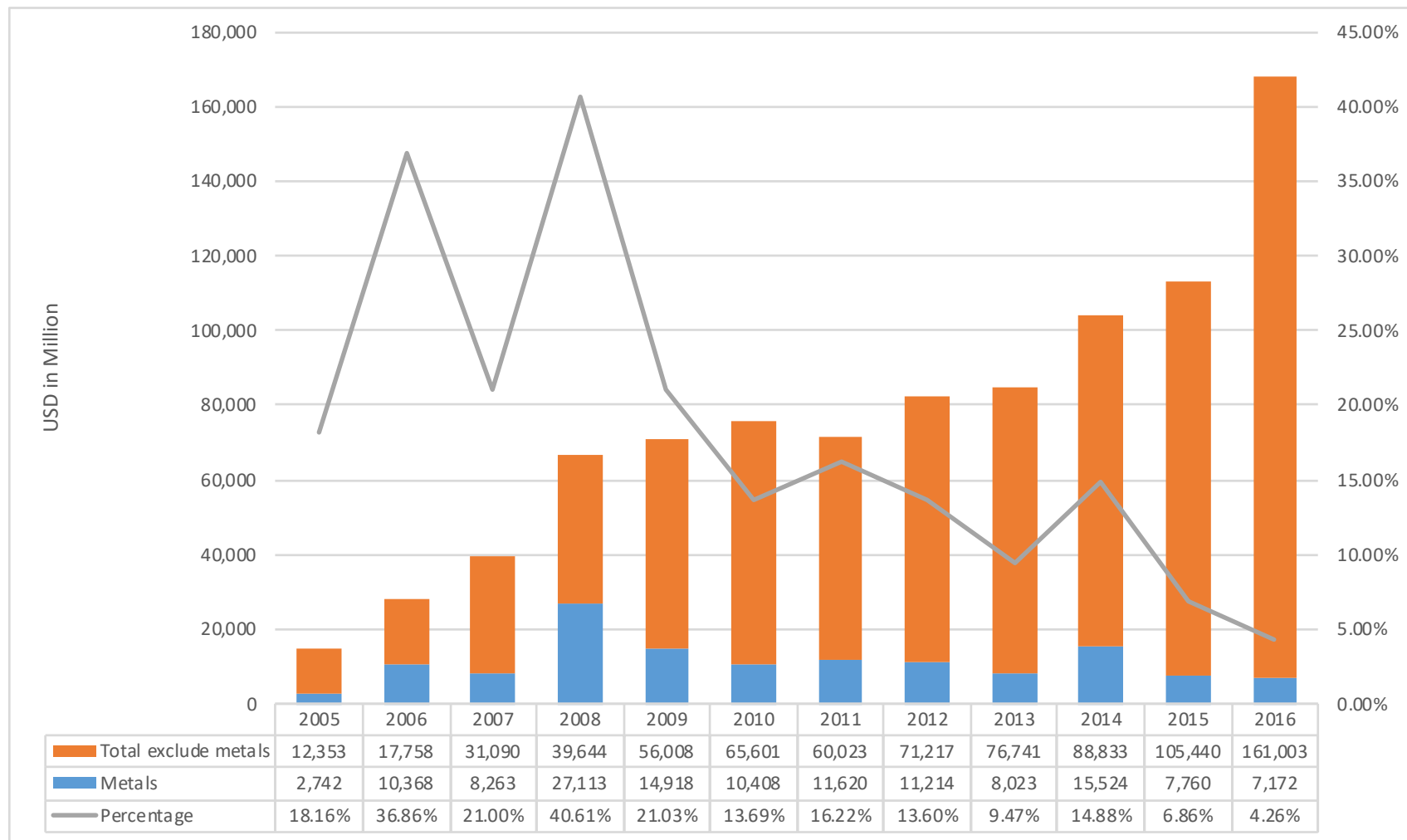
In recent years, China's OFDI has become more diversified. In 2016, the energy sector was about one fifth and the metal sector accounted for only 4% of total OFDI. In 2008, the metal sector peaked at 40.61%. In this year, natural resource seeking OFDI represented by the energy and metal sectors took over 80% of total OFDI from China (*Figure 3-4* and *Figure 3-5*)

Figure 3-4 Trends of China's OFDI in energy sector



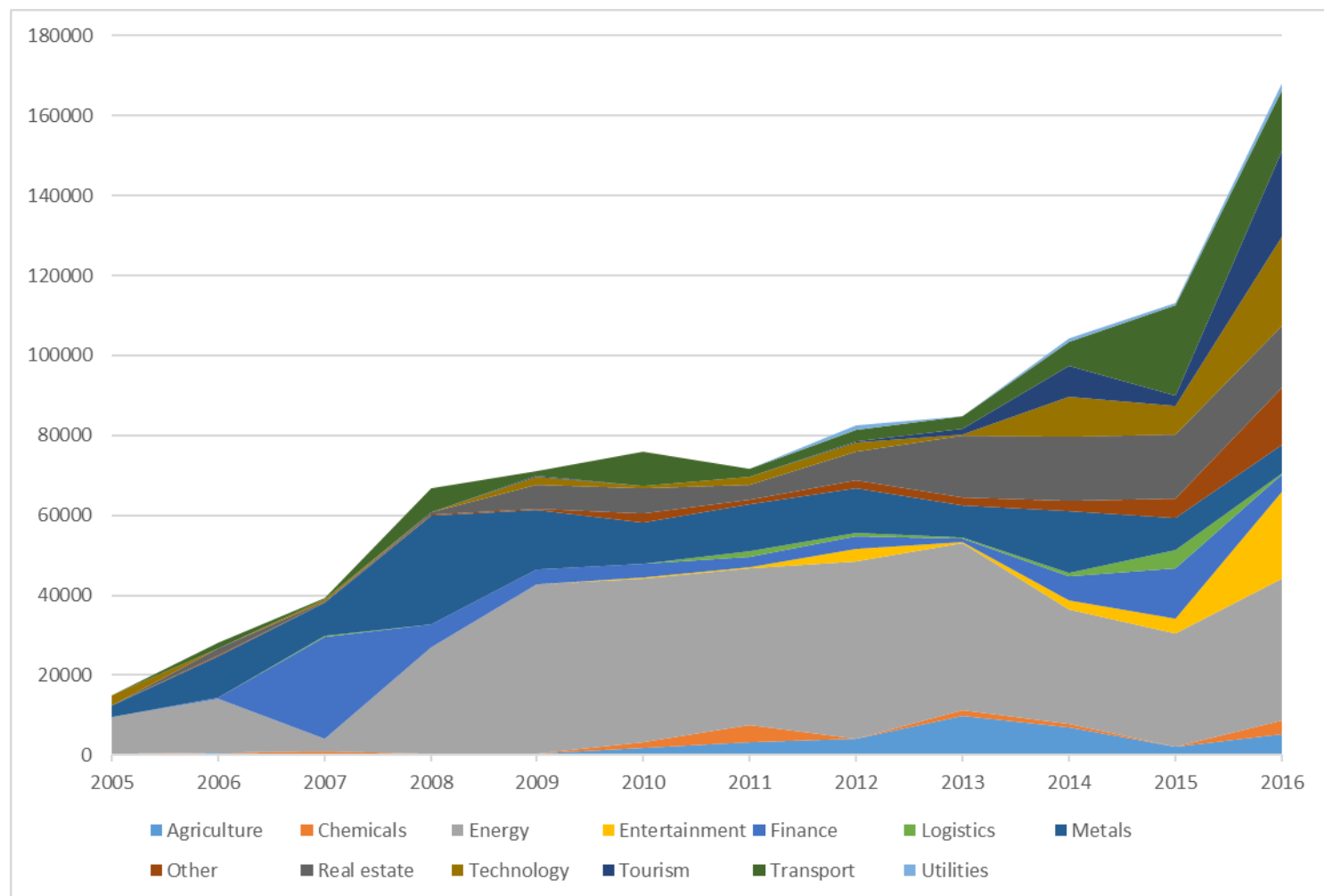
Source: CGIT

Figure 3-5 Trends of China's OFDI in the metal sector



Source: CGIT

Figure 3-6 Trends and compositions of China's OFDI



Source: CGIT

From the analysis above, we can identify a clearer pattern of China's natural resource seeking OFDI. Before 2010, China's OFDI is natural resource seeking. Both the energy and metals sectors were important. After 2010, OFDI in metals decreased to a very low level, meanwhile energy OFDI maintains a relatively more important level (30%). Both the importance of energy and metals have been decreasing. Energy was always an important motivation of China's OFDI. This is consistent with the literature review in Chapter 2. Therefore, the characteristic, which is natural resource seeking OFDI, still exists.

This pattern mirrors what we also found using SBCOFDI data, which is that China completed its overall global positioning in the natural resource sector in the early 2000s. Natural resource seeking OFDI remains an important part of China's economic strategy. The top eight out of ten MNEs that invested in the energy sector from 2005 to 2016 were state owned enterprises (SOE) (*Table 3-2*). Considering that more than half of China's OFDI was invested by SOEs, the resourcing seeking OFDI can be regarded as a tool of government to secure natural resources for economic development.

Table 3-2 Top ten MNEs that invested in energy sector (CGIT)

Name	Quantity in Millions USD	Type
China National Petroleum Corporation (CNPC)	75,093.55	SOE
The China Petroleum and Chemical Corporation (Sinopec)	69,294.36	SOE
China Investment Corporation (CIC)	63,469.88	SOE
China National Offshore Oil Corporation (CNOOC)	37,139.72	SOE
HNA Group Co., Ltd.	28,480.88	Unclear
Aluminium Corporation of China Limited (Chinalco)	26,387.87	SOE
SAFE	24,715.91	SOE
State Grid Corporation of China	19,120.78	SOE
China Three Gorges Corporation	18,178.19	SOE
Dalian Wanda	17,217.56	Private

Source: CGIT

3.3.2 Market seeking OFDI and Asset seeking OFDI

Scholars also believed that China's OFDI was market seeking and asset seeking. The GDPPC of host countries are used to represent their market size (Sanfilippo, 2010; Kolstad and Wiig, 2012; Wei et al., 2014). Countries with higher GDPPC and more valuable assets are usually developed countries. Countries with lower GDPPC and less valuable assets are usually less developed countries. Analysing China's OFDI between developed countries and less developed countries will help us have a better understanding of China's OFDI in terms of market seeking OFDI and asset seeking OFDI.

3.3.2.1 *Classification of developed countries and developing countries*

We will define advanced economies in our sample according to the United Nations (UN), suggesting that developed countries and developing countries were defined by general criteria and manually classified into groups in case one country was classified into both groups.

According to the concept of developed countries made by the United Nations, there are four blocks of developed countries: Western Europe, North America, Oceania and Asia. Each block has several members. North America has the USA and Canada. Oceania has Australia and New Zealand. Asia has Japan. Western Europe has Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

3.3.2.2 *Destinations*

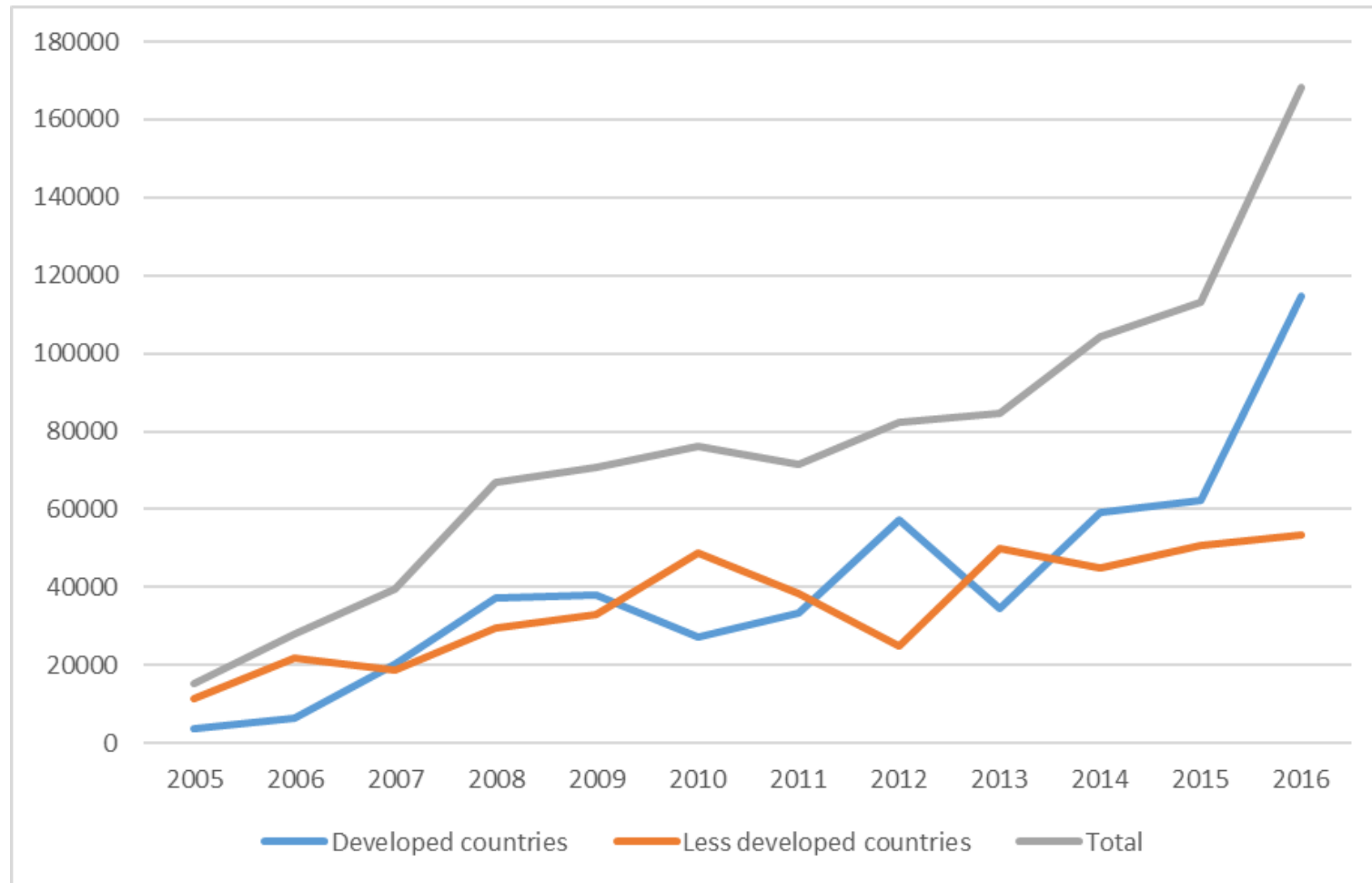
There are 119 countries in total in the CGIT database, with 28 of them being developed countries and the rest less developed countries. *Figure 3-8* shows the top ten destinations of China's accumulated OFDI, accounting for 54.87% of total OFDI from 2005

to 2016. FDI was always considered as a tool used by developed countries to invest in less developed countries. However, investors from China have been attracted to developed countries. As it can be seen, among the top ten destinations of China's OFDI, there are seven developed countries according to the UN's standard: US, Australia, Canada, UK, France, Germany and Italy.

According to CGIT, before 2013, investors had the same preference regarding developed countries and less developed countries (*Figure 3-7*). The volume of OFDI to the two groups of countries was increasing, but following a staggered pattern. Investment flows from China to developed countries from 2005 to 2013 could be regarded as increasing like a wave. Firstly, the flows of OFDI increased from 3.55 billion to 37.25 billion USD between 2005 and 2008. Then, the flows decreased to 27.11 billion USD in 2010. In the following two years, it kept increasing and reached 57.44 billion USD in 2012. Finally, it dramatically dropped to 34.69 billion USD in 2013. Meanwhile, flows to less developed countries experienced an exactly reverse pattern. From 2006, flows to less developed countries increased while flows to developed countries decreased, and vice versa.

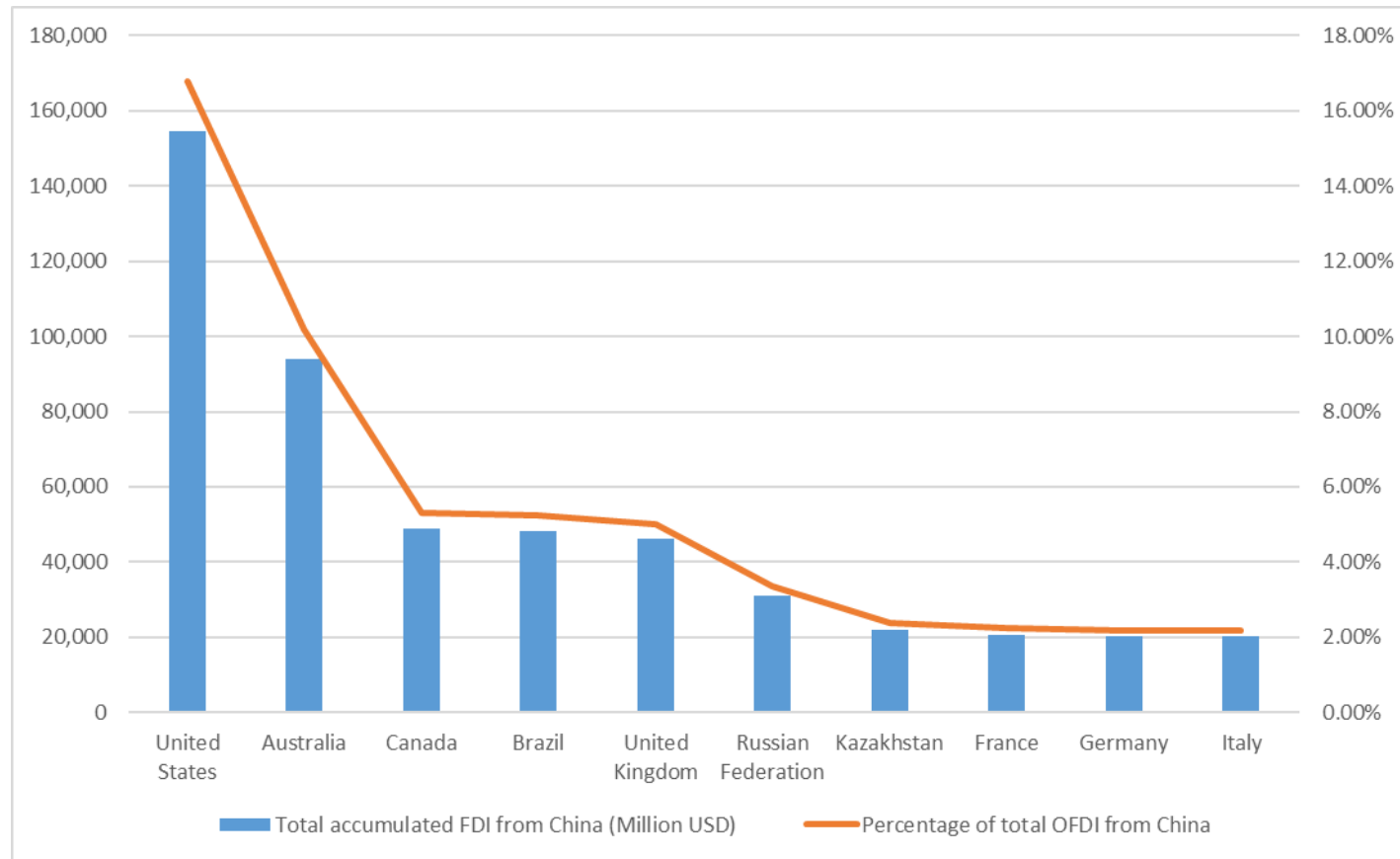
Although FDI in both developed countries and less developed countries fluctuated all the time, when both components are added together it is surprising that the total volume of OFDI was increasing smoothly during this period except for 2011. In 2011, China's OFDI in the world slightly decreased by 5.74% but resumed upward in the next year and increased 15.06% in 2012.

Figure 3-7 Trends of China's OFDI to developed countries and less developed countries



Source: CGIT

Figure 3-8 Top ten destinations of China's OFDI (CGIT)



Source: CGIT

From 2014, the volume of OFDI to developed countries increased dramatically and increased 231.12% in the next three years. Meanwhile, OFDI to less developed countries increased 6.47%. Compared to the total rate of increase during these three years, which was 98.4%, the increasing rate of OFDI to less developed countries was slow. It indicated that China's OFDI in more recent years was more attracted by developed countries which have larger markets and more valuable assets compared to less developed countries.

From the analysis above, we can conclude that China's market seeking and asset seeking OFDI started around 2014. From the analysis of Section 3.3.1, when we study China's OFDI from resource seeking perspective, we know that China's OFDI in the beginning of 2010s have less incentive to be resource seeking. Therefore, the years around 2010 can be regarded as a *transition stage* in terms of strategy at the country level perspective.

This is consistent with what we have found in the policies. Our data range is 2004 to 2016, which was mainly in the period when Go Global strategic policies were being applied. To what extent strategic will was being applied can be seen by how it was described in Five-Year Plans. The first Five-Year Plan during this period was the Tenth Five Year Plan published in 2001. In this plan, it was clearly demonstrated that government supported overseas cooperation and exploitation of shortages in domestic resources to promote domestic industrial structure adjustment and resource substitution. This means that China's government regarded OFDI as a way of securing natural resources. In the eleventh Five-Year Plan published in 2006, exploitation of resources was still mentioned in the section on OFDI. However, in the twelfth Five-Year Plan published in 2011, the description of exploitation of resources was removed but what was added was that one the principles of OFDI is market-oriented. According to the Five-Year Plans, the period of twelfth Five-Year Plan was the *transition stage*.

Heavily carrying out resource seeking OFDI was characteristic of the OFDI of emerging economies. Market seeking OFDI was carried out by both emerging economies and advanced economies. From this perspective, China's OFDI was losing its characteristic of EMNEs' OFDI and can be explained more by mainstream theories of internationalisation. The transition process could continue for several years, considering that China is still an emerging economy. Resource seeking OFDI, especially natural resources, will continue to be an important part to secure high development in China's economy. But it will not continue to increase sharply, because the positioning of China's OFDI in sectors related to natural resources was sufficient to satisfy the country's economic development needs. Moreover, industry upgrading was mentioned in many government reports, suggesting that China's economic growth will rely less on energy intensive sectors. The development of clean energy and the discovery of new fossil energy can be also a decreasing motivation for natural resourcing OFDI. However, considering the importance of the current situation, China will not easily change the pattern.

3.4 IDP and Policy

In this section, we present the pattern of China's OFDI at the national level and its relationship with strategic policies. We use the data of the history of China's OFDI from 1982 to 2016, which shows the patterns of the relationship between economic and non-economic factors of China and OFDI from China to the World.

3.4.1 Overview of China's OFDI

The history of China's OFDI only started 36 years ago. If we look back at the history, Chinese OFDI began to invest abroad since the beginning of 1980s when China implemented the Open Door policy and moved from being a planned economy to becoming a market

economy. As we discussed in the literature review in Chapter 2, Voss et al.(2008) divided this development progress from 1979 to 2008 into three stages and five sub-stages, with each stage being marked by a strategic policy or political event: Open Door policies in the early 1980s, Deng Xiaoping's Southern Journey in 1992 and the Go Global policy in the early 2000s.

Indeed, in the second stage, Deng Xiaoping's journey to the south strengthened the confidence of China to continue the Open Door policy and market reform and to promote OFDI. However, SC approved and published a policy in 1991 that had exactly the opposite effects on China's OFDI. The policy suggested that the condition for China's MNEs to carry out OFDI was not mature. It shows a negative attitude of government on OFDI. Therefore, we think that the increase of OFDI in this stage was mainly due to the rapid growth of China's economy. In other words, economic factors rather than policy factors promote OFDI. Strategic policies may have had only indirect effects.

In the third stage, government's attitude on OFDI became positive and the Go Global strategic policy was published. This strategic policy was added into Five-Year Plans. Meanwhile, joining the WTO and several other reforms pushed for a dramatic increase of China's OFDI. Like Deng Xiaoping's journey to the south, joining the WTO promoted OFDI indirectly via exporting. Exporting could help firms to overcome barriers to overseas market. Therefore, the increase of OFDI in this stage was promoted by both policies and the development of economy.

In addition to the three stages mentioned by Voss et al. (2008), we found there was a sixth stage that started in 2014, due to the launch of the One Belt One Road policy, sometimes called the Belt Road Initiative. It was brought up in September of 2013 and started to be applied in the next following years. In the following years, China's OFDI increased even

faster than the speed of fifth stage. This can be also seen by using data from SBCOFDI and CGIT (*Figure 3-1* and *Figure 3-4*).

Therefore, there were four important time points in China's OFDI history. The first one was in the early 1980s when China started to invest overseas because of the Open Door policy. The second one was in the early 1990s and was influenced by Deng Xiaoping's journey to the south, which strengthened the reform and opening of China's policy. The third change point was the early 2000s, which was influenced by the Go Global Policy. At this stage, China joined the WTO and participated in the world economy more actively. The fourth one is the One Belt One Road policy published in 2013. China's OFDI started to increase even faster after this policy was published and the pace of increase was kept up in the next following years.

All these stages were marked by the publication or launch of policies, hence by political reasons. The overall volume of China's OFDI flows was stimulated by China's strategic policies made by the central government of China. This history of the evolution of China's OFDI and the time points suggest that policies were very important determinants. China economy was planned economy before the reform in 1980s. Although China now has a more open and free economy, the government is still very powerful in terms of the regulation of the economy.

3.4.2 Compare OFDI with Economic and Non-economic Factors

From 1979 to 2016, both GDPPC and OFDI significantly increased and showed very similar trends (*Figure 3-9*). Thanks to the Open Door Policy, GDPPC increased from 1098.83 USD in 1979 to 1655.43 USD in 2000. Meanwhile, at the beginning of the 1980s, OFDI increased from 247.71 million USD in 1982 to 11781.72 million USD in 1992. However, in the following 12 years, overall OFDI decreased to 4676.31 million USD in 2003.

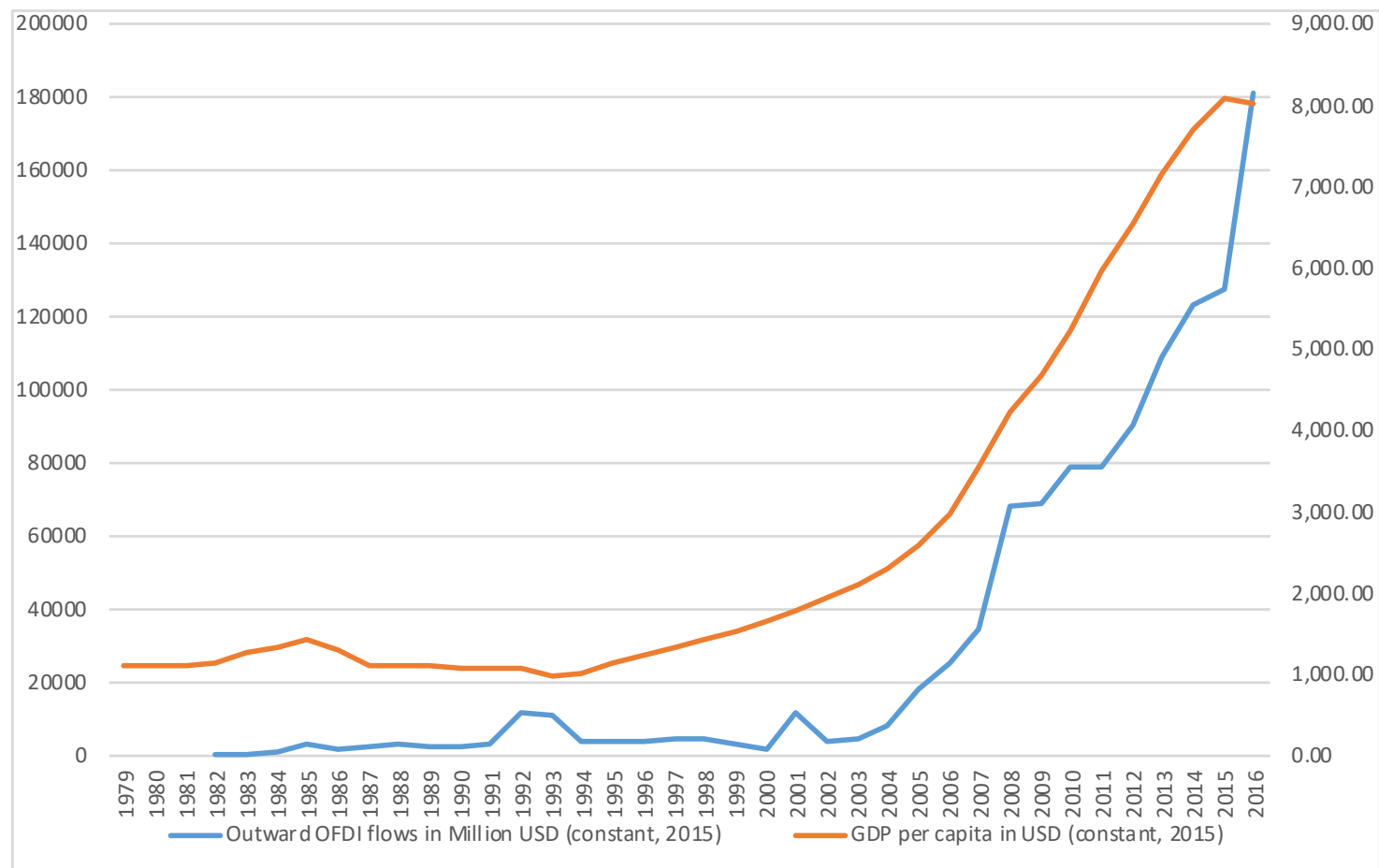
During this period, it jumped to 11643.12 million USD in 2001. This rise may be caused by the Asian Financial crisis. From 2004 to 2016, OFDI increased dramatically. While GDPPC increased from 2310.71 USD to 8025.13 USD. OFDI increased from 8420.86 million USD to 180889.89 million USD. GDPPC increased nearly 4 times and OFDI increased over 21 times.

Although the trends of GDPPC and OFDI were similar -see *Figure 3-9* - GDP took off earlier than OFDI. The deflated GDPPC started to increase since 1995, whereas OFDI started to increase only since 2004. Therefore, GDPPC and OFDI flows have a positive relationship, but there are other factors that affect OFDI flow.

One possible explanation is that this is consistent with Dunning's theory (Dunning, et al., 2001). OFDI flows would increase only in the third stage of an economy's growth. That means OFDI flows' rapid growth depends on certain levels of GDPPC, explaining why OFDI flows started to increase only since 2004. Before 2004, China's economy overall was in the first and second stages. In this stage, OFDI remained at a lower level. After 2004, China's economy went into the third stage, when OFDI increase at a higher rate.

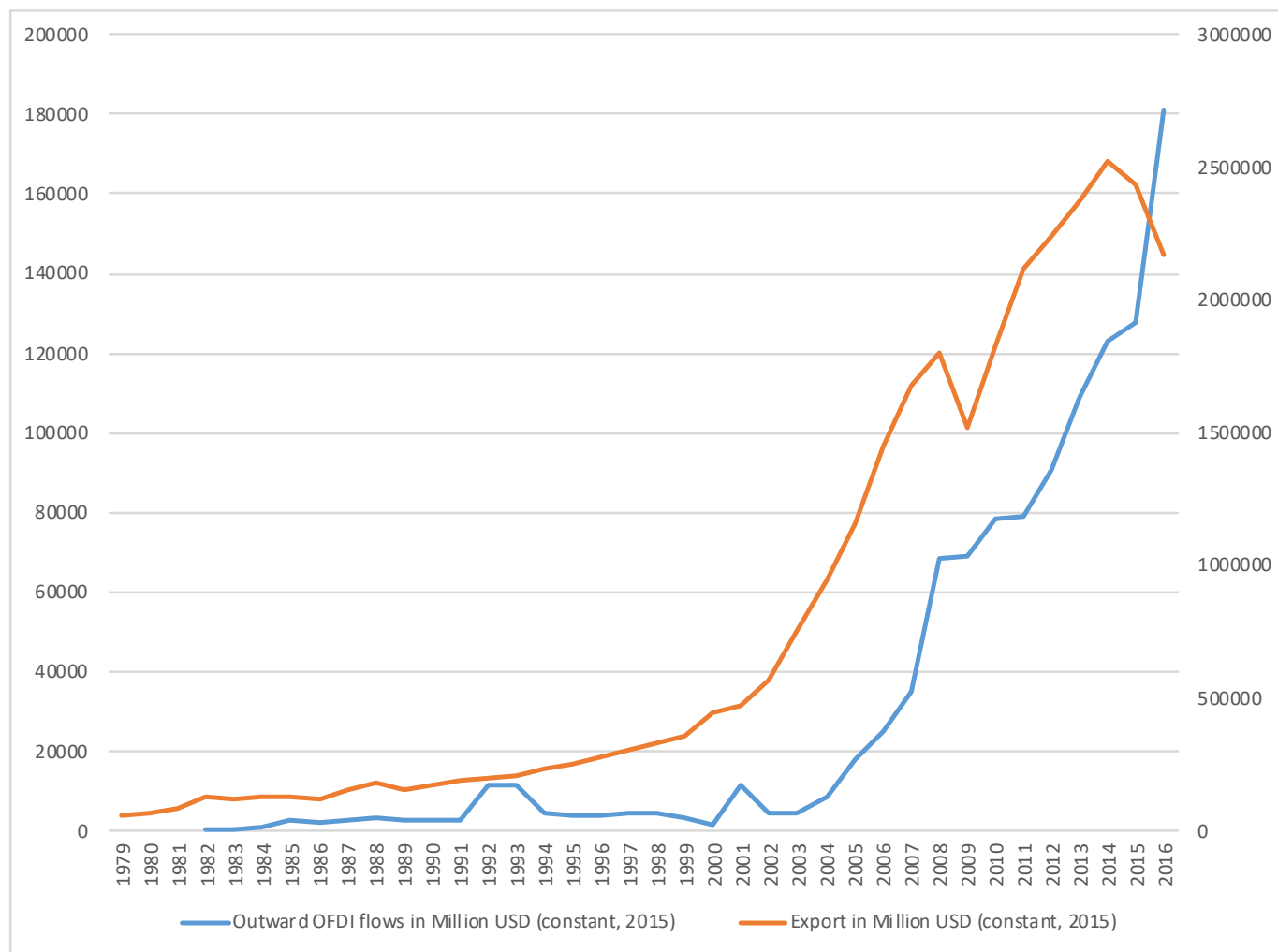
The Open Door Policy also impacted on exports, which started to increase rapidly since the 1980s. Meanwhile, OFDI flows remained at lower levels. Growth rates of both exports and OFDI was higher than before thanks to the Go Global policy which began in the 2000s. We can see that OFDI and export trends have been almost parallel since 2004 (*Figure 3-10*).

Figure 3-9 the history of OFDI and GDPPC of China from 1982 to 2016



Source: UNCTAD, World Bank

Figure 3-10 the history of OFDI and Export of China from 1982 to 2016



Source: UNCTAD, World Bank

From the analysis above, we have a clearer idea of the patterns of Chinese OFDI and what economic and non-economic factors shaped it. Benefiting from the Open Door policy, Chinese economic growth rate increased, as evidenced by the rise of deflated GDPPC, especially after 1994. During this period, exports increased four times. Meanwhile, OFDI grew from nothing to an equilibrium level in the beginning of the 1990s and then remained quite stable during the 1990s. Since the 2000s, GDPPC increased four times, thanks to the Go Global Policy. At the same time, in these ten years, exports doubled again. China's OFDI had not increased fast until 2004. Because of the huge increase of exports, according to Dunning's eclectic theory, it was time for firms to invest overseas and to exploit location advantages. In terms of GDPPC, according to Dunning's theory, the economy of China entered its the third stage. In this stage, OFDI increased rapidly. Therefore, the curve of OFDI became steeper and steeper especially after 2004.

3.5 Conclusion

In this chapter, we analysed the background of China's OFDI. We confirmed China's OFDI was natural resource seeking, market seeking and asset seeking. Natural resource seeking OFDI was more obvious before 2010. From 2011 to 2015, during the twelfth Five-Year Plan, the OFDI was transformed from natural resource seeking OFDI to market seeking OFDI. The data empirically supported what was said in the tenth, eleventh and twelfth Five-Year Plans. The data showed that China's OFDI changed focus from emerging market OFDI to advanced economy OFDI. Moreover, the history of China's OFDI development path followed the IDP theory but also was affected by policies. China's OFDI was affected by economic variables such as GDPPC and exports, and non-economic variables i.e. policies. There were some important policies or political events: the Open Door Policy, Deng Xiaoping's Southern Journey, the Go Global Policy and the One Belt One Road Policy.

China's OFDI was divided into stages by these strategic policies. The Chinese government publishes several types of policies: strategic policies, specific policies and Five-Year Plans. Strategic policies are very general and cover many aspects of the economy, while specific policies are detailed and feasible. The Five-Year Plans are very general but present timetables; hence they have been perceived to be feasible and achievable. So far, most of the analyses that have considered policies have been qualitative.

In the next chapter, we will try to analyse the effect of China's OFDI related policies on China's OFDI by using quantitative methods.

CHAPTER 4

THE EFFECTS OF CHINA'S NATIONAL LEVEL POLICIES ON OFDI

4.1 Introduction

From the analysis in the previous chapters, we know that policies do push Chinese Outward Foreign Direct Investment (OFDI). However, there is no robust quantitative research that has addressed this issue. Existing literature mainly has focused on using dummies to represent strategic policies or using qualitative methods to study the specific policies. Such methods were too simplistic and inadequate to fully capture the impact of government policies on motivating OFDI. Strategic policies were made and evaluated during a long period before they were published, and informal documents could be released before the formal documents were published. Moreover, strategic policies needed specific policies to be implemented. The whole process could last a very long time. For example, the idea of the Go Global policies was first mentioned in 1979. However, it was not formally implemented until it was added to the tenth Five-Year Plan in 2001. Before that, several specific policies had been published which can be seen as an informal start of the Go Global policy. Therefore, this policy did not have any clear start. Hence, it was not appropriate to select one year as a start and use it as a dummy in the model. On the other hand, the timing of some strategic policies have overlapped with other events, which could also have significant effects on China's OFDI. For example, China joined the WTO in 2001, which was the same year that the Go Global policy was added to the tenth Five-Year Plan. Joining the WTO would promote China's exports and hence have complementary or substitution effects on OFDI (Liu et al., 2005). Therefore, both joining the WTO and the Go Global policy could have affected China's OFDI. Just adding a year dummy of 2001 could not fully capture and reflect the effect of the Go Global policy on

OFDI. Another example is Deng Xiaoping's Southern Journey, which started from January of 1992. This was regarded as sign of policy liberalisation (Buckley, 2007). However, the timing of the journey overlapped with a specific policy published by SC in 1991 which heavily discouraged China's OFDI, and only one specific policy has been published in the next four years. Therefore, adding a year dummy of 1992 was also problematic in this case. Moreover, this case also indicated that sometimes specific policies were more appropriate compared to strategic policies to represent the changes of policies. Therefore, it is necessary to capture the impact of specific policies.

