Managerial Foreign Experience and Outward Foreign Direct Investment: Evidence from China

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Abstract

Using hand-collected data from Chinese public companies, we examine whether managerial foreign experience affects corporate outward foreign direct investment (OFDI) decision. Our result shows that there is a positive association between managerial foreign experience and OFDI. The finding is robust to alternative sampling method, foreign experience measures, and regression specification. We also use the instrumental variable approach, the propensity score matching procedure, and the Heckman two-stage selection model to mitigate potential endogeneity concerns. While both foreign work and study experience promote OFDI, the effect is significant only in non-state-owned entities and only when returnee managers hold senior positions. Lastly, we show that managerial foreign experience is associated with improved performance of outward investments.

Managerial Foreign Experience and Outward Foreign Direct Investment: Evidence from China

1. Introduction

Recent development of globalization has been characterized by the rapid growth of outward foreign direct investment (OFDI) from emerging economies (e.g., Buckley et al., 2018; Lu et al., 2014; Wang et al., 2012; Shi et al., 2017; Gaur et al., 2018). It has long been recognized that OFDI is a key developing strategy for both firms and countries. Firms invest abroad to seek market access, acquire strategic assets (e.g., Buckley et al., 2009; Deng, 2009), and to avoid home country regulation or resource distortions (Chen et al., 2015; Shi et al., 2017). Countries utilize OFDI to optimize industrial structure (Mock et al., 2008) and promote home country innovation (Li et al., 2016). Current research examining the determinants of outward investment from emerging economies mainly focuses on macro-economic environments such as market demand, host and home country institutional and cultural differences (e.g., Lu et al., 2014; Wang et al., 2012; Nielsen et al., 2017; Kang and Jiang, 2012). However, very few studies emphasize the role of firm characteristics[1] and none systematically analyzes how managerial foreign experience is associated with corporate OFDI decisions. Our study attempts to fill this void.

China, as the largest emerging economy, has been significantly and consistently increasing its OFDI in the last several decades along with its economic reform and globalization. According to the recent report published by United Nations Conference on Trade and

[1] Wang et al. (2012), as an exception, includes several firm level factors as control variables in their empirical specifications. However, there is no studies providing consistent and statistically significant effect on firm outward investment.

Development (UNCTAD), China was ranked second in year 2016 based on total amount of OFDI, only after the United States.[2]

Along with the rapid growth in OFDI, the Chinese government also initiated a series of policies aiming to attract talents with foreign experience. In particular, the famous "Thousand Talents Plan"[3] was implemented by the Central government in 2008, followed by various pecuniary incentives and housing subsidies provided by the local governments. While existing literature on the impacts of returnee's foreign experience suggests positive benefits to firm performance when talents join corporate boards (Giannetti et al., 2015), it is mute on whether these returnees can influence OFDI decisions when becoming executives. In addition, how knowledge gained abroad by managers is transformed into firm value is largely overlooked. Thus, it is important to understand whether managerial foreign experience can effectively promote firms' OFDI, which can provide implications to policy makers.

Several studies exploring the effects of individual's foreign experience focus on foreign board members in developed countries (e.g., Masulis et al., 2012; Piekkari et al., 2015). These studies suggest negative impacts due to lower participation rates of corporate boards and language barriers. Unlike evidence from developed countries, returnees in emerging markets usually gain their foreign experience from countries with well protected legal and business backgrounds (Yuan and Wen, 2018). They obtain advanced technology and managerial expertise, are equipped with international vision and network, and some even possess

[2] https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf

[3] On December 2008, the Chinese government launched the "Thousand Talents Plan", aiming to recruit experts with overseas working and studying experience who are willing to work in China on a full-time basis. Please see more information at http://www.1000plan.org.cn/en/.

intellectual property. Thus, for emerging economies, it is possible that bringing these talents back can benefit the hiring firms.

To examine the effect of managerial foreign experience on corporate OFDI, we first hand-collect managerial foreign experience information from 2001 to 2015. Then we merge it with firm foreign investment dataset obtained from the Chinese Research Data Services (CNRDS). Our sample consists of 23,146 firm-year observations from 2,552 unique firms. Our multivariate OLS regression results show that foreign experience of managers is positively associated with outward foreign direct investment. That is, firms with returnee managers are more likely to participate in foreign investment, with higher frequency and larger values of investment. The impact is more pronounced when the number and percentage of managers with foreign experience is higher. The result is robust to alternative sampling that excludes managers with only Hong Kong, Macau, and Taiwan experience, to alternative measures of foreign experience, and to alternative non-linear regression models (Logit and Tobit).

Concerning a company's decision of hiring managers with foreign experience is not random and can be correlated to certain unobservable firm characteristics, we perform several robustness tests to mitigate the potential endogeneity issue. The results show that the positive association remains robust using the instrumental variable approach and the propensity score matching (PSM) approach. We also use the Heckman two-stage selection model to control for self-selection bias and the result continues to hold. Cross-sectional analyses reveal that the effect is significant only in non-state-owned entities (non-SOEs), and only when returnee managers hold senior positions (CEOs and vice-CEOs). In addition, we find that both

managerial foreign work experience and study experience can promote OFDI. Lastly, we show that managerial foreign experience is associated with improved performance of outward investments.

Our study contributes to the literature in at least two ways. First, it emphasizes the role of managerial international experience as a determinant of outward investments. Although OFDI from emerging economies has attracted numerous research, most of them emphasize the quality of home or host country institutions, industrial environments and other macro-economic conditions (see Shi et al., 2017; Wang et al., 2012; Buckley et al., 2009; Lu et al., 2014). Little evidence is available about firm heterogeneity and how it relates to outward investment. Our paper addresses the association between managerial foreign experience and corporate OFDI. We find that managerial international experience, in particular, could facilitate the decision and performance of outward investments. Second, our study enriches the literature on the economic impacts of individual foreign experience. Prior research mainly examines how returnee contributes to innovation and firm performance through knowledge spillover channels (e.g., Liu et al., 2010; Li et al., 2012). To the best of our knowledge, this is the first paper to systematically examine the effects of managerial foreign experience on firm outward FDI. The hand-collected data allows us to classify individual foreign experience by country and further examine how institutional and cultural differences lead to heterogeneous effects.

2. Literature and hypothesis development

2.1. Literature

Our study builds on two streams of literature. The first stream, emerging recently, is about the impact of managerial foreign experience on firms. Globalization over the last several decades witnesses the increasing likelihood of having foreign managers or directors joining firms. Masulis et al. (2012) find that while foreign independent directors can help mitigate cultural barriers in cross-border M&As and provide better consultation, they attend less board meetings and their firms are more likely to have financial restatements and bad earnings performances. The findings suggest that the better advisory role played by foreign directors comes at the cost of weakened monitoring role. Piekkari et al. (2015) focus on the change in working language due to board diversity in nationality and find that the use of English as working language after the join of foreign directors creates a barrier for local non-English speaking directors to effectively express their opinion, which adversely affects corporate governance.

For emerging countries, the impact of returnee managers from developed countries might be more pronounced as they possess advanced knowledge and superior management. Recent studies using Chinese data document the positive impacts. For example, Giannetti et al. (2015) find that directors' foreign experience can help improve firms' operating performance as they bring world-class management practice, facilitate cross-country M&As and financing with their resources, and devote themselves more to corporate governance instead of pleasing government officials or extracting rent from government. Yuan and Wen (2018) show that managers' experience gained from foreign countries can promote the adoption of new technology in their companies, and can have positive effect on corporate innovation. Dai et al.

(2018) find that managers' foreign experience can help improve firms' investment efficiency, especially for the firms that experience over-investment. In terms of firms' strategic development, Xu and Sun (2017) find that CEOs' foreign experience can help lower transaction cost and promote technology diffusion, which improves their firms' export and product quality. Finally, Wen and Song (2017) show that managerial foreign experience is positively related to their firms' CSR performance.

This study is also related to the literature on outward investment decisions of emerging economies. Comprehensive investigations of OFDI determinants have been carried out mainly at the country level. A number of factors such as market seeking, strategic asset acquiring, institutional risk avoidance and etc., are demonstrated to affect the location choice and performance of outward foreign investments from developing economies (e.g., Buckley et al., 2018; Gaur et al., 2018; Lu et al., 2014; Wang et al., 2012; Kang and Jiang, 2012). Recent studies on OFDI from developing countries draw on firm level information to show that manufacturers with outward investment are more productive and profitable (e.g., Tian et al., 2016; Huang and Zhang, 2017). Beside macro-economic conditions and institution qualities, firm-specific characteristics such as ownership begin to enter the analysis of firm OFDI decisions (e.g., Hu and Cui, 2014; Huang et al., 2017). For instance, Wang et al. (2012) suggests firm specific idiosyncrasies such as sales, employment, and age, could drive outward FDI of Chinese firms. Furthermore, Wei et al. (2014) found that productivity, technology-based capability and export experience affect firm outward investments. But the role of managers

who participate in and directly execute corporate investment projects, has not been fully considered and explored.

2.2 Hypothesis development

Building on the upper echelon theory, we now discuss how returnee managers might affect corporate OFDI from three aspects: knowledge advantage, international experience, and cross-cultural communication skills. First, returnee managers tend to have better understanding of OFDI with their inimitable knowledge, which can positively influence their firms' global strategy and investment. Hambrick and Mason (1984) point out the importance of managers' knowledge base to firms' strategic choice, and such knowledge is largely built on their formal education and work experience. It has been documented that most returnee managers pursued higher education overseas (Guo et al., 2009; Zhang and Li, 2002). They represent a key source of knowledge due to their knowledge acquired aboard. When they are hired, they are more likely to facilitate knowledge transfer and information exchange, which influences their firms' cross-border investment (Docquier and Lodigiani, 2010). Returnees can also help lower information asymmetry when their companies enter into foreign markets for investment opportunities and help reduce the uncertainty and risks with overseas investment (Wang, 2007). A few studies provide evidence consistent with international knowledge diffusion through returnee managers (Filatotchev et al., 2011; Jean et al., 2011; Malchow-Møller et al., 2011; Markusen and Trofimenko, 2009). Saxenian (2006) also suggests that returnee managers with extensive knowledge may help to promote Chinese OFDI as they can identify foreign market/investment opportunities and find foreign business partners. Prior studies do find that

management team's knowledge about foreign markets enables their firms to increase their investments in foreign markets (Eriksson et al., 1997). In sum, returnee managers' cognitive advantage in outward investment can promote OFDI.