Therefore, in this chapter, we apply a quantitative research methodology to fill this gap, which could bring a richer understanding of the effects of policies on OFDI.

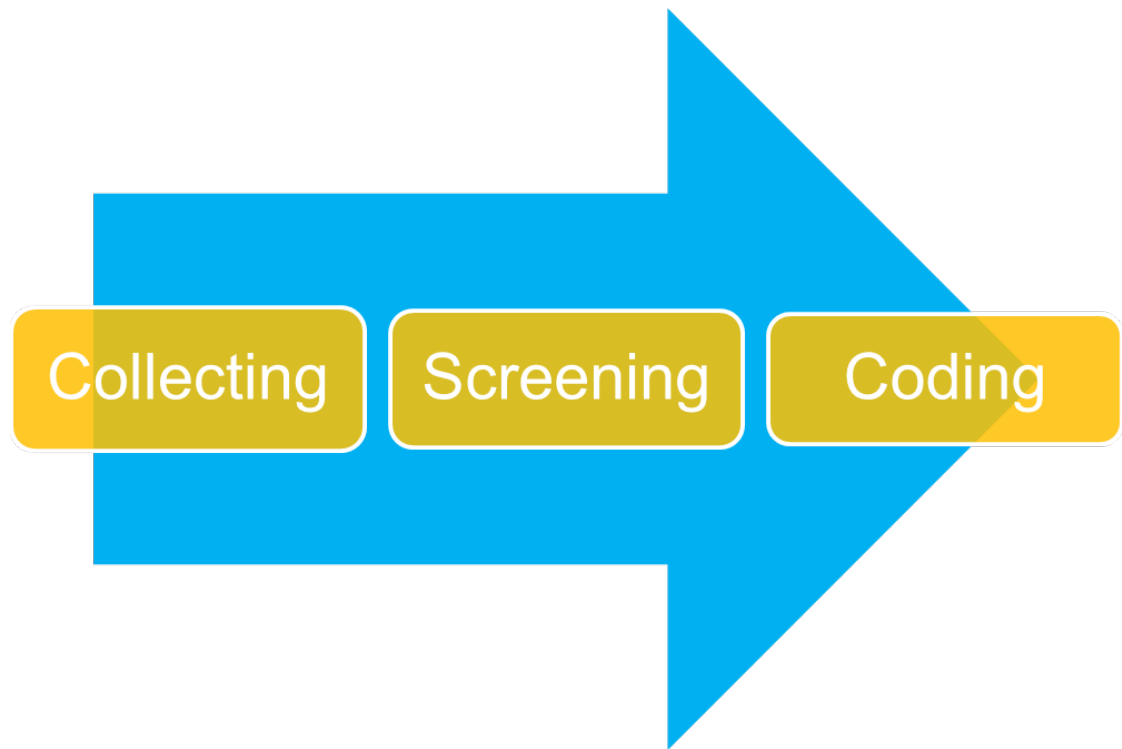
Our model extends the model created by Liu, et al. (2005) by adding policy variables. The biggest challenge was to codify the descriptive policies into quantitative indices. We developed a process for collecting, screening and coding policies. After this, we constructed a series of indices for different types of policies and used them in a regression model. By using such a quantitative methodology, we found robust evidence that regulatory policies, service policies and the attitude of government did have significant effects that the policy makers intended on China's OFDI.

This chapter will proceed as follows. The next section presents the methodology used to codify policies into indices. This is followed by the model and data sources in Section 4.3, the results in Section 4.4, and, finally, a conclusion.

4.2 Methodology of creating policies indices

This section describes how we created the OFDI-related policies indices in detail. The process followed a three-step methodology as shown in *Graph 4-1*.

Graph 4-1 Steps of transferring policies into indices



Firstly, we adopted a methodology to extract relevant policies on OFDI. We collected policies by searching two key words on the official website of China's government. We also collected policies from existing literature in case the key word search missed some policies. This is described in the first subsection. As a result, we have been able to capture policies that potentially are related to OFDI. However, these policies contained some noise policies which were not strictly OFDI-related. Noise policies are those policies that, we believe, would not affect the national level of OFDI. For example, there are some policies that were collected into the database because of the ambiguity of the key word. Noise policies could be summarised into ten categories, which will be described later. In the second subsection, we describe how we identified and removed noise policies and kept key direct policies. We found that key policies could be either direct or indirect policies. We believe that only direct key policies would have a significant effect on the volume of China's OFDI, so we also eliminated indirect policies. In the last step, we transferred the remaining direct policies into indices to

measure OFDI-related policies. Direct key policies can be further divided into four specific policies, which are regulatory policies, supervisory policies, service policies and promotional policies. Then, we used different methods on different types of policies to transfer them into policies indices.

4.2.1 Step 1: Methods and results of collecting policies

4.2.1.1 *Policies definition*

Before collecting policies, the definition of OFDI-related policies should be clear. Such policies should have four characteristics. Firstly, the policies must be related to firms. Any policies affecting the national level of Chinese OFDI should be the policies that affect firm's behaviours. We are studying the direct policies. Therefore, any policies that did not target firms should not be included in our database. As we will see when we screen noise policies, some policies were work arrangement that were published by the State Council (SC). These were used to distribute tasks to departments and therefore should not be included in our database.

Secondly, the policies should be at the national level, just like economic variables. We are studying the determinants of Chinese OFDI at the national level so therefore the policies should be taking effect in the whole country and in every sector, and the policies should be published by the central government.

Thirdly, China started to invest overseas in 1981. Therefore, we need all OFDI related policies published after 1980. The data ranges of our sample period are from 1981 to 2015, with the first direct policy published in 1984.

Fourthly, in order to be accurate, the definition of policy at each step was different. In the first step (collecting policies), we were trying to include as many policies as possible and avoid missing any policy, so our definition of policy in the first step was very general. After

that, the definition of policy became more and more precise from the first step of collecting policies to the third step of coding policies. In the first step of collecting policies, any formal document published by the central government will come into our database. In the second step, policies should be OFDI-related. Not every policy having the key word in the context is an OFDI related policy. In the third step, policies should be direct policies that would have an effect on China's OFDI at the national level and each specific type of key direct policies has its own definition².

4.2.1.2 *Sources*

We relied on two sources to search for OFDI related policies. The first one, and the main source, was the official website of China's government. As we said in the definition of OFDI policies in 4.2.1, policies are at the national level and are published by the central government on its website. Although, the central government would cross post some provincial level policies, they would not post all of them. Every province was expected to follow the lead of the central government, and the central government did not give too much flexibility to local government. Therefore, the website of the central government was the main source for published policies. China's OFDI was supervised by SC and by its three ministries or departments – the National Development and Reform Commission (NDRC), the Ministry of Commerce (MOC) and the State Administration of Foreign Exchange (SAFE). Each department of government had its own website. Since the Chinese OFDI policies were mainly supervised by the MOC, all policies published by other ministries or departments would be repeated on the website of the MOC. SC would also repeat some of the policies when SC

² Definitions of specific policies are introduced in 4.2.2.2 .

thought they were very important. SC, as the leader, would also publish OFDI-related policies. Therefore, the two main sources were the websites of the SC and MOC.

Some policies could not be searched online. The reason for this is twofold. Firstly, online publication of policy started only at the end of 1990s. Due to the underdevelopment of the internet, earlier policies were not published on the website. The earliest policies on the website by the SC were published in 1985, while the earliest policy published on the website of the MOC was in 1996. However, China began investing in foreign countries at the beginning of the 1980s, when China was transitioning its economy from a planned to a market oriented economy. In a planned economy, everything needed to be planned and supervised, so policies played more important roles during this period. Therefore, it is reasonable to believe that some policies have been published before 1985, but those policies were not published on the website.

Secondly, the MOC was reformed several times. The former institution was the Ministry of Trade when it was first founded in the year 1949. Then it became the Ministry of Foreign Trade and the Ministry of Business in 1952. In 1982, the Ministry of Foreign Trade and other three departments – the National Import and Export Management Committee, the State Administration of Foreign Investment and the Ministry of Foreign Economic Relations - merged and became the Ministry of Foreign Economics and Trade. This became the Ministry of Foreign Trade and Economic Cooperation in 1993 and eventually the MOC in 2003. During the progress of reforms, the MOC's roles and functions changed several times. Therefore, it might not have been the responsibility of the MOC's former institutions to publish OFDI-related policies.

For the two reasons above, and to make sure that all relevant policies were collected, supplementary measures were needed. A second source of information was the existing academic literature. After searching online, we captured most of the relevant policies. It was

unrealistic for us to look through all the published policies in every aspect to identify relevant policies; there were too many policies for us to read one by one. The total number of formal documents published by the MOC from 2001 was more than 10,000, not to mention the formal documents published by other departments in earlier years. A much more rigorous and efficient way was to search the literature. Many scholars such as Luo et al. (2010) and Voss et al. (2008) had done qualitative research on this topic. To check whether we had all the policies, we checked every policy mentioned by the literature, such as Luo et al. (2010) and Voss et al. (2008)³. If a policy had not already been included in the database, we could collect it by searching for its title on the internet and then adding it to our database.

4.2.1.3 *Key words*

To identify those policies related to OFDI, we searched the website by using a search engine and two key words. All policies were written in Chinese, as were the key words. The two key words were Overseas Investment (境外投资) and Outward Investment (对外投资). Most of the policies could be found by using the first key word. China's government used Overseas Investment (境外投资) and Outward Investment (对外投资) instead of Outward Foreign Direct Investment (OFDI).

4.2.1.4 *Results of collecting policies*

In the end, we found 297 policies from the MOC's website and 70 policies from the SC's website by using the key word Foreign Investment (境外投资). We found 76 policies from the MOC's website and 22 policies from the SC's website using the key word Outward

³ The literature also includes: Luo et al. (2010); Voss et al. (2008); Zhou (2009); Yao and Li (2011); Yang and Stoltenberg (2014); Sauvart and Chen (2014); Davies (2013); Freeman (2013).

Investment (对外投资). Therefore, we had 465 policies in total, all of which were written in Chinese.

Moreover, we found 61 policies from reviewing the academic literature that had not been collected by the key word search to complete the policy database, giving us 526 policies in total.

Table 4-1 Results of Collecting Policies

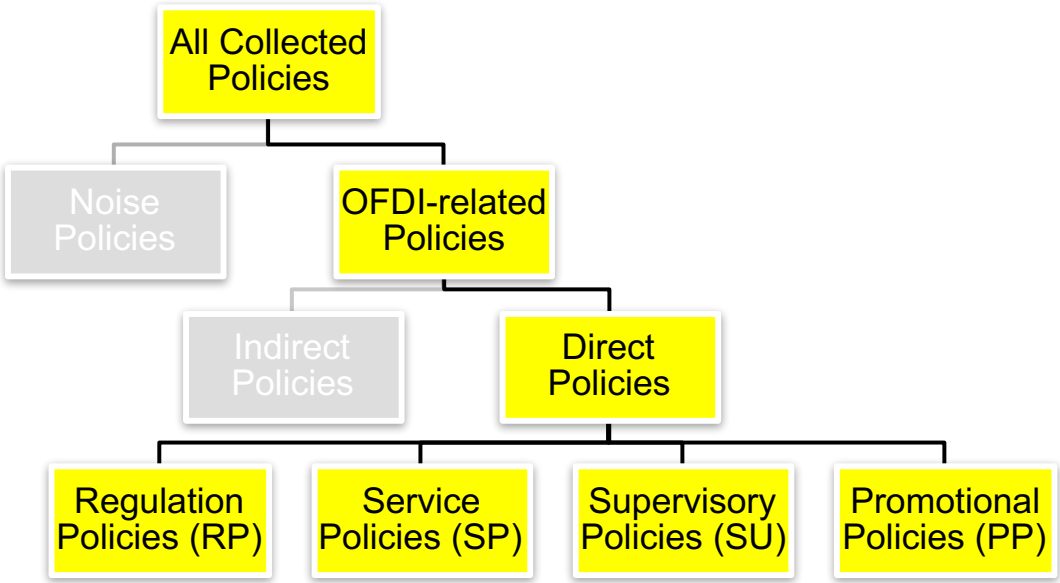
Research Method	Sources	Key Words	Numbers of Policies
Key Words Search	MOC	Foreign Investment	297
		Outward Investment	76
	SC	Foreign Investment	70
		Outward Investment	22
Supplementary Method	Literature	-	61
Total			526

4.2.2 Step 2: Screening and removing noise policies and indirect policies

In our policy database, after the first step of collecting OFDI related policies, we screened out those policies that did not comply with our definition, kept policies that would have an effect on China's OFDI at the national level and removed the rest. There were two types of policies that would not have an effect on the volume of China's OFDI and needed to be removed: noise and indirect policies (a visual of the selection process is presented in Graph 4-2 below). Firstly, noise policies were deemed to not be OFDI-related policies at all (even though the text of those policies contained the key words) and therefore judged not to have an effect on Chinese OFDI at the national level. These noise policies were removed from the database. Secondly, among the OFDI-related policies, the other type of policies again deemed not to impact on OFDI at the national level were indirect policies. The main target of these indirect policies was, for instance, export rather than OFDI. OFDI was only a tool to

accomplish the export target, and the effects of indirect policies on OFDI were limited. Moreover, the description of such policies was usually very general. Examples are provided in the following subsection.

Graph 4-2 Hierarchy of China's key direct OFDI-related policies



4.2.2.1 *Categories of OFDI-unrelated policies*

After a meticulous assessment of these noise policies, we decided to group them into ten possible categories. These are described in detail below and a summary table is presented in *Table 4-2*.

Table 4-2 Summary of noise policies

Reasons of removing policies	Numbers of policies removed	Numbers of policies left
Number of All Policies	-	526
Out of Sample Period	27	499
Repeated Policies	52	447
Sector Policies	102	345
Regional Policies	63	282
Draft Policies	12	270
Just Mentioned OFDI	6	264
Report of Name List of Policies	50	214
Ambiguous of Key Words	10	204
Policies targets are not firms	41	163
Experimental Policies	3	160

The first category comprised policies that were out of the sample period (27)⁴. We could access the data of OFDI flows from 1981 to 2015, therefore, any policy that was published before 1981 and after 2015 was removed. The second category included repeated policies (52). We searched for policies on the official website of the SC and MOC. Sometimes, each government department would crosspost policies published by another department. The content of those policies was identical. We used the same key words and searched on both websites, and any policy that was repeated was kept once and the others were removed.

The third and fourth categories of noise policies comprised policies that were not strictly at the national level. There were two categories of these: sector policies (102) and regional policies (63). Departments of the central government also published sector policies.

⁴ Numbers in the parentheses are numbers of policies of this type.

The sectors included the mineral, financial, agriculture, transport, manufacture, and service sectors. Most of them were in the financial and manufacturing sectors such as *Temporary measures for the management of special funds for the exploration of foreign mineral resources*, *The implementation rules for the management of foreign financial institutions*, etc. This kind of policy only regulated activities in a single sector and were less likely to have effects at the national level. Therefore, sector policies were removed from the database. We found there were also some regional policies as well. Departments of the central and local governments also crossposted some regional policies, such as *Shandong province government opinions on accelerating the implementation of the Go Global policy*. This kind of policy was only applied in certain provinces or regions. As with sector level policies, these policies would not have any significant effects on the volume of the national level of OFDI and were removed from the database.

The fifth category of noise policies included draft policies (12). Before policies are published, the government publishes draft policies for collecting feedback and suggestions. For example, in 2009, the MOC published *the draft of measures for the administration for overseas investment*. This *draft* policy was published two months before the official one. Since policies become binding when they are officially published, we decided to remove draft policies from the database to avoid duplication.

The sixth and seventh categories of noise policies covered those policies that were not OFDI related even though they mentioned OFDI. Indeed, some policies just mentioned OFDI but focused on other aspects of the national economy rather than OFDI (6). For example, *Notice on Relevant Issues concerning the foreign exchange administration of perfecting foreign mergers and acquisitions* was used to regulate IFDI. This policy mentioned that OFDI should follow another policy titled *Measure for the administration of foreign exchange in overseas investment*, which was published in 1989. This meant that this policy only

regulated IFDI instead of OFDI, and the reason it mentioned OFDI was to clarify this situation. Therefore, this type of noise policy would not have a significant effect on OFDI directly. The searching methods we used when we collected policies was very general, which is why we had this type of policy in the database. These types of noise policies, however, were removed from the database.

The seventh category of noise policies referred to policies from the *Ministry of Commerce publishes China's foreign economic and trade report* (50). These documents were reports published regularly by the MOC; about 80 reports every year were published to review published policies and contained therefore just a list of published policies (including the title and publishing institution). The reports did not have any policy content, therefore, they could not have impacted on Chinese OFDI and were therefore removed.

The eighth category of noise policies comprised those which came into our database because of the ambiguity of the key words (10). This kind of policy became part of our database just because of the ambiguous meaning of the term outward investment (对外投资) in Chinese. As mentioned before, we relied on two key words to capture OFDI: one was Outward Investment and the other was Overseas Investment. In Chinese, Outward Investment also means firms which invest in some place “outside”. Sometimes “outside” means “other firms”. Therefore, sometimes policies captured inter-firm rather than cross border investment. For example, the MOC and the Ministry of Public Security jointly published *Pawn Management Approach*. In this policy, pawnbrokers were not allowed to do any outward investment. From the context, we could determine that the outward investment meant external investment, i.e. pawnbrokers were not allowed to invest in other firms, not abroad. We found many other similar cases like this one and so decided to remove these policies from our database.

The ninth category of noise policies covered policies that did not target directly on firms (41). These policies were used for the government to distribute tasks to each department. The targets of this kind of policy were departments of government rather than firms. This type of policy is usually published by the SC, and the targets were likely to be the MOC, the Ministry of Finance (MOF), etc. For example, the SC would distribute documents about the main task of work every year, such as the *Circular of the State Council on issuing the main points of work in 2005*. In this policy, it said that:

NDRC and MOC should further apply go global policies, perfect promotional and service system, encourage firms that meet criteria to invest overseas and multinational investment. Devote more effect on support such as loan, insurance and foreign exchange rate. Strengthen guide and coordinate with firms. Build supervise system on overseas state-owned asset. Push forward the economic cooperation with developing countries. Enlarge cooperation overseas in energy and resources.

This category of policy was referred to as the implementation and administration of policies. Following these instructions, the NDRC and MOC would start to make specific policies, but we did not know when they would publish specific policies and what the policies were by just looking at, for example, the single policy above. Before the specific policy was published, a work arrangement policy could not affect OFDI. Therefore, this category of policy would not have affected the national level of OFDI and was removed.

The tenth category of noise policies included experimental policies (3). The latter were only rolled out and implemented in certain provinces and regions. The function of experimental policies was usually to test the impact of the new measures on one or few aspects. Experimental policies might and might not be expanded to all areas of the country. For example, the MOC published the *Circular on simplifying the examination and approval procedures for overseas enterprises and institutions in some provinces and municipalities* in

2003, which was only applied in eight provinces. It thus was less likely to have a significant effect on the volume of national OFDI and we decided to remove it and policies like it from our database. We will expand on these regional policies in Chapter 5, where we will analyse the effect of policies on OFDI at the provincial level. ,

After removing 366 policies, we were left with 160 which, we are confident, are strictly and meaningfully related to OFDI.

4.2.2.2 *Remove indirect OFDI-related policies*

Not every OFDI-related policy would have significant effects on OFDI at the national level. Although they were related to OFDI and policy makers would like to reach goals by making these policies, their intensities were different. While some policies would have effects on OFDI, the others would not, and among the policies that would have effects on OFDI, the effects would be different. OFDI-related policies could be divided into two categories: direct policies (82) and indirect policies (78).

Direct policies were aimed to regulate or promote OFDI, and the content of each policy was all about OFDI. Based on the literature and our understanding of policies, we believe that the direct policies could be further divided into four types - regulation (approval/recording) policies (RP), supervisory policies (SU), service policies (SE) and promotional policies (PP).

RP were policies that described government's approval process. They regulated the process by informing on which department would regulate which aspect of the process. The regulatory system on China's OFDI was changing from an examination and approval system to a record system. SU were used to supervise the multinational operation of firms, and they were used to regulate firms after the OFDI had been approved. SE were published by the government to support Chinese firms' investments and operations in other countries by

sharing information or providing a communication platform. PP was used by the government to promote OFDI by providing financial support or giving firms privileges.

More details on direct policies are discussed in subsection 4.2.3 when we describe how we coded them. Here we just introduce indirect policies and why they would not affect OFDI, and why we removed them.

Indirect policies were policies aimed at other aspects such as exports, state-owned assets, etc. In such policies, OFDI was just an aspect or a tool. Only a paragraph or a few sentences mentioned OFDI. When OFDI was mentioned in indirect policies, the description was very general and did not have specific measures. For example, in 2012, the MOC and another ten ministries jointly issued *guidance opinions on speeding up the transformation of foreign trade development*. This policy said:

“Each department should accelerate the improvement of the foreign investment promotion system and service support system, encourage enterprise to carry out overseas investment cooperation. Support renewable energy enterprises to enhance the ability to obtain overseas renewable energy. Actively participate in global economic governance, accelerate the implementation of the FTA strategy, deepen bilateral and regional economic and trade cooperation, create a favourable external environment for development. Strengthening the protection of intellectual property rights, expand the multilateral and bilateral communication and cooperation in the field of intellectual property.”

As can be seen from the policy content above, the policies said that OFDI should be encouraged in aspects such as the service support system, but it did not include any specific measures. The service support system may be optimised in future, but it had not been changed immediately after this policy was published. Firms had not acquired more service such as information of host countries. Hence, OFDI would not be promoted until further specific policies would be published. Therefore, without specific measures, indirect policies were less

likely to have an effect on the volume of OFDI, and the policies that could affect the national level of volume of OFDI were only direct policies. In this chapter, we removed indirect policies. In Chapter 5, we will use two strategic policies, which were also indirect policies, to check whether this hypothesis is correct.

Therefore, in this chapter, we focus on the direct policies that would actually affect China's OFDI at the national level. According to the definitions above, we summarise the number of our policies in *Table 4-3* and the list of policies are in *Table 4-4*⁵:

⁵ The policies published at the end the years were less likely to have an effect on the volume of OFDI of current years. Therefore, we counted the policies published in the second half of the year as next year's policies. For example, if a policy was published in the first six months of 2014, we regarded this policy as one of the policies of 2014. If a policy was published in the last six month of 2014, we regarded this policy as a policy of 2015.

Table 4-3 Summary of Policies numbers by types and years

Year	PP	RP	SE	SU	Total
1981	0	0	0	0	0
1982	0	0	0	0	0
1983	0	0	0	0	0
1984	0	1	0	0	1
1985	0	0	0	0	0
1986	0	1	0	0	1
1987	0	0	0	0	0
1988	0	0	0	0	0
1989	0	1	0	0	1
1990	0	0	0	0	0
1991	0	1	0	0	1
1992	0	1	0	0	1
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	0	0	0
1996	0	1	0	0	1
1997	0	0	0	1	1
1998	0	0	0	0	0
1999	6	0	0	1	7
2000	1	0	0	0	1
2001	1	0	0	0	1
2002	0	0	1	0	1
2003	2	5	1	4	12
2004	0	1	3	0	4
2005	3	5	3	1	12
2006	3	3	0	1	7
2007	0	1	2	2	5
2008	0	1	0	1	2
2009	0	2	0	0	2
2010	0	1	0	0	1
2011	0	1	2	1	4
2012	2	0	0	1	3
2013	0	1	1	2	4
2014	1	1	1	3	6
2015	0	3	0	0	3
Total	19	31	14	18	82

Table 4-4 Summary of Key Direct Policies

Year	Title in Chinese	Title in English	Department	Policy Type
1984	关于在国外和港澳地区举办非贸易性合资经营企业审批权限和原则的通知	Notice on the limits of authority and principles for the examination and approval of non-trading joint ventures in foreign countries and Hong Kong and Macao	MOC	RP
1986	关于在境外开办非贸易性企业的审批程序和管理办法的试行规定	Provisions on the examination and approval procedures and administrative measures for the establishment of non-trading enterprises abroad	MOC	RP
1989	境外投资外汇管理办法	Measures for the administration of foreign exchange in overseas investment	SAFE	RP
1991	关于加强海外投资项目管理意见	Opinions on strengthening the management of overseas investment projects	SC	RP
1992	关于在境外举办非贸易性企业的审批和管理规定（试行稿）	Provisions of foreign economic and trade department on the approval and management of founding non-tradable enterprises (trial draft)	MOC	RP
1996	关于《境外投资管理办法》的补充通知	Supplementary Notice on measures for the administration of overseas investment	SAFE	RP
1997	境外投资财务管理暂行办法	Interim Measures for financial management of overseas investment	MOF	SU
1999	境外加工贸易人民币中长期贷款贴息管理办法	Measures for the administration of interest on Renminbi long term loans in foreign processing trade	Multi	PP
1999	关于贯彻落实国务院关于鼓励企业利用援外优惠贷款和援外合资合作项目基金开展境外带料加工装配业务意见的通知	Opinions on encouraging enterprises to use foreign aid, preferential loans and foreign aid joint ventures and cooperation projects to carry out overseas processing and assembling business with materials	MOC	PP
1999	关于境外带料加工装配企业有关财务问题的通知	Circular on the financial issues concerning the overseas processing and assembling Enterprises	MOC	SU

Year	Title in Chinese	Title in English	Department	Policy Type
1999	关于印发《境外加工贸易企业周转外汇贷款贴息管理办法》的通知	Circular on the issuance of measures for the administration of interest discount on foreign exchange loans for overseas processing trade enterprises	Multi	PP
1999	关于境外带料加工装配业务中有关出口退税问题的通知	Circular on issues concerning export tax refund in overseas processing and assembling business	Multi	PP
1999	关于鼓励企业开展境外带料加工装配业务意见	Opinions on encouraging enterprises to carry out overseas material processing and assembling business	MOC	PP
1999	关于支持境外带料加工装配业务的信贷指导意见	Guidance Opinions on credit for supporting the processing and assembling of overseas materials	Multi	PP
2000	关于大力发展对外承包工程意见	Opinions on vigorously developing foreign contracted projects	SC	PP
2001	中小企业国际市场开拓资金管理(试行)办法	Management of funds for international market development of small and medium-sized enterprises (Trial Implementation)	Multi	PP
2002	关于成立境外中资企业商会（协会）的暂行规定	Notice on printing and Issuing the Interim Regulations on the establishment of chambers of Commerce (associations) of overseas Chinese funded enterprises	MOC	SE
2003	境外投资综合绩效评价办法(试行)	Measures for comprehensive performance evaluation of overseas investment (for Trial Implementation)	MOC	SU
2003	对外直接投资统计制度	Foreign direct investment statistical system	Multi	SU
2003	关于境外加工贸易企业周转外汇贷款贴息和人民币中长期贷款贴息有关问题的补充通知	Supplementary Circular on discount interest on revolving Foreign Exchange loans and Medium- and Long-Term renminbi loans of overseas processing Trade Enterprises	Multi	PP
2003	关于对国家鼓励的境外投资重点项目给予信贷支持有关问题的通知	Circular on issues concerning granting credit support to key projects encouraged by the state for overseas investment	Multi	PP
2003	关于清理境外投资汇回利润保证金有关问题的通知	Notice on Relevant Issues concerning the liquidation of margin deposits for overseas investment	SAFE	RP

Year	Title in Chinese	Title in English	Department	Policy Type
2003	关于简化境外投资外汇资金来源审查有关问题的通知	Circular on Relevant Issues concerning simplifying the examination of sources of foreign exchange funds for overseas investment	SAFE	RP
2003	国家外汇管理局公告	Announcement of the State Administration of foreign exchange	SAFE	RP
2003	关于取消部分资本项目外汇管理行政审批后过渡政策措施的通知	Notice on the cancellation of the interim policies and measures concerning the administration of foreign exchange for administrative examination and approval of certain capital accounts	SAFE	RP
2003	关于简化境外加工贸易项目审批程序和下放权限有关问题的通知	Circular on issues concerning the procedures for examination and approval and the power to decentralize the procedures for overseas processing trade projects	Multi	RP
2003	境外投资联合年检暂行办法	Interim Measures for joint annual inspection of overseas investment	MOC	SU
2003	同类资源 2002 年全国进口数量表(供 2003 年境外投资综合绩效评价使用)(更新)	National import quota table for similar resources in 2002 (used for comprehensive performance evaluation of overseas investment in 2003) (Updated)	MOC	SU
2003	国别贸易投资环境报告	Countries' trade and investment environment report	MOC	SE
2004	关于退还境外投资汇回利润保证金有关问题的通知	Circular on issues concerning the refund of margin deposits for overseas investments	SAFE	RP
2004	关于组织“走出去”国内企业参加第七届投洽会的通知	Notice on the organization of domestic enterprises to participate in the seventh of "going out" CIFIT	MOC	SE
2004	关于在驻外经商机构子站上建立驻在国（地区）投资项目招商信息库栏目的通知	Notice on the overseas construction sub station by a host country (region) business investment project information database column to inform merchants	MOC	SE
2004	关于建立企业境外投资意向信息库的通知	Notice on establishing the information database of overseas investment intentions of enterprises	MOC	SE

Year	Title in Chinese	Title in English	Department	Policy Type
2005	关于跨国公司外汇资金内部运营管理有关问题的通知	Circular on issues concerning internal operation and management of foreign exchange funds of Transnational Corporations	SAFE	SU
2005	关于对国家鼓励的境外投资重点项目给予信贷支持政策的通知	Notice on granting credit support policies to key projects encouraged by the state for overseas investment	Multi	PP
2005	关于境外投资开办企业核准事项的规定	Provisions on approval items for overseas investment enterprises	MOC	RP
2005	境外投资项目核准暂行管理办法	Interim Measures for the administration of approval of overseas investment projects	NDRC	RP
2005	关于启用《中华人民共和国境外投资批准证书》的通知	Notice on opening the certificate of approval for overseas investment of People's Republic of China	MOC	RP
2005	关于做好 2004 年资源类境外投资和对外经济合作项目前期费用扶持有关问题的通知	Circular on Relevant Issues concerning the support of the preliminary expenses of overseas investment in resources category and foreign economic cooperation projects in 2004	Multi	PP
2005	关于 2004 年资源类境外投资和对外经济合作项目前期费用扶持有关问题的补充说明	Supplementary explanation on the preliminary expenses support for overseas investment in resources and foreign economic cooperation projects in 2004	Multi	PP
2005	企业境外并购事项前期报告制度	Preliminary reporting system for overseas mergers and acquisitions of enterprises	Multi	RP
2005	关于扩大境外投资外汇管理改革试点有关问题的通知	Circular on the relevant issues concerning the pilot program for the reform of foreign exchange control of overseas investment	SAFE	RP
2005	关于在各驻外使(领)馆经商参处(室)网站上建立投资中介服务机构子栏目的通知	Notice on the establishment of sub sections of investment intermediary service institutions on the websites of foreign embassies and consulates (business offices) (offices)	MOC	SE

Year	Title in Chinese	Title in English	Department	Policy Type
2005	关于发布《对外投资国别产业导向目录》的通知	National industry oriented catalogue of foreign investment	Multi	SE
2005	关于印发《国别投资经营障碍报告制度》的通知	Notice on printing and distributing the system for reporting barriers to investment in China	MOC	SE
2006	境外投资开办企业核准工作细则	Rules for the examination and approval of overseas investment enterprises	MOC	RP
2006	关于调整境外投资批准证书网上发放系统的通知	Notice on adjusting the online issuance system of overseas investment approval certificates	MOC	RP
2006	关于启用《中国企业境外投资批准证书》的通知	Circular on opening the certificate of approval for overseas investment of Chinese Enterprises	MOC	RP
2006	关于实行出口信用保险专项优惠措施支持个体私营等非公有制企业开拓国际市场的通知	Circular on the implementation of special preferential measures for export credit insurance, and support for non-public enterprises, such as individual and private enterprises, to open up international markets	Multi	PP
2006	关于调整境内银行为境外投资企业提供融资性对外担保管理方式的通知	Notice on adjusting domestic banks to provide financing and external guarantee management methods for overseas investment enterprises	SAFE	PP
2006	关于规范境外中资企业及机构冠名有关事项的通知	Notice on regulating the naming of overseas Chinese funded enterprises and institutions	MOC	SU
2006	关于印发《对外经济技术合作专项资金管理办法》的通知	Measures for the administration of special funds for foreign economic and technological cooperation	Multi	PP
2007	境外投资产业指导政策	Overseas investment industry guidance policy	Multi	SE
2007	关于调整部分境外投资外汇管理政策的通知	Notice on adjusting foreign exchange control policies for some overseas investments	SAFE	RP
2007	中国企业境外商务投诉服务暂行办法	Interim Measures for Chinese enterprises' overseas business complaint service	MOC	SE

Year	Title in Chinese	Title in English	Department	Policy Type
2007	2006 年度境外企业财务会计决算报表	Notice on Issuing the final statements of financial accounting statements of overseas enterprises in 2006	MOF	SU
2007	对外直接投资统计制度	Circular on Issuing the statistical system for foreign direct investment	Multi	SU
2008	关于下放境外投资外汇资金来源审查权限的通知	Notice on the power of examination of the sources of foreign exchange funds for overseas investment	SAFE	RP
2008	关于进一步规范我国企业对外投资合作的通知	Circular on further regulating the foreign investment cooperation of enterprises in China	Multi	SU
2009	境外投资管理办法	Measures for the administration of overseas investment	MOC	RP
2009	关于完善境外投资项目管理有关问题的通知	Circular on issues concerning Improving the management of overseas investment projects	NDRC	RP
2010	境内机构境外直接投资外汇管理规定	Notice on Issuing the regulations on the administration of foreign exchange in direct investment by domestic institutions	SAFE	RP
2011	关于做好境外投资项目下放核准权限工作的通知	Notice on the approval of the delegated authority for overseas investment projects	NDRC	RP
2011	对外投资合作境外安全风险预警和信息通报制度	Foreign investment cooperation overseas security risk early warning and information notification system	MOC	SU
2011	境外中资企业机构和人员安全管理规定	Provisions on the safety administration of institutions and personnel in overseas Chinese funded enterprises	Multi	SE
2011	境外中资企业（机构）员工管理指引	Guidelines for the administration of staff members of overseas Chinese funded enterprises (Institutions)	Multi	SE
2012	关于印发鼓励和引导民营企业积极开展境外投资的实施意见的通知	Advice on encouraging and guiding private enterprises to actively carry out overseas investment	Multi	PP

Year	Title in Chinese	Title in English	Department	Policy Type
2012	关于鼓励和引导民间投资健康发展有关外汇管理问题的通知	Circular on encouraging and guiding the healthy development of private investment in the administration of foreign exchange	SAFE	PP
2012	关于下发安全管理指南的通知	Circular on Issuing the guidelines for safety management	MOC	SU
2013	关于进一步改进和调整直接投资外汇管理政策的通知	Notice on further improving and regulating foreign exchange control policies for direct investment	SAFE	RP
2013	关于鼓励和引导工程咨询机构服务民间投资的实施意见	Implementation opinions on encouraging and guiding engineering consulting institutions to serve private investment	NDRC	SE
2013	关于开展境外中资企业安全生产质量大检查专项行动的通知	Notice on the special operation of the safety production quality inspection of Chinese enterprises abroad	Multi	SU
2013	对外投资合作环境保护指南	Notice on Issuing the guidelines for environmental protection for foreign investment cooperation	Multi	SU
2014	境外投资项目核准和备案管理办法	Administrative measures for the approval and filing of foreign investment projects	NDRC	RP
2014	规范对外投资合作领域竞争行为的规定	Notice on regulating the competitive activities in the field of foreign investment cooperation	MOC	SU
2014	对外投资合作境外安全事件应急响应和处置规定	Provisions for emergency response and disposal of foreign investment cooperation for overseas security incidents	Multi	SU
2014	对外投资合作和对外贸易领域不良信用记录试行业办法	Measures for the trial of bad credit records in the field of foreign investment cooperation and foreign trade	Multi	SU
2014	境外企业知识产权指南（试行）	Notice on Issuing the guidelines for the intellectual property rights of overseas enterprises (for Trial Implementation)	MOC	SE
2014	外经贸发展专项资金管理办法	Notice on the issuance of measures for the administration of special funds for the development of foreign trade and economic cooperation	Multi	PP

Year	Title in Chinese	Title in English	Department	Policy Type
2015	境外投资管理办法	Measures for the administration of overseas investment	MOC	RP
2015	关于进一步简化和改进直接投资外汇管理政策的通知	Notice on further simplifying and improving the foreign exchange control policy of direct investment	SAFE	RP
2015	关于修改《境外投资项目核准和备案管理办法》和《外商投资项目核准和备案管理办法》有关条款的决定	Decisions of amending the relevant provisions of the administrative measures on the approval and filing of foreign investment projects and the approval and filing of foreign investment projects	NDRC	RP

4.2.3 Step 3: Coding Policies

There were four types of direct policies - RP, SU, SE and PP. These different types of policies would have different effects on OFDI, and the way they affected the OFDI would also be different. Therefore, we needed to look into the mechanisms that allowed policies to be implemented.

Table 4-5 Summary of Types of Specific Policies

Policy Types	Aims	Numbers	Publishing Department
Regulatory policies (RP)	Regulatory (Approval/recording) policies (RP) were policies that described government's approval process, they regulated the process by expressing who and how would regulate which aspects.	31	NDRC, MOC, SAFE, SC
Service Policies (SE)	Service policies (SE) were published by government to support Chinese firm's investment and operation in other countries by sharing information and providing communication platform.	14	MOC, NDRC, MFA,
Promotional Policies (PP)	Promotional policies (PP) were published by government to promote OFDI by providing financial support or giving privilege to firms.	19	SC, MOC, SAFE, MOF, PBC, SAT, NDRC, EBIC, CECIC, MIIT, GAS
Supervisory Policies (SU)	Supervisory policies (SU) were used to supervise the operations of multinational firms. They were used to regulate firms after the OFDI had been approved and finished.	18	MOC, MOF, SAFE, NBS, MFA, SASAC, GASU, NDRC, MOHURD, MEP, NPFPC, MPS, GAS, SAT, SAIC, AQSIQ.

Firstly, **regulation (Approval/recording) policies (RP)** were policies that described the government's approval process; they regulated the process by expressing who would regulate which aspects, and how. Regulatory policies on China's OFDI were changing from an examination and approval system to a recording system. The coding process can be

summarised by the equations below. More specifically, we gave each policy a sign, a weight and considered the accumulated effects.

$$Index_t = \sum_{i=0}^4 YearScore_{t-i}$$

$$YearScore_t = \sum PolicyScore_{tj}$$

$$PolicyScore_{tj} = \pm WeightRP_{tj}$$

There are 31 RP policies in our database. The first RP was published in 1984 when the former MOC published *Notice on the limits of authority and principles for the examinations and approval of non-tradeable of joint ventures in foreign countries and Hong Kong and Macao*. RP policies were published by the SC, NDRC, MOC and SAFE. The NDRC, MOC and SAFE are ministries and departments of the SC, and are responsible to it. Although the names of each department have changed several times since the 1980s, we used the latest names to represent them. The SC was the leader of these three ministries and departments, and in charge of all aspect of the regulation process of OFDI. The NDRC was responsible for examining the recommendation and the feasibility study report. The MOC was responsible for examining the contract. The SAFE was responsible for examining the security and source of the foreign exchange. From the perspectives of firms, the functions of these three ministries and departments were equally important. Firms cannot engage in OFDI without proceeding along all of the three steps. The main policy factors that affected whether OFDI was successful or not were the complexity of the regulatory process and government's attitude. New research projects such as questionnaire surveys could be done to measure the importance of different approval processes as a supplementary study to our research. Among the 31 RPs, 5 policies were published by the NDRC, 10 policies were published by the MOC, 13 policies were published by the SAFE, 2 policies were joint published by the MOC and SAFE, and 1 policy was published by the SC. In terms of the content of policies, most policies (29) were

releasing restrictions in the regulatory process. Two policies were exceptions. One policy was *Opinions on strengthening the management of overseas investment project*. This policy was published by the SC in 1991 to keep the Open Door Policy was implemented healthier and to control the pace of China's OFDI. The main view of this policy was that the conditions for China's firms to invest in other countries were premature. It heavily discouraged China's OFDI. The other policy was *Preliminary reporting system for overseas mergers and acquisitions of enterprises*. It was published by the MOC in 2005. This policy asked firms to submit a report to the MOC just after firms had decided to invest in other countries, and made the approval system more complicated.⁶

Based on the content and the department that published it, each policy can be assigned a weight with a positive or negative sign. If the policy was relaxing restrictions, the sign of this policy is positive. If the policy was strengthening the restriction, the sign is negative. Therefore, the 29 policies releasing restrictions have positive signs and the two policies – *Opinions on strengthening the management of overseas investment project* and *Preliminary reporting system for overseas mergers and acquisitions of enterprises* – have negative signs.

Policies should also be weighted. Strategic policies and specific policies would have different intensities, i.e. the power of these kinds of policies should be different. We should take this into consideration when we weight the policies. However, the key direct OFDI-related policies were all specific policies. Strategic policies were excluded when we removed indirect policies. Therefore, we only had specific policies and the different intensities of the different types of policy was not a problem.

⁶ More details of regulation process of OFDI will be introduced and discussed in Chapter 5.

Policies published by the three departments were equally important, so the same type of policies published by the NDRC, MOC and SAFE should be equally weighted. If the policy was published by either of these three departments, it had a score of 1. If it was jointly published by more than one department, it had a score of the number of departments, because the approval process would be changed in different aspects accordingly. Jointly publishing policies was different from repeating policies. Repeating policies are duplicated. The department which repeated the policies was not publishing the policy, it just repeated the it. On the contrary, ministries or departments that jointly published a policy were publishing ministries or departments; they jointly made the policies. For example, the MOC and SAFE jointly published *Circular on issues concerning the procedures for examination and approval and the power to decentralize the procedures for overseas processing trade projects*, which simplified the MOC's and SAFE's approval process. Therefore, this policy can be regarded as two policies published by the MOC and SAFE together. Similarly, if the policy was published by the SC, it was more powerful and had a score of 3, because three departments of the SC would follow its lead, and all three aspects of the approval process would be changed. Therefore, we had the scores of each of the regulatory policies.

Finally, we accumulated the policy scores year by year and accumulated the yearly scores of policies in the past five years as the policy index of that year. We assumed that the policy was going to remain in force for five years after been published. The reasons were: each policy had a start date, but not an explicit expiration date. Usually, each regulated policy would be replaced by a new policy in the next few years. Moreover, the measures of the policies that released restrictions could be less powerful after several years. Therefore, we had the index of regulatory policies each year.

The RP index is shown in the *Table 4-6*:

Table 4-6 Numbers and indices of Regulatory policies

	Policies Numbers						Scores						RP Ind ex
Year	MO C	Mul ti	NDR C	SAF E	S C	Tot al	MO C	Mul ti	NDR C	SAF E	S C	Tot al	
1984	1	0	0	0	0	1	1	0	0	0	0	1	1
1985	0	0	0	0	0	0	0	0	0	0	0	0	1
1986	1	0	0	0	0	1	1	0	0	0	0	1	2
1987	0	0	0	0	0	0	0	0	0	0	0	0	2
1988	0	0	0	0	0	0	0	0	0	0	0	0	2
1989	0	0	0	1	0	1	0	0	0	1	0	1	2
1990	0	0	0	0	0	0	0	0	0	0	0	0	2
1991	0	0	0	0	1	1	0	0	0	0	-3	-3	-2
1992	1	0	0	0	0	1	1	0	0	0	0	1	-1
1993	0	0	0	0	0	0	0	0	0	0	0	0	-1
1994	0	0	0	0	0	0	0	0	0	0	0	0	-2
1995	0	0	0	0	0	0	0	0	0	0	0	0	-2
1996	0	0	0	1	0	1	0	0	0	1	0	1	2
1997	0	0	0	0	0	0	0	0	0	0	0	0	1
1998	0	0	0	0	0	0	0	0	0	0	0	0	1
1999	0	0	0	0	0	0	0	0	0	0	0	0	1
2000	0	0	0	0	0	0	0	0	0	0	0	0	1
2001	0	0	0	0	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0	0	0	0	0	0
2003	0	1	0	4	0	5	0	2	0	4	0	6	6
2004	0	0	0	1	0	1	0	0	0	1	0	1	7
2005	2	1	1	1	0	5	0	2	1	1	0	4	11
2006	3	0	0	0	0	3	3	0	0	0	0	3	14
2007	0	0	0	1	0	1	0	0	0	1	0	1	15
2008	0	0	0	1	0	1	0	0	0	1	0	1	10
2009	1	0	1	0	0	2	1	0	1	0	0	2	11
2010	0	0	0	1	0	1	0	0	0	1	0	1	8
2011	0	0	1	0	0	1	0	0	1	0	0	1	6
2012	0	0	0	0	0	0	0	0	0	0	0	0	5
2013	0	0	0	1	0	1	0	0	0	1	0	1	5
2014	0	0	1	0	0	1	0	0	1	0	0	1	4
2015	1	0	1	1	0	3	1	0	1	1	0	3	6

A higher the index meant that more restrictions had been released, and it became easier for firms to carry out OFDI. Therefore, we expected that

Hypothesis 1: The regulatory policy index and the volume of OFDI would have a positive relationship, i.e. The OFDI in the year with higher policies index was expected to be larger.

Supervisory policies (SU) were used to supervise the operations of multinational firms. They were used to regulate firms after the OFDI had been approved and finished, and therefore cannot affect firms' decision on OFDI directly, hence, we expected that

Hypothesis 2: The supervisory policies index would not have significant effects on the volume of OFDI.

We did not find a supervisory framework and each policy was equally important. Therefore, these policies were equally weighted. We used five years' worth of accumulated policies to represent the SU index and checked the effects of SU in the regression model.

Service policies (SE) were published by the government to support Chinese firms' investments and operations in other countries by sharing information and providing communication platform. According to Wang et al. (2012), government, especially in developing countries, played an important role in sharing information and communication. Therefore, we expected that service policies would help firms to invest in other countries.

Service policies tend to have accumulated effects. There were 14 service policies in total. These policies helped firms by providing them with information such as the investment environment of other countries toward firms, building communication platforms on websites

and providing suggestions on the operation of firms. The information sharing would not be out of date over the next few years. We did not expect these policies would take effect immediately after the policies had been published. Service policies would affect firms' decision-making over a certain period. Therefore, two conditions should be met for these policies to have an effect. The first condition was that it needed time to affect the OFDI. The second condition was that the information should not be out of date during the period, i.e. the contained information should not be too old.

Since they are service policies, all policies would have a positive sign, and the policies are equally weighted. Each policy was helpful in one aspect. It would not be more helpful just because of a larger number of publishing departments; more publishing departments meant that providing the help required the cooperation of departments. Then, we used the accumulated scores of service policies over the past five years to represent the power of service policies each year. The index can be seen in *Table 4-7*.

The higher the index, the more service policies had been provided over the past five years. Therefore, we expected that

Hypothesis 3: The service policy index would have a positive relationship with the volume of China's OFDI at national level.

Table 4-7 Indices of Promotional policies (PP), Service Policies (SE), Supervisory Policies (SU) and OFDI Policies.

Year	PP Index	SU index	SE index	OFDI index
1984	0	0	0	1
1985	0	0	0	0
1986	0	0	0	1
1987	0	0	0	0
1988	0	0	0	0
1989	0	0	0	1
1990	0	0	0	0
1991	0	0	0	1
1992	0	0	0	1
1993	0	0	0	0
1994	0	0	0	0
1995	0	0	0	0
1996	0	0	0	1
1997	0	1	0	1
1998	0	1	0	0
1999	6	2	0	7
2000	7	2	0	1
2001	8	2	0	1
2002	8	1	1	1
2003	10	5	2	12
2004	4	4	5	4
2005	6	5	8	12
2006	8	6	8	7
2007	8	8	9	5
2008	6	5	8	2
2009	6	5	5	2
2010	3	4	2	1
2011	0	4	4	4
2012	2	3	2	3
2013	2	4	3	4
2014	3	7	5	7
2015	3	7	5	3

Promotional policies (PP) were published by the government to promote OFDI by providing financial support or giving privilege to firms. There were 19 promotional policies in total. We expected promotional policies to promote OFDI. However, it is not surprising if the effect cannot be reflected on the national level of OFDI. Some promotional policies only affected certain firms, and they had strict criteria. This was because the Chinese government preferred to promote those firms that had an ownership advantages to invest in other countries; these were not the majority of Chinese firms. Therefore, we did expect that

Hypothesis 4: The promotional police index would not have positive significant effects on national OFDI.

We still used five year's accumulated scores to represent the PP index and checked the effects of PP in the regression model.

We calculated the total number of the direct policies and used it as a policy index overall. The total number of direct policies can reflect policy making activities. All the policies were made by the central government. The policy index can be used to reflect the attitude of the government on OFDI. Every investment should be examined and reviewed by the central government or local governments. Therefore, the attitude of government was very important. The restrictions of the regulation process indeed were loosening. The regulation process also was changing from an approval process to a recording system. Not all investment had to be approved by government. Some firms just needed to fill out some forms before they could get the certificate of investment. Although the approval system was becoming a recording system, every investment was essentially regulated by the government. The recording system required firms to report the information online. Although it did not need to get approval from the government, firms still needed a certificate of record from the NDRC

and a certificate of outward investment from the MOC to go to the next step of investment. Therefore, government was still able to directly regulate the volume of OFDI.

The total number of policies could reflect the attitude of the government on OFDI. If the government allowed and wanted firms to invest in other countries, it would publish policies to support this behaviour. The policies could be any kind of policies, such as releasing the restrictions of regulatory policy, giving subsidies to certain firms to promote them to invest and at the same time, sharing more information to help firms to invest. As a result, the total number of policies would be large. If the government would like to discourage firms, it would approve less applications from firms. We cannot know the detailed information behind this, but we can detect government's attitude from the total number of policies. When this happened, government would stop publishing new policies. It was more likely that government would only publish one policy to clarify the attitude such as the case in 1991. As a result, the total number of policies of each year would be less.

Therefore, we used the total number of policies each year to represent the OFDI index overall. The attitude should be directly reflected by the volume of OFDI and we expected that

Hypothesis 5: The OFDI index would have a positive relationship with OFDI.

This index can also be found in the *Table 4-7*.

$$Index_t = Number_t$$

4.2.4 Analysis of policies indices

To make the indices clear, we represented the indices on the graphs, *Figure 4-1* to *Figure 4-7*.

Figure 4-1 China's OFDI related regulatory policies from 1982 to 2015

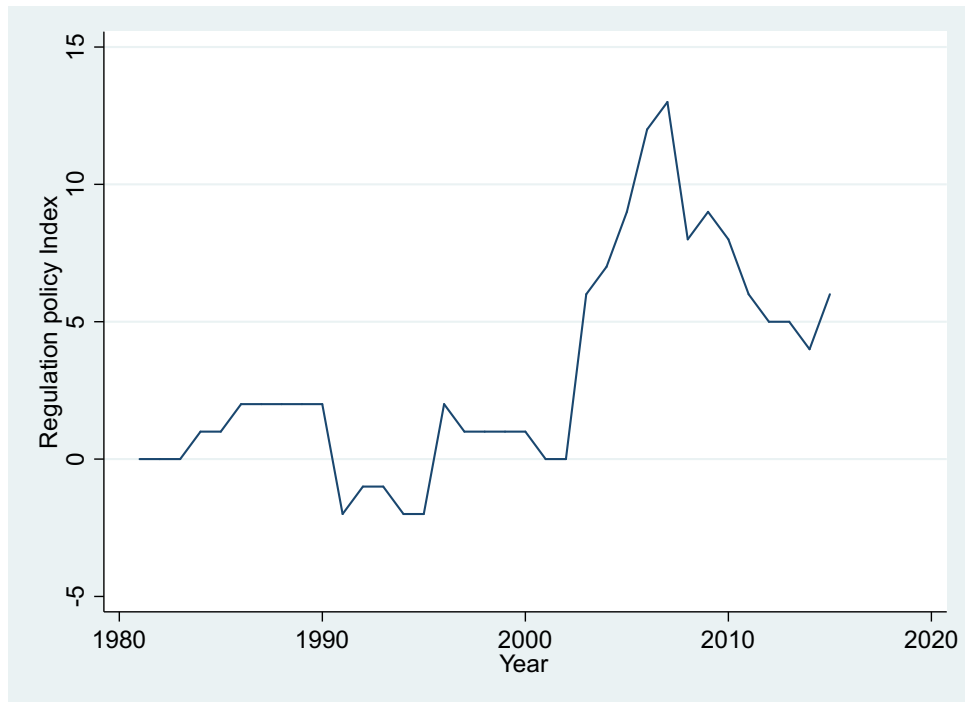


Figure 4-2 China's OFDI related service policies from 1982 to 2015

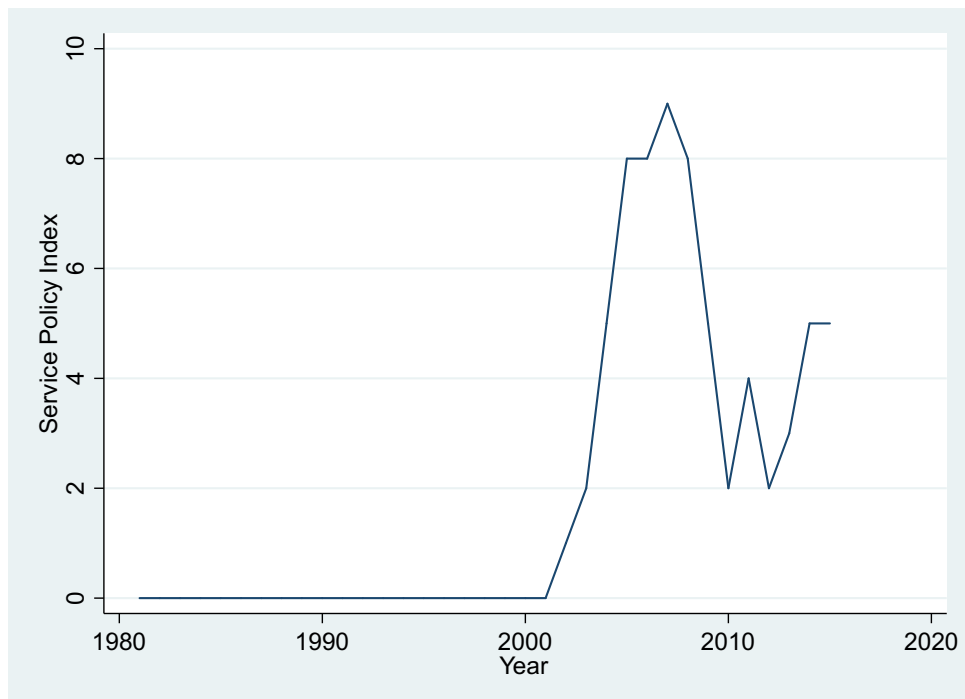


Figure 4-3 China's OFDI related supervision policies from 1982 to 2015

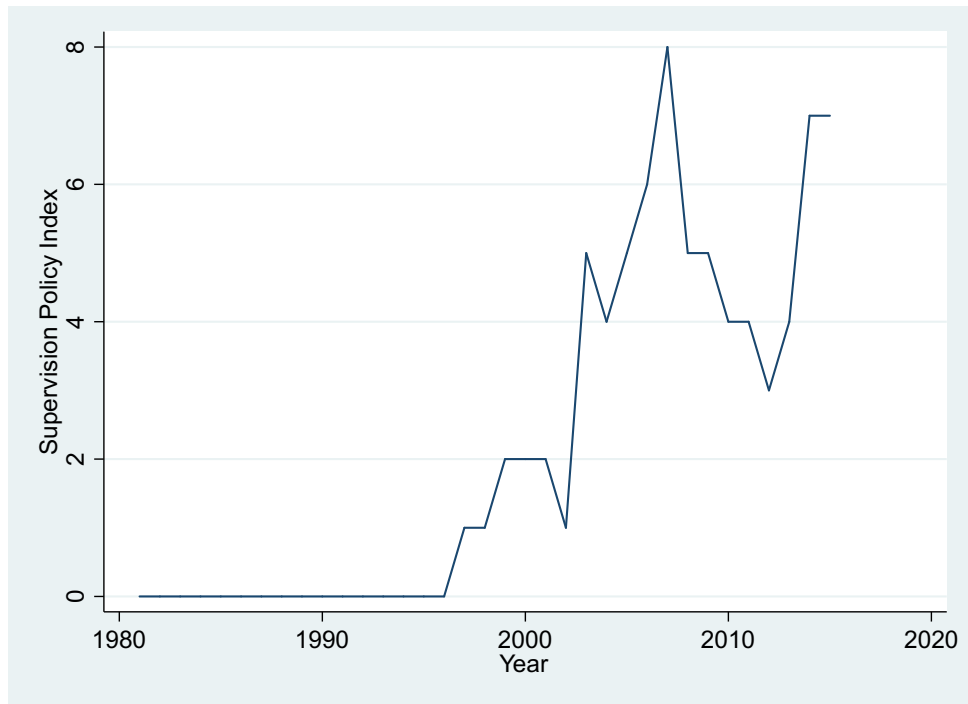


Figure 4-4 China's OFDI related promotional policies from 1982 to 2015

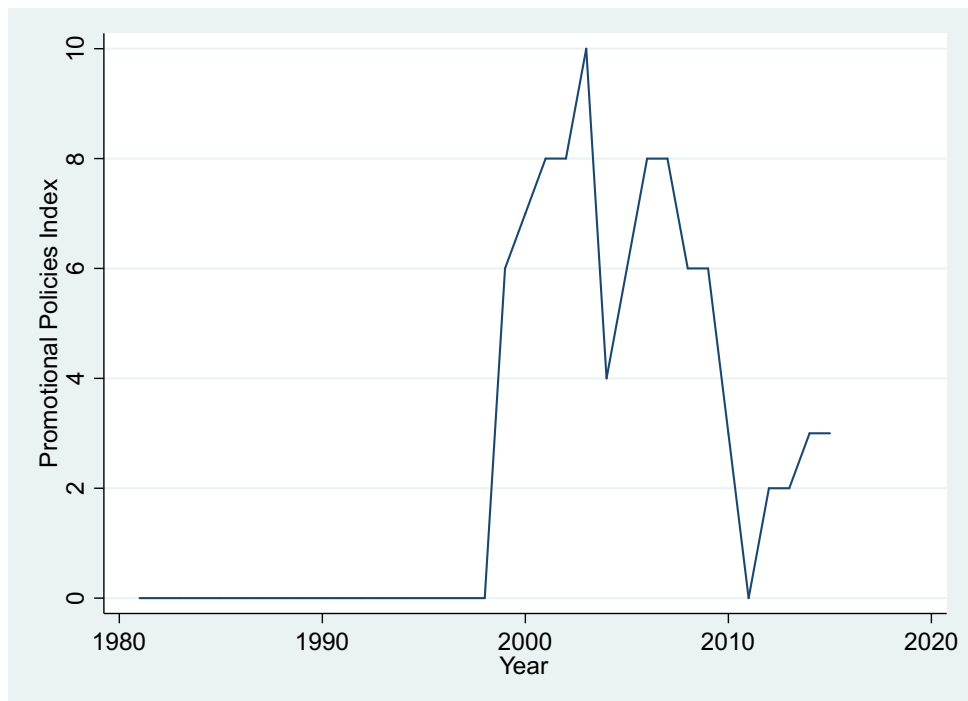


Figure 4-5 China's OFDI related key direct policies from 1982 to 2015

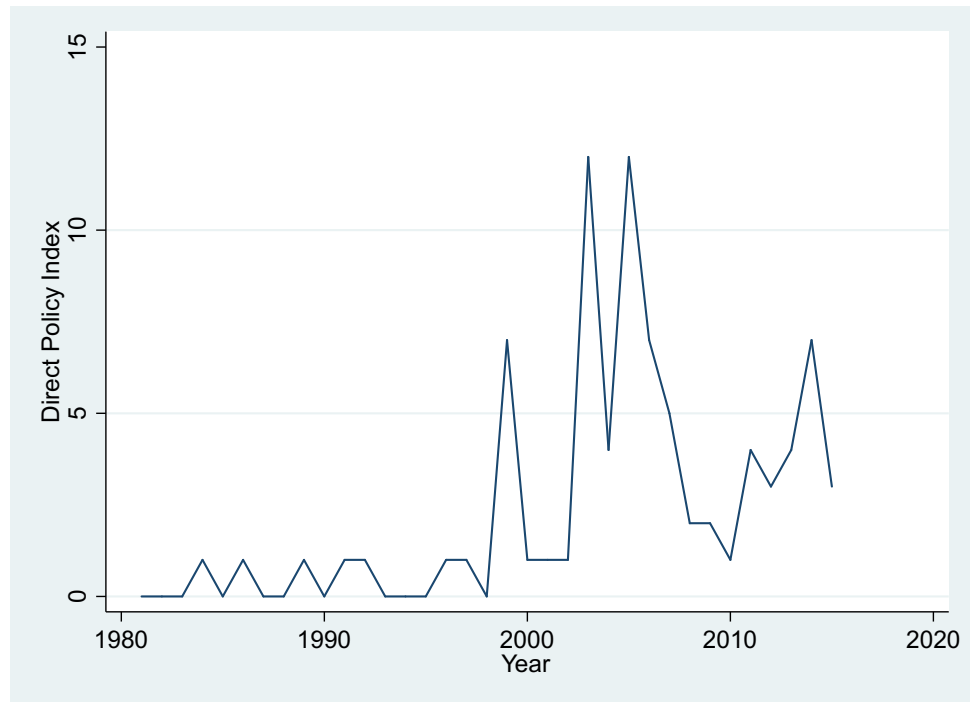


Figure 4-6 Growth rate and Regulatory policies index of China's OFDI

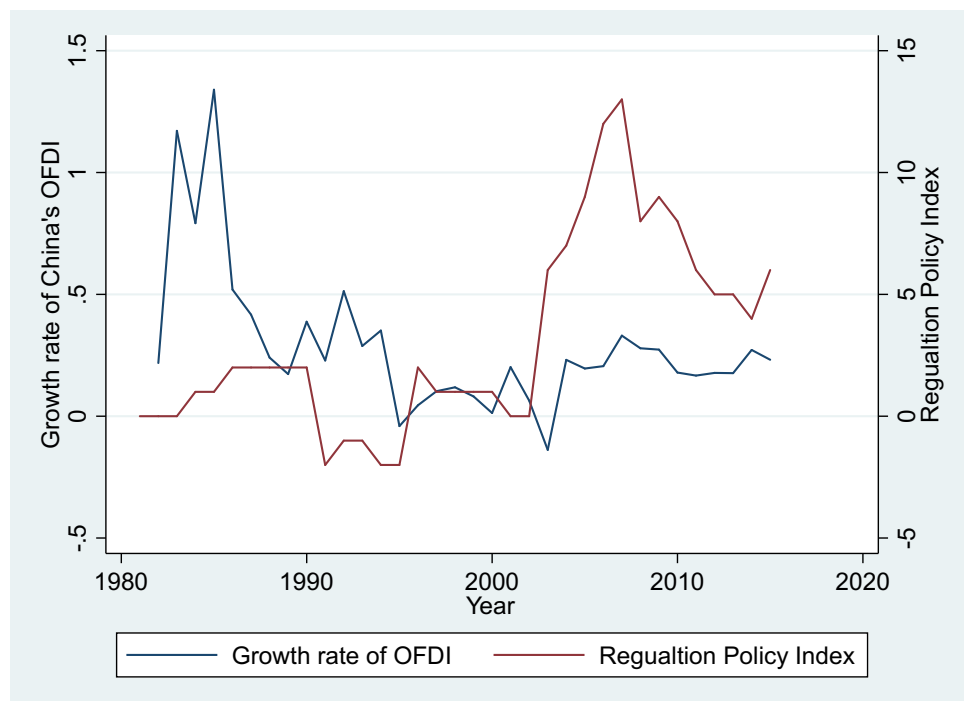
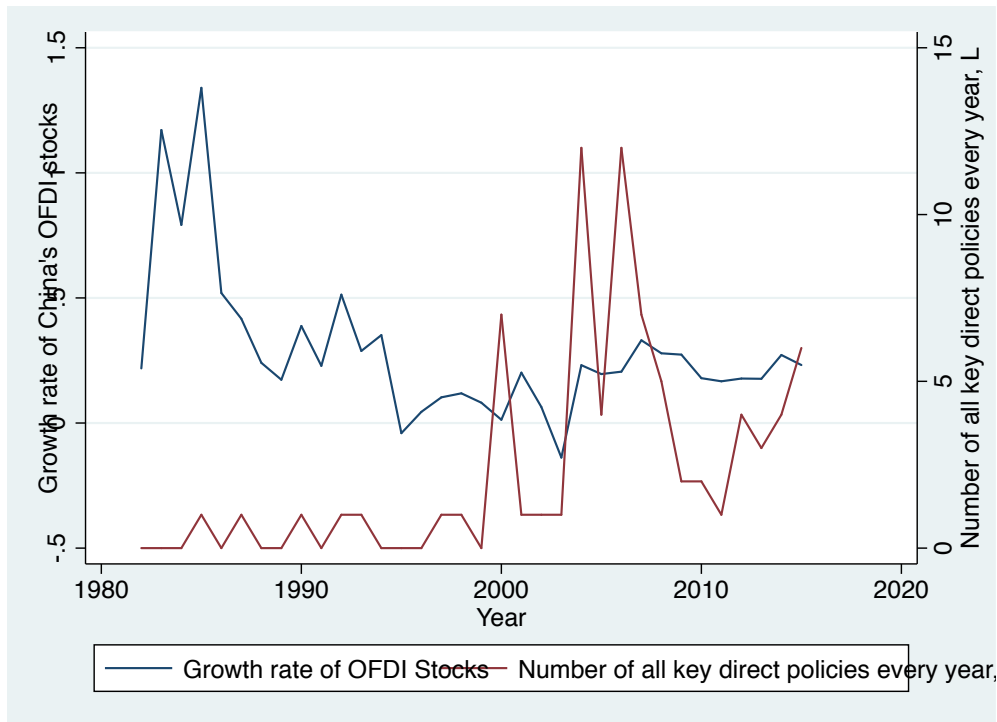


Figure 4-7 Growth rate and Direct Policies index of China's OFDI



As can be seen, the patterns of each index were similar. Before 2000, the indices were relatively at a lower level. Around the year 2000, the indices increased dramatically and reached the peak around the year 2010. After that, each index fluctuated a few times.

Before the year 1996, all published policies were regulatory policies. There were only 5 regulatory policies from 1984 to 1995: *Notice on the limits of authority and principles for the examination and approval of non-trading joint ventures in foreign countries and Hong Kong and Macao* (1984, MOC); *Provisions on the examination and approval procedures and administrative measures for the establishment of non-trading enterprises abroad* (MOC, 1985); *Measures for the administration of foreign exchange in overseas investment* (SAFE, 1989); *Opinions on strengthening the management of overseas investment projects* (SC, 1991) and *Provisions of foreign economic and trade department on the approval and management of founding non-tradable enterprises (trial draft)* (MOC, 1992). Except for the fourth one, the policies were used to build a comprehensive regulatory framework to promote OFDI by

making the regulatory progress more transparent. The fourth one was published by the SC, and indicated that the conditions for Chinese firms to invest in other countries were not mature. This was a negative policy for OFDI.

In the following three years, the Chinese government did not publish any OFDI-related key direct policies until SAFE published another regulatory policy, *Supplementary Notice on measures for the administration of overseas investment*, in 1996.

The next stage coincided with the most dramatic increases for all of the indices around the year 2000. The supervisory policies index started to increase in 1996 which was the earliest one in this stage. Then, the promotional policies index started to increase in 1999. The service policies and regulatory policies started to increase in the year 2002 and 2003, which was after the Go Global Policy has been formally published in the early 2000s when it was added to the tenth five year plan in 2001.

The ideology behind this was that the government first paid attention to existing MNEs because the multinational businesses became more and more important in China's economic development. Other than exports, the government would like the country to be more active in OFDI. The first thing to do was to make sure the existing businesses were healthy, especially in the financial aspect. In the second half 1996 (we regarded it was published in 1997), the MOF published *Interim Measures for Financial Management of overseas Investment*. In 1999, the MOC published the *Circular on the Financial Issues Concerning the Overseas Processing and Assembling Enterprises*. By using these two policies, the government made, for the first time, detailed regulations on financial problems involving OFDI.

From 1997 to 2014, the government published supervisory policies regularly, except in the years 1998, 2000 to 2002, 2004, 2009 and 2010. The content of these policies was in several aspects linked to keeping firms healthy in the financial aspect, standardising the

statistics system in order to keep authority over the data, and carrying out an annual inspection and risk reporting system.

After keeping the existing OFDI healthy, it was time to try to invest more. Government promoted selected firms by publishing promotional policies. The firms usually were those who had comparative advantages or were in a sector, such as manufacturing, that could be used to meet national interests such as promoting exports or upgrading the sector , As we will show in the next chapter, the Chinese government has preferred to publish experimental policies before rolling out a policy nationwide. Promotional policies were essentially experimental policies. In 1999, the MOC published *Circular on the implementation of the State Council's opinions on Encouraging enterprises to use foreign aid, preferential loans and foreign aid joint ventures and cooperation projects to carry out overseas processing and assembling business with materials*. This policy encouraged firms in the light, textile and household appliances industries to conduct assembling businesses overseas by using concessional loans and financial support. As can be seen, firms had to be in those sectors to be eligible for promotion. The approval process was also very strict. The investment should have been approved by the MOC, the government of host countries and other departments. In the same year, the MOC, MOF, NDRC and People's Bank of China (central bank of China, PBC) jointly published *Measures for the administration of interest on Renminbi long term loans in foreign processing trade*, which was also a promotional policy by providing financial support with strict criteria.

In 1999, China's government published 6 promotional policies. The word "process" appeared in the titles of each policy. As indicated by the titles, firms with processing business were encouraged to carry out OFDI. This was closely related to China's export-oriented economy. Therefore, the promotional policies were only applied for certain firms.

After 2000, China's government kept publishing promotional policies regularly at a moderate rate. From 2000 to 2006, 10 promotional policies were published. As were the first 6 policies published in 1999, these 10 policies were only applied in certain sectors.

From 2007 to 2011, no promotional policy was published. *Circular on issues concerning granting credit support to key projects encouraged by the state for overseas investment* was published by the NDRC and the Export-import Bank of China (EBC) in 2003 and *Notice on granting credit support policies to key projects encouraged by the state for overseas investment*, published by the NDRC and EBC in 2005, indicated that four types of investment were encouraged. These investment and projects included 1) overseas resource development projects that could make up for the relative shortage of domestic resources, 2) overseas production projects and infrastructure projects that could promote the export of domestic technology, products, equipment and labour services, 3) overseas R&D Centre projects with access to international advanced technology, management experience and expertise and 4) overseas acquisition and merger projects that improving the international competitiveness of enterprises and speed up of opening up the international market.

In 2012, China's government published two promotional policies to encourage private enterprises to carry out OFDI. In 2014, *Notice on the issuance of measures for the administration of special funds for the development of foreign trade and economic cooperation* was published. Such policies went back to China's original purpose for promoting OFDI, which was trade.

In terms of service policies, in 2002, the MOC published *Notice of the Ministry of foreign trade and economic cooperation on printing and issuing the interim regulations on the establishment of chambers of Commerce (associations) of overseas Chinese funded enterprises*. This policy made the foundation of Chambers of Commerce become more official and brought more connections between China's government and Chambers of

Commerce located in host countries. With the help of the government, Chambers of Commerce could be more helpful for China's firms overseas. Then, from 2003 to 2007, service policies were published regularly. Policies were all about sharing information of host countries or providing services for Chinese firms in other countries.

From 2008 to 2010, no service policy was published. From 2011, the government again started to publish service policies regularly. The content of each policy was different.

In terms of regulatory policies in this stage, from 1996 to 2003, none were published. Since 2003, the government started to publish regulation oriented policies regularly. Almost all policies were about releasing restrictions, except for *Preliminary reporting system for overseas mergers and acquisitions of enterprises* in 2005. This policy made the process more complicated. 25 policies released the restrictions step by step. Margin deposits for overseas investment were cancelled, foreign exchange source checking was simplified and cancelled eventually, risk check was cancelled, the power of checking OFDI was released from the central government to local government and increased the threshold of OFDI values that were exempt from the approval process and a certificate of investment was used to simplify the approval process. More detailed discussion of these regulatory policies can be found in subsection 5.3.2 in the next chapter.

Policies indices and OFDI also followed a similar trend. As can be seen in *Figure 4-6*, the trends of the regulatory policy index and OFDI were similar. In the 1980s, the regulatory policies index started to increase, which meant that the restrictions started to be being removed. As a result, the rate of OFDI increased and reached its peak. After 1986, the RP index did not change over the next five years and the growth rate of OFDI started to decrease. The reason could be that there was less motivation for firms to carry out OFDI.

During the first half of the 1990s, the RP index decreased dramatically because of the policy *Opinions on strengthening the management of overseas investment project* published

by the SC. This policy discouraged firms to carry out OFDI, however, the growth rate of OFDI during this period increased in general. The reason was that policy was not the only determinant; there were four other determinants - GDPPC, export, IFDI and education. From *Figure 4-8 to Figure 4-22*, we can see that all the growth rates of the other variables increased in general. Therefore, during this period, the economic variables were the real power to push China's OFDI.

Contrary to the first half of the 1990s, during the second half most of economic variables dropped except education. The RP index increased in 1996 and decreased in the following five years. Meanwhile the SU index and SE index started to increase from zero. As a result, the growth rate of OFDI increased first in 1996 because of the increase of the RP index in 1996 and then dropped moderately even though policies indices started to increase. In that period, GDPPC, export, IFDI and RPI had stronger effects than education, on the SU index and SE index.

Benefiting from the Go Global strategic policy, OFDI policies indices started to increase at the beginning of the 2000s. OFDI decreased first along with the dramatic decrease of education. Then, both OFDI and RP rates increased, reached a peak in 1997 and then dropped in the following years. All other policies decreased around the year 2000, which pulled down the growth rate of OFDI further.

Therefore, as can be seen from the graphs, we found that the growth rate of OFDI, economic variables and policies indices followed the same trends. In the next section, we use quantitative methods to analyse the relationships.

In summary, the evolution of each type of policy was similar. The process of the evolution of each type of policy was not independent. The government published each type of policy systematically. The government's willingness in encouraging China's OFDI started to increase from the beginning of 2000s and reach a peak around the year 2010. Before 2000, the

regulatory policies were published first with caution. Government published policies, on one hand, make the regulation progress more transparent, but on the other hand prevent the situation from getting out of control. After around the 2000s, when the Go Global Policy was published, more policies were published. A comprehensive regulatory framework was created jointly by the SC, MOC, NDRC and SAFE. Meanwhile, the regulation process was loosening. Government paid its attention mainly on OFDI with large values and OFDI in sensitive sectors and sensitive destinations, i.e. OFDI with higher risks. As a result, firms faced fewer restrictions and could carry out OFDI easier. Supervisory policies were started to be published from 1996 and its tasks were always to keep the multinational firms developing healthily. Promotional policies were targeted at certain sectors. With an established and efficient regulatory and supervisory framework and the transition of national interests, the first promotion was published in 1999 together with another 5 five promotional policies. All of them encouraged “processing” type OFDI. From 2000 to 2010, the OFDI that were promoted was resource seeking OFDI. This was described in the policy published by the NDRC and EBC in 2005. In 2012, the targets were changed to private enterprises. In 2014, the targets of promotional policies were changed to OFDI that could promote trade, i.e. market seeking OFDI. The evolution of promotional policies was also consistent with our analysis on the pattern of China’s OFDI in Chapter 3 that at the end of the 2000s and the beginning of the 2010s was a transition period when China’s OFDI was transitioning from resources seeking OFDI to market seeking OFDI. Service policies started to be published from 2002. The tasks of service policies were always to provide more information. Different from promotional policies which had clearer targeted sectors, service policies could benefit firms in every sector. Together with other types of policies, OFDI was promoted further since the beginning of 2000s.

4.3 Economic Variables

According to Dunning's IDP theory (1981), the volume of OFDI stocks at the national level is determined by the level of economic variables. Based on the literature review in Chapter 2, we know that scholars added more variables in their models in addition to the GDP, both economic variables and policy variables were important determinants.