Second, returnee managers' foreign (or international) experience can help their firms to formulate and implement international strategies, especially in terms of OFDI. Many Chinese companies face obstacles when they explore foreign markets and overseas operations because their management teams do not understand foreign institutions, such as media relation, trade unions, or competition law (Cui et al., 2014). Returnee managers' international experience can alleviate this problem. Prior studies find that top management team's foreign experience is positively associated with firms' international diversification and international performance (Sambharya, 1996; Athanassiou and Nigh, 2000; Tihanyi et al., 2005; Lee and Park, 2006). Adler and Bartholomew (1992) point out that the success of any international strategy is highly depending on the manager's competence in dealing with transnational business. Such skills can only be obtained through significant international assignments. Many of returnee managers obtained such experience in multinational companies. The knowledge-based view also suggests that managerial foreign experience shapes corporate internationalization strategy (Filatotchev et al., 2009; Saxenian 2006). Other studies show that managerial international experience enables firms to increase their investment in foreign markets (Eriksson et al., 1997).

Finally, returnee managers possess superior cross-cultural communication skills and social networks, which can help their firms deal with cultural differences and other obstacles in cross-country investing activities. Institutional and cultural differences are major barriers for many

Chinese firms conducting OFDI (Johanson and Vahlne, 1997; Kang and Jiang, 2012). Using their personal experience, returnee managers can help bridge the cultural gap, which can lower risks, uncertainties, and transaction costs associated with OFDI (Rabbiosi and Stucchi, 2012). It has also been documented that many returnee managers have developed their professional and social networks aboard, which can help their firms' overseas management (Cui and Jiang, 2012; Wang et al., 2012). For example, these networks can facilitate their access of information relevant to their firms' foreign investment (Athanassiou and Nigh, 2000). The networks they developed can also improve coordination and cooperation both inter-firm and intra-firm (Daily et al., 2000).

Based on our discussion above, we hypothesize the following:

H: Ceteris paribus, firms with returnee managers are associated with higher probability of OFDI and larger OFDI amounts.

3. Methodology

3.1 Sample

Our initial sample consists of all Chinese public companies listed in Shanghai Stock Exchange (SHSE) and Shenzhen Stock Exchange (SZSE) from 2001 through 2015. We start from 2001 since most listed companies started to disclose managers' bios and background information from that year. We hand-collect managers' foreign experience data from their companies' annual reports. Specifically, we read and screen the biography to determine whether managers have foreign study or work experience. We also verify and supplement the data with

information from public media.[4] Following prior literature (e.g., Giannetti et al., 2015), we consider a manager having foreign experience if he or she studied or worked outside (mainland) China. To further ensure that foreign experience captures managers' actual exposure to a foreign environment, we exclude the situations in which they only worked for an overseas branch of a Chinese company or a Chinese branch of a foreign company or a Sino-foreign joint venture to obtain managerial foreign working experience. We also record the countries or regions where these returnee managers obtained their foreign experience, whether they have study or work experience, their academic degrees in foreign countries, as well as their job positions in listed companies.

Corporate OFDI data are obtained from Chinese Research Data Services Platform (CNRDS). We match the OFDI investor companies with Chinese A-share listed companies. We download other financial and corporate governance data from China Stock Market & Accounting Research (CSMAR) database. All the data are cross-checked for consistency. Following the literature, we exclude firms in financial industry (e.g., banks, insurance companies, and investment trusts) from our sample since they are heavily regulated and their financial statement structures are quite different from other companies. We also drop observations without enough information to calculate the regression variables. After imposing these requirements, we end up with a sample of 23,146 firm-year observations from 2,552 unique firms.

Table 1 Panel A presents sample distributions by year. We can clearly observe that the

[4] We use public media such as Baidu (https://baike.baidu.com/), Sina (https://finance.sina.com.cn), Ifeng (http://finance.ifeng.com/), and Hexun (http://renwu.hexun.com/) to verify managerial foreign experience data.

number (percentage) of firms hiring returnee managers steadily grows through the sample period, from 83 (8.78%) in year 2001 to 468 (19.48%) in year 2015. The trend is consistent with previous findings (e.g., Morck et al., 2008). In addition, the number (percentage) of firms initiating OFDI also increases from 5 (0.53%) in year 2001 to 153 (6.37%) in year 2015. The growth of OFDI among Chinese public firms is also consistent with previous findings (e.g., Li et al., 2016).

[Insert Table 1 about here]

We then separate the sample into two subgroups: firms with returnee managers and firms without returnee managers, and examine the percentage of firms initiating OFDI for these two subgroups separately. The results are reported in the last two columns in Panel A. The percentage of initiating OFDI in firms with returnee managers (*percentage1*) is greater than that in firms without returnee managers (*percentage2*) in most years, which suggests that returnee managers have a positive impact on OFDI and provides preliminary support to our hypothesis. To visualize the effect, we plot the percentages of firms initiating OFDI for these two subsamples in Figure 1.