The level of economic development divided the development of OFDI into four stages (Dunning, 1981). In the first stage, with a lower level of economic development, there is neither IFDI nor OFDI. With the development of the economy, IFDI increases first in stage 2. OFDI starts to increase in stage 3 and catches up with the increase rate of OFDI and the net FDI decreases to zero. In stage 4, with a higher level of economic development, OFDI increases even faster and the net FDI is positive. Hence, economic variables are positively related to the volume of OFDI.

The relationship between OFDI and exports is ambiguous. One group of scholars believes that exports promote OFDI (a complementary effects). More exports means more activities in other countries. OFDI would help firms save transport costs and expand markets in host countries. However, in terms of OFDI from China, another group of scholars believes that OFDI and exports is negative related, (a substitution effect) (Bellak, 2001 and Liu et al., 2005). One explanation is that China's OFDI was used to getting behind the trade barrier. Moreover, China's exports and OFDI were not in the same sector (Liu et al., 2005), and exports would not promote OFDI. Hence, exports and OFDI would have a substitution effect.

IFDI promotes OFDI in two ways. Firstly, IFDI brings more capital. Foreign firms re-invest to a third country and become a firm engaging in OFDI. Secondly, IFDI from firms, especially from developed countries bring spillover effects. Their technology spreads out via demonstration effects, linkage to upstream and downstream sectors, people turnover and competition effects. This makes local firms more competitive and hence have the ability to

participate in international business via OFDI. Therefore, IFDI has a positive relationship with OFDI.

Education also promotes OFDI in two ways. Firstly, a higher education level increases the ability of an employee of an MNE and increases firms' ability to participate in international business via OFDI. Secondly, firms who have high skill employees attract more IFDI and hence promote OFDI. Therefore, education would have a positive relationship with OFDI.

4.4 Model and Data Sources

According to the trends analysis in Chapter 3, economic variables and non-economic variables - including policies - had a joint effect on China's OFDI. There are five variables that can affect the volume of OFDI at the national level: 1) Gross Domestic Product (GDP) per capita, 2) Exports, 3) Education, 4) Inward Foreign Direct Investment (IFDI) and 5) Policies. The model we built is based on the work of Liu, et al (2005), as shown below.

$$I_t = \alpha + GDPPC_t + IFDI_t + EX_t + EDU_t + \varepsilon_t$$

where I_t is China's OFDI at time t . $GDPPC_t$ is Gross Domestic Product per capita (GDPPC) at time t ; $IFDI_t$ is Inward FDI at time t ; EX_t is export at time t ; EDU_t is the education at time t . Graduation of higher education each year was used to represent education, with ε_t an error term. Both OFDI and IFDI are stocks rather than flows because flows cannot reflect investment earnings (Bellark, 2000).

We processed the data before running the model. Economic variables were deflated by using a GDP deflator (base year is 2010) that came from World Bank's World Bank Indicators (2017). The education variable was deflated by the total amount of population every year, which came from China's statistic yearbook (1981-2015). Both allowed us to use the economic variables' real terms, which were then logged. We then differenced all economic

variables. Hence, the economic variables became the growth rates of each economic variables.

Therefore, the model we used became

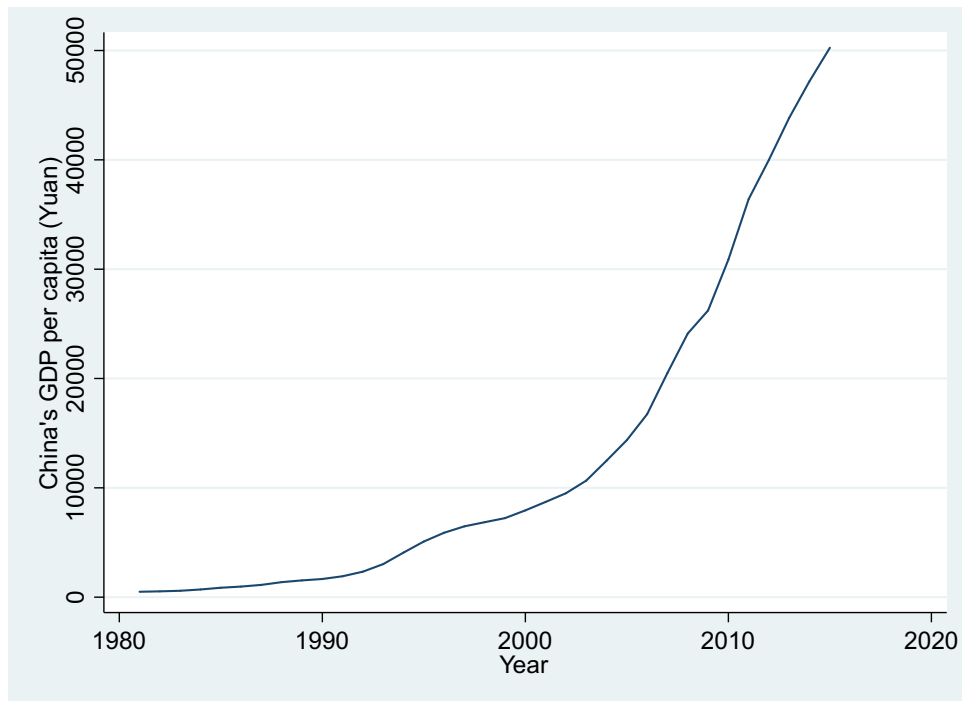
$$\Delta \text{Log } I_t = \alpha + \Delta \text{Log } \text{GDPPC}_t + \Delta \text{Log } \text{IFDI}_t + \Delta \text{Log } \text{EX}_t + \Delta \text{Log } \text{EDU}_t + \varepsilon_t$$

After this, policy variables were added to the model so that the determinants of China's OFDI were all included in the model. Therefore, the full model became:

$$\Delta \text{Log } I_t = \alpha + \Delta \text{Log } \text{GDPPC}_t + \Delta \text{Log } \text{IFDI}_t + \Delta \text{Log } \text{EX}_t + \Delta \text{Log } \text{EDU}_t + \text{POLICY}_t + \varepsilon_t$$

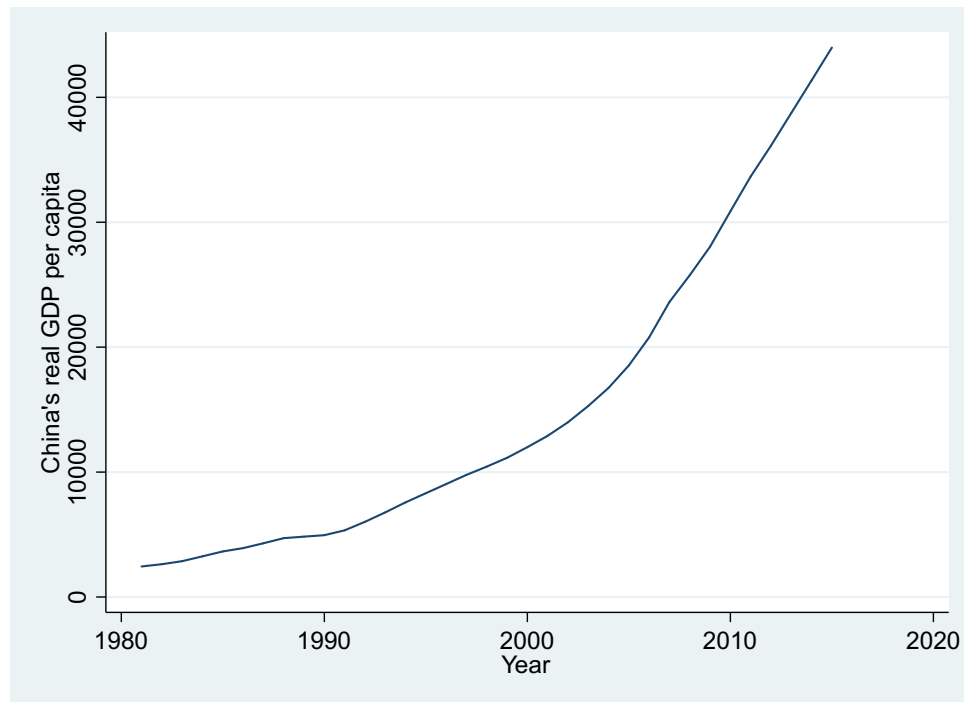
The stocks of OFDI and the stocks of IFDI were collected from UNCTAD. Other economic variables were collected from China's statistical yearbook. Policy variables were created by ourselves. The time ranges of all the variables are from 1981 to 2015. The data is summarized in the *Figure 4-8* to *Figure 4-22* and *Table 4-8* below.

Figure 4-8 China's GDPPC from 1981 to 2015



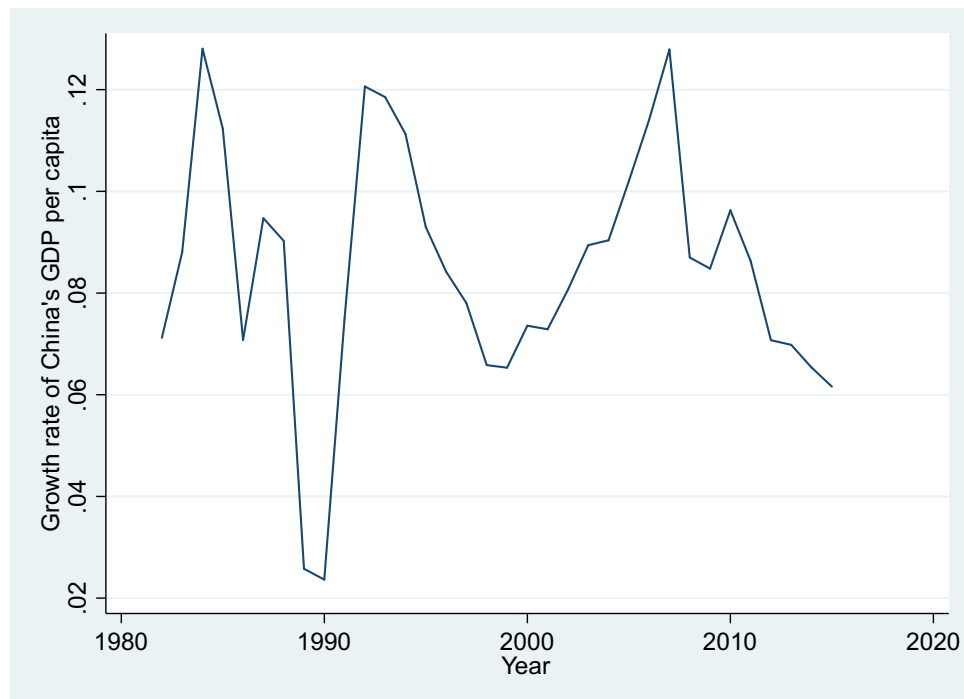
Source: China's statistical yearbook

Figure 4-9 China's real GDPPC from 1981 to 2015



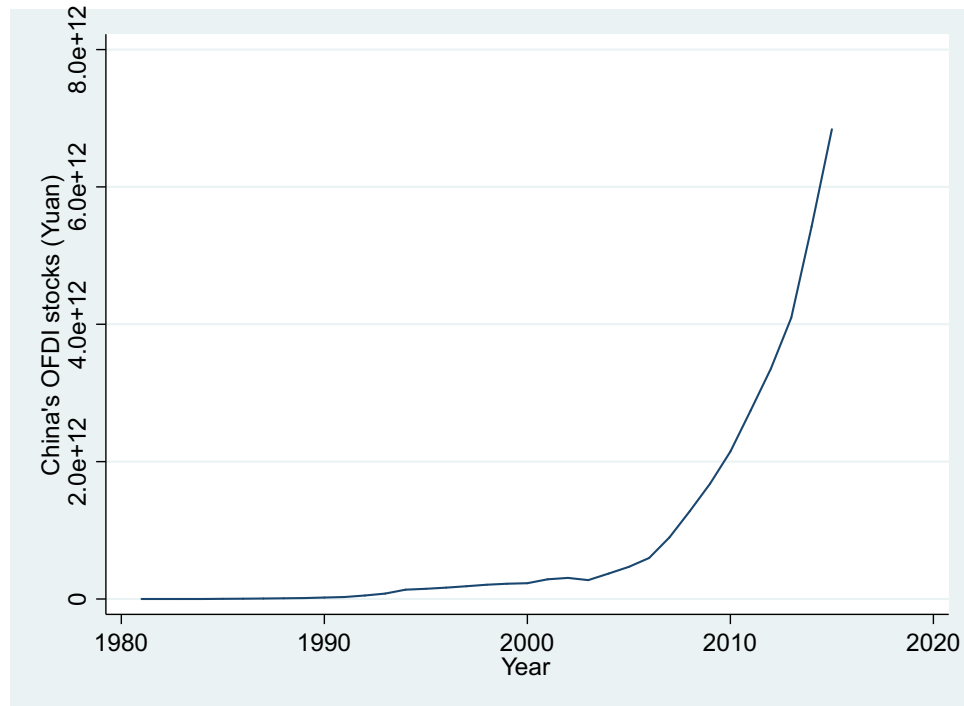
Source: China's statistical yearbook (base year: 2010)

Figure 4-10 Growth rate of China's GDPPC from 1982 to 2015



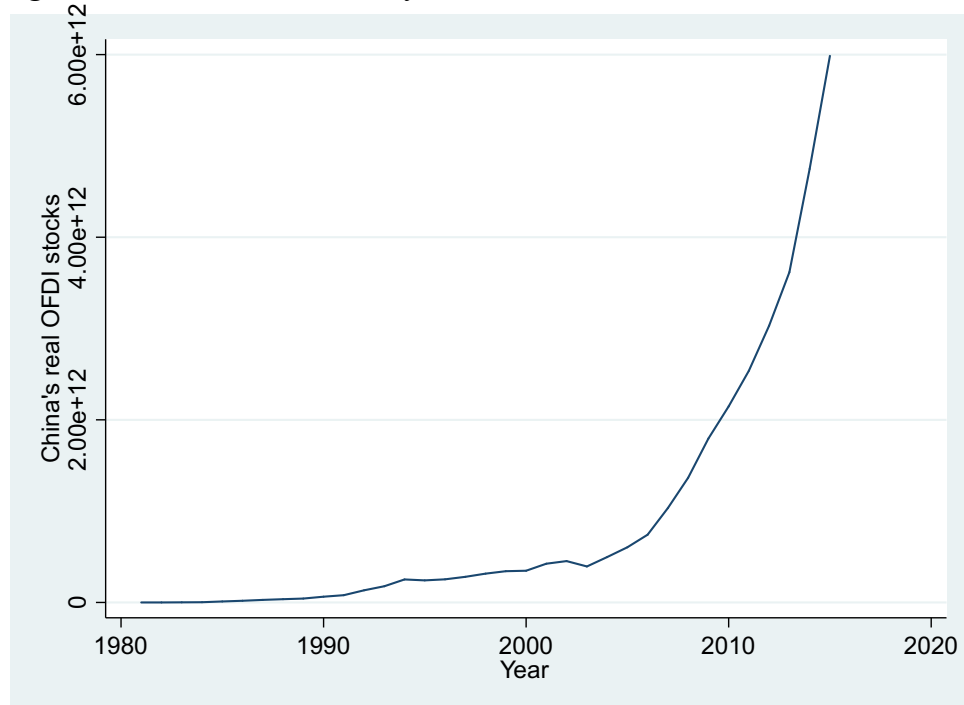
Source: China's statistical yearbook

Figure 4-11 China's OFDI from 1981 to 2015



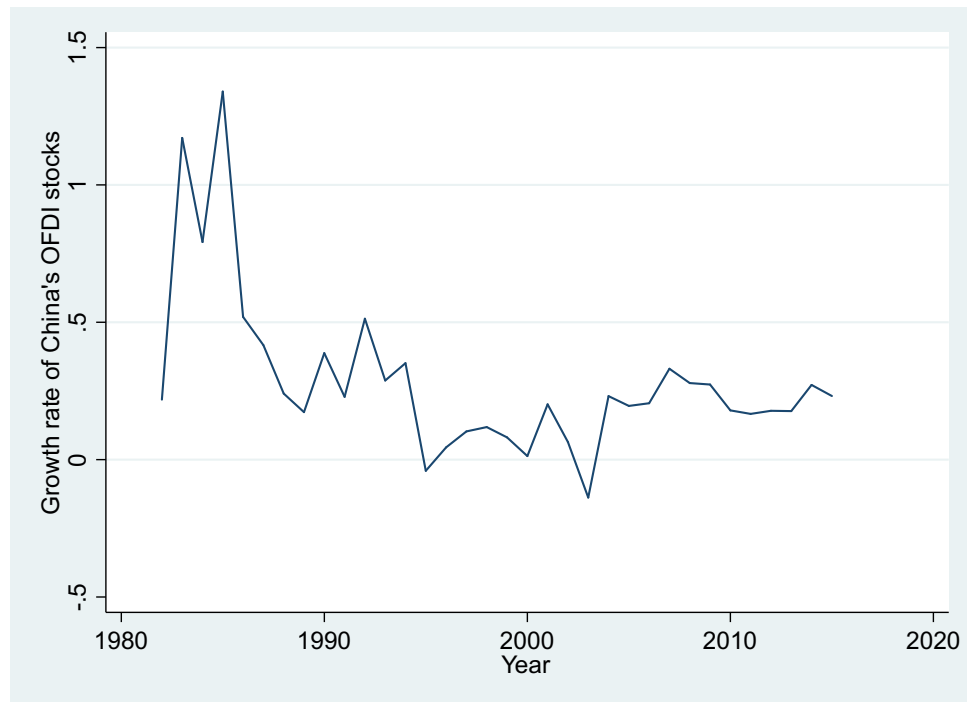
Source: UNCTAD

Figure 4-12 China's real OFDI from 1981 to 2015



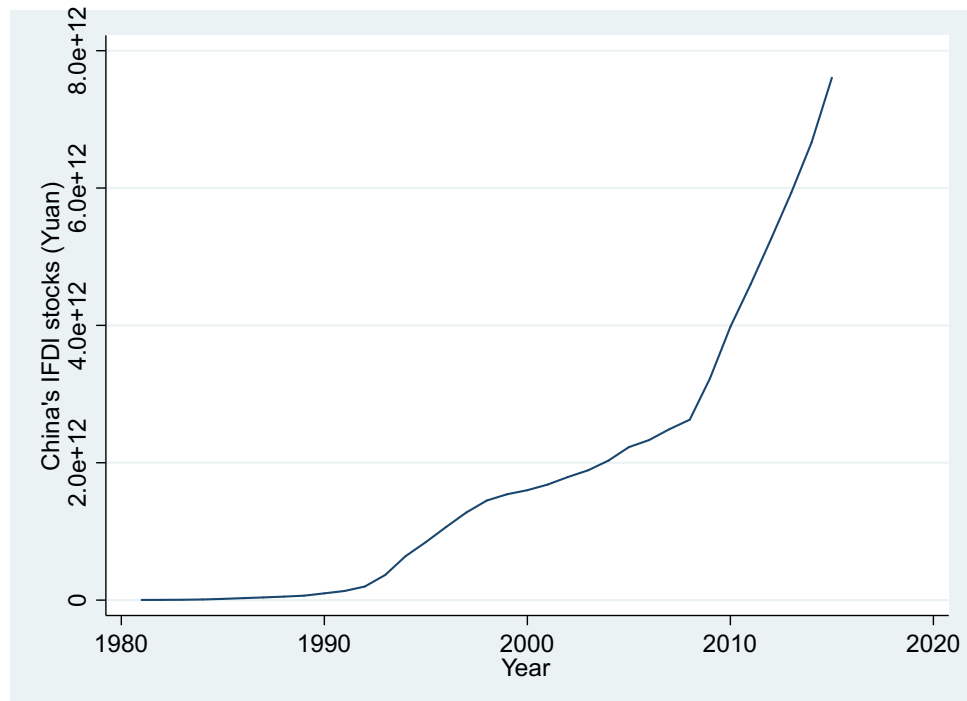
Source: UNCTAD (base year: 2010)

Figure 4-13 Growth rate of China's OFDI from 1982 to 2015



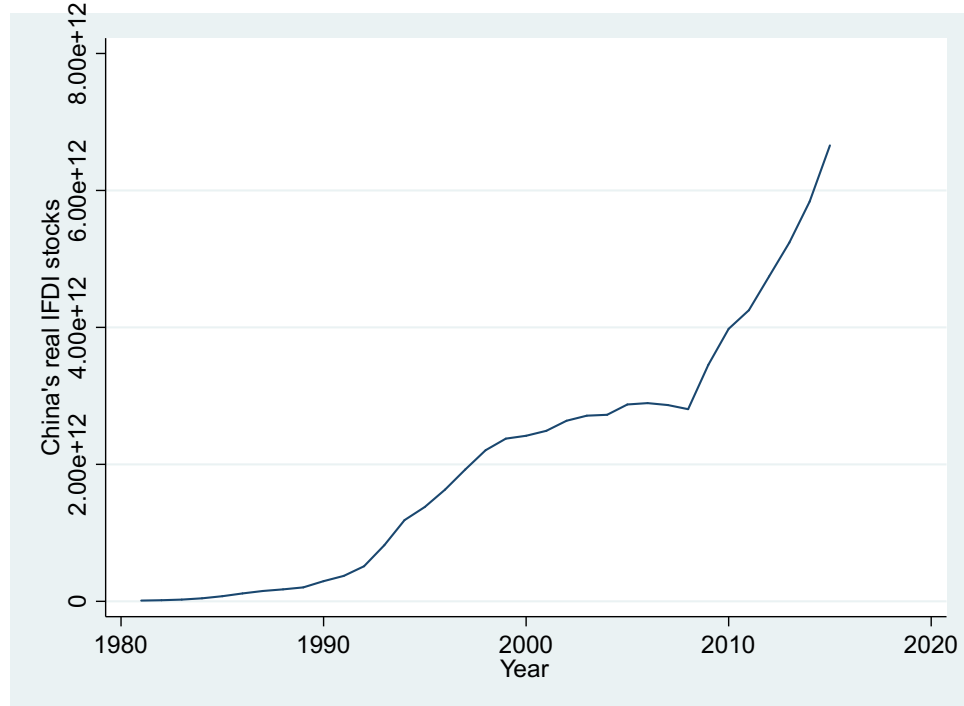
Source: UNCTAD

Figure 4-14 China's IFDI from 1981 to 2015



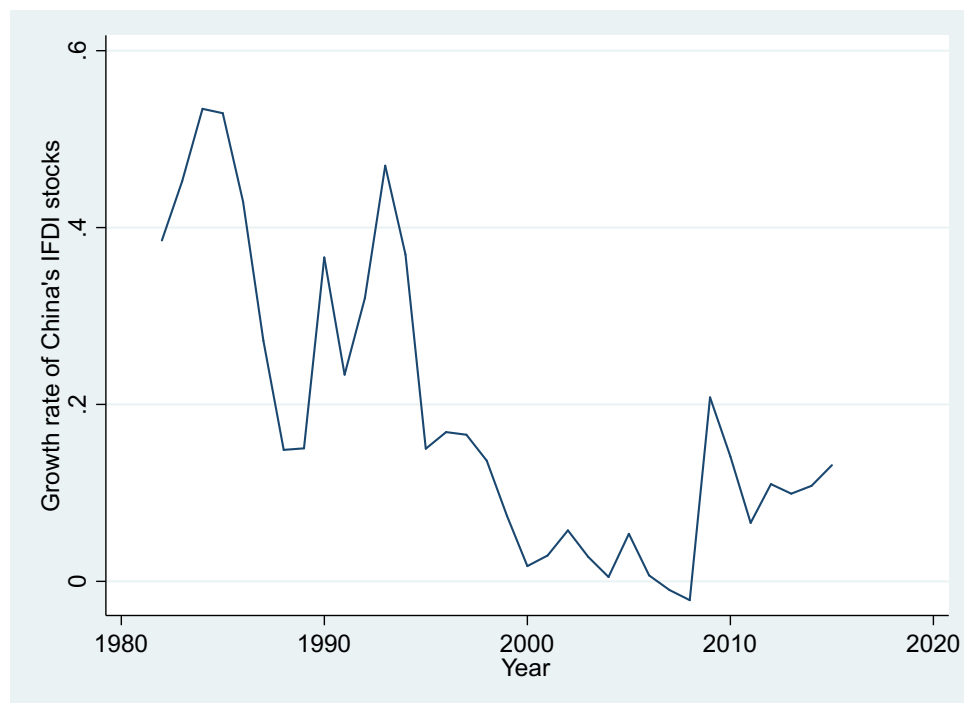
Source: UNCTAD

Figure 4-15 China's real IFDI from 1981 to 2015



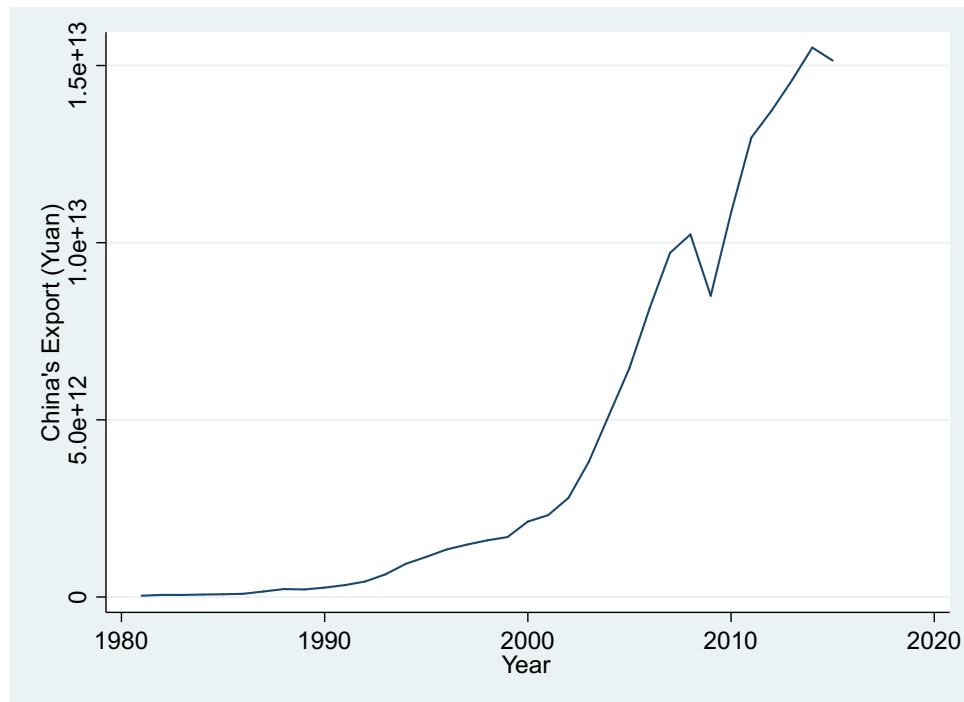
Source: UNCTAD (base year: 2010)

Figure 4-16 Growth rate of China's IFDI from 1982 to 2015



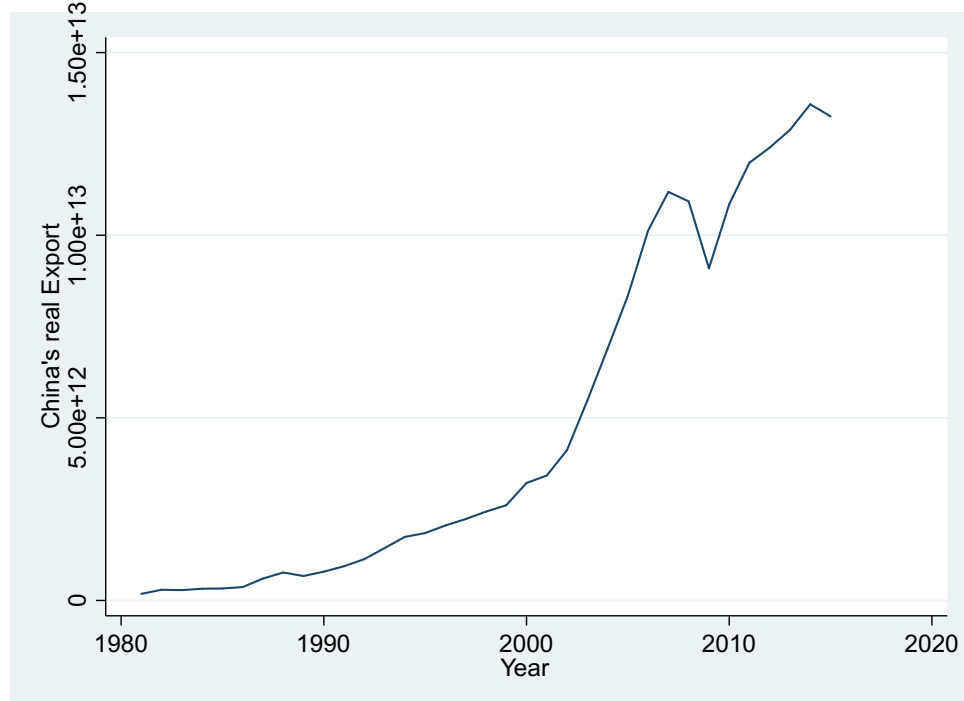
Source: UNCTAD

Figure 4-17 China's Export from 1981 to 2015



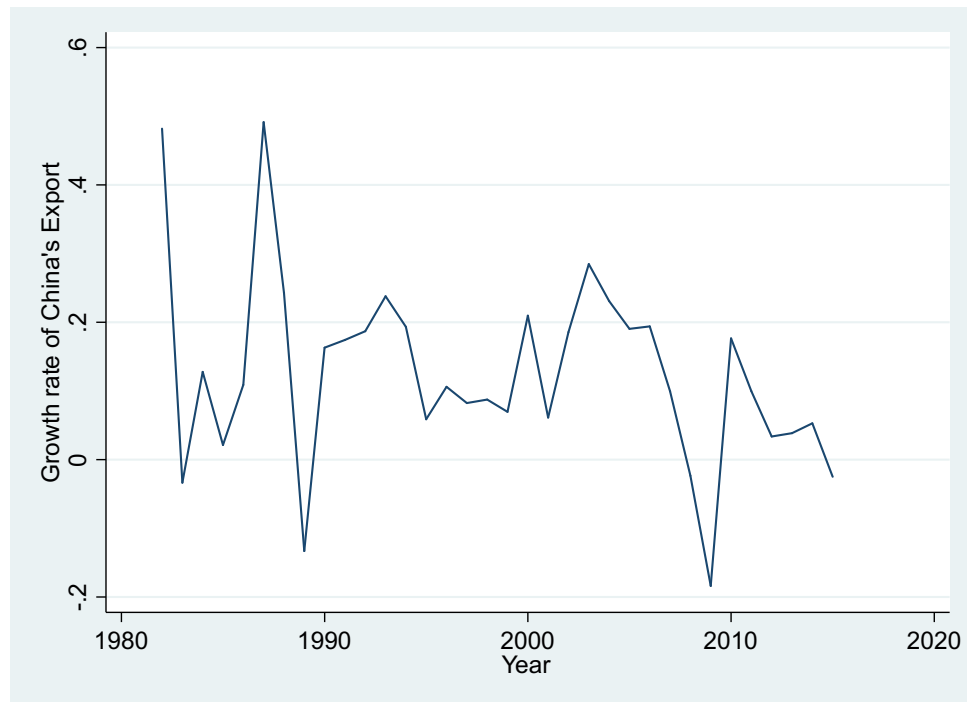
Source: China's statistical yearbook

Figure 4-18 China's real Export from 1981 to 2015



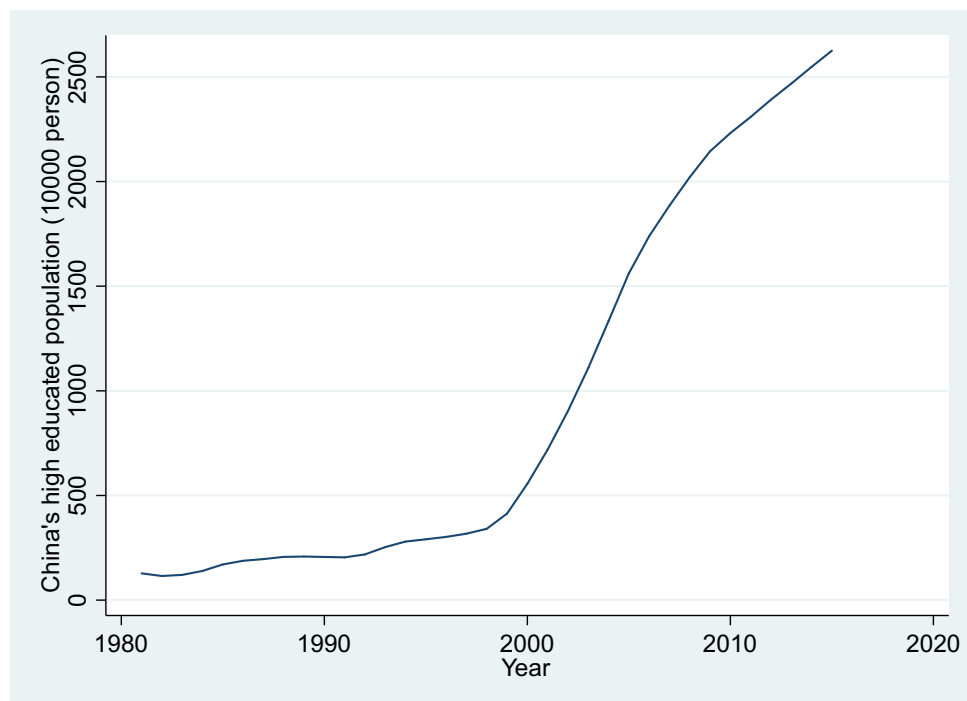
Source: China's statistical yearbook (base year: 2010)

Figure 4-19 Growth rate of China's Export from 1982 to 2015



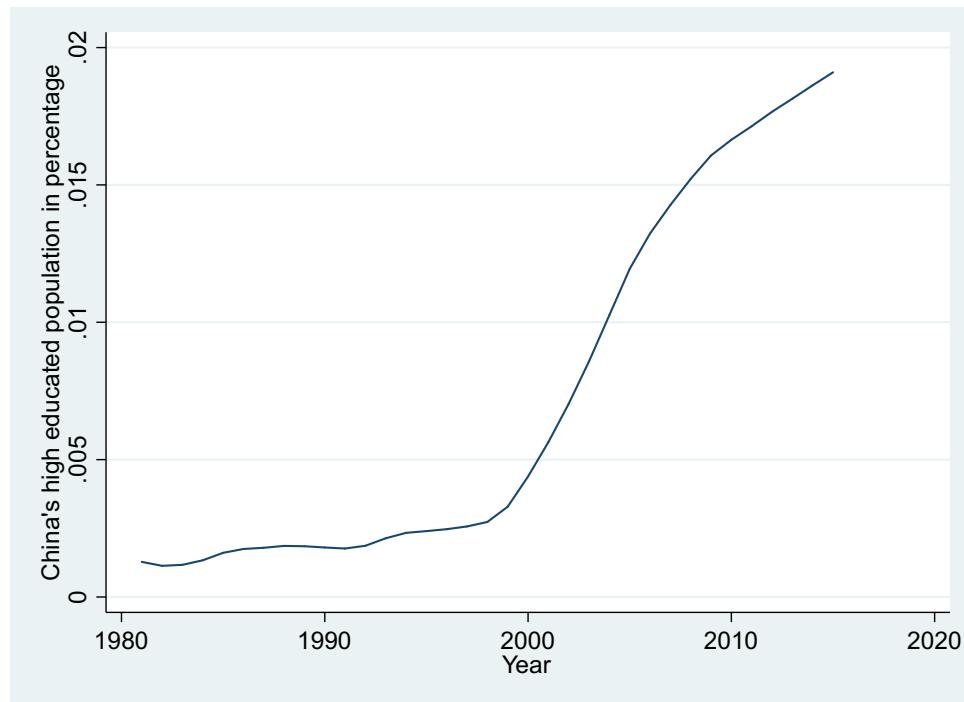
Source: China's statistical yearbook

Figure 4-20 China's Education from 1981 to 2015



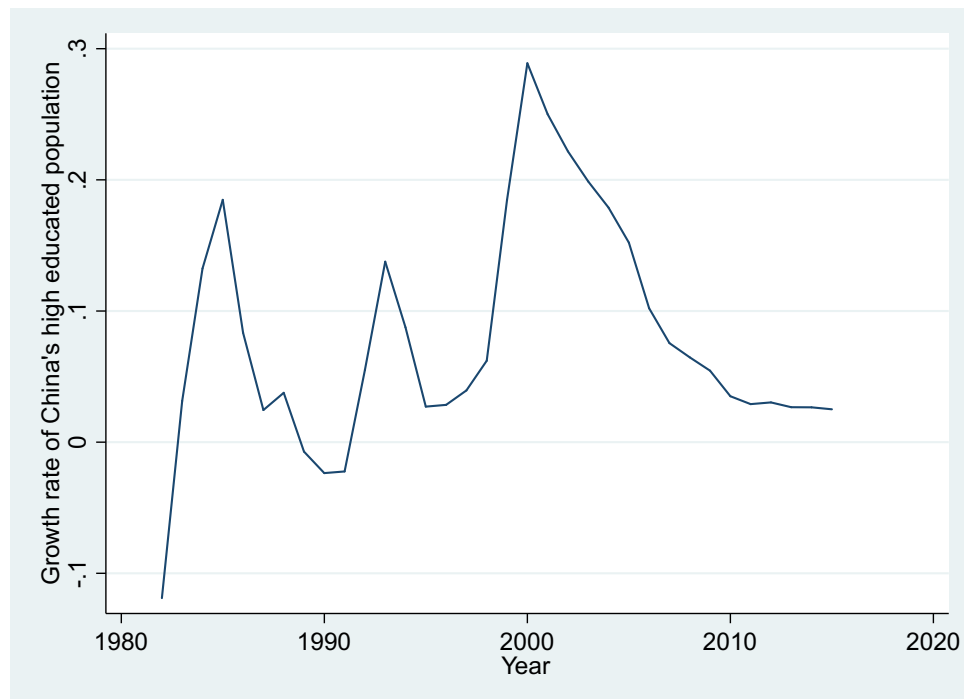
Source: China's statistical yearbook

Figure 4-21 China's real Education from 1981 to 2015



Source: China's statistical yearbook (deflated by total population every year)

Figure 4-22 Growth rate of China's Education from 1982 to 2015



Source: China's statistical yearbook

Table 4-8 Summary of Data

Variable name	Variable Description	Observation Numbers	Mean	Std. Dev.	Min	Max
GDPPC	GDPPC in Yuan at current prices	35	12932.41	14976	496.62	50251.02
EX	Export in Yuan at current prices	35	4.37E+12	5.26E+12	3.68E+10	1.55E+13
EDU	High educated (10000 person)	35	938.4003	909.4577	115.4	2625.3
IFDI	IFDI Stock Yuan at current prices	35	1.82E+12	2.06E+12	2.28E+09	7.61E+12
OFDI	OFDI Stock Yuan at current prices	35	9.22E+11	1.65E+12	6.69E+07	6.84E+12
rGDPPC	Real GDPPC in Yuan	35	14981.6	12462.7	2445.199	43983.39
rEXP	Real Export in Yuan	35	4.82E+12	4.79E+12	1.81E+11	1.36E+13
rEDU	Real education	35	0.0071732	0.006622	0.0011352	0.0190984
rIFDI	Real IFDI Stock in Yuan	35	2.06E+12	1.83E+12	1.12E+10	6.66E+12
rOFDI	Real OFDI Stock in Yuan	35	9.15E+11	1.44E+12	3.29E+08	5.99E+12

4.5 Results

4.5.1 Unit root tests

We did unit root tests to see if the variables were stationary. If the variables in the model were not stationary, the regression could be a spurious regression and the t test and F test could be not reliable (Engle and Granger, 1987).