Table 1 Panel B reports sample composition by industry. The industry classification is based on the 2012 China Security Regulation Commission (CSRC) industry classification. Consistent with prior literature, most of our sample observations (62.82% = 14,542/23,146) comes from manufacturing industry. The top three industries with most returnee managers are Health and social work (44.44%), Information and technology (29.07%), and Scientific research and technical services (26.47%). The top three industries in terms of initiating OFDI

are Health and social work (11.11%), Construction (10.02%), and Mining (7.22%).

3.2. Regression model and variables

We employ the following multivariate model to test our hypotheses. To mitigate the potential endogeneity issue, we regress the contemporaneous OFDI measures on the lagged managerial foreign experience variable and other control variables. The basic OLS empirical model is as follows:

$$OFDI_{i,t} = \alpha_0 + \alpha_1 Overseas_{i,t-1} + \alpha_2 Top1_{i,t-1} + \alpha_3 Independence_{i,t-1} + \alpha_4 Managerial\ ownership_{i,t-1} + \alpha_5 Firm\ size_{i,t-1} + \alpha_6 Leverage_{i,t-1} + \alpha_7 ROA_{i,t-1} + \alpha_8 Sales\ growth_{i,t-1} + \alpha_9 Asset\ turnover_{i,t-1} + \alpha_{10} Firm\ age_{i,t-1} + \sum Industry + \sum Year + \varepsilon \quad (1)$$

The dependent variable *OFDI* is our proxy for outward foreign direct investment. We employ two different measures to capture the existence and the extent of *OFDI*: (1) *OFDI (0/1)* is a dummy variable, which equals one if a firm initiates at least one outward foreign direct investment, and zero otherwise,[5] and (2) *OFDI amount* measures the logarithm of the total amount of OFDI a firm initiates in a year.

Our independent variable is managers with overseas experience (*Overseas*). Following prior literature (e.g. Giannetti et al., 2015; Yuan and Wen, 2018), we use two variables to capture managers' foreign experience. The first one is *Overseas dummy*, which equals one if a firm has at least one returnee manager, and zero otherwise. The second measure is *Overseas number*, which represents the total number of returnee managers a firm has.[6] According to our

[5] For robustness, we also run Logit regression when we use the indicator variable as our dependent variable. The result is similar.

[6] In the robustness test, we also scale this number by the total number of managers in a firm and the results are qualitatively similar.

hypothesis, we expect the coefficient on *Overseas* to be positive, consistent with managerial foreign experience having a positive impact on OFDI.

Following prior literature (e.g., Hu and Cui, 2014; Huang et al., 2017; Quer et al., 2012; Wang et al., 2012; Wei et al., 2014), we control for several firm-level characteristics that are suggested to affect the likelihood of companies' OFDI decisions. These control variables include the share percentage of the largest shareholder (*Top1*), board independence (*Independence*), the percentage of managers' share holdings (*Managerial ownership*), leverage (*Leverage*), profitability (*ROA*), growth opportunity (*Sales growth*), operating capacity (*Asset turnover*), and the number of years a firm operated (*Firm age*). We also add industry and year dummies to control for the industrial fixed effect and macroeconomic environment changes. Standard errors are clustered at the firm-level. Detailed variable definitions are in the Appendix.

3.3 Descriptive statistics

Table 2 Panel A presents descriptive statistics. To mitigate the undue influence of outliers, we winsorize all continuous variables at the 1% and 99% tails. The mean of *OFDI (0/1)* is 0.025, suggesting that about 2.5 percentage of sample observations conducted OFDI during our sample period. In terms of the amount of OFDI investment (*OFDI amount*), the mean is 0.515, which corresponds to 17.246 billion RMB.

Regarding managerial foreign experience, the mean of overseas dummy is 0.155, indicating that 15.5 percent of observation has at least one returnee manager during the sample period. The mean number of returnee managers (0.217), however, is relatively low, suggesting the overall scarce of managers with foreign experience. The mean value of *Overseas CEO* is

0.049, indicating that only 4.9 percent of CEOs has overseas experience. The means of *Overseas work dummy* and *Overseas study dummy* are 0.065 and 0.132, respectively, revealing that 6.5% of managers obtained overseas work experience while 13.2% of them gained overseas study experience. Finally, the mean of *Overseas senior* and *Overseas junior* are 0.131 and 0.036, respectively, which suggests that returnee managers are more likely to take executive-level positions in companies. For brevity, we do not discuss the statistics of other control variables which are largely consistent with prior studies (e.g., Hu and Cui, 2014; Huang et al., 2017; Quer et al., 2012; Wang et al., 2012).