We used Phillips-Perron unit-root test (Phillips and Perron, 1988) to test all the variables in the model.

The test used Ordinary Least Square (OLS) to fit the model:

$$y_t = \alpha + \rho y_{t-1} + \delta t + u_t$$

where y_t is the variable to be tested at time t , α is a constant, δt is the trend term, u_t is the error term which has an independent and identical distribution. The null hypothesis is that the variable has unit roots ($H_0: \rho=1$, $H_1: \rho<1$).

From the graphs above, there was not any significant evidence for having a trend in any of the graph, so we put in the restriction $\delta=0$ and carried out the Phillips-Perron unit root test by keeping the default settings.

This test has two statistics. The results are:

Table 4-9 Results of Phillips-Perron tests

Phillips-Perron test for unit root	Test Statistic Z(rho)	5% Critical Value	Test Statistic Z(t)	5% Critical Value	MacKinnon approximate p-value for Z(t)	Degree of Integration
ΔLog OFDI	-16.688	-12.756	-3.158	-2.978	0.0225	I(0)
ΔLog GDPPC	-15.249	-12.756	-2.976	-2.978	0.0372	I(0)/I(1)
ΔLog IFDI	-5.17	-12.756	-1.776	-2.978	0.3922	I(1)
ΔLog Export	-31.462	-12.756	-5.672	-2.978	0.0000	I(0)
ΔLog Education	-13.49	-12.756	-3.007	-2.978	0.0343	I(0)
RP Index	-4.782	-12.788	-1.553	-2.975	0.5073	I(1)
SP Index	-5.058	-12.788	-1.571	-2.975	0.498	I(1)
SU Index	-1.329	-12.788	-0.523	-2.975	0.8875	I(1)
PP Index	-5.645	-12.788	-1.752	-2.975	0.4046	I(1)
Key Direct Policies Index	-21.887	-12.788	-3.837	-2.975	0.003	I(0)
Key Indirect Policies Index	-6.316	-12.788	-1.756	-2.975	0.403	I(1)
ΔΔLog IFDI	-26.359	-12.724	-5.648	-2.98	0.0000	I(0)
Δ RP Index	-34.401	-12.756	-5.538	-2.978	0.0000	I(0)
Δ SP Index	-26.411	-12.756	-4.374	-2.978	0.0000	I(0)
Δ SU Index	-40.873	-12.756	-7.231	-2.978	0.0000	I(0)
Δ PP Index	-35.409	-12.756	-6.109	-2.978	0.0000	I(0)
ΔKey Indirect Policies Scores	-47.758	-12.756	-10.76	-2.978	0.0000	I(0)

As can be seen in *Table 4-9*, not all variables are stationary. $\Delta\text{Log OFDI}$, $\Delta\text{Log GDPPC}$, $\Delta\text{Log Export}$, $\Delta\text{Log Education}$ and the overall Direct Policies index are stationary. Therefore, the results indicate that the overall Direct Policies index, the growth rate of OFDI, GDPPC, export and education are integrated at $I(0)$. $\Delta\text{Log IFDI}$, RP index, SP index, SU index and PP index are not stationary and the difference of each variable is stationary, which indicated that these variables were integrated at $I(1)$. In particular, we found that the null hypothesis was marginally rejected when we tested whether there is any unit root in the growth rate of GDPPC. Moreover, the Phillips-Perron test tends to have less power to reject the null hypothesis (Schwert, 1989). Therefore, we can use the ADF-GLS test to test the unit root. We found that there is a unit root in the growth rate of GDPPC. Therefore, we can regard the growth rate of GDPPC as $I(1)$. Hence, we cannot use the variables directly in the model as it could cause spurious problems. To use these variables in the model, we could continue to difference them until all of them were stationary (Wooldridge, 2008), but the variables that had been differenced too many times would become meaningless. Hence, if the variables were co-integrated, the regression model would be more meaningful. As can be seen, there were at least two variables in each model that were integrated at $I(1)$, which meet the pre-condition for that the model could be co-integrated (Johansen, 1995).

4.5.2 Co-integration Test

We did tests to see if there was any co-movement among these variables, i.e. co-integration. If there were co-movements among these variables, the models will be super-consistent rather than spurious (Engle and Granger, 1987).

Johansen's (1995) approach for the co-integration test is widely used in the literature. Therefore, we first used this approach. The results are presented in *Table 4-10* and *Table 4-11* below. The null hypothesis of Johansen's test is that there are at most a certain number of co-

integration vectors in each model. The numbers to be tested in each model is shown in the first column. For example, in the first model (model (1), column 2), in the first row, the null hypothesis is that there is at most 0 co-integration vectors in model (1). The alternative hypothesis is that there is at most 1 co-integration vectors in model (1). The null hypothesis is rejected and we cannot reject the alternative hypothesis. In the second row of model (2), the null hypothesis is that there was at most 1 co-integration vectors in model (1) and the alternative hypothesis is that there are at most 2 co-integration vectors in model (1). The result shows that the null hypothesis cannot be rejected. Therefore, we accept that there are at most 1 co-integration vectors in model (1). Considering the results of the first row and second row of model (1), we conclude that there is one co-integration vector in model (1). Similarly, the rest column shows the Johansen's test of model (2) to model (13) and the test results show that there is at least one co-integration vector in each model. Therefore, each model is co-integrated. Hence, each model was super-consistent rather than spurious.

It is also useful to carry out the Engle-Granger co-integration test developed by Engle and Granger (1987) as a robust alternative to Johansen's approach. The results are shown in *Table 4-12* and *Table 4-13*. As can be seen from the table, the results of Engle-Granger test are similar to Johansen's test. The null hypothesis that each model is not co-integrated is rejected at least at the 10% level; thus we accept it. Considering the results of both Johansen's tests and Engle-Granger tests, we found evidence of co-movement among variables especially when we added the policies indices in the model, hence, each model was co-integrated.

Table 4-10 Results of Johansen co-integration tests (1)

Maximum rank	(1)	(2)	(3)	(4)	(5)	(6)
0	78.3579	141.1757	150.7285	121.2412	132.6178	105.2522
1	45.4966*	77.0837	79.0757	80.7683	79.0429	66.5624*
2	22.2082	47.3723	41.9463*	47.5301	48.8744	38.3455
3	11.8116	21.8734*	22.3494	23.6991*	21.6721*	15.1277
4	4.6614	11.6692	11.7453	12.2147	11.4951	7.007
5		3.5029	5.6693	5.1212	5.3218	1.9921

*Number of co-integration vectors suggested by Johanson's co-integration test

Table 4-11 Results of Johansen co-integration tests (2)

Maximum rank	(7)	(8)	(9)	(10)	(11)	(12)	(13)
0	132.4232	114.184	111.6612	122.7968	126.3325	106.906	112.2066
1	81.6822	70.3121	69.2977	80.6478	78.8211	63.0217*	68.8545
2	48.2368	41.1490*	43.7408*	46.3584*	48.7488	34.646	38.7262*
3	25.5562*	23.1016	21.8937	21.2552	23.6087*	19.1597	18.4541
4	12.7476	12.0513	11.8886	12.1603	10.8633	9.5683	10.3043
5	4.5051	4.8871	4.5027	4.7498	4.2816	2.8946	3.4105

*Number of co-integration vectors suggested by Johanson's co-integration test

Table 4-12 Results of Engle-Granger tests for co-integration (1)

Engle-Granger test for co-integration	(1)	(2)	(3)	(4)	(5)	(6)
Test Statistic	-4.824*	-6.37***	-6.278***	-5.814 **	-6.200***	-5.577**
1% Critical Value	-5.662	-6.074	-6.074	-6.074	-6.074	-6.074
5% Critical Value	-4.852	-5.234	-5.234	-5.234	-5.234	-5.234
10% Critical Value	-4.461	-4.829	-4.829	-4.829	-4.829	-4.829

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4-13 Results of Engle-Granger tests for co-integration (2)

Engle-Granger test for co-integration	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Test Statistic	-5.152*	-4.971*	-5.519**	-6.061**	-5.775**	-5.347**	-5.591**
1% Critical Value	-6.074	-6.074	-6.074	-6.074	-6.074	-6.074	-6.074
5% Critical Value	-5.234	-5.234	-5.234	-5.234	-5.234	-5.234	-5.234
10% Critical Value	-4.829	-4.829	-4.829	-4.829	-4.829	-4.829	-4.829

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4-14 Results of the determinants of China's OFDI (1)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID
ΔLog GDPPC	2.821*	1.423	1.006	1.537	0.624	1.955
	(1.550)	(1.658)	(1.546)	(1.671)	(1.786)	(1.670)
ΔLog IFDI	1.323***	1.655***	1.788***	1.611***	1.754***	1.604***
	(0.217)	(0.272)	(0.259)	(0.267)	(0.287)	(0.304)
ΔLog Export	-0.638**	-0.517**	-0.408	-0.602**	-0.461*	-0.526*
	(0.250)	(0.248)	(0.241)	(0.243)	(0.250)	(0.262)
ΔLog Education	0.325	0.570	0.808*	0.430	0.644	0.441
	(0.423)	(0.426)	(0.420)	(0.414)	(0.426)	(0.428)
Regulation scores (5 years interval)		0.0207*				
		(0.0109)				
Lagged Regulation scores (5 years interval)			0.0291**			
			(0.0106)			
Service policies numbers (3 years interval)				0.0386*		
				(0.0222)		
Service policies numbers (5 years interval)					0.0357**	
					(0.0167)	
Supervisory policies numbers (5 years interval)						0.0250
						(0.0192)
Constant	-0.145	-0.189	-0.233*	-0.150	-0.155	-0.203
	(0.124)	(0.121)	(0.116)	(0.120)	(0.117)	(0.130)
Observations	34	34	34	34	34	34
R-squared	0.637	0.678	0.715	0.672	0.688	0.658
Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1						

Table 4-15 Results of the determinants of China's OFDI (2)

VARIABLES	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID	ΔLog OFID
ΔLog GDPPC	2.717*	2.761*	1.932	1.622	1.536	2.000	1.685
	(1.584)	(1.597)	(1.519)	(1.645)	(1.823)	(1.624)	(1.559)
ΔLog IFDI	1.434***	1.355***	1.619***	1.680***	1.633***	1.580***	1.690***
	(0.309)	(0.259)	(0.247)	(0.292)	(0.320)	(0.277)	(0.268)
ΔLog Export	-0.636**	-0.641**	-0.641**	-0.586**	-0.529*	-0.506*	-0.548**
	(0.253)	(0.255)	(0.236)	(0.243)	(0.261)	(0.262)	(0.240)
ΔLog Education	0.166	0.311	0.280	0.297	0.408	0.552	0.455
	(0.531)	(0.434)	(0.400)	(0.409)	(0.423)	(0.444)	(0.405)
Promotional policies numbers (5 years interval)	0.00935						
	(0.0184)						
Key Direct Policy numbers every year		0.00310					
		(0.0131)					
Lagged Key Direct Policy numbers every year			0.0265**				
			(0.0124)				
Key Direct Policy numbers (3 year interval)				0.0111*			
				(0.00634)			
Key Direct Policy numbers (5 year interval)					0.00604		
					(0.00464)		
Lagged Key Indirect Policy numbers every year						0.0242	
						(0.0167)	
Lagged Policy numbers every year							0.0168**
							(0.00794)
Constant	-0.169	-0.152	-0.183	-0.191	-0.180	-0.209	-0.214*
	(0.134)	(0.129)	(0.118)	(0.122)	(0.125)	(0.129)	(0.121)
Observations	34	34	34	34	34	34	34
R-squared	0.640	0.638	0.688	0.673	0.658	0.662	0.687
Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1							

4.5.3 Results of the determinants of China's OFDI.

Because there are co-movements among variables, we can use OLS to test the relationships. The results are shown in *Table 4-14* and *Table 4-15*.⁷

In models 1, 7 and 8 we found evidence of a positive relationship between GDPPC and OFDI. GDPPC could promote the volume of OFDI. However, the evidence was found to be only at the 10% level. According to Dunning (1981, 2001), the intensity of the effects of GDP at different levels are different. The GDPPC in different provinces in China were different and the gaps between provinces in different regions were huge. Therefore, if GDPPC in different provinces was different, its effect on the volume of OFDI should be different. In the next chapter, we will use provincial data to analyse this question.

The relationship between IFDI and OFDI was positive and significant. More IFDI, especially from developed countries, would bring advanced technologies and management skills, which increased the ability of Chinese firms, hence, made it easier for firms to win in global completion. Moreover, IFDI would bring more foreign exchange, which made the government's attitude more positive when they examine Chinese firms' application for OFDI.

Exports and OFDI had a substitution effect. This finding contradicts evidence in the literature such as Liu, et al (2005). Firms treated exports and OFDI as alternatives, especially with policy regulation, which can be regarded as a cap of China's OFDI. While firms' business was expanding, they preferred to choose OFDI to replace their current export because they could exploit location advantages such as less transport costs and other barriers. Because of the regulation process, firms would postpone OFDI until their business was growing further. As a result, the volume of exports kept growing. When the condition was mature, or the relevant regulation had been released, exports would be replaced by OFDI.

⁷ We also tested other methods of coding, the methods and results can be found in the Appendix B.

In terms of policies, the results were the same as we expected. The index of RP (model 2 & 3) and SP (model 4 & 5) had positive relationships with the stocks of China's OFDI. As government released the restrictions, more OFDI was carried out. The relationship between the lagged RP index and OFDI was more significant at the 5% level (model 3). This implies that there was a learning process. When policies changed, both firms and governments (the central government and local governments) needed to adapt to the new process. The changes of regulatory policies always involved releasing examination power to local governments. The releasing policies have two situations. Firstly, local governments acquired new examination power from the central government. Secondly, the existing power of local governments was increased. Local governments also might not have the relevant experience and thus needed to learn how to examine the investment that needed to be approved especially in the first situation. In model 2, the 10% significant effect of regulatory policies came from the second situation in which local governments needed less time to learn. In model 3, with more time, local governments in both situations could handle the approval process, which released the restriction effectively, hence released OFDI. Moreover, not knowing that the approval process has changed may waste firms' time when they prepared for the approval process. Results show that the involved local governments were able to learn the required knowledge for the approval process within a year.

SP also promoted OFDI (model 4 & 5), which was consistent with the idea of Wang et al. (2012), which was that governments in developing countries promote OFDI by providing information to compensate firms' lacking experience. We used different methods to code the SP. As can be seen in the result

Table 4-14, in model 4, SP was coded as the number of SP in the last three years. The coefficient of service policies was positive and significant at the 10% level. In model 5, the service policies were coded as the number of service policies in the last five years. The coefficient was similar but was more significant at the 5% level. It indicated that using policies numbers in the last five years was a better way of coding service policies. It suggested that the effects of SP can be captured better when the five year period after publication is considered.

The attitude indices (model 9 and 13) was also positively related to OFDI, which show that the attitude of government was important. The total number of direct, indirect and key policies (direct policies plus indirect policies) can all be used as the overall index in different ways. From the result, we can see that the total number of key direct policies in the current year in model 8 were not significantly related to OFDI. The coefficients of lagged variables in model 9 and 13 were positive and significantly related to OFDI, indicating a delayed effect. The attitude of government could be reflected by the number of policies and could be observed by firms. The investment could not be done immediately and needed to be prepared before the documents were sent to the government to get approved. After the investments were approved by the government, firms could get the certificate of approval and needed the certificate to do the rest of the investment. The increase of OFDI could be reflected in the next years' volume. The coefficient of numbers of direct policies in the last three years in model 10 is less significant and the coefficient of numbers of direct policies in the last five years in model 11 is not significant. It shows that with more years past, the numbers of policies were less and less able to represent the attitude of the central government. Therefore, these two ways of coding methods in model 10 and 11 could not be used as indices. This indicated that the effect of the attitude of government was dynamic and that it appeared quickly and would be replaced by the new attitude.

SU (model 6) and PP (model 7) did not have significant relationships with the stock of China's OFDI, which was consistent with our predictions. Indirect policies (model 12) did not promote OFDI either. Specific measures were needed for policies to have effects on OFDI. Indirect policies could have effects on OFDI via GDP or exports, but it would be harder to be integrated in our model.

4.6 Conclusion

From Chapter 2 and Chapter 3, we know that policies and China's OFDI have a relationship. Scholars have tried using qualitative research method (Voss et al., 2008; Luo et al, 2010) to study the relationship between OFDI and policy. Year dummies have been used to control strategic policies in the model (Buckley et al. 2007). However, no robust quantitative research has been done on this topic until now. In this chapter, we created a series of policy indices and analysed them using quantitative methods. Our study brings a richer understanding of the effects of policies on China's OFDI. We collected policies from the official websites of China's government and existing academic literature. We removed noise and indirect policies and ended up with a robust number of direct policies that in our view were likely to impact OFDI. There are four types of direct policies: regulatory policies, service policies, supervisory policies and promotional policies. We codified them into indices. As a result, we got a series of indices that are able to capture the changes of China's OFDI related policies. Compared to studies that used qualitative methods or dummies to control the effects of strategic policies, our indices are more capable to bring robust rigorous results.

When we analysed the determinants of the variables, we found the co-movement among variables, including OFDI, GDPPC, export, IFDI, education and policies indices. Therefore, we can use the OLS to test the relationships. We found that the GDPPC did not have a significant relationship. We believe the reason for this was the uneven development

among China's provinces. IFDI and OFDI were positively related while exports and OFDI were negatively related. In terms of the policies, relaxing regulatory restrictions did promote OFDI, but it needed time for local governments and firms to get used to the new approval process. SP which provide information and other assistance did promote OFDI. SU did not promote OFDI, as it only regulated firms' behaviour after the OFDI had been done. PP could not affect the national level OFDI because of their strict criteria and limited coverage. Finally, the attitude of government was important in the approval and recording process.

In this chapter, we found the relationship between China's OFDI and policies and other variables. However, China is too big to be studied as a single unit. The development among each province and region has large variations. This could bring potential problems. As can be seen, some results of national level analysis cannot be fully explained. In the next chapter, we will bring a province level study on the determinants of China's OFDI. Combining the results of these two chapters, we will have a clearer picture of the determinants of China's OFDI.

CHAPTER 5

EFFECTS OF REGIONAL AND EXPERIMENTAL APPROVAL POLICIES ON CHINESE PROVINCIAL OFDI

5.1 Introduction

In the previous chapter, we analysed how the Outward Foreign Direct Investment (OFDI)-related policies and other economic variables affected Chinese OFDI at the national level. In this chapter, we will analyse the effects of policies and economic variables on OFDI at the **provincial level** by using regional and experimental regulatory policies. Studying policies at the provincial level will help us have a better understanding of the mechanisms and the logic behind OFDI policies, bearing in mind the heterogeneous socio-economic environment of Chinese provinces.

In Chapters 2 and 3, we analysed why policies were important determinants of OFDI. In Chapter 4, we analysed the effect of policies on the volume of China's OFDI at the national level. Our model was based on the Investment Development Path theory (Dunning, 1981, 2001). According to this theory, the level of economic development is an important determinant of OFDI. From the previous analysis, we found that Gross Domestic Product (GDP) per capita, exports, Inward Foreign Direct Investment (IFDI) and education in the home country were very important determinants of OFDI. By using this quantitative analysis, we found that regulatory policies, service policies and the attitude of government had significant effects on Chinese OFDI at the national level, as policies makers intended to. We also found a positive relationship between Gross Domestic Product per capita (GDPPC) and OFDI. The relationship between IFDI and OFDI was positive and significant. Exports and OFDI had a substitution effect.

However, studying the effects of policies on the volume of China's OFDI at the country level presents drawbacks for two reasons. Firstly, the effects of each determinant on OFDI would be vary due to the disparities of economic development among provinces and regions in China. China has a very large territory and population. There were decades of gaps of economic development among the richest provinces in the East region and the poorest provinces in the West region. According to IDP theory (Dunning, 1981), the increasing speed of OFDI could be different in different stages based on GDPPC. Considering that, it would be no surprise if GDPPC had a limited effect on poorest provinces and the effect of GDPPC would not be significant at the national level. The effects of specific policies could also be different if the precondition had not been met. Secondly, there are some experimental and regional policies that are not published nationwide. Therefore, a national level study cannot take these effects in to consideration.

To minimise the disadvantages of using national level data, we will use provincial data and quantitative methods to analyse these questions: how did economics factors and non-economics factors affect China's OFDI and how did they interact with each other? The non-economics factors in this chapter are referred to as policies which are regional policies and regulatory policies. It will show us the details of the whole picture and will give us an opportunity to exam the impact of regional and provincial level policies on OFDI. Examining the determinants of OFDI at the provincial level also allows us to use a panel data set and expand the sample size compared to the data in Chapter 4, which could deliver more robust results.

In this chapter, we first introduce why we should study the determinants of China's OFDI at the provincial level. Then we introduce economic patterns in China's provinces and policies background, and at last we discuss methodology and results.

5.2 Economic patterns of China's provinces

5.2.1 China Provinces

China has 34 provincial administrative divisions including 23 provinces, 5 autonomous regions, 4 municipalities and 2 special administrative regions. For simplicity, we call provincial administrative divisions as **provinces** from now on. The 34 provinces are Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Hainan, Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, Liaoning, Jilin, Heilongjiang, Shanxi, Anhui, Jiangxi, Henan, Hubei, Hunan, Hong Kong, Macau and Taiwan.

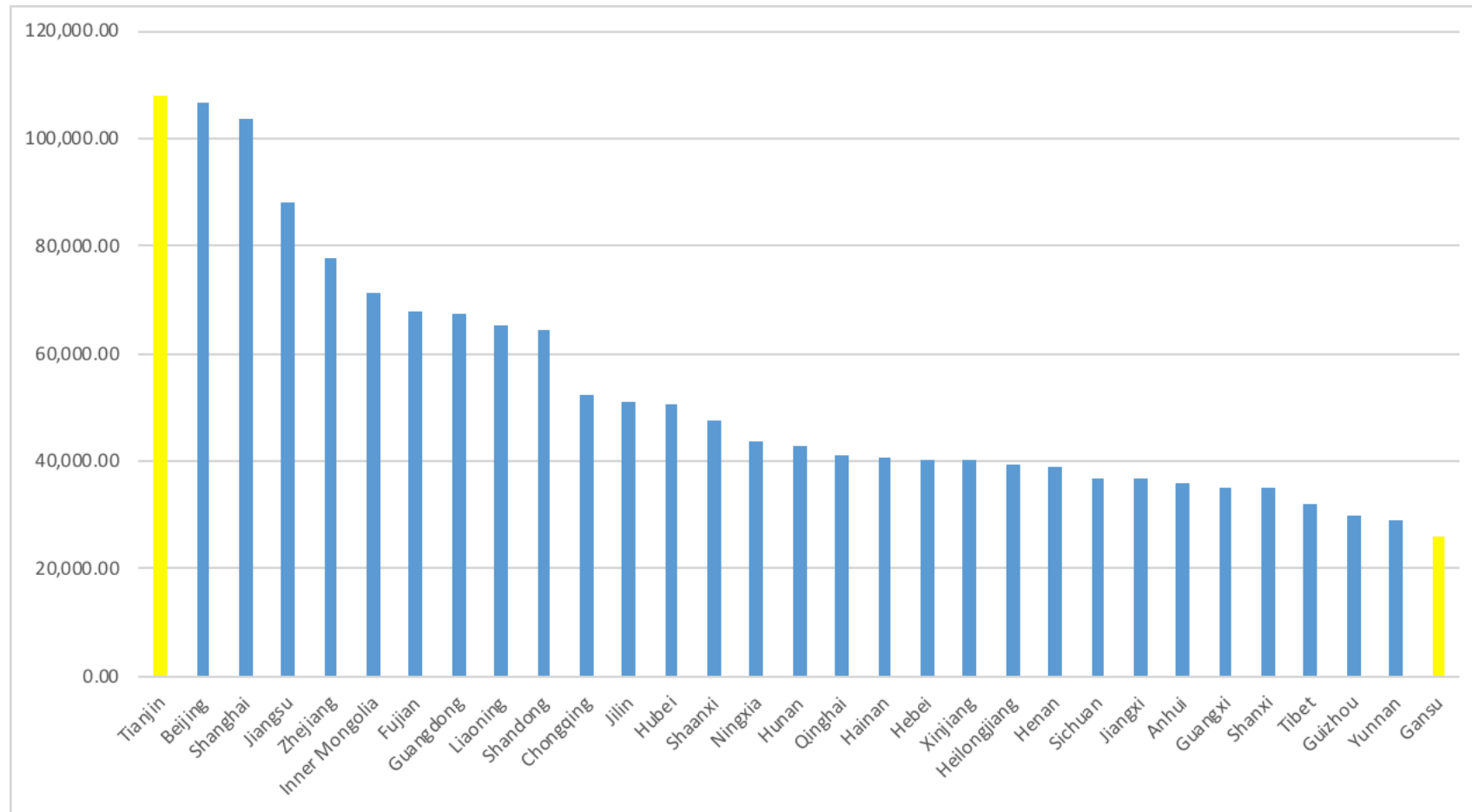
According to *Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China* and *Basic Law of the Macau Special Administrative Region of the People's Republic of China*, Hong Kong and Macau have their own independent statistical systems. Taiwan also has a different statistical system.

The first 31 provinces are regarded as the mainland and they have a unified statistical system and, therefore, the economic and policy environments of these 31 provinces are comparable. We decided therefore to only include these 31 provinces in our database.

5.2.2 Patterns of Chinese economy among provinces

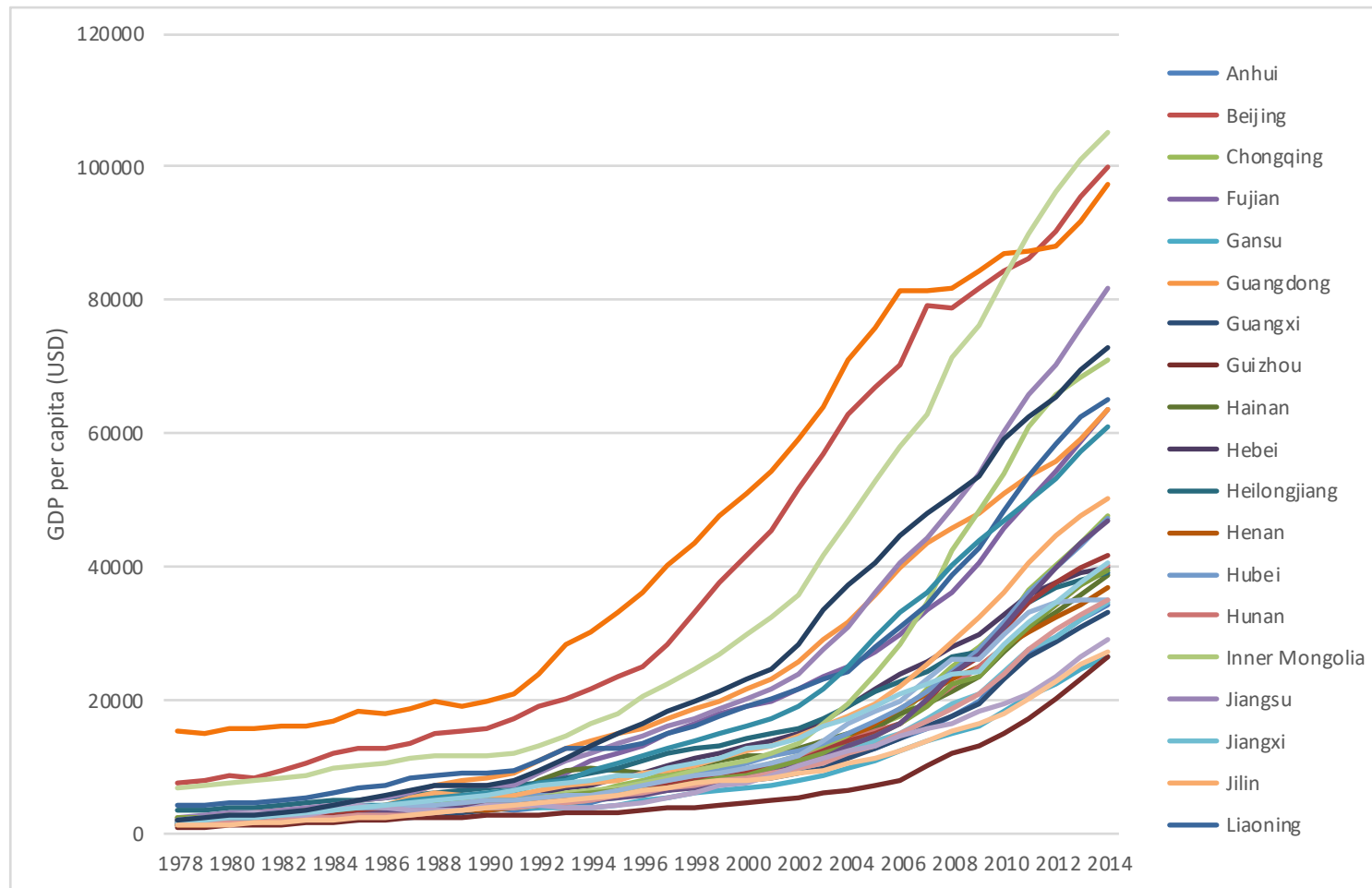
From the analysis of the previous chapters, we know that GDPPC is an important determinant of OFDI. However, the GDPPC in different provinces and different regions has been different during the last decades. According to Dunning (2001), the intensity of the effects of GDP at different levels are different. Therefore, if GDPPC in different provinces was different, its effect on the volume of OFDI should be different. In this subsection, we will analyse the GDPPC in different provinces and different regions.

Figure 5-1 Provinces' GDPPC (Yuan) of China in 2015



Source: Variety of Provincial Yearbook from 2003 to 2014. Data are deflated by using deflator from World Development Indicators of World Bank (2015=100)

Figure 5-2 Provinces' GDPPC of China in from 1979 to 2014



Source: Variety of Provincial Yearbook from 2003 to 2014. Data are deflated by using deflator from World Development Indicators of World Bank (2015=100)

GDPPC among provinces is different and the differences between some provinces can be very large, as shown in *Figure 5-1*, which describes China's GDPPC at the provincial level in 2015 and the province with the highest GDPPC is Tianjin with 107,960.09 Yuan. The province with the lowest GDPPC is Gansu with 26165.26 Yuan, about one quarter of Tianjin's GDPPC.

GDPPC can also be compared using a time trend. As shown in *Figure 5-2*, China's GDPPC at the provincial level from 1979 to 2014 has increased. However, growth rates have been completely different with gaps over time. As a result, GDPPC in poor provinces is at the same level richer provinces were at the end of the 1990s. For example, Gansu's GDPPC, which was the lowest in 2014, was at the same as Shanghai's GDP, which was the highest, in 1993.

The differences of GDPPC in provinces in different regions are obvious. Based on geographic positions and the level of economic development, and according to the National Bureau of Statistics of China (NBS) based on two regional policies - China Western Development and Rise of Central China Plan - China comprises four regions - East, Northeast, West and Central. The distribution of provinces is described in *Figure 5-3*. Each region has a different development history and economic characteristics. Geographically, all provinces in the East region are along or very close to the coast, favourably located for trade and investment. They benefitted from the Open Door policy in the 1980s; this region was the first area that opened to the world. This region also has benefited from some special policies such as lower taxes. Therefore, this region developed faster than any of the other provinces in other regions and has been in the leading position till now.

As can be seen in *Figure 5-1*, among the richest ten provinces in terms of GDPPC in 2015, nine of them were in the East region. The exception is Inner Mongolia. Among the least

developed ten provinces, seven of them were in West region while three of them were in the Central region of China.

It is interesting to look at the GDPPC of provinces in different regions (see *Figure 5-4*) as figures are very different. In 2003, the average GDPPC in the East was 3332 USD, whereas in the Northeast region was 2346 USD, in the Central and West regions was only 1432 USD and 1318 USD respectively.

We would argue that gaps between the economic levels of provinces and regions were large enough to affect result of regression models. Hence, the intensity of the effects of economic variables was different in different provinces. Therefore, studying China's OFDI at the country level could be problematic.

Figure 5-3 China map and regions

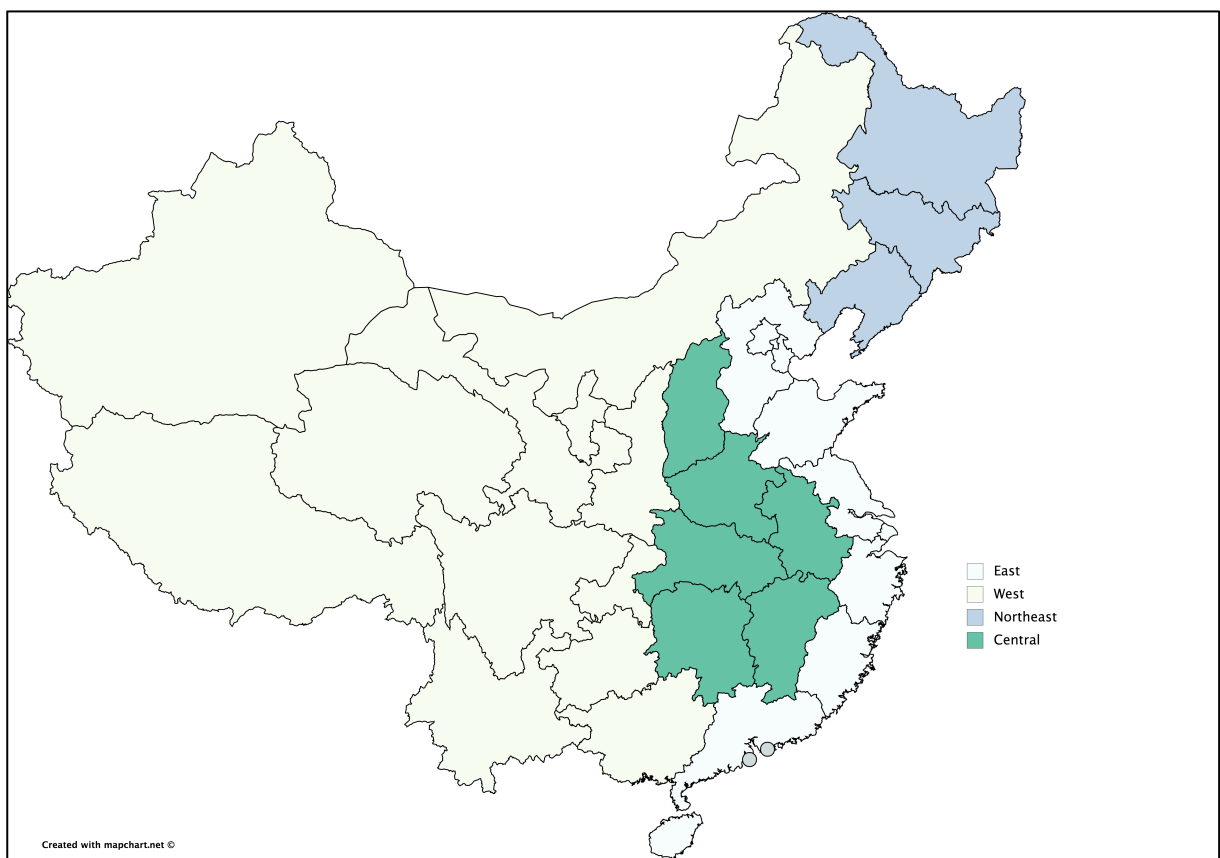
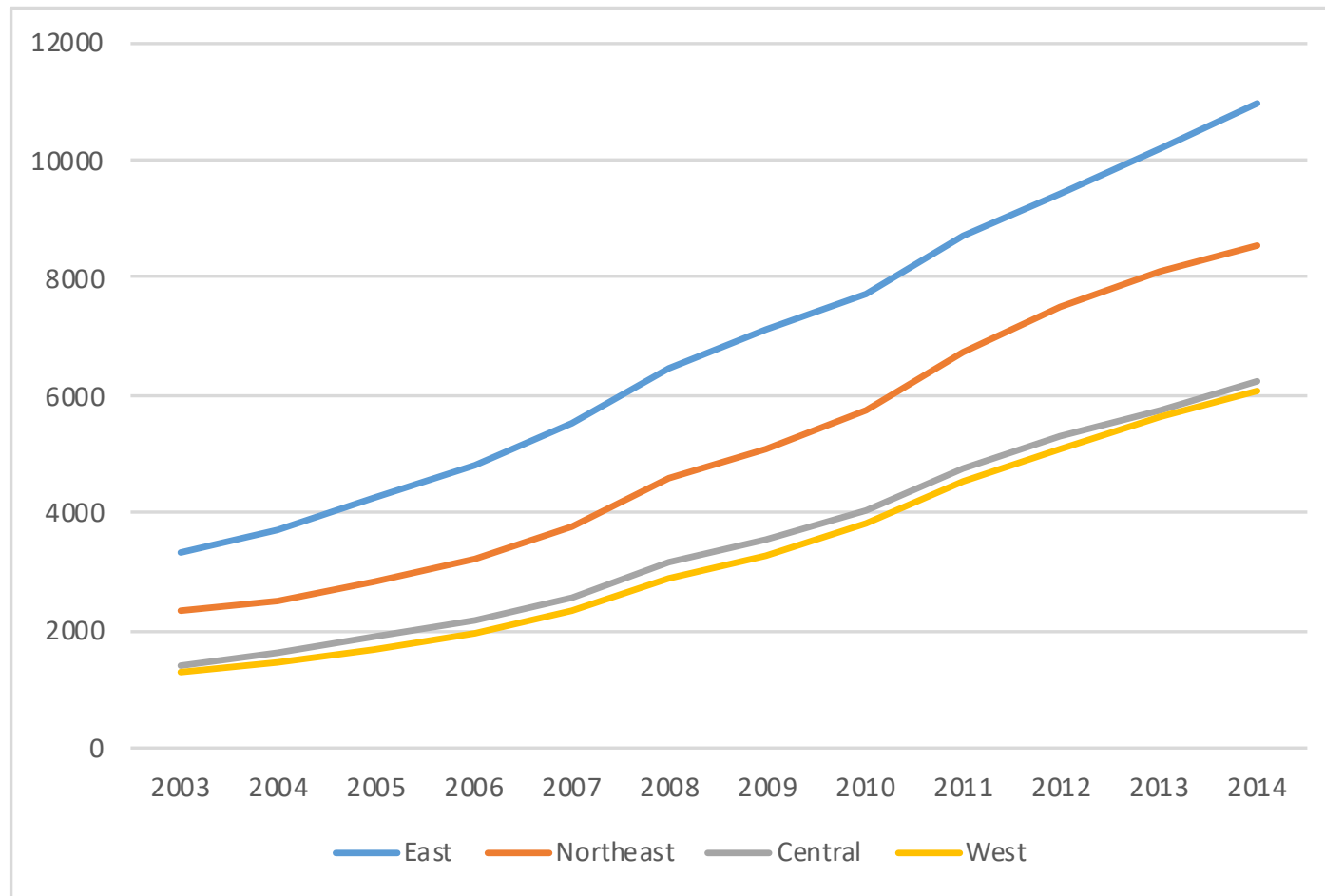


Figure 5-4 GDPPC of each region in USD



Source: Variety of Provincial Yearbook from 2003 to 2014. Data are deflated by using deflator from World Development Indicators of World Bank (2015=100)

5.3 OFDI related policies used in the model

This section describes the policies we will use in the model. We will use four policies to study the effects of policies on China's provincial OFDI. Two of them are regional policies and can be also regarded as strategic policies. The other two policies are regulatory policies and can be regarded as specific policies and experimental policies. The next subsection describes the content of the two regional policies. The second subsection describes the regulatory progress and the content of the two regulatory policies that we will use in our model. The third subsection illustrates why we will use these four policies and how they policies can be used in our model.

5.3.1 Regional policies

Two regional policies can be used in our model, the *Northeast Area Revitalization Plan (NARP)* and *Rise of Central China Plan (RCCP)*.

These two policies were made by the central government rather than local governments. Given the large scale of the country, China's central government would implement different policies in different provinces to make full use of the advantages of each region and province. For example, provinces along the east coast developed faster partly because of their convenient location; these provinces would attract more IFDI from foreign firms who were looking for production outsourcing. Therefore, the Government would set up free trade zone in provinces or cities along the east coast to attract more trade and investment.

These two regional policies are OFDI-related policies. As the title of both policies indicates, *NARP* was applied in the Northeast region, which has three provinces (Heilongjiang, Jilin and Liaoning) (3), while *RCCP* was applied in the Central region, which has six provinces: Anhui, Henan, Hunan, Hubei, Jiangxi and Shanxi (6).

Table 5-1 Summary of Policies in the model (1)

Policy Names	Policy Type	Main Contents	Period of Validity	Regions and Provinces	Publishing Departments
Northeast Area Revitalization Plan (NARP)	Regional Policies; Strategic Policies	<ul style="list-style-type: none"> · Comprehensively promote the optimization and upgrading of industrial structure · Vigorously develop modern agriculture · Actively develop the third industry · Promoting the economic transformation of resource based cities · Strengthen infrastructure construction · Further opening up to the outside world 	2004 - 2014	Northeast: Heilongjiang, Jilin and Liaoning.	CCCPC and SC
Northeast Area Revitalization Plan (RCCP)	Regional Policies; Strategic Policies	<ul style="list-style-type: none"> · Accelerate the construction of an important grain production base · Promote the optimization and upgrading of industrial structure · Enhance the status of transportation· hub, promote the development of trade circulation, tourism · Expand the opening to the outside world 	2006 - 2014	Central: Anhui, Henan, Hunan, Hubei, Jiangxi and Shanxi.	CCCPC and SC

Table 5-2 Summary of Policies in the model (2)

Policy Names	Policy Type	Main Contents	Period of Validity	Regions and Provinces	Publishing Departments	Replacement Policy	Replace year
Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment (Policy 1)	Provincial Policy, Regulatory policy	<ul style="list-style-type: none"> · It released the approval power to local branches of MOC. · It simplified the approval process 	2003 - 2004	Shanghai, Jiangsu, Zhejiang, Shandong, Guangdong, Beijing, Tianjin, and Fujian.	MOC	Provisions on approval items for overseas investment enterprises	2005
Notice on further deepening the reform of foreign exchange management in overseas investment (Policy 2)	Provincial Policy, Regulatory policy	<ul style="list-style-type: none"> · It released power to local SAFE branches. · This policy allowed the experimental provinces to examine investment policies under 3 million dollars. 	2003 - 2004	Zhejiang, Jiangsu, Shanghai, Shandong, Guangdong, Fujian, Beijing, Tianjin, Sichuan, Heilongjiang, Chongqing, Guangxi, Hubei, and Hainan.	SAFE	Circular of the state administration of foreign exchange on the relevant issues concerning the pilot program for the reform of foreign exchange control of overseas investment	2005

The NARP was approved by the central government on 29 September 2003. The Central Committee of the Communist Party of China and the State Council (SC) published *some opinions on carrying out the strategy of revitalizing the old industrial bases in the Northeast*. In the model, we regarded it as having started in 2004 because only a few months left when it was approved. The leader group of these policies was founded in December, therefore it would not affect the volume of OFDI of 2003 too much. The NARP has 12 sections, with the ninth section called *further opening up to the outside world*. In this section, it said that

“while carrying out “Bring in” policy, we should accelerate the implementation of “going out” strategy to encourage all capable enterprises to carry out multinational investment and management, and actively carry out international economic cooperation in various forms, the establishment of overseas energy, raw materials and manufacturing base, hence promote the commodities, technology and labour export.”

Therefore, we think the NARP is relevant in our research as a policy tool to promote OFDI.

The second regional policy was *RCCP*. On 15th of April in 2006, the Central Committee of the Communist Party of China and the SC published *some opinions on promoting the rise of the central region*. The sixth section is about *expanding internal and external opening up and speeding up the innovation of system and mechanism*, and said:

“Strengthen the guidance and services, and encourage qualified enterprises to “go out” and expand overseas labour output.”

Hence, this policy is also relevant to our research. Since both two policies were strategic policies, as can be seen, the descriptions were very general. There was not any specific goal that was claimed in them.

5.3.2 Regulatory Policies

Government is able to control and adjust the volume of OFDI by using policies.

Before introducing the policies that we will use in the model, it is useful to have an overview of China's OFDI regulatory process and its history of changing. Understanding the regulatory process helps us find the common characteristics of regulations, and use them in our model.

5.3.2.1 *Regulation Process*

When firms decide to invest aboard, they need to get the governmental approval, and the investment has to be approved or recorded. Regulatory policies were used to describe this process.

When firms want to invest aboard, there are three steps involving three different departments of the Chinese government. The first step is that firms should submit a recommendation and feasibility study report and other files to the National Development and Reform Commission (NDRC). Once they got permission or the report was recorded, firms submit the contract and other files to the Ministry of Commerce (MOC). After being approved or recorded by the MOC, they report to foreign exchange administration authorities such as the State Administration of Foreign Exchange (SAFE) and banks who have been authorised for foreign exchange sources and security checks. Once the investment is registered and recorded, the investment approval process then can be regarded as completed. Once firms get the a certificate of overseas investment they can do other business such as transferring capital and tax claim by showing this certificate.

This standard process, which involves firms and three different government departments, was started and was clearer from the beginning of the 21st century. The distribution of jobs among government departments was clarified. Every firm who intended to

invest abroad followed the standard process. Before that, there were only several scattered policies related to the OFDI regulatory process.

Three policies marked the beginning of this period. On six March 1989, SAFE published *Procedures for the administration of the foreign exchange involved in investment abroad* (境外投资外汇管理办法). This was the first policy that related to the administration of foreign exchange in investment abroad. On 1 October 2004, the MOC published *Provisions on the approval of overseas investment enterprises* (关于境外投资开办企业核准事项的规定), which was the first policy to elaborate on the approval process of OFDI by the MOC. On 14 February 2004, the NDRC published *Interim Administrative Measures for the approval of overseas investment projects* (境外投资项目核准暂行管理办法). This was the first comprehensive policy that stipulated the approval process reviewed by the NDRC.

To keep up the pace of the development and strategic policies of China, after those three policies were published, the three different departments (the NDRC, MOC and SAFE) continued to adjust the process by publishing new policies, which will be introduced in the following subsections.

5.3.2.2 *Changes of OFDI-policies published by the NDRC*

Different investments should follow different regulatory processes. Policies made by the NDRC made it clear by mainly regulating two aspects. In the first, these policies described which kind of investment should be approved and which kind of investment should be recorded by the central government or local government in terms of their value, types of firms (state owned enterprise (SOE) or private firms), destinations and sectors. In the second, these policies made it clear what the regulatory process firms need to follow is, such as how many days the department should respond to the request.

The first policy is *Interim Administrative Measures for the approval of overseas investment projects* (境外投资项目核准暂行管理办法, 2004). According to this policy, different regulations should be applied in terms of whether the investment involves resource development projects and whether the firms are managed by the central government. Resource development projects valued over 30 million USD should be approved by the NDRC and the ones that are valued over 200 million USD should be approved by the SC. Investment in other than resource development projects which were valued over 10 million USD should be approved by the NDRC, and those valued over 20 million USD should be approved by the SC. Other forms of investment, no matter whether they involved resource development projects or not, should be approved by branches of the NDRC (local NDRC) in the local provincial government. If the firms were controlled by the central government rather than the local government, they did not need to report to the local NDR. Their investment only needed to be recorded by the NDRC of the central government.

In terms of time, normally the NDRC should respond within 20 days, although the time could be expanded to 30 days with the permission of NRDC leaders. The uncertainty was that in terms of some complicated investment, the NDRC should ask professional institutions for a detailed assessment within 5 days after they received the request. However, how long it should take to finish the assessment was not declared. Before the application was processed by the NDRC, it should be firstly approved by the local NDRC in the local government. The time it takes by the local government was not declared neither.

From this process, we can see that regulations on resource development were looser than regulations on other types of investment. The value of resource development projects that needed to be approved by the central government was lower than the value of other investments. Firms which intended to carry out regular OFDI needed a longer time to get approved. Regulations on firms controlled by the central government were looser than

regulations on local firm; they just needed to report to the central government, which could save effort and time.

On 14 February 2011, the NDRC published *Notice of the national development and Reform Commission on the work of the approval authority to do a good job in the delegated approval of overseas investment projects* (关于做好境外投资项目下放核准权限工作的通知). This policy simplified the regulatory process and increased the power of the local NDRC. Investments valued under 300 million USD involved in resource development and under 100 million USD not involved in resource development could be approved by the local NDRC. Compared to the last version of policy, the former threshold were 30 and 10 million USD. Investments like the types of investment above that were valued under 30 and 10 million USD just should be recorded by the local NDRC. Investments no matter the value should be approved by the NDRC of the central government if this investment was invested in special destinations such as countries that were at war or the investment belonged to sensitive sectors such as communication and media. According to this policy, the SC was only responsible for some of this kind of investment.

On 8 April 2014, the NDRC published *Measures for administration of the approval and record of overseas investment projects* (境外投资项目核准和备案管理办法) to replace *Interim Administrative Measures for the approval of overseas investment projects* (境外投资项目核准暂行管理办法, 2004). This policy released the approval and record method further. The NDRC only kept the power to approve investments in special destinations or sectors and with large values. According to this policy, only investments valued over 1 billion USD or investment in special countries and special sectors should be approved by the NDRC. In addition, investments in special countries and sectors than valued over 2 billion should be

approved by the SC. Other than that, investments should only be recorded by the NDRC or the local NDRC.

In terms of time limits, the new policy pointed out that the record process should only take 7 days or less. The approval time remained the same, but it pointed out that the assessment time should be finished within 40 days.

On 27 December 2014, the NDRC published *Decision of the national development and Reform Commission on amending the measures for the approval and filing of foreign investment projects and the relevant provisions of the administrative measures for the approval and record of foreign investment projects* (国家发展改革委关于修改〈境外投资项目核准和备案管理办法〉和〈外商投资项目核准和备案管理办法〉有关条款的决定, 2014). This policy removed the regulation that investments over 1 billion USD should be approved by the NDRC. Till then, only investments involving special countries and special sectors should be approved. Other than that, they only needed to be recorded.

5.3.2.3 *Changes of OFDI-policies published by the MOC*

On 1 October 2004, the MOC published *Provisions on the approval of overseas investment enterprises* (关于境外投资开办企业核准事项的规定), which was the first policy elaborating on the approval process of OFDI by the MOC. According to this policy, some approval power was given to branches of the MOC in provincial governments (the local MOC). The local MOC could examine investments carried out by local firms and invested in countries on the approved list of 135 countries. Other investments such as investments carried out by firms managed by the central government should be approved by the MOC.

On 16 March 2009, the MOC published a new policy, *Measures for the administration of overseas investment* (境外投资管理办法) to replace the old policy. This policy explained the approval process in a new and complicated way. There were three different approval

processes. For investments in countries that had not established diplomatic relations with China or in other special countries, firms with investments valued at over 100 million USD, investments involved in more than two countries and investments with special purposes, should submit material and investment and be approved by MOC. For investments over 10 million and below 100 million, investments in the energy and minerals sectors and investments needing more cooperation in China, firms should submit material and be approved by the local MOC. For the remaining kinds of investment, firms should only fill a form via an online system and be approved by the MOC or the local MOC.

In terms of the time limit, the first type of investment should firstly be approved by the local MOC and then would be transferred to the national MOC. The whole process could take up to 30 days. The second type of investment could take up to 20 days, but the third type investment would only take up to 3 days.

On 6 September 2014, the MOC published a new version of *Measures for the administration of overseas investment* (境外投资管理办法). This policy heavily reduced the restriction of overseas investment and pointed out that investments made in sensitive countries and sectors should be approved by the MOC. Other than that, investments carried out by central government controlled firms should only be recorded by the MOC and, investments carried out by other firms should only be recorded by the local MOC.

The approval could take up to 30 days, and the recording process could take only up to 3 days.

5.3.2.4 *Changes of OFDI-policies published by the SAFE*

On 6 March 1989, the SAFE published *Measures for the administration of foreign exchange for foreign investment* (境外投资外汇管理办法). This policy mainly regulated two things related to foreign exchange. The first was that the SAFE would take foreign exchange

risk review and the review of sources of foreign exchange funds. The second was that firms should submit a deposit to ensure that firms will repatriate profits.

On 14 September 1995, the SAFE published *Supplementary Notice on the measures for the administration of foreign investment* (关于《境外投资管理办法》的补充通知). This policy explained some parts of the previous policy in more detail and said that investments valued over 1 million USD should be approved by the SAFE. Other than that, investment should be approved by the provincial branches of SAFE.

On 12 November 2002, the SAFE published *Notice of the State Administration of foreign exchange on clearing up the relevant issues concerning the profit margin of foreign investment remitted back* (国家外汇管理局关于清理境外投资汇回利润保证金有关问题的通知). According to this policy, firms did not need to guarantee repatriating profits by making a deposit with the government.

On 19 March 2003, the SAFE published *Notice of the State Administration of foreign exchange on simplifying the relevant issues concerning the examination of the sources of foreign exchange funds for foreign investment* (国家外汇管理局关于简化境外投资外汇资金来源审查有关问题的通知). The SAFE did not completely cancel but instead simplified foreign exchange risk review and the review of sources of foreign exchange funds.

On 19 May 2005, the SAFE published *Notice of the State Administration of foreign exchange on the relevant issues concerning the expansion of the pilot reform of foreign exchange management of foreign investment* (国家外汇管理局关于扩大境外投资外汇管理改革试点有关问题的通知). On 6th June 2006, SAFE published *Notice of the State Administration of foreign exchange on adjusting some foreign exchange management policies for foreign investment* (国家外汇管理局关于调整部分境外投资外汇管理政策的通知). On 8 August 2007, the SAFE published *Notice of the State Administration of foreign exchange on*

the examination of the sources of foreign exchange funds for overseas investment (国家外汇管理局关于下放境外投资外汇资金来源审查权限的通知). These policies slightly adjusted foreign exchange policies related to overseas investment. However, this did not change the two main aspects noted earlier.

On 13 July 2009, the SAFE published *Provisions on foreign exchange administration of overseas direct investment of domestic institutions (境内机构境外直接投资外汇管理规定)*. This policy abolished almost all the previous related policies. This policy became a comprehensive policy on the administration of foreign exchange for overseas investments. This was a big step towards loosening restrictions on foreign exchange administration of overseas investments. The SAFE cancelled all the approval processes. Investments should only be recorded by the local branches of SAFE.

On 28 February 2015, the SAFE published *Notice of the State Administration of foreign exchange on further simplifying and improving the policy of direct investment in foreign exchange administration (国家外汇管理局关于进一步简化和改进直接投资外汇管理政策的通知)*. According to this policy, the SAFE formally gave up the overseas investment approval and record functions. This function was transferred down to qualified bank. The SAFE also cancelled the recording process of reinvestment in foreign countries.

5.3.2.5 *Summary*

From the description and analysis above, we can see that there were three different regulatory processes that firms had to follow when they planned to invest abroad. The three regulatory processes were carried out by the NDRC, MOC and SAFE. The regulatory processes were in certain order and the regulatory process of each department was independent of each other. The examination time is an important indicator of the complexity

of the approval process. Moreover, an important way to relax restrictions is to shift the examination power from the central government to the local government. The characteristics of the regulatory policies allow us to choose two experimental policies, published by different departments but having similar content, to test the effects of regulatory policies on the volume of OFDI at the provincial level.

5.3.3 Policies used in the model

Besides those policies above, there were also experimental policies. The two experimental approval policies were *Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment* (Policy 1) published by the MOC, and *Notice on further deepening the reform of foreign exchange management in overseas investment* (Policy 2) published by the SAFE.

5.3.3.1 *Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment (Policy 1)*

Policy 1 could be dated back to a policy called *Interim provisions on the establishment of overseas trading companies and trade representative offices* published by the MOC in 1999. This policy simplified the approval process of trade companies and was aimed at expanding exports. It allowed some firms with good business records to invest in some safe foreign countries⁸ without approval. These firms just needed to have their investments recorded by the central MOC. Firms, either without a good business record or a targeting destination deemed not safe, needed to seek the approval of the central MOC before investing.

⁸ Over 100 safe countries are listed in the appendix of the policy.

Table 5-3 Summary of China's Provinces

Provinces	Region	Policy 1	Policy 2	Provinces	Region	Policy 1	Policy 2
Beijing	East	√	√	Guangxi	West		√
Tianjin	East	√	√	Chongqing	West		√
Shanghai	East	√	√	Sichuan	West		√
Jiangsu	East	√	√	Inner Mongolia	West		
Zhejiang	East	√	√	Guizhou	West		
Fujian	East	√	√	Yunnan	West		
Shandong	East	√	√	Tibet	West		
Guangdong	East	√	√	Shaanxi	West		
Hainan	East		√	Gansu	West		
Hebei	East			Qinghai	West		
Hubei	Central		√	Ningxia	West		
Hunan	Central			Xinjiang	West		
Shanxi	Central			Heilongjiang	Northeast		√
Anhui	Central			Liaoning	Northeast		
Jiangxi	Central			Jilin	Northeast		
Henan	Central						

At the beginning of 2003, the MOC decided to modify this policy. Not only trade companies, but also contracting, labor service cooperation, transportation, tourism, R&D and consulting companies could use the simplified approval process. Also, the business record constraint was relaxed and any firms regardless of their business record wanting to invest in safe countries just needed to be approved by the local MOC rather than the central government. The number of documents that needed to be prepared by firms during the approval process was also less than before. For policy 1, there are 8 experiment provinces: Shanghai, Jiangsu, Zhejiang, Shandong, Guangdong, Beijing, Tianjin, and Fujian.

In 2005, this policy was replaced by a formal national level policy called *Provisions on approval items for overseas investment enterprises*, which expanded the experimental policy to the whole country and all sectors. Every firm except firms controlled by the central government just needed to report to the local MOC to get approval to invest in countries on a list of 135 safe countries. Centrally controlled firms still needed to get approval from the MOC of the central government.

5.3.3.2 *Notice on further deepening the reform of foreign exchange management in overseas investment (Policy 2)*

Policy 2 was also about relaxing the power of approval process to local SAFE branches. The SAFE of the central government or the local SAFE should check whether the fund resources were legal before the investment. Before this policy, every investment over one million US dollars should be reported to the central SAFE. This policy allowed the experimental provinces to examine investment policies under 3 million US dollars. When the overall limit of investment was reached, every investment should be reported to the SAFE in the central government. This policy also raised the overall limit of investment. Moreover, it decreased the workload of firms to prepare the documents and saved time in the approval

process. With the approval by the central SAFE, the local SAFE could delegate their power further down to its branches in cities and districts. For policy 2, there are 14 experiment provinces: Zhejiang, Jiangsu, Shanghai, Shandong, Guangdong, Fujian, Beijing, Tianjin, Sichuan, Heilongjiang, Chongqing, Guangxi, Hubei, and Hainan.

In 2005, the central government expanded this experiment to all provinces by publishing a new policy, *Circular of the state administration of foreign exchange on the relevant issues concerning the pilot program for the reform of foreign exchange control of overseas investment*. This policy has three main aspects. Firstly, the experiment was expanded to all provinces. Secondly, the overall limit was raised from 3.3 billion US dollars to 5 billion US dollars. Thirdly, the limit value of the single investment of fund resource assessment process was raised from 3 million US dollars to 10 million US dollars.

5.3.4 Why do we use these policies?

Based on our analysis, we believe that these policies are important and relevant to our research for three reasons. The first reason is that those policies were only applied in some provinces rather than all provinces. This made provinces comparable in our research. Secondly, those policies were all published by the central government. Thirdly, the types of these policies were different, which could let us examine the effects of different types of policies.

5.3.4.1 *The policies were all at the provincial level*

The above described four policies that are all at the provincial level. The NARP said that support of the old industrial base in Northeast to accelerate the adjustment and transformation was an important strategic policy in the construction of a well-off society. These policies were only applied in the provinces of the Northeast region. The RCCP said that

promoting the development of the central area of China was an important component for the overall development strategic policy of China in the new stage. This policy was only applied in the provinces in the Central region.

The two approval policies were both experimental policies. Before carrying out a policy, especially those policies that had never been carried out before, and policies that might have huge effects, the Chinese central government did experiments on some selected provinces to see the effects. No matter whether these experimental policies had expected results, then, the experiences of carrying out this policy would be applied to the same or similar policies that applied to the whole countries. The typical experimental policy was at the beginning of the Open-Door policy. In 1979, the Chinese government decided to make Shenzhen, a city close to Hong Kong, as well as three other cities as special economic zones and gave Shenzhen concessions such as a custom tax cut to apply the Open Door policy rapidly and adventurously. In 1988, the Chinese government added Hainan province as a special economic zone. These five special economic zones covered several exclusive policies made by the central government and allowed them to make regulations which would not be in conflict with regulations made by superior governments or laws. These economics zones played a very important role during the process of implementing the Open Door Policy and still are playing an important role in current economic development. Experimental OFDI related policies played similar roles.

Policy 1 was only applied in 8 provinces and policy 2 was only applied in 14 provinces. Those selected provinces were distributed in different regions.

The characteristics of those policies let us regard these policies as provincial policies. They were only applied in certain provinces and made provinces different. Therefore, we could study the effect of policies by comparing the differences of OFDI volumes of provinces with and without policies.

5.3.4.2 *The policies were published by the central government*

These policies were made by the central government, not local governments. Therefore, the provinces with the policy used the same policies on OFDI. If they were made by local governments, the specific measures could be different, and their effects cannot be compared. The policies were made by the central government, so the measures, implementation periods and effectiveness were the same. The central government would supervise the experiment to keep the quality of the experiment at the same level.

The same measures of policies allow us to divide the provinces into experimental groups and a control group. Therefore, we could use regression methods such as difference in difference (DID) to analyse it.

5.3.4.3 *The types of the policies were different*

Based on different criteria, the policies could be categorised into several types. The first two regional policies were strategic policies. The introduction parts of both policies said that both policies were strategic policies. The two regulatory policies were specific policies.

In the previous chapter, when we coded the policies, we believed strategic policies were indirect policies. Specific policies were direct policies. Strategic policies could only be effective via specific policies. Using these four policies would help us to exam this hypothesis. If these two strategic policies in our model are effective, we can reject this hypothesis and our coding criteria could be problematic. If the effect of these two policies are not significant, then, we were right to regard strategic policies as indirect policies and the way strategic policies were used as policy dummies in some academic literature was not convincing.

5.4 Methodology

5.4.1 Model

Drawing on the previous sections, we decided to include two kinds of variables: economics variables and non-economic variables. Therefore, our model is

$$OFDI = f(\text{GDP, Export, Education, Policies})$$

In our model, economic variables include GDP, Export, Import, IFDI, and Education. Non-economic variables are policies; in particular, there are two regional policies and two regulatory policies.

We used Difference in Difference (DID) and a fixed effect model to analyse the determinants of China's OFDI. However, the normal DID is usually applied to the situation that policy intervenes in the middle of the experimental period. In the case of regulatory policies, policies intervene at the start of the experimental period and expand to both the control group and the experimental group. Because of the characteristics of the regulatory policies, we can only use classic DID for regional policies, and we derived a DID for regulatory policies.

The 'parallel trends' is a strict assumption for DID. It requires that the trends of the dependent variable (OFDI in this case) follows the same trends (parallel) between the control group and treated group (Blundell, 2004). In practice, scholars test this assumption by presenting and comparing the variables trends in graphs. This is an informal test. To solve this problem, and because we have multiple years before and after the treatment, we added year dummies in the model to relax this assumption⁹ (Mora and Reggio, 2017).

⁹ The coefficient of year dummies would not be reported because they are used for control the time trends.

5.4.1.1 *Classic DID for regional policies*

We used classic DID (Wooldridge, 2008) for regional policies. Assume I_{1ist} is OFDI of province i in region s at time t with policies. I_{0ist} is OFDI of province i in region s at time t without policies. In practice, only one of these situations can happen for one province.

Therefore, the expected investment without policies is

$$E[I_{0ist} | s, t] = \gamma_s + \lambda_t$$

Where γ_s is the sum of a time-invariant province effect. λ_t is a year effect.

D_{st} is a dummy for provinces with policies, assuming $E[I_{1ist} - I_{0ist} | s, t] = \delta$ is the treatment effect. So, the volume of OFDI of province in one year can be written as

$$I_{ist} = \gamma_s + \lambda_t + \delta D_{st} + \varepsilon_{ist}$$

The expected OFDI in the policy region before the policies started is:

$$E[I_{ist} | s = PR, t = BS] = \gamma_{PR} + \lambda_{BS}$$

where PR stands for the Policy Region, and BS stands for *Before* policies has been Started. For the first regional policy, we use (NARP); the PR were provinces in Northeast region - Heilongjiang, Jilin and Liaoning. BS was the year 2003. For RCCP, the PR were provinces in Central region - Anhui, Henan, Hunan, Hubei, Jiangxi and Shanxi. BS were the years from 2003 to 2005.

The expected OFDI in the policy region after the policies has been started is:

$$E[I_{ist} | s = PR, t = AS] = \gamma_{PR} + \lambda_{AS} + \delta$$

AS stands for *After* the policies has been Started. For NARP, AS were the years from 2004 to 2014. For RCCP, AS were the years from 2006 to 2014.

The difference of expected OFDI between these two periods is:

$$E[I_{ist} | s = PR, t = AS] - E[I_{ist} | s = PR, t = BS] = \lambda_{AS} - \lambda_{BS} + \delta$$

As can be seen, the difference of expected OFDI consists of the difference of year effect and the policy effect.

Other regions consisted of provinces without policies. The expected OFDI of other regions before policies has been started is:

$$E[I_{ist}|s = OR, t = BS] = \gamma_{OR} + \lambda_{BS}$$

Where OR stands for Other Regions. For NARP, other regions were East, Central and West. For RCCP, other regions were Northeast, East and West.

The expected OFDI of other region after the policies has been started is:

$$E[I_{ist}|s = OR, t = AS] = \gamma_{OR} + \lambda_{AS}$$

The difference of OFDI between two periods is:

$$E[I_{ist}|s = OR, t = AS] - E[I_{ist}|s = OR, t = BS] = \lambda_{AS} - \lambda_{BS}$$

As can be seen, differences in OFDI in other regions between two periods were the difference of year effect.

Difference-in-difference was used to compare the change in investment in the policy region with the change in investment in the other region.

So, the policy effect can be expressed as:

$$\begin{aligned} \delta &= E[I_{ist}|s = PR, t = AS] - E[I_{ist}|s = PR, t = BS] - (E[I_{ist}|s = OR, t = AS] - E[I_{ist}|s \\ &= OR, t = BS]) \end{aligned}$$

We can use it in the regression model. Our model was

$$I_{ist} = \alpha + \mu P_s + \rho y_t + \theta(P_s \times y_t) + GDPPC_{ist} + IFDI_{ist} + EX_{ist} + EDU_{ist} + \varepsilon_{ist}$$

where α is a constant, and P_s is the policy dummy. If province i belonged to the policies region, P_s equalled 1 and if province i belonged to another region, P_s equalled 0. μ is its coefficient. y_t is the year dummy. If OFDI was carried out in BS years, y_t equalled 0. If OFDI was carried out in years of AS, y_t equalled to 1. θ is the coefficient of interaction item.

To simplify, we just discuss dummies in the regression that is

$$I_{ist} = \alpha + \mu P_s + \rho y_t + \theta(P_s \times y_t) + \varepsilon_{ist}$$

The expected OFDI of the other region before the policies had been started, i.e. $P=0$ and $y=0$, is

$$E[I_{ist}|P = 0, y = 0] = \alpha$$

The expected OFDI of the other region after the policies had been started, i.e. $P=0$ and $y=1$, is

$$E[I_{ist}|P = 0, y = 1] = \alpha + \rho$$

The expected OFDI of the policy region before the policies had been started, i.e. $P=1$ and $y=0$, is

$$E[I_{ist}|P = 1, y = 0] = \alpha + \mu$$

The expected OFDI of the policy region after the policies had been started, i.e. $P=1$ and $y=1$, is

$$E[I_{ist}|P = 1, y = 1] = \alpha + \mu + \rho + \theta$$

From the discussion above, we know that the policy effect could be represented by

$$E[I_{ist}|s = PR, t = AS] - E[I_{ist}|s = PR, t = BS] - (E[I_{ist}|s = OR, t = AS] - E[I_{ist}|s = OR, t = BS])$$

Therefore, if we plug everything in, we get

$$E[I_{ist}|P = 1, y = 1] - E[I_{ist}|P = 1, y = 0] - (E[I_{ist}|P = 0, y = 1] - E[I_{ist}|P = 0, y = 0]) = \theta$$

Hence, θ was the estimator that we used to examine the effect of region policies.

5.4.1.2 *Derived DID for regulatory policies*

We adjusted the DID method for the regulatory policies. Normally, we would compare a treatment group with a control group, and there are at least two periods. The treatment group was treated at the start of the second period. The control group was not treated in both periods. Our situation was different, however. The experimental provinces were treated in

both periods. The other provinces were treated at the start of the second period. Therefore, we could not use DID directly. We illustrate this by using the steps that are similar to the classic DID.

The expected OFDI in the policy area before the policies expanded to the whole country is:

$$E[I_{ist}|s = PA, t = BE] = \Gamma_{PA} + \Lambda_{BE} + \Delta$$

where PA stands for Policy Area, BE stands for Before the policy has been Expanded to the whole country. For policy 1, PA consisted of eight provinces (Shanghai, Jiangsu, Zhejiang, Shandong, Guangdong, Beijing, Tianjin, and Fujian). For policy 2, PA consisted of 14 provinces (Zhejiang, Jiangsu, Shanghai, Shandong, Guangdong, Fujian, Beijing, Tianjin, Sichuan, Heilongjiang, Chongqing, Guangxi, Hubei, and Hainan). For both policies, BE were the years 2003 and 2004.

The expected OFDI in the policy area after the policy has been expanded to the whole countries is:

$$E[I_{ist}|s = PA, t = AE] = \Gamma_{PA} + \Lambda_{AE} + \Delta$$

Where AE stands for After the policy has been Expanded to the whole country. For both policies, AE were the years from 2005 to 2014.

The difference of OFDI between two periods is:

$$E[I_{ist}|s = PA, t = AE] - E[I_{ist}|s = PA, t = BE] = \Lambda_{AE} - \Lambda_{BE}$$

As can be seen, the difference of OFDI between the two periods was the difference of the year effect.

The OFDI of other areas before the policy has been expanded to the whole countries is:

$$E[I_{ist}|s = OA, t = BE] = \Gamma_{OA} + \Lambda_{BE}$$

where OA stands for Other Area. For policy 1, OA were the China's mainland provinces except those eight experimental provinces. For policy 2, OA were the mainland provinces except those 14 experimental policies.

The expected OFDI of other region after the policies has been started is:

$$E[I_{ist}|s = OA, t = AE] = \Gamma_{OA} + \Lambda_{AE} + \Delta$$

The difference of OFDI between two periods is:

$$E[I_{ist}|s = OA, t = AE] - E[I_{ist}|s = OA, t = BE] = \Lambda_{AE} - \Lambda_{BE} + \Delta$$

As can be seen, the difference of OFDI between two periods consisted of the difference of year effect and the policy effect.

So, the policy effect could be expressed as:

$$\begin{aligned} \Delta &= (E[I_{ist}|s = OA, t = AE] - E[I_{ist}|s = OA, t = BE]) - (E[I_{ist}|s = PA, t \\ &= AE] - E[I_{ist}|s = PA, t = BE]) \end{aligned}$$

We used the derived DID in the regression model. Similarly, for simplicity, we just discussed the policy dummies in the regression. The regression was the same with the regression used in the classic DID:

$$I_{ist} = A + MP_s + Py_t + \Theta(P_s \times y_t) + \varepsilon_{ist}$$

The expected OFDI of the other area before the policies had been started, i.e. P=0 and y=0, is

$$E[I_{ist}|P = 0, y = 0] = A$$

The expected OFDI of the other area after the policies had been started, i.e. P=0 and y=1, is

$$E[I_{ist}|P = 0, y = 1] = A + P$$

The expected OFDI of the policy area before the policies had been started, i.e. P=1 and y=0, is

$$E[I_{ist}|P = 1, y = 0] = A + M$$

The expected OFDI of the policy area after the policies had been started, i.e. $P=1$ and $y=1$, is

$$E[I_{ist}|P = 1, y = 1] = A + M + P + \Theta$$

From the discussion above, we know that the policy effect could be represented by $(E[I_{ist}|s = OA, t = AE] - E[I_{ist}|s = OA, t = BE]) - (E[I_{ist}|s = PA, t = AE] - E[I_{ist}|s = PA, t = BE])$

Therefore, if we plug everything in, that is

$$E[I_{ist}|P = 0, y = 1] - E[I_{ist}|P = 0, y = 0] - (E[I_{ist}|P = 1, y = 1] - E[I_{ist}|P = 1, y = 0]) = -\Theta$$

Hence $-\Theta$ was the estimator that we expected if policies could promote OFDI.

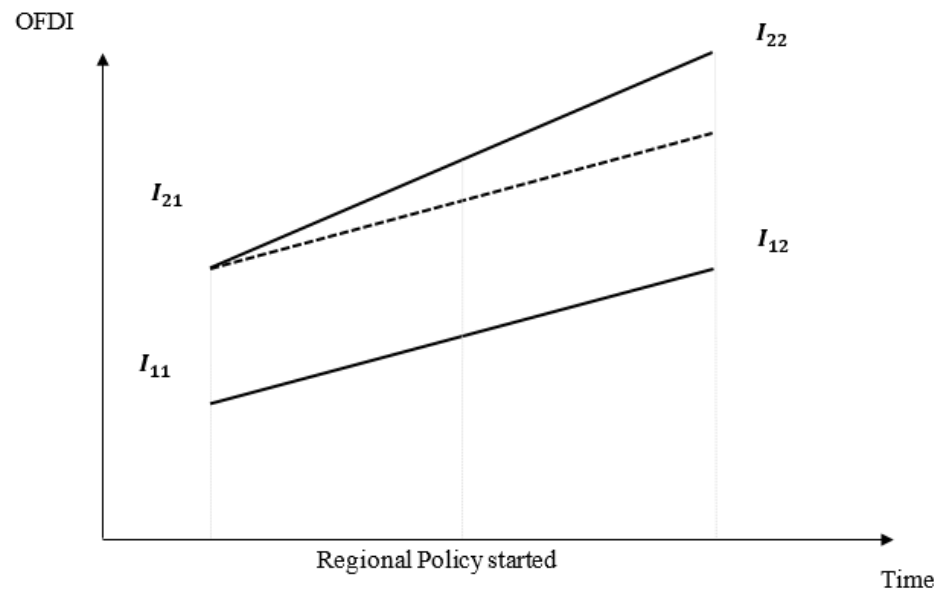
Therefore, if the coefficient of the interaction term was negative, it mean the effects of policies were positive. If the coefficient was positive, the effects of policies were negative.

It can be regarded that the growth rate of OFDI of the policy area is lower than the growth rate of OFDI of the other areas after the policy has been expanded to the whole country. In our model, the policy area is the experimental group. In the policy area, the policies were applied all the time. The other areas are the control group. The policies were expanded to these areas in 2005. When experimental policies started in 2003, the OFDI in policy area started to increase if the policies were effective. When the policy was expanded to other area, compared to the other area (control group), in the policy area the growth rate of OFDI was slower and the policies were less effective.