[Insert Table 2 about here]

Panel B of Table 2 reports Pearson (below) and Spearman (above) correlations, which show that all measures of corporate OFDI are significantly and positively related to managerial foreign experience. Nevertheless, we compute variance inflation factor (VIF) for control variables and find the value is very low, which suggests that multicollinearity is not a serious problem in our study. The univariate testing results, reported in Panel C, also confirm that the levels of OFDI (measured by both the existence and the amount of OFDI) in firms with returnee managers are higher than that of firms without returnee managers, and the differences are statistically significant at the 1 percent level. Thus, both correlation and univariate test provide preliminary support to our hypothesis.

4. Empirical results

4.1. Multivariate regression results

We report the results of multivariate regression in Table 3. When we measure OFDI with

an indicator variable (columns 1 and 2), we find that the coefficient on *Overseas dummy* is positive and statistically significant at the 1 percent level (0.012, t = 2.71, in column 1). The magnitude is also economically significant. The coefficient suggests that hiring at least one returnee manager is associated with 1.2 percent increase in the probability of OFDI, which is important given the overall probability of OFDI (the mean) is only 2.5 percent for the whole sample. We obtain similar but statistically weaker result when we measure foreign experience using *overseas number* (column 2). We also use the amount of OFDI (columns 3 and 4) as our dependent variables to run the model. The results continue to be positive and statistically significant. The coefficients on control variables are in general consistent with previous studies (e.g., Hu and Cui, 2014; Huang et al., 2017; Quer et al., 2012; Wang et al., 2012). For example, OFDI is positively associated with firm size, profitability, and sales growth. Overall, the results demonstrate that managerial foreign experience is positively related to OFDI.

[Insert Table 3 about here]

4.2*. Alternative sampling, measure, and regression specification*

We include mangers who obtained their experience in Hong Kong, Macau and Taiwan in our benchmark results. The rationale underlying this research choice is that business management in these areas has been heavily influenced by Western countries in the last several decades. To make sure that our results are not solely driven by managers from these areas, we remove these managers and rerun the regression model as a robustness check. Table 4 Panel A reports the results. The coefficients on independent variables remain positive and statistically significant in five columns. More importantly, the magnitude of coefficients increases relative

to those reported in Table 3, suggesting that our results are not particularly due to those returnee managers who only obtained experience from Hong Kong, Macau, and Taiwan.

[Insert Table 4 about here]

The generalization of our results also critically hinges on the measure of managers' foreign experience. To assure the robustness of our finding, we use two alternative measures, *Overseas percentage* and *Overseas CEO*, to rerun the regression model. *Overseas percentage* is the number of returnee managers divided by the total number of managers, which mitigates the potential problem that different companies may have different size of management teams. *Overseas CEO* is an indicator variable that equals one if a CEO has foreign experience, and zero otherwise, capturing CEO's foreign experience solely. The results of using these two alternative measures are presented in Panel B of Table 4. The results remain to be statistically significant at the 5 or 10 percent levels.

Since *OFDI (0/1)* is a dummy variable, we also use the non-linear Logit regression to re-estimate our model. In addition, as *OFDI amount* is a truncated measure (greater or equal to zero), we use the Tobit model to estimate the model. Panel C of Table 4 reports the regression results using alternative model specifications. We find that *Overseas dummy* and *Overseas number* are still positively significant, which is consistent with our main results using OLS model.

4.3. Addressing potential endogeneity concerns

4.3.1. Using instrumental variable (IV) approach

While we include many firm characteristics to control for the determinants of OFDI, we

may still suffer from omitted variable problem. To address this issue, we adopt the instrumental variable (IV) approach. We use the mean ratio of *Overseas dummy* in the industry (excluding the firm itself) and the introduction of provincial talent policy as two instruments. Specifically, we first calculate *Mean overseas* of other firms within the same industry as the first instrument. Firms in the same industry have similar characteristics and face similar risks, the fact that other peer firms hire returnee managers may affect a firm's hiring decision, but unlikely affects its OFDI decisions. We then follow Giannetti et al. (2015) and use the staggered introduction of talent retention policy in different provinces as the second instrument. For each firm-year observation, the variable *Policy* is set to 1 after the announcement of the policy in the province and 0 otherwise. Both instruments are expected to correlate with firms' hiring decision, but not with firms' OFDI. The test of over identification of IV suggests that they do not correlate with residuals, satisfying the requirement of good IVs. Panel A of Table 5 (left) reports the result of first stage regression, showing both IVs are positively and significantly related to the hiring of returnee managers. For the second stage, we use the predicted hiring of returnee manger as independent variables and reports the results in Panel B (right). The coefficients on the independent variable remain to be significantly positive at the 5 percent level. Thus, our findings are unlikely to be driven by omitted variable problem.

[Insert Table 5 about here]

4.3.2. Using propensity score matched (PSM) sample

Another potential concern for our finding is that treatment firms (i.e., firms hiring returnee managers) and control firms (i.e., firms without returnee managers) might differ significantly

from each other in many characteristics. While our regression model controls for those characteristics linearly, nonlinear effects that could not be controlled adequately may still drive our results. To alleviate this problem, we re-estimate our model using a propensity score matched sample.

Following prior study (Yuan and Wen, 2018), we first regress our indicator variable (i.e., whether a firm has returnee managers) on a set of control variables, which includes all control variables in regression model (1), and estimate the propensity score that a firm hires a returnee manager. We then match each treatment firm with a control firm with the closest propensity. The matching is done with replacement, and the caliper is 0.01. Table 6 Panel A reports the covariate balance check result of PSM, suggesting that after matching treatment and control groups do not differ from each other significantly. Panel B reports the regression results using the matched sample. When we use *Overseas dummy* as independent variable, the results (columns 1 and 3) remain to be statistically significant and are largely consistent with those reported in Table 3. When the independent variable becomes *Overseas number*, the coefficients are still positive, but marginally insignificant (columns 2 and 4). This may be due to the reduced statistical power as our sample size also reduced significantly by about 70 percent. Overall, our analysis here suggests that our findings are unlikely to be driven by endogeneity introduced by nonlinearity.

[Insert Table 6 about here]

4.3.3. Controlling for self-selection

While the PSM approach helps alleviate the nonlinearity problem, it does not mitigate the

self-selection bias. That is, a company's decision of hiring managers with foreign experience is not random and can be correlated to certain unobservable firm characteristics.[7] For instance, a company considering future OFDI might be more likely to hire returnee managers, and returnee managers are more likely to join such company if they sense such investment opportunities in the future. To account for this self-selection bias, we perform another robustness test with the Heckman selection model.

Following Giannetti et al. (2015), we build a Probit selection model, and the dependent variable is *Overseas dummy*. We include those variables that might affect a company's decision of hiring returnee managers in the model, such as state ownership, largest shareholder's ownership, board size, board independence, firm age, firm size, leverage, ROA, and industry and year fixed effects. As Heckman approach requires an instrument variable (IV) that is correlated with the likelihood of hiring returnee managers, but not correlated with firm's OFDI, we use the average percentage of hiring returnee managers in the same industry (*Mean overseas*) as the IV. We calculate Inverse Mills Ratio (IMR) in the first stage Probit model and then include it into the second stage regression.

Table 7 reports the results for this test. Panel A (left) shows the first-stage regression result. The coefficients on firm size and market-to-book are significantly positive, suggesting that large and growth companies are more likely to hire returnee mangers. On the other hand, we also find that state ownership, the largest shareholder ownership, and firm age are negatively related to the decision of hiring returnee managers. Panel B (right) reports the second-stage

[7] As those characteristics are unobservable, PSM approach could not address this problem.

regression result. The coefficients on *Overseas number* remain to be significantly positive at the 5 percent level for both dependent variables, *OFDI (0/1)* and *OFDI amount*. Thus, after controlling for potential self-selection bias, we still find a positive association between the hiring of returnee managers and the increase in OFDI.

[Insert Table 7 about here]

5. Further exploratory tests

So far, we have provided empirical evidence that managerial foreign experience helps corporate OFDI. Next, we perform several extensions to explore the heterogeneity of the relation.

5.1. The effect of state ownership

We first investigate how state ownership might affect our main finding. On the one hand, it has been pointed out that China's OFDI has been largely conducted by state-owned entities (SOEs) (Morck et al., 2008). Thus, one might expect the impact of managers with foreign experience on OFDI to be more pronounced in SOEs. However, drawing on resource dependence theory, Huang et al. (2017) argue and find some evidence that state ownership undermines SOEs' willingness to conduct OFDI. Therefore, ex ante, it is unclear about the impact of state ownership on the relation. We partition our sample into two subgroups: SOEs vs. non-SOEs and run our regressions on them separately. The results are reported in Table 8 Panel A. Interestingly, we find that the effect of managers' foreign experience on OFDI actually concentrates in non-SOEs, suggesting that returnee managers play more important role in shaping OFDI decision in non-SOEs.

[Insert Table 8 about here]

5.2. The effect of managerial position

Next, we explore at which position these managers with foreign experience can play a role in OFDI decision. Generally, senior managers are more powerful and influential on firms' decision-making. We predict that returnee managers at CEO and vice-CEO positions have more significant effect on OFDI. We hand-collect the information of managerial position. Following Yuan and Wen (2018), we construct the following model to test the effect of returnee managers' position on OFDI:

$$OFDI_{i,t} = \beta_0 + \beta_1 \, Overseas\ senior\ dummy\ (Overseas\ junior\ dummy)_{i,t-1} + \sum \text{Control variables} + \sum Industry + \sum Year + \varepsilon \quad (2)$$

Overseas senior dummy is an indicator variable, which equals 1 if firm *i* has at least one returnee senior manager (at the position of CEO or vice-CEO). Overseas junior dummy is also a dummy variable. If firm *i* has at least one returnee junior manager (non-CEOs). We use these two variables as our independent variable and rerun model (1). The results are reported in Panel B of Table 8. For all three dependent variables, we can see that the effect of managers with foreign experience on OFDI is only significant when returnee managers take senior management positions, but not significant when they take junior level positions. Therefore, the result is consistent with our prediction that senior managers with foreign experience are more influential on OFDI than junior managers with foreign experience.