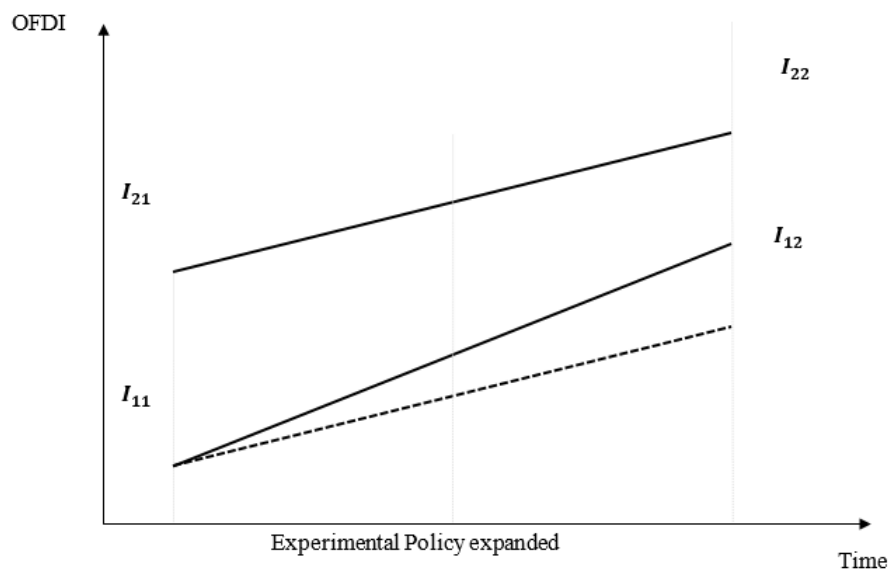
The two different DIDs could also be compared on the graphs below. On the graph, I_{11} is OFDI in the control provinces before policies. I_{12} is OFDI in the control provinces after policies. I_{21} is OFDI in the experimental provinces before policies. I_{22} is OFDI in the experimental provinces after policies. The policy effect of the regional effect is $(I_{22} - I_{21}) - (I_{12} - I_{11})$

– I_{11}) on *Graph 5-1*. The policy effect of the approval effect of the regulation effect is $(I_{12} - I_{11}) - (I_{22} - I_{21})$ on *Graph 5-2*.

Graph 5-1 DID for regional policies



Graph 5-2 DID for regulatory policies



5.4.2 Data

In this part, we use provincial panel data to analyse how Chinese policies affected Chinese OFDI. The data could be divided into two groups: economic data and non-economic data (policies). In terms of the non-economic variables (policies), there were two kinds of policies that could be used in our provincial data. We introduced these policies in the previous section.

Chinese provincial OFDI was collected from various versions of the Statistical Bulletin of China's Outward Foreign Direct investment. China started to publish provincial OFDI flows data beginning in 2003 (stocks data were published from 2004) and the latest data was up to 2014. GDPPC, exports, education and IFDI was collected from various versions of the Chinese Yearbook. The official exchange rate and the GDP deflator (base year is 2000) was collected from the World Bank's World Development Indicators. OFDI, GDPPC and exports were deflated by using the deflator. Therefore, the database we used was provincial data with a time range from 2003 to 2014. The summary of data can be found in the *Table 5-4* below.

Table 5-4 Summarise of Variables

Categories	Variables	Sources	Year
FDI	OFDI	SBCOFDI	2003-2014
	IFDI	Yearbook	2003-2014
Economics	China GDPPC	Yearbook	2003-2014
	Export	Yearbook	2003-2014
	Education	Yearbook	2003-2014
	Deflator	World Bank	2003-2014
	Exchange Rate	World Bank	2003-2014
Non-Economics	Policies	Compiled by using information from www.mofcom.gov.cn and www.fdi.com.cn	-

5.5 Results

5.5.1 Unit root test:

Before making the regression, we did the unit root test to see whether the data were stationary. If they were not stationary, there could be a problem of spurious regression. The results are list on the *Table 5-5*.

As can be seen, all the log real variables were stationary. Therefore, we could use logarithm-deflated data in our model directly.

Table 5-5 Variables Unit root test

Variables	Unadjusted t	Adjusted t	p-value
OFDI Flows	2.1602	7.3647	1.0000
GDPPC	-12.9829	-8.5307	0.0000
GDPPC of Primary sector	-16.1178	-10.2241	0.0000
GDPPC in Secondary sector	-11.1933	-5.6858	0.0000
GDPPC in tertiary sector	-3.5977	-1.1060	0.1344
IFDI flows	-0.6103	6.3776	1.0000
Export	-3.4628	3.4722	0.9997
Education	-9.5942	-7.1889	0.0000
Deflated Data			
OFDI Flows	2.0112	7.4189	1.0000
GDPPC	-13.4102	-8.3850	0.0000
GDPPC of Primary sector	-14.7978	-8.8869	0.0000
GDPPC in Secondary sector	-10.6473	-4.7168	0.0000
GDPPC in tertiary sector	-2.9800	0.7790	0.7820
IFDI flows	-1.4126	5.5507	1.0000
Export	-4.6180	2.3508	0.9906
Education	-9.5942	-7.1889	0.0000
Logarithm Deflated Data			
OFDI Flows	-15.9789	-7.0604	0.0000
GDPPC	-11.1548	-5.7719	0.0000
GDPPC of Primary sector	-15.2564	-8.0793	0.0000
GDPPC in Secondary sector	-8.5840	-3.4886	0.0002
GDPPC in tertiary sector	-13.2022	-7.0005	0.0000
IFDI flows	-15.1973	-8.7323	0.0000
Export	-14.2105	-7.6503	0.0000
Education	-16.2598	-11.6866	0.0000

5.5.2 Regional Strategic Policies

To test whether we should use fixed effects or random effects, we carried out a Hausman test and Schaffer and Stillman's (2010) method. The results suggested that we should use a Fixed Effect Model.

Results can be seen in the *Table 5-6* and *Table 5-7*. The coefficients of policies dummies (μ/M) only represent the differences of OFDI between the policy area (PA) and other area (OA) during the whole period (BS+AS in terms of regional policies, BE + AE in terms of regulatory policies), and they do not include the differences of OFDI between BS/BE and AS/AE. The coefficients of the time dummies (ρ/P) only represent the difference of OFDI of the whole area (PA + OA) between before (BS/BE) and after (AS/AE) the policies are carried out, and they do not include the differences of OFDI between different areas (PA and OA). Therefore, those coefficients (μ/M and ρ/P) are less interesting and are not presented in the results table. Rather, we just present the coefficients of the interaction terms (θ/Φ), which represent the effects of policies on OFDI.

Before interpreting the results, the possible endogeneity issue should be addressed, as there may be an endogeneity issue in this model. The endogeneity problems could come from the simultaneous causality among dependent variables and independent variables (Wooldridge, 2008). In our model, simultaneous causality among OFDI, GDP per capita and Export could cause an endogeneity problem, which could make the estimator inconsistent. We have analysed that OFDI could be affected by GDP per capita and Export. However, the level of GDP per capita and Export could also be affected by OFDI.

In particular, in terms of OFDI and GDP per capita, firms, especially from EMNEs, use OFDI as a springboard to get valuable strategic assets such as advanced technology (Luo and Tung, 2007). EMNEs bring these assets to the parent companies and apply them in the

domestic market. As a result, GDP per capita of home countries increases via reverse spillover effects (Driffield and Love, 2010).

However, this is not the case in terms of China's OFDI. As we have analysed in Chapter 3, before 2010 China's OFDI was mainly resource seeking. Both the twelfth Five-Year Plan and the data from the SBCOFDI supported this fact. The period from 2011 to 2015 can be regarded as a transition period when China's OFDI changed from resource seeking OFDI to market seeking and asset seeking. Our data sample period ranges from 2003 to 2014. During this period, resource seeking OFDI was dominant and the transition had not been finished. In this case, resource seeking OFDI would not promote domestic economic development via reverse spillover effects. Hence, there was not any simultaneous causality between OFDI and GDP per capita and therefore would not cause an endogeneity problem.

In terms of exports and OFDI, market seeking OFDI would help firms get behind trade barriers and promote exports. In terms of China's OFDI, however, according to the official data from the SBOCOFDI, OFDI in the manufacturing sector only took 4% of the total OFDI in 2006 and 7.78% in 2014. The majority of OFDI was distributed in resource seeking, leasing and business services, and banking, which would not promote exports. Hence, there is not any simultaneous causality between OFDI and exports and hence no endogeneity problem. Therefore, our model does not have any endogeneity problem.

To test whether we need to solve the endogeneity problem, we conducted the Hausman test to compare OLS and 2SLS and figured out which one is more appropriate. In the 2SLS, we used the lag variables as instruments. The results of the Hausman tests are shown on Table 5-6 and Table 5-7. As can be seen, we cannot reject the null hypothesis that all the variables are exogenous. Therefore, our model does not have an endogeneity problem. As a further robustness check, the results of 2SLS and System GMM model can be found in Appendix D.

Table 5-6 Results of Fixed Effect Model (OLS) (1)

VARIABLES	(1) OFDI flows	(2) OFDI flows	(3) OFDI flows	(4) OFDI flows	(5) OFDI flows
GDPPC	2.631*** (0.679)		2.612*** (0.680)	2.670*** (0.681)	2.672*** (0.680)
GDPPC of Primary sector		-0.212 (0.614)			
GDPPC in Secondary sector		0.639 (0.553)			
GDPPC in tertiary sector		2.449*** (0.939)			
Export	0.0284 (0.210)	-0.00262 (0.218)	0.0349 (0.211)	0.0214 (0.211)	0.0272 (0.210)
IFDI flows	-0.0406 (0.149)	0.00142 (0.152)	-0.0420 (0.149)	-0.0388 (0.149)	-0.0398 (0.148)
Education	1.711** (0.693)	1.646** (0.720)	1.795** (0.701)	1.593** (0.708)	1.639** (0.708)
Regional Policy: NARP (θ_1)			0.555 (0.671)		1.119 (0.776)
Regional Policy: RCCP (θ_2)				-0.353 (0.433)	-0.719 (0.501)
Constant	21.83*** (7.687)	-0.0858 (3.015)	21.36*** (7.712)	22.60*** (7.748)	22.44*** (7.736)
Hausman test	10.09	11.84	9.84	10.42	10.24
P-value	0.8143	0.81	0.8748	0.8437	0.893
Observations	372	372	372	372	372
R-squared	0.731	0.730	0.731	0.731	0.733
Number of provinces	31	31	31	31	31
Standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Table 5-7 Results of Fixed Effect Model (OLS) (2)

	(6)	(7)	(8)	(9)	(10)
VARIABLES	OFDI flows	OFDI flows	OFDI flows	OFDI flows	OFDI flows
GDPPC	2.208***	2.650***	2.355***	3.262***	2.846***
	(0.693)	(0.698)	(0.693)	(1.031)	(0.660)
Export	0.0541	0.0244	-0.0183	0.0817	0.380*
	(0.209)	(0.213)	(0.210)	(0.251)	(0.220)
IFDI flows	-0.110	-0.0370	-0.0772	-0.171	-0.0190
	(0.150)	(0.152)	(0.150)	(0.180)	(0.146)
Education	1.561**	1.710**	1.431**	2.369**	-1.103
	(0.690)	(0.694)	(0.688)	(0.913)	(0.742)
Experimental Policy: Policy 1 (Θ_1)	-0.905**		-		
	(0.354)		1.513***		
			(0.448)		
Experimental Policy: Policy 2 (Θ_2)		0.0376	0.846**		
		(0.308)	(0.386)		
Opol2 (Θ_3)				0.780*	
				(0.434)	
Pol12 (Θ_4)					-0.776**
					(0.331)
Constant	18.85**	22.01***	20.76***	26.54**	30.96***
	(7.712)	(7.830)	(7.717)	(10.54)	(7.405)
Hausman test	8.42	10.09	7.83	6.22	6.75
P-value	0.9353	0.8621	0.9701	0.9855	0.9778
Observations	372	372	372	276	300
R-squared	0.736	0.731	0.740	0.732	0.759
Number of provinces	31	31	31	23	25
Standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Notes: Policy 1: Policy dummy for Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment; Policy 2: Policy dummy for Notice on further deepening the reform of foreign exchange management in overseas investment; Opol2: Policy dummy for provinces only has policy 2. Pol12: Policy dummy for provinces have both policy 1 and policy 2.

As can be seen, when no policies dummy was added to the model (model 1), GDPPC and education had significantly positive effects on Chinese provincial OFDI. This was consistent with most literature that OFDI and GDP and education in host countries had positive relationships. Provinces with higher GDPPC could take a higher level of international business; that is, OFDI. Education was positively related to OFDI. Education helped firms to get skilled workers and experienced managers, which is essential to win the competition with firms in other countries, especially advanced countries.

From the previous chapter, where we studied the determinants of OFDI at the national level, we did not find significant evidence of the positive effect of GDPPC. The differences of the results between these two methods supported our hypothesis that different levels of GDPPC would have different effects on the volume of OFDI. Other variables such as exports and IFDI also did not have a significant relationship with OFDI, but we found a substitution effect between exports and OFDI in the previous chapter. The reason was that at a certain level of GDPPC, OFDI prevails over exports. However, conditions for OFDI were not mature in some provinces, so we found a mixed effects of exports between provinces, and the coefficient for exports was not significant.

Therefore, we decided to split GDP into different industries to see whether this could help us look into the effects. We split GDP into primary, secondary and tertiary GDP and applied the fixed effect model. The results could also be seen in *Table 5-6* (model 2). The results were consistent with our prediction. Tertiary GDP has a positive and significant relationship with the volume of provincial OFDI, but primary GDP and secondary did not have a significant relationship with OFDI. This implies that a higher level of economic development contributed to more OFDI, and that economic growth was the real power behind OFDI growth.

With the results of the first two models, we could conclude that GDPPC had positive effects on OFDI, but the intensity of the effects was different. The effect was stronger in a higher level economy.

Then, we added non-economic variables, i.e. policy variables, in our model (model 3, 4 and 5). Firstly, we added regional policies in our model. As can be seen, *NARP* applied in the Northeast part of China and *RCCP* applied in the Central part of China did not promote local OFDI.

The reason that regional policies did not have an effect on OFDI was that, as we noted before, the regional policies were strategic policies and did not focus on OFDI, although they were related to OFDI. Strategic policies were regarded as indirect policies and should not be able to have any effect on OFDI by using a quantitative method.

5.5.3 Experimental Approval Policies

Then we examined experimental regulatory policies by analysing two experimental policies, *Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment* (policy 1) published by the MOC and *Notice on further deepening the reform of foreign exchange management in overseas investment* (policy 2) published by the SAFE.

The results also can be seen from *Table 5-7* (models 6, 7 and 8). In each model, GDP and education had positive and significant effects on the volume of provincial OFDI, which was the same in model 1. Besides, two policies with same period and similar content from different departments have different results. The effects of policy 1 was significant and the sign was negative. As shown in Section 5.4.1.2, we used derived DID to analyse the effects of regulatory policies. The sign of the coefficient of policies was opposite to the sign of the effects of policies. When the sign is negative, it indicates a positive effect, which implies that

the growth rate of OFDI in the experimental area was slower than other areas when the experimental policies were expanded to the whole country. Therefore, policy 1 had positive effects on the volume of provincial OFDI. Hence relaxing approval power to local authorities effectively promoted the efficiency of the OFDI system and then increased the volume of Chinese OFDI. However, the effect of policy 2 was not significant. Therefore, it was interesting to investigate why two policies with similar content would have different effects.

The contents of the two policies were introduced in 5.3.3. Generally, the contents of both policies are similar. According to the content of policy 1, it relaxed the approval power to local branches of the MOC. Before this policy, every investment valued over 1 million USD should be examined by the MOC in Beijing. This policy delegated power to the local government. The local MOC could directly examine investments under 3 million US dollars, and the approval process was simplified. Policy 2 was also about delegating power to the local SAFE branches. Before this policy, every investment, no matter its value, had to be examined by the SAFE. This policy allowed the experimental provinces to examine investment policies under 3 million US dollars. Moreover, with approval by the central SAFE, the local SAFE could delegate its power further down to its branches in cities and districts.

The main content of both policies were delegating examination power to the local government. From the perspectives of the firms, the advantage of this new method was saving primary examination time and transferring the documents to the central government by the local government. These two policies were used to regulate examination and approval procedures carried out exclusively by the MOC and SAFE. We did not see any direct connections or differences between these two policies.

However, the reason that the two policies had different results might be that not only policies content mattered, but also the background of the provinces. By looking into the characteristics of provinces in each group, we could find some patterns.

Comparing the two approval policies, the major difference between them was in which provinces they were rolled out. From *Table 5-3*, we can see that these two policies overlapped in some provinces. There were 14 provinces that had either policy 1 or policy 2. Among these 14 application provinces, there were eight provinces that had both policy 1 and policy 2. The other six provinces only had policy 2. Since the implementation time was the same, we could see that policy 1 and policy 2 had joint positive and significant effects on local OFDI in the overlapped provinces. We could not say whether policy 1 had effects or not. Therefore, all provinces could be separated into four groups: provinces which had policy 1 only, provinces which had policy 2 only, provinces which had both policy 1 and policy 2 and provinces which had neither policy 1 nor policy 2. The first group did not exist because any provinces who had policy 1 also had policy 2. Therefore, we have two experimental groups and one control group for the DID analysis.

The results can be seen in *Table 5-6* (models 9 and 10). *Opol2* is the province dummy when the experimental group consisted of provinces that only have policy 2. *Pol12* is the province dummy when the experimental group consisted of provinces that had both policy 1 and policy 2.

When we tested whether policy 2 only had effects on local OFDI in model 9, the results showed that policy 2 only did not have a significant relationship with local OFDI. Therefore, policy 2 only did not influence the volume of Chinese provincial OFDI. In model 10, the sign of policy dummies was negative, which implies that the growth rate of OFDI in the experimental area was slower than other areas when the policy was expanded to the whole country (see Section 5.4.1.2). This means that the measures in this policy promote the volume of OFDI effectively. Therefore, in those provinces which have both policy 1 and policy 2, the policies had positive and significant effects. In terms of magnitudes, simplifying

the approval process of the MOC could double the OFDI¹⁰ on average, controlling for other variables. For example, the real OFDI of Hebei in 2004 was 106 million Yuan. If the regulation process had been simplified, the OFDI would have been 312 million Yuan. In 2005, the real OFDI increased from 593 million Yuan to 699 million Yuan. According to our results, another 106 million of the 593 million was due to the regulation process being simplified by policy 1 and policy 2.

The results became meaningful when we took the regions into consideration. Provinces which had both policy 1 and policy 2 were all from the East. However, none of provinces that only had pol2 are from the East. Among the five provinces that only had policy 2 in our database, three of them were from the West, one of them was from the Northeast and one of them was from Central.

As we discussed before, provinces in the East part of China were more advanced in terms of economic development compared to other regions. As two similar policies had different effects, a conclusion could be drawn that this kind of policies was more effective in more advanced provinces.

Dunning (1981) divided OFDI development into four stages in terms of the level of GDP, and OFDI started to increase at the third stage but would not increase before the third stage. In stages one and two, firms' ownership is not strong enough to compete with local firms in host countries. But in stage three, with the growth of the economy in the region, firms were more competitive, as they had stronger ownership advantages. This implied that the volume and increased speed of OFDI had a relationship with the level of economic growth. Our results were consistent with Dunning's theory. Based on Dunning's theory, different

¹⁰ The volume of OFDI was logged. Therefore, $\text{LogOFDI}_t - \text{Log OFDI}_{t-1} = \theta$ controlling other variables. Therefore, the growth rate were calculated as $(\exp(\theta) - 1) * 100\%$, where θ is the coefficient. In this case, the absolute value of θ is 0.777. Therefore, the OFDI increased 117.49%.

region's OFDI were at different stages when the policy started. The East region had moved into the third stage, in which firms were more likely to expand their international business by transferring their business forms from exports to OFDI and try to exploit the location advantages of host countries. The restriction policies partially blocked OFDI. This may be caused by complicated procedures, which discouraged firms. The long approval period which made the approval process less efficient could also be a disadvantage. As a result, when the restriction was relaxed, total OFDI volume increased rapidly.

In contrast, provinces in other regions, especially the West and Central, were still at the second stage of development or even at the first stage. In this stage, firms in these provinces were more likely to exploit ownership advantages and internalization advantages. They preferred to keep their domestic business and try to participate in international business by just exporting, and as the target firms of outsourcing rather than investing abroad. They did not have sufficient conditions to invest in other countries. Therefore, those experimental policies did not work very well in those provinces. Relaxing restrictions could not promote OFDI, which was still at a lower and inactive level. Therefore, OFDI in these provinces barely increased, or increased slowly.

From the discussion above, we can say that the increased OFDI in our model was caused by loosening restrictions rather than promotion.

Therefore, loosening restriction policies had positive effects on the volume of provincial OFDI. GDP was the real power behind the increase of volume of OFDI. A higher GDP not only promoted OFDI but also was a pre-condition for policies to take effect.

CHAPTER 6

CONCLUSION

6.1 Main Contributions

Our overarching contribution is to show the impact of government policies on China's OFDI at the national level and the provincial level by means of a quantitative methodology relying on econometric modelling

In particular, our **main methodological contribution** is that we quantified China's OFDI related policies and used robust quantitative methods to study the effects of policies. Different from previous studies which use dummies to represent policies in the model, we divided all direct policies into four types: regulatory policies, supervisory policies, service policies and promotional policies. We then created a series of indices by quantifying these policies based on the different characteristics of the different types of policies. These series captured the changes of different types of policies. Then we used OLS to test the relationship between OFDI and policies. As far as we know, this is the first time that a robust quantitative method has been used on this topic. China's OFDI was regulated by several departments. The departments evolved several times, hence, their functions also changed several times. Moreover, OFDI was regulated in several aspects. There are different types of policies such as strategic policies, Five-Year Plans and specific policies. Because of the complexity of specific policies, scholars tended to use strategic policies by adding year dummies in their models. As we have analysed, using strategic policies has drawbacks. Strategic policies cannot capture changes in policies accurately. We managed to overcome the difficulties and created a series of indices. By using a quantitative method, comparing it to a qualitative method and adding dummies in the models, our model was more robust and convincing. The indices and policy

framework was effective and can be also used to control the effects of policies in other studies. Our work brings a rich understanding of the effects of policies on China's OFDI.

We also used two regional policies and two regulatory policies to study the effects of policies at the provincial level by using comparative analysis. The chosen policies were all published by the central government and were only carried out in certain provinces. Moreover, the types of policies were different. The characteristics of those policies allowed us to test the relationships of policies and OFDI by using comparative analysis. This is another way of studying specific policies which is more robust and convincing compared to qualitative methods and studying strategic policies. We also derived a new Different in Different model, which made studying the effects of experimental regulatory policies possible.

6.2 Main contribution to the OFDI debate

Our results show the importance of policies, and specifically which policies, on OFDI. Our empirical findings endorse some key theories for the first time in the Chinese context.

We found that, from the perspective of the Investment Development Path (IDP), economic development represented by Gross Domestic Product per capita (GDPPC) was the main power to push OFDI. However, the coefficients were only significant at the 10% level. The IDP theory told us that the relationship between GDPPC and OFDI was different at different stages of economic development. The unbalanced development across the country has been one of the characteristics of China. There has been for decades a widening gap in the economic development and prosperity between the richest and the poorest provinces. For this reason, it has been necessary to study the effects of policies at the provincial level to take such unbalanced development into consideration. When we studied such effects at the provincial level in Chapter 5, the positive relationship between OFDI and GDPPC was significant at the

1% level. The coefficient was at the same level as it was at the national level. This indicated that a province level study was a better method than a national level study when we examine the determinants of China's OFDI from the side of China.

We also found a positive relationship between Inward Foreign Direct Investment (IFDI) and OFDI. Foreign firms who invested in China were very likely to invest in other countries. Foreign firms from more advanced economies were likely to bring more advanced technologies and strengthen the abilities of local firms to carry out OFDI, especially in those sectors where joint ventures were required by China's law. More IFDI was bringing more foreign exchange, which may lower the financial risk. As a result, the government might have a more positive attitude toward OFDI during the regulatory and approval process.

We found a substitution effect between exports and OFDI. We found that beyond a certain level of economic development firms started to consider investing abroad, but in the presence of too many restrictions, which made it more difficult to invest in other countries, firms would choose to export rather than invest abroad. However, once restrictions such as regulatory restrictions were relaxed, capable firms would invest more and export less to expand their international business.

In terms of policies, the effects of strategic policies could not be reflected in our model. This was because strategic policies tend to impact over long periods of time and there was not any specific date that could be used as a starting point in the model. Moreover, the description of strategic policies has always been very general. More specific policies were needed to implement the idea of strategic policies. Therefore, when we studied the determinants of China's OFDI, it was not appropriate to control for the effects of policies by just adding year dummies. This highlights our contribution of creating policies indices. Scholars can use our indices to control the effects of policies that are made by the central government.

In terms of specific policies, we found that releasing restrictions did push OFDI. There was a positive relationship between the regulatory policy index and OFDI. More specifically, we chose two specific policies to study the effects of regulatory policies at the provincial level. The specific policies were also experimental policies made by the central government and implemented in several provinces. These characteristics allowed us to use comparative analysis. We found that relaxing restrictions had better effects in rich provinces where the level of economic development promoted firms to invest more. In the undeveloped provinces, removing restrictions did not increase OFDI because the firms in these areas did not have the ability to invest in other countries. Therefore, this confirmed our main hypothesis that policies and economic variables have joint effects on China's OFDI. Service policies which provide information and communication platforms helped inexperienced Chinese firms to invest in other countries, while supervisory policies did not have a significant effect since it only supervised firms' behaviour after the investment had been made. Scholars believed that China's government promoted firms to invest in other countries, but we found that the effects of promotional policies were limited. The effects of China's policies were mainly via relaxing restrictions and providing useful information. The main drive of Outward Foreign Direct Investment (OFDI) has always been the development of the Chinese economy.

6.3 Policy Implications

Our research has policy implications. Firstly, strategic policies are used to fulfil a long term task, and to do so, specific policies are needed. Specific policies are a better proxy compared to strategic policies to study their effects on OFDI. Secondly, in some other countries, policies are also an important tool to promote OFDI. OFDI from emerging countries tends to be resource seeking. Firms from emerging countries use OFDI as a springboard to get assets and enlarge their influence. Governments in home countries would

like to encourage this type OFDI. However, according to our research, GDPPC is the main power behind OFDI. Removing restrictions push OFDI. The restrictions that government use in early stages are used to keep the investment healthy. Therefore, it does not need specific promotional policies to promote OFDI at the national level. The main task of the policy makers is to promote economic development and provide services to firms.

6.4 Limitation/Caveats and further research

Our study is the first time that policies have been coded and added into a regression model. Therefore, our research can be further developed. For instance, methods to code the policies can of course be further improved by further research. We tried to find the mechanisms of how policies work and then code them accordingly. We dug for the truth underneath. It also is essential to know where to stop at this stage. Different types of policies have different functions. The importance of each policy is different, i.e. policies have different intensities of influences. We managed to find the common ground of all the policies and built a consistent framework. The framework, though, could be more comprehensive. We could find a more detailed base, but we cannot measure specifically the importance of each point, as they are implicit. A firm level survey could be a good supplementary method. If we can know how firms treat the policies, the indices will be more accurate, and the research will be more convincing.

Also, a sector level research would also be valuable. Firstly, different sectors have different situations, and the effects of policies could be different in different sectors. There are also some sector level policies and indirect policies, and their effects could be considered to be added to the indices. We did not find effects for promotional policies. Maybe this is because the policies in our model are national level policies. China's government promotes firms who have advantages to carry out OFDI, and the effects of promotional policies can be

reflected by sector level research. A sector level study or firm level study could increase the number of observations.

6.5 Conclusions

In this thesis, our main methodological contribution is that we created a series of indices that capture the changes of China's OFDI related policies and are applied in a regression model based on IDP theory and institutional theory. Our work also contributes to the debate of the importance of government policies, and what policies, on OFDI. This has brought a rich understanding on the effects of policies on China's OFDI. We found that IDP theory still is valid in terms of China's OFDI. The development of the economy and policies had joint effects on China's OFDI. Our results provide theory supports to policy makers for the regulation of OFDI. However, the way in which policies are coded can be more precise with further research. The framework of OFDI related policies can be more comprehensive with the study of indirect policies. Our research can be regarded as a start for the way to quantify policies, and there is still a long way to go.

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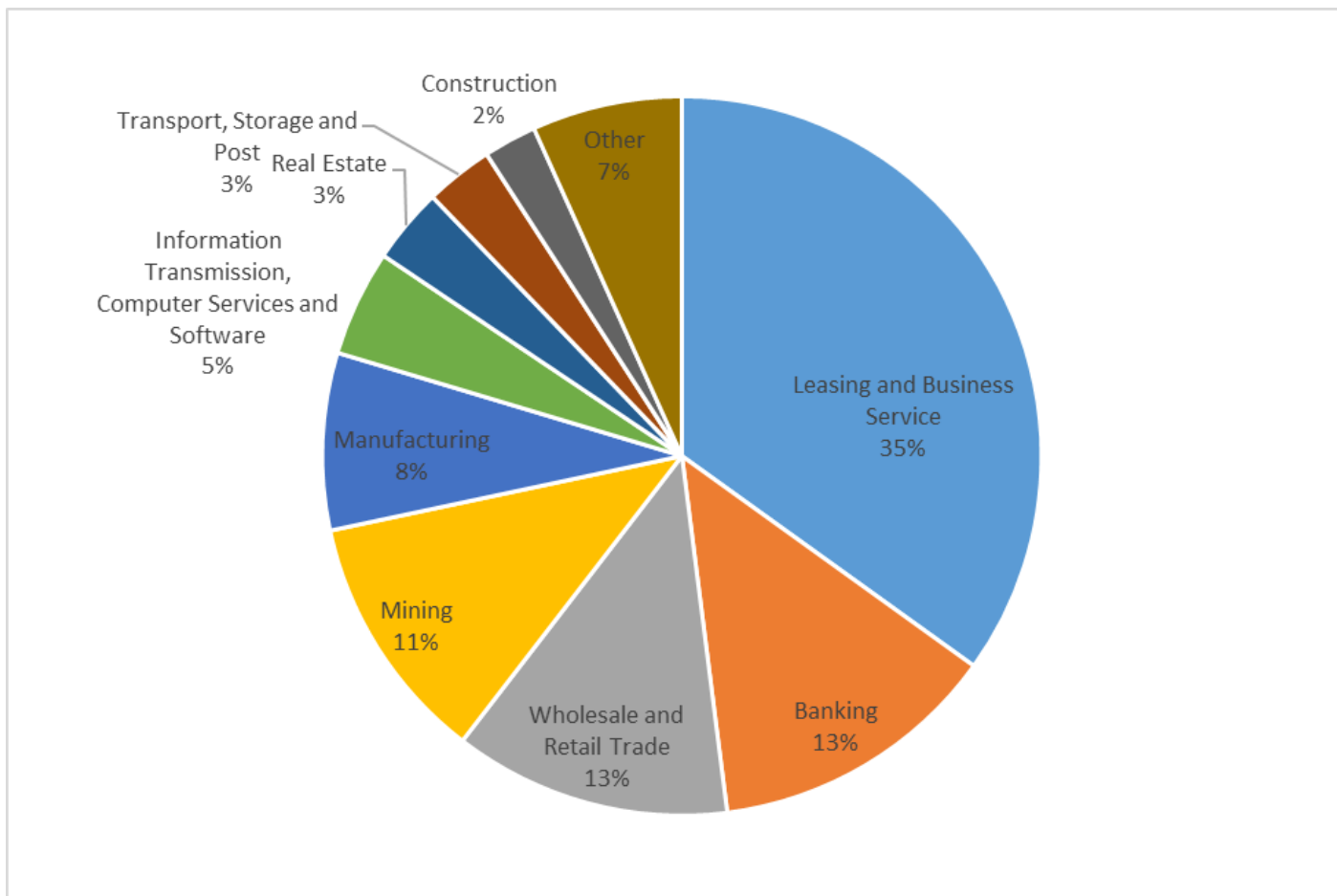
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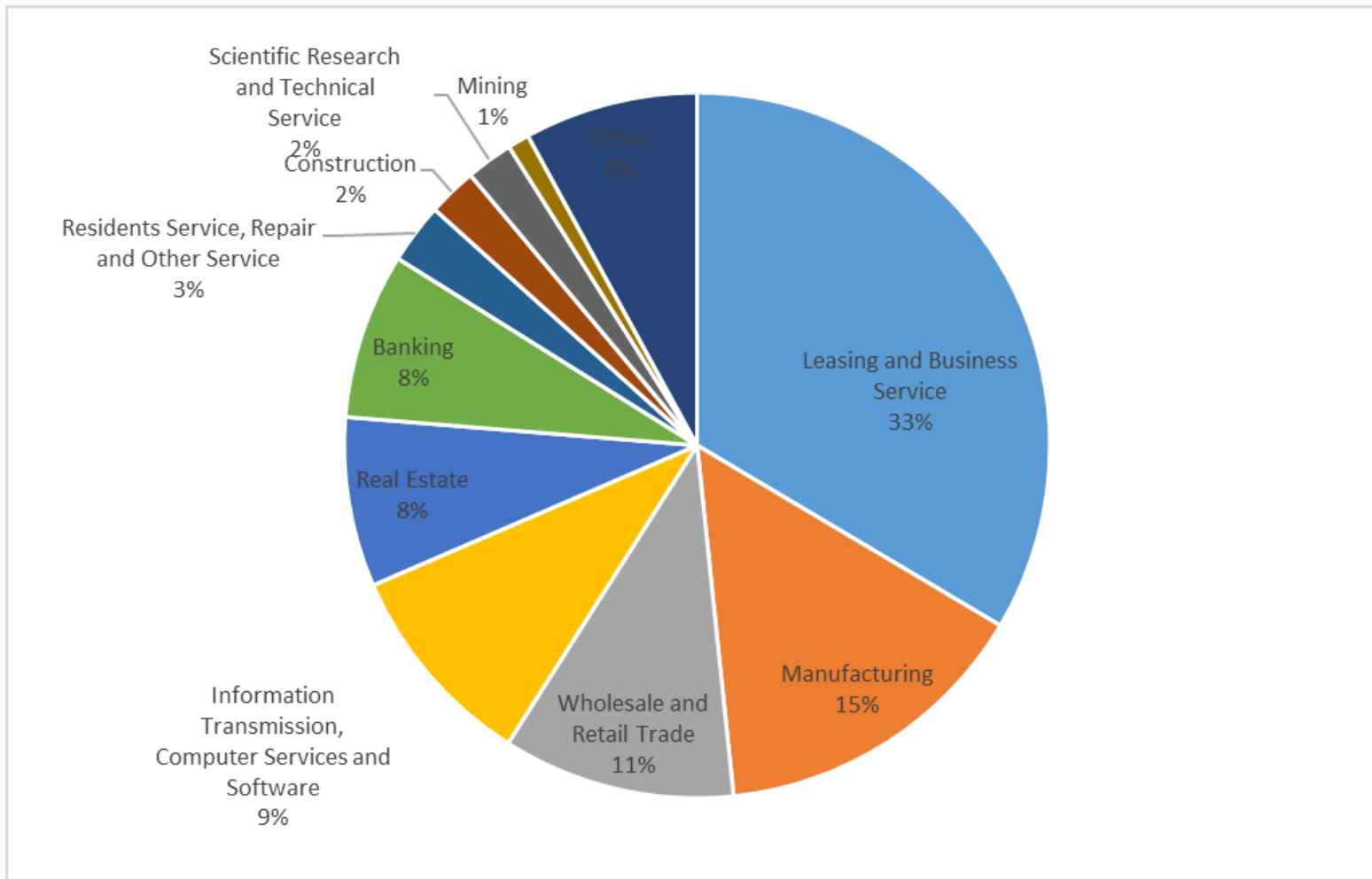
APPENDIX A. Supplementary figures of China's OFDI distribution among sectors