5.3. Overseas work experience vs. study experience

Finally, we investigate whether foreign work experience and study experience have different effects on OFDI. We construct the following model to do this test:

$$OFDI_{i,t} = \beta_0 + \beta_1 \, Overseas\ work\ dummy\ (Overseas\ study\ dummy)_{i,t-1} + \sum \text{Control variables} + \sum Industry + \sum Year + \varepsilon \quad (3)$$

where, *Overseas work (study) dummy* is an indicator variable, which equals 1 if firm *i* has at least one manager with overseas work (study) experience in year *t*, and otherwise equals 0. Overseas study experience includes obtaining academic degrees (i.e., bachelor, master, and doctoral degrees), being visiting scholars and having post-doctoral experience in foreign countries.

Table 8 panel C reports the regression results. The coefficients on *Overseas work dummy* and *Overseas study dummy* are both positively significant. The results indicate that overseas experience, both study experience and work experience, has important impacts on OFDI.

5.4. Overseas revenue percentage

The evidence we provide so far suggests that managerial foreign experience facilities their firms' OFDI. These results, however, do not tell us whether OFDI leads to improved operating performance. Thus, in this section, we investigate whether returnee mangers help their firms generate more overseas revenue. To do so, we look at the percentage of overseas revenue in total revenue and regress it on managerial foreign experience variables. Table 9 reports the regression results. In column 1, we find that the coefficient on *Overseas dummy* is significantly positive (0.040, t = 4.63), suggesting that the existence of firm managers with foreign

experience can increase their firms' overseas revenue by 4.0%. As the mean level of overseas revenue is about 10%, such an increase represents about 40% change, which is economically significant. The results using *Overseas number* and *Overseas percentage* as independent variable are similar in columns 2 and 3. Finally, we show in column 4 that when a CEO has overseas experience, the firm's overseas revenue also increases.

[Insert Table 9 about here]

6. Conclusion

Using a sample of Chinese publicly listed companies, we examine whether and how managerial foreign experience affects firm OFDI decisions. We find a significantly positive association between managerial foreign experience and corporate OFDI. The relation is stable with a series of robustness tests, including alternative measures of foreign experience and foreign investment, the instrumental variable method, the PSM approach, and the Heckman selection model. Further analyses reveal significant cross-sectional variation of the relation. Specifically, compared to state owned enterprises (SOEs), the foreign investment promotion effect is larger among private firms (non-SOEs). Returnee managers at senior positions exert a more significant impact on firm outward investment than those at junior positions. In addition, both foreign work experience and study experience have positive effect on OFDI.

By documenting the positive impact of managerial foreign experience on corporate OFDI, we contribute to the literature on OFDI and the literature on how management knowledge is transmitted across countries. Our paper also has its policy implication. In 2013, the Chinese government started the "One Belt and One Road" (OBOR) initiative, attempting to further

expand its economic integration with other countries in Asia, Europe, and Africa through OFDI.[8] The initiative is also viewed as a national strategy and a commitment to China's open economy policy. More recently, Chinese government actively promotes OBOR and encourages Chinese companies to invest in those counties along the Silk Road. The evidence in our paper suggests that recruiting returnee managers into Chinese companies can effectively promote OFDI, which complements prior studies' finding (Luo et al., 2010).

[8] OBOR refers to the Silk Road Economic Belt and the 21st Century Maritime Silk Road.

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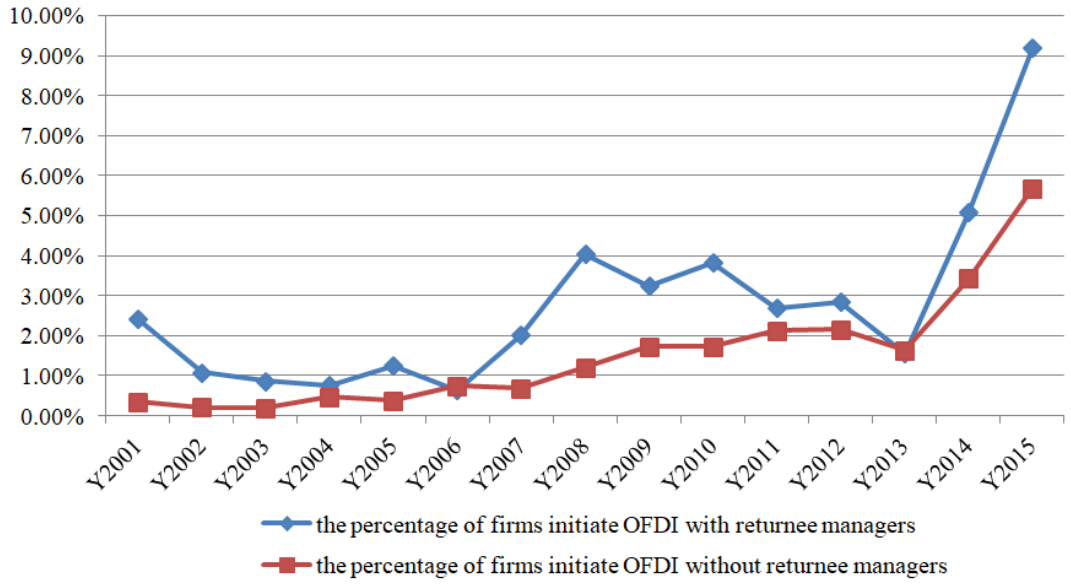
Figure 1: The percentage of firms initiating OFDI with or without returnee managers