Figure A-1 Stocks of China's OFDI by sectors in 2016



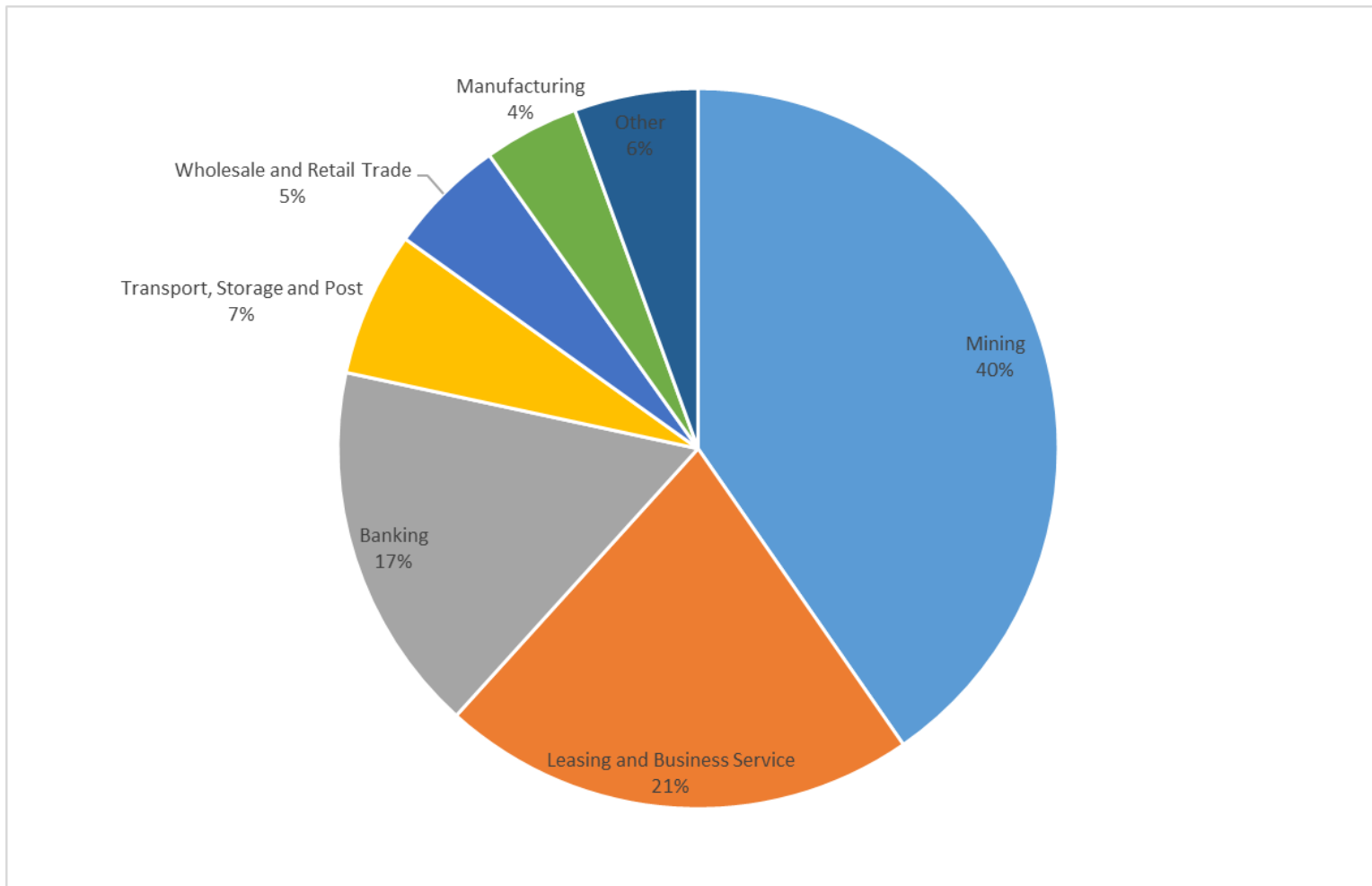
Source: SBCOFDI

Figure A-2 Outflows of China's OFDI by sectors in 2016



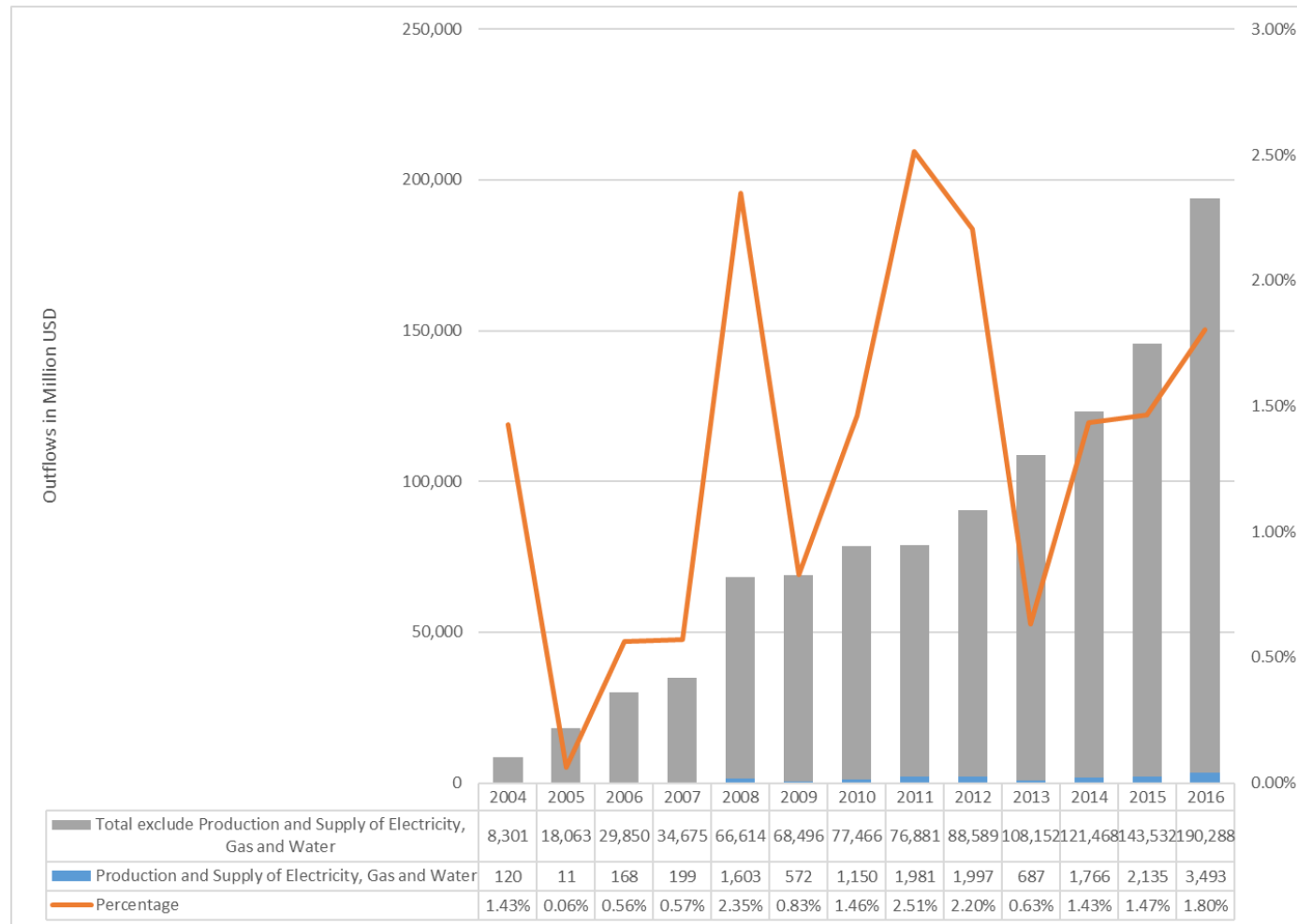
Source: SBCOFDI

Figure A-3 Outflows of China's OFDI by sectors in 2006



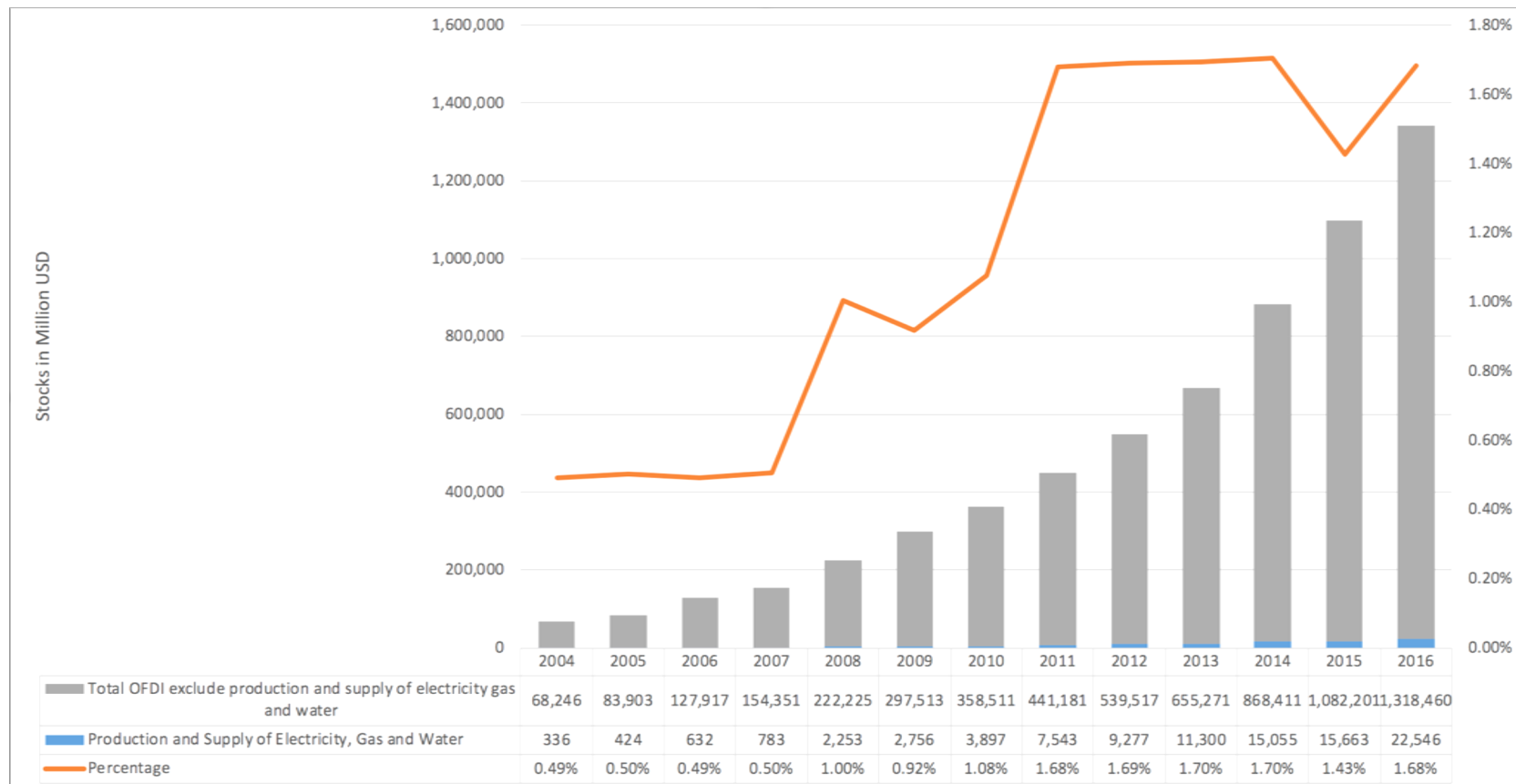
Source: SBCOFDI

Figure A-4 Trends of OFDI flows in the sector of Production and Supply of Electricity, Gas and Water



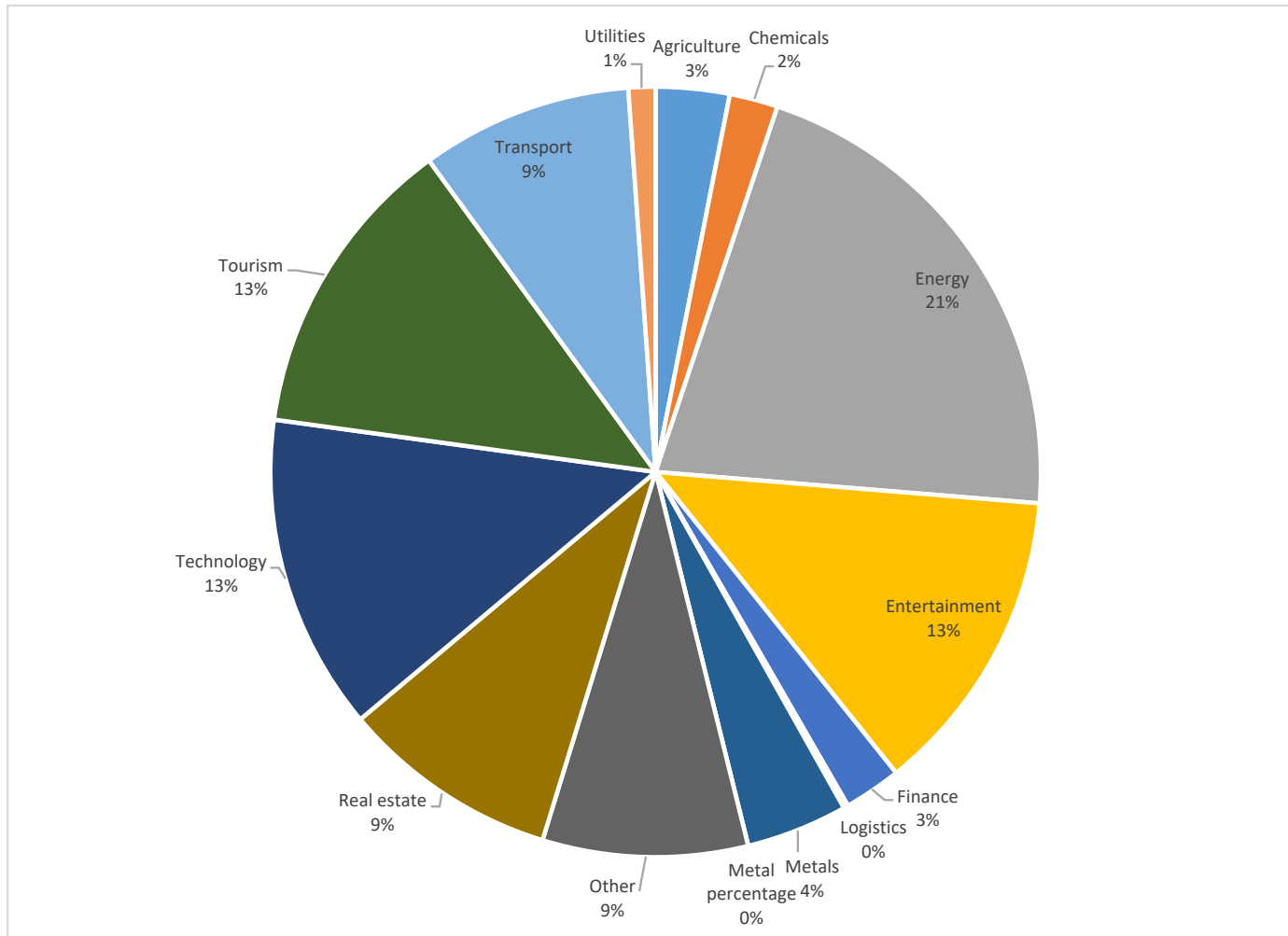
Source: SBCOFDI

Figure A-5 Trends of OFDI stocks in the sector of Production and Supply of Electricity, Gas and Water



Source: SBCOFDI

Figure A-6 Outflows of China's OFDI by sectors in 2016 (CGIT)



Source: CGIT

APPENDIX B. Results of the effects of policies on China's OFDI

Variable names: In terms of policy name, generally, there are rp for regulatory policy, se for service policies, su for supervisory policies, pp for promotional policy, kdp for key direct policy, kip for key indirect policy and kp for key policy which contains kdp and kip. If it is followed by a "s", it means it is weighted as described in the thesis. We call it as scores. If it is not followed by a "s", it is unweighted. It is the number of policies. We call it as numbers. If it is followed by a "3", it means the numbers or scores added in the last 3 years. If it is followed by a "5", it means it is the numbers or scores added in the last 5 years. If it is followed by a "a", it means it is the number or scores added up in past years from 1981. D. mean differenced. L. mean lagged. Selected results that presented in Chapter 4 are highlighted.

(Standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$)

Table B-1 Result of using numbers of policies every year as the coding method (1)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	2.932*	2.340	2.783*	2.801*	2.761*
	(1.550)	(1.612)	(1.568)	(1.591)	(1.588)	(1.597)
D.lrifdis	1.323***	1.297***	1.476***	1.344***	1.316***	1.355***
	(0.217)	(0.236)	(0.242)	(0.248)	(0.230)	(0.259)
D.lrexp	-0.638**	-0.642**	-0.680**	-0.638**	-0.636**	-0.641**
	(0.250)	(0.254)	(0.248)	(0.254)	(0.255)	(0.255)
D.lredu	0.325	0.321	0.296	0.330	0.342	0.311
	(0.423)	(0.430)	(0.418)	(0.432)	(0.457)	(0.434)
rp		-0.00903				
		(0.0282)				
se			0.0618			
			(0.0452)			
su				0.00732		
				(0.0399)		
pp					-0.00339	
					(0.0303)	
kdp						0.00310
						(0.0131)
Constant	-0.145	-0.141	-0.151	-0.150	-0.142	-0.152
	(0.124)	(0.126)	(0.122)	(0.129)	(0.129)	(0.129)
Observations	34	34	34	34	34	34
R-squared	0.637	0.638	0.660	0.637	0.637	0.638

Table B-2 Result of using numbers of policies every year as the coding method (2)

	(7)	(8)	(9)	(10)	(11)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.296	2.541	1.932	2.000	1.685
	(1.643)	(1.626)	(1.519)	(1.624)	(1.559)
D.lrifdis	1.489***	1.434***	1.619***	1.580***	1.690***
	(0.276)	(0.279)	(0.247)	(0.277)	(0.268)
D.lrexp	-0.562**	-0.618**	-0.641**	-0.506*	-0.548**
	(0.262)	(0.255)	(0.236)	(0.262)	(0.240)
D.lredu	0.441	0.341	0.280	0.552	0.455
	(0.440)	(0.428)	(0.400)	(0.444)	(0.405)
kip	0.0157				
	(0.0161)				
kp		0.00529			
		(0.00825)			
L.kdp			0.0265**		
			(0.0124)		
L.kip				0.0242	
				(0.0167)	
L.kp					0.0168**
					(0.00794)
Constant	-0.186	-0.171	-0.183	-0.209	-0.214*
	(0.131)	(0.131)	(0.118)	(0.129)	(0.121)
Observations	34	34	34	34	34
R-squared	0.649	0.642	0.688	0.662	0.687

Table B-3 Results of using numbers of policies in the last three years as the coding method (1)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	1.857	1.537	2.524	2.843*	1.622
	(1.550)	(1.836)	(1.671)	(1.572)	(1.518)	(1.645)
D.lrifdis	1.323***	1.485***	1.611***	1.493***	1.575***	1.680***
	(0.217)	(0.273)	(0.267)	(0.269)	(0.271)	(0.292)
D.lrexp	-0.638**	-0.615**	-0.602**	-0.570**	-0.665**	-0.586**
	(0.250)	(0.251)	(0.243)	(0.258)	(0.246)	(0.243)
D.lredu	0.325	0.442	0.430	0.362	-0.125	0.297
	(0.423)	(0.440)	(0.414)	(0.424)	(0.511)	(0.409)
rp3		0.0155				
		(0.0158)				
se3			0.0386*			
			(0.0222)			
su3				0.0243		
				(0.0229)		
pp3					0.0329	
					(0.0219)	
kdp3						0.0111*
						(0.00634)
Constant	-0.145	-0.145	-0.150	-0.200	-0.209	-0.191
	(0.124)	(0.124)	(0.120)	(0.134)	(0.128)	(0.122)
Observations	34	34	34	34	34	34
R-squared	0.637	0.649	0.672	0.651	0.664	0.673

Table B-4 Results of using numbers of policies in the last three years as the coding method (2)

	(8)	(9)	(10)	(11)	(12)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	1.531	1.330	1.033	1.540	0.794
	(1.551)	(1.554)	(1.702)	(1.592)	(1.623)
D.lrifdis	1.468***	1.540***	1.743***	1.502***	1.641***
	(0.272)	(0.283)	(0.288)	(0.287)	(0.293)
D.lrexp	-0.272	-0.313	-0.488*	-0.217	-0.182
	(0.292)	(0.276)	(0.248)	(0.307)	(0.290)
D.lredu	0.607	0.472	0.439	0.671	0.600
	(0.432)	(0.405)	(0.405)	(0.446)	(0.410)
kip3	0.0100				
	(0.00599)				
kp3		0.00590*			
		(0.00316)			
L.kdp3			0.0130**		
			(0.00628)		
L.kip3				0.0115*	
				(0.00634)	
L.kp3					0.00762**
					(0.00326)
Constant	-0.211*	-0.204*	-0.185	-0.231*	-0.219*
	(0.119)	(0.116)	(0.119)	(0.129)	(0.119)
Observations	32	32	34	31	31
R-squared	0.646	0.654	0.685	0.599	0.628

Table B-5 Results of using numbers of policies in the last five years as the coding method (1)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	2.130	0.624	1.955	2.717*	1.536
	(1.550)	(2.065)	(1.786)	(1.670)	(1.584)	(1.823)
D.lrifdis	1.323***	1.434***	1.754***	1.604***	1.434***	1.633***
	(0.217)	(0.307)	(0.287)	(0.304)	(0.309)	(0.320)
D.lrexp	-0.638**	-0.578**	-0.461*	-0.526*	-0.636**	-0.529*
	(0.250)	(0.279)	(0.250)	(0.262)	(0.253)	(0.261)
D.lredu	0.325	0.440	0.644	0.441	0.166	0.408
	(0.423)	(0.484)	(0.426)	(0.428)	(0.531)	(0.423)
rp5		0.00647				
		(0.0126)				
se5			0.0357**			
			(0.0167)			
su5				0.0250		
				(0.0192)		
pp5					0.00935	
					(0.0184)	
kdp5						0.00604
						(0.00464)
Constant	-0.145	-0.149	-0.155	-0.203	-0.169	-0.180
	(0.124)	(0.126)	(0.117)	(0.130)	(0.134)	(0.125)
Observations	34	34	34	34	34	34
R-squared	0.637	0.640	0.688	0.658	0.640	0.658

Table B-6 Results of using numbers of policies in the last five years as the coding method (2)

	(7)	(8)	(9)	(10)	(11)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	1.652	1.235	1.322	2.032	1.339
	(1.546)	(1.646)	(1.825)	(1.605)	(1.696)
D.lrifdis	1.442***	1.521***	1.656***	1.370***	1.494***
	(0.270)	(0.297)	(0.309)	(0.282)	(0.299)
D.lrex	-0.230	-0.238	-0.479*	-0.300	-0.233
	(0.309)	(0.302)	(0.267)	(0.317)	(0.313)
D.lredu	0.608	0.529	0.513	0.569	0.586
	(0.438)	(0.419)	(0.434)	(0.460)	(0.440)
kip5	0.00635				
	(0.00404)				
kp5		0.00369			
		(0.00224)			
L.kdp5			0.00666		
			(0.00449)		
L.kip5				0.00501	
				(0.00418)	
L.kp5					0.00362
					(0.00224)
Constant	-0.218*	-0.204*	-0.183	-0.207	-0.205
	(0.123)	(0.118)	(0.124)	(0.134)	(0.127)
Observations	32	32	34	31	31
R-squared	0.641	0.644	0.663	0.572	0.590

Table B-7 Results of using accumulated numbers of policies from 1981 as the coding method (1)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821* (1.550)	2.668 (1.692)	2.142 (1.654)	2.472 (1.605)	2.298 (1.619)	2.404 (1.651)
D.lrifdis	1.323*** (0.217)	1.372*** (0.296)	1.511*** (0.272)	1.466*** (0.271)	1.543*** (0.296)	1.469*** (0.288)
D.lrexp	-0.638** (0.250)	-0.607** (0.284)	-0.506* (0.274)	-0.544* (0.272)	-0.533* (0.267)	-0.550* (0.276)
D.lredu	0.325 (0.423)	0.375 (0.475)	0.569 (0.473)	0.465 (0.454)	0.413 (0.430)	0.453 (0.457)
rpa		0.00123 (0.00497)				
sea			0.00991 (0.00870)			
sua				0.00676 (0.00763)		
ppa					0.00688 (0.00633)	
kdpa						0.00130 (0.00168)
Constant	-0.145 (0.124)	-0.163 (0.144)	-0.196 (0.131)	-0.196 (0.137)	-0.209 (0.137)	-0.192 (0.139)
Observations	34	34	34	34	34	34
R-squared	0.637	0.638	0.653	0.647	0.652	0.645

Table B-8 Results of using accumulated numbers of policies from 1981 as the coding method (2)

	(7)	(8)	(9)	(10)	(11)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.278	2.146	2.411	2.391	2.224
	(1.478)	(1.500)	(1.648)	(1.545)	(1.566)
D.lrifdis	1.308***	1.339***	1.462***	1.308***	1.342***
	(0.244)	(0.255)	(0.282)	(0.264)	(0.273)
D.lrexp	-0.346	-0.337	-0.544*	-0.359	-0.339
	(0.296)	(0.296)	(0.279)	(0.304)	(0.306)
D.lredu	0.536	0.535	0.465	0.539	0.553
	(0.446)	(0.443)	(0.463)	(0.461)	(0.458)
kpa	0.00187				
	(0.00167)				
kpa		0.000941			
		(0.000803)			
L.kdpa			0.00136		
			(0.00175)		
L.kipa				0.00195	
				(0.00186)	
L.kpa					0.00100
					(0.000873)
Constant	-0.200	-0.203	-0.192	-0.204	-0.209
	(0.127)	(0.127)	(0.138)	(0.137)	(0.136)
Observations	32	32	34	31	31
R-squared	0.626	0.627	0.645	0.566	0.570

Table B-9 Results of using weighted scores as coding method

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	2.367	2.941*	2.225	2.811*	2.766*	2.751*	2.768*
	(1.550)	(1.749)	(1.595)	(1.645)	(1.567)	(1.590)	(1.579)	(1.519)
D.lrifdis	1.323***	1.431***	1.293***	1.433***	1.365***	1.310***	1.382***	1.501***
	(0.217)	(0.272)	(0.231)	(0.240)	(0.229)	(0.227)	(0.254)	(0.244)
D.lrexp	-0.638**	-0.623**	-0.647**	-0.629**	-0.624**	-0.636**	-0.631**	-0.592**
	(0.250)	(0.262)	(0.254)	(0.250)	(0.254)	(0.254)	(0.254)	(0.247)
D.lredu	0.325	0.485	0.338	0.413	0.364	0.353	0.319	0.290
	(0.423)	(0.467)	(0.430)	(0.430)	(0.432)	(0.443)	(0.429)	(0.415)
rps		-0.0152	-0.0115					
		(0.0274)	(0.0261)					
ses		0.0163		0.0170				
		(0.0168)		(0.0159)				
sus		0.00831			0.00724			
		(0.0121)			(0.0115)			
pps		-0.00118				-0.00245		
		(0.00970)				(0.00935)		
kdps							0.00289	
							(0.00625)	
L.kdps								0.00901
								(0.00605)
Constant	-0.145	-0.153	-0.141	-0.138	-0.166	-0.136	-0.164	-0.216
	(0.124)	(0.137)	(0.126)	(0.124)	(0.129)	(0.130)	(0.132)	(0.130)
Observations	34	34	34	34	34	34	34	34
R-squared	0.637	0.660	0.639	0.651	0.642	0.638	0.640	0.664

Table B-10 Results of using accumulated scores in the last three years as coding method

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	2.308	2.028	1.873	2.827*	3.099*	2.469	2.338
	(1.550)	(1.846)	(1.599)	(1.735)	(1.565)	(1.561)	(1.531)	(1.534)
D.lrifdis	1.323***	1.743***	1.547***	1.522***	1.375***	1.482***	1.607***	1.603***
	(0.217)	(0.309)	(0.257)	(0.273)	(0.233)	(0.257)	(0.280)	(0.270)
D.lrexp	-0.638**	-0.622**	-0.594**	-0.523*	-0.593**	-0.641**	-0.536**	-0.500*
	(0.250)	(0.292)	(0.246)	(0.267)	(0.261)	(0.249)	(0.253)	(0.257)
D.lredu	0.325	0.0366	0.403	0.527	0.376	0.0538	0.315	0.366
	(0.423)	(0.629)	(0.417)	(0.454)	(0.434)	(0.483)	(0.414)	(0.412)
rps3		0.0274	0.0233					
		(0.0202)	(0.0151)					
ses3		-0.00103		0.0128				
		(0.0142)		(0.0108)				
sus3		-0.00211			0.00426			
		(0.00742)			(0.00629)			
pps3		0.0100				0.00804		
		(0.00886)				(0.00702)		
kdps3							0.00492	
							(0.00318)	
L.kdps3								0.00520
								(0.00314)
Constant	-0.145	-0.253*	-0.178	-0.166	-0.179	-0.215	-0.242*	-0.237*
	(0.124)	(0.143)	(0.123)	(0.124)	(0.134)	(0.137)	(0.136)	(0.132)
Observations	34	34	34	34	34	34	34	34
R-squared	0.637	0.687	0.665	0.654	0.643	0.653	0.666	0.669

Table B-11 Results of using accumulated scores in the last five years as coding method

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	1.046	1.423	1.612	2.671*	2.866*	2.286	2.060
	(1.550)	(1.914)	(1.658)	(1.730)	(1.569)	(1.574)	(1.596)	(1.584)
D.lrifdis	1.323***	1.630***	1.655***	1.599***	1.416***	1.418***	1.579***	1.635***
	(0.217)	(0.333)	(0.272)	(0.284)	(0.245)	(0.298)	(0.298)	(0.288)
D.lrexp	-0.638**	-0.452	-0.517**	-0.448	-0.573**	-0.633**	-0.531*	-0.488*
	(0.250)	(0.291)	(0.248)	(0.278)	(0.263)	(0.254)	(0.262)	(0.261)
D.lredu	0.325	0.849	0.570	0.676	0.415	0.193	0.374	0.433
	(0.423)	(0.675)	(0.426)	(0.479)	(0.439)	(0.512)	(0.421)	(0.418)
rps5		0.0190	0.0207*					
		(0.0155)	(0.0109)					
ses5		0.00385		0.0117				
		(0.0132)		(0.00798)				
sus5		0.00148			0.00514			
		(0.00932)			(0.00611)			
pps5		-0.00371				0.00309		
		(0.00840)				(0.00652)		
kdps5							0.00286	
							(0.00231)	
L.kdps5								0.00377
								(0.00236)
Constant	-0.145	-0.172	-0.189	-0.196	-0.186	-0.180	-0.219	-0.231*
	(0.124)	(0.145)	(0.121)	(0.126)	(0.134)	(0.146)	(0.136)	(0.132)
Observations	34	34	34	34	34	34	34	34
R-squared	0.637	0.682	0.678	0.663	0.646	0.640	0.656	0.667

Table B-12 Results of using accumulated scores in the from 1981 as coding method

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis	D.lrofdis
D.lrgdppc	2.821*	2.590	2.440	2.468	2.700*	2.455	2.501	2.500
	(1.550)	(1.810)	(1.627)	(1.610)	(1.571)	(1.592)	(1.594)	(1.595)
D.lrifdis	1.323***	1.561***	1.457***	1.441***	1.406***	1.513***	1.468***	1.460***
	(0.217)	(0.341)	(0.273)	(0.257)	(0.246)	(0.287)	(0.270)	(0.265)
D.lrexp	-0.638**	-0.594*	-0.545*	-0.539*	-0.570**	-0.547**	-0.545*	-0.540*
	(0.250)	(0.302)	(0.276)	(0.276)	(0.268)	(0.266)	(0.271)	(0.273)
D.lredu	0.325	0.157	0.487	0.509	0.429	0.398	0.455	0.466
	(0.423)	(0.720)	(0.470)	(0.476)	(0.449)	(0.429)	(0.448)	(0.452)
rpsa		-0.0101	0.00459					
		(0.0243)	(0.00560)					
sesa		0.000562		0.00352				
		(0.0157)		(0.00407)				
susa		-0.00146			0.00277			
		(0.00913)			(0.00374)			
ppsa		0.00676				0.00230		
		(0.00946)				(0.00228)		
kdpsa							0.000829	
							(0.000910)	
L.kdpsa								0.000887
								(0.000979)
Constant	-0.145	-0.204	-0.196	-0.189	-0.187	-0.209	-0.200	-0.198
	(0.124)	(0.151)	(0.139)	(0.134)	(0.137)	(0.139)	(0.138)	(0.137)
Observations	34	34	34	34	34	34	34	34
R-squared	0.637	0.654	0.645	0.646	0.644	0.650	0.647	0.647

APPENDIX C. Supplementary statistics of the disparities of the economic development among provinces and regions

Table C-1 Provinces' GDPPC of China in 2015

District	GDPPC (Yuan)	District	GDPPC (Yuan)
Beijing	106,497.00	Hubei	50,653.85
Tianjin	107,960.09	Hunan	42,753.86
Hebei	40,255.00	Guangdong	67,503.00
Shanxi	34,918.71	Guangxi	35,190.00
Inner Mongolia	71,100.54	Hainan	40,818.00
Liaoning	65,354.41	Chongqing	52,321.00
Jilin	51,086.00	Sichuan	36,775.00
Heilongjiang	39,461.56	Guizhou	29,847.25
Shanghai	103,795.54	Yunnan	28,806.00
Jiangsu	87,995.00	Tibet	31,999.00
Zhejiang	77,643.69	Shaanxi	47,626.00
Anhui	35,996.56	Gansu	26,165.26
Fujian	67,965.52	Qinghai	41,252.00
Jiangxi	36,724.00	Ningxia	43,805.00
Shandong	64,168.30	Xinjiang	40,036.00
Henan	39,122.61		

Table C-2 GDPPC of each region in USD

Year	East	Northeast	Central	West
2003	3332.05017	2346.78222	1432.38538	1318.16977
2004	3713.91338	2505.33907	1626.97888	1484.85422
2005	4255.89869	2873.28218	1911.79124	1707.1754
2006	4845.65546	3254.75484	2194.19817	1992.75082
2007	5531.39962	3753.64488	2595.74061	2357.07848
2008	6484.70481	4587.5652	3170.81531	2928.95778
2009	7099.18089	5096.42214	3545.43774	3292.12308
2010	7728.44605	5775.48354	4070.68677	3808.72438
2011	8687.9601	6764.86746	4772.10915	4524.01207
2012	9397.51355	7518.11597	5289.72534	5110.57329
2013	10208.7904	8119.70355	5773.95564	5644.53591
2014	10933.9285	8530.3965	6230.91498	6107.68218

Source: Variety of Provincial Yearbook from 2003 to 2014. Data are deflated by using deflator from World Development Indicators of World Bank (2015=100)

APPENDIX D. Results of the effects of Regional and experimental policies on provincial OFDI (Robustness Check)

Table D-1 Results of the effects of Regional and experimental policies on provincial OFDI (2SLS) (1)

	(1)	(2)	(3)	(4)	(5)
VARIABLES	OFDI flows	OFDI flows	OFDI flows	OFDI flows	OFDI flows
GDPPC	1.900***		1.894***	1.920***	1.934***
	(0.721)		(0.721)	(0.723)	(0.722)
GDPPC of Primary sector		-0.0107			
		(0.732)			
GDPPC in Secondary sector		-0.203			
		(0.626)			
GDPPC in tertiary sector		2.967***			
		(1.100)			
Export	0.258	0.223	0.270	0.249	0.262
	(0.259)	(0.270)	(0.260)	(0.260)	(0.259)
IFDI flows	-0.0596	0.0175	-0.0624	-0.0572	-0.0597
	(0.151)	(0.155)	(0.151)	(0.151)	(0.151)
Education	1.837***	1.759**	1.917***	1.742**	1.778**
	(0.707)	(0.733)	(0.714)	(0.722)	(0.722)
Regional Policy: NARP (θ_1)			0.601		1.132
			(0.673)		(0.779)
Regional Policy: RCCP (θ_2)				-0.307	-0.677
				(0.435)	(0.503)
Constant	13.52*	-1.721	13.16	14.05*	14.01*
	(8.141)	(3.120)	(8.166)	(8.205)	(8.192)
Observations	372	372	372	372	372
Number of id	31	31	31	31	31
Standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Table D-2 Results of the effects of Regional and experimental policies on provincial OFDI (2SLS) (2)

	(6)	(7)	(8)	(9)	(10)
VARIABLES	OFDI flows	OFDI flows	OFDI flows	OFDI flows	OFDI flows
GDPPC	1.543**	1.864**	1.708**	2.500**	2.612***
	(0.736)	(0.744)	(0.736)	(1.115)	(0.703)
Export	0.298	0.266	0.236	0.389	0.787***
	(0.257)	(0.264)	(0.260)	(0.314)	(0.281)
IFDI flows	-0.141	-0.0668	-0.112	-0.228	-0.0710
	(0.152)	(0.154)	(0.152)	(0.184)	(0.148)
Education	1.622**	1.838***	1.492**	2.282**	-1.297*
	(0.703)	(0.708)	(0.701)	(0.924)	(0.766)
Experimental Policy: Policy 1 (Θ_1)	-0.991***		-1.527***		
	(0.356)		(0.451)		
Experimental Policy: Policy 2 (Θ_2)		-0.0750	0.751*		
		(0.312)	(0.390)		
Opol2 (Θ_3)				0.672	
				(0.439)	
Pol12 (Θ_4)					-0.835**
					(0.335)
Constant	11.37	13.20	13.43	18.49	27.51***
	(8.168)	(8.322)	(8.186)	(11.34)	(7.850)
Observations	372	372	372	276	300
Number of id	31	31	31	23	25
Standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Notes: Policy 1: Policy dummy for Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment; Policy 2: Policy dummy for Notice on further deepening the reform of foreign exchange management in overseas investment; Opol2: Policy dummy for provinces only has policy 2. Pol12: Policy dummy for provinces have both policy 1 and policy 2.

Table D-3 Results of the effects of Regional and experimental policies on provincial OFDI (System GMM) (1)

	(1)	(2)	(3)	(4)	(5)
VARIABLES	OFDI flows	OFDI flows	OFDI flows	OFDI flows	OFDI flows
GDPPC	1.960***		1.891***	1.888***	1.890***
	(0.632)		(0.645)	(0.644)	(0.652)
GDPPC of Primary sector		0.399			
		(0.419)			
GDPPC in Secondary sector		1.050			
		(0.641)			
GDPPC in tertiary sector		0.855			
		(0.610)			
Export	0.298	0.332*	0.339	0.338	0.339
	(0.202)	(0.194)	(0.213)	(0.212)	(0.215)
IFDI flows	-0.305	-0.304	-0.319	-0.316	-0.317
	(0.198)	(0.193)	(0.203)	(0.204)	(0.207)
Education	1.453***	1.358***	1.417***	1.414***	1.415***
	(0.421)	(0.397)	(0.435)	(0.436)	(0.441)
Regional Policy: NARP (θ_1)			0.533		1.119**
			(0.500)		(0.544)
Regional Policy: RCCP (θ_2)				-0.367	-0.730
				(0.431)	(0.480)
Constant	0	1.754	0	16.61**	16.53**
	(0)	(1.993)	(0)	(6.129)	(6.345)
Observations	372	372	372	372	372
Number of provinces	31	31	31	31	31
Robust standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Table D-4 Results of the effects of Regional and experimental policies on provincial OFDI (System GMM) (2)

	(6)	(7)	(8)	(9)	(10)
VARIABLES	OFDI flows	OFDI flows	OFDI flows	OFDI flows	OFDI flows
GDPPC	2.201*** (0.758)	1.963*** (0.628)	2.191** (0.799)	2.628** (1.171)	2.322** (0.851)
Export	0.507** (0.218)	0.340 (0.251)	0.499** (0.233)	0.458 (0.320)	0.534** (0.221)
IFDI flows	-0.339* (0.195)	-0.292 (0.199)	-0.325 (0.201)	-0.374 (0.223)	-0.421* (0.237)
Education	1.324*** (0.447)	1.418*** (0.451)	1.321*** (0.462)	1.392** (0.541)	1.490*** (0.525)
Experimental Policy: Policy 1 (Θ_1)	-1.001** (0.410)		-1.496* (0.863)		
Experimental Policy: Policy 2 (Θ_2)		-0.176 (0.527)	0.677 (0.875)		
Opol2 (Θ_3)				0.682 (0.886)	
Pol12 (Θ_4)					-0.828** (0.394)
Constant	18.94** (7.076)	17.00** (6.188)	0 (0)	23.38* (11.54)	0 (0)
Observations	372	372	372	276	300
Number of provinces	31	31	31	23	25
Robust standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Notes: Policy 1: Policy dummy for Notice of the Ministry of Commerce on the relevant issues concerning the examination and approval of overseas investment; Policy 2: Policy dummy for Notice on further deepening the reform of foreign exchange management in overseas investment; Opol2: Policy dummy for provinces only has policy 2. Pol12: Policy dummy for provinces have both policy 1 and policy 2.