Appendix: Variable definitions

Variable name	Variable definition
Foreign direct investment	
OFDI (0/1)	An indicator variable that equals 1 if there is at least one OFDI in the year, and 0 otherwise.
OFDI amount	Natural logarithm of 1 plus total OFDI amount in RMB in the year.
Overseas revenue	Overseas revenue divided by total revenue.
Managerial foreign experience	
Overseas dummy	An indicator variable that equals 1 if the company has any executive with overseas experience, and 0 otherwise.
Overseas number	Total number of executives having overseas experience.
Overseas percentage	Total number of executives having overseas experience divided by total number of executives.
Overseas CEO	An indicator variable that equals 1 if the company CEO has overseas experience, and 0 otherwise.
Overseas work dummy	An indicator variable that equals 1 if the company has at least one executive with overseas working experience, and 0 otherwise.
Overseas study dummy	An indicator variable that equals 1 if the company has at least one executive with overseas studying experience, and 0 otherwise.
Overseas senior dummy	An indicator variable that equals 1 if the company has at least one senior executive (CEO or vice CEO) with overseas experience, and 0 otherwise.
Overseas junior dummy	An indicator variable that equals 1 if the company has at least one junior executive (except CEO or vice CEO) with overseas experience, and 0 otherwise.
Other variables	
Top1	The percentage shares owned by the largest shareholder in year t.
Independence	The number of independent directors divided by total number of directors.
Managerial ownership	The percentage shares owned by executives in year t.
Firm size	Natural logarithm of 1 plus total assets at the end of year.
Leverage	Total liability divided by total assets at the end of year.
ROA	Net income divided by total assets at the end of year.
Sales growth	Sales growth from year t-1 to year t.
Asset turnover	Total revenue divided by total assets at the end of year.
Firm age	The number of years since the firm was incorporated.

Table 1: Sample distribution

Panel A: Sample distribution by year

Year	N	# of firms with returnee managers (%)	# of firms initiate OFDI (%)	Percentage1	Percentage2
2001	945	83 (8.78%)	5 (0.53%)	2.41%	0.35%
2002	1,025	93 (9.07%)	3 (0.29%)	1.08%	0.21%
2003	1,092	116 (10.62%)	3 (0.27%)	0.86%	0.20%
2004	1,159	134 (11.56%)	6 (0.52%)	0.75%	0.49%
2005	1,231	159 (12.92%)	6 (0.49%)	1.26%	0.37%
2006	1,222	157 (12.85%)	9 (0.74%)	0.64%	0.75%
2007	1,162	150 (12.91%)	10 (0.86%)	2.00%	0.69%
2008	1,255	173 (13.78%)	20 (1.59%)	4.05%	1.20%
2009	1,347	185 (13.73%)	26 (1.93%)	3.24%	1.72%
2010	1,498	235 (15.69%)	31 (2.07%)	3.83%	1.74%
2011	1,893	298 (15.74%)	42 (2.22%)	2.68%	2.13%
2012	2,279	421 (18.47%)	52 (2.28%)	2.85%	2.15%
2013	2,328	448 (19.24%)	38 (1.63%)	1.56%	1.65%
2014	2,307	472 (20.46%)	87 (3.77%)	5.08%	3.43%
2015	2,403	468 (19.48%)	153 (6.37%)	9.19%	5.68%
Total	23,146	3,592(15.52%)	491(2.12%)	3.54%	1.86%

Note: Percentage1 represents the ratio of firms initiating OFDI with returnee managers, while Percentage2 represents the ratio of firms initiating OFDI without returnee managers.

Panel B: Sample distribution by industry

Industry	N	# of firms with returnee managers	(%)	# of firms initiating OFDI	(%)
Agriculture	445	43	(9.66%)	5	(1.12%)
Mining	471	59	(12.53%)	34	(7.22%)
Manufacturing	14,542	2,355	(16.19%)	275	(1.89%)
Electronic and gas	877	63	(7.18%)	32	(3.65%)
Construction	499	69	(13.83%)	50	(10.02%)
Wholesale and retail	1,561	183	(11.72%)	20	(1.28%)
Transportation	826	119	(14.41%)	16	(1.94%)
Accommodation and catering	129	19	(14.73%)	3	(2.33%)
Information and technology	994	289	(29.07%)	13	(1.31%)
Real estate	1,315	168	(12.78%)	21	(1.60%)
Leasing and business services	256	34	(13.28%)	3	(1.17%)
Scientific research and technical services	68	18	(26.47%)	1	(1.47%)
Public Facilities Management	203	14	(6.90%)	1	(0.49%)
Residents services	63	10	(15.87%)	1	(1.59%)
Education	4	0	(0.00%)	0	(0.00%)
Health and social work	18	8	(44.44%)	2	(11.11%)
Culture, sports and entertainment	154	34	(22.08%)	7	(4.55%)
Comprehensive	721	107	(14.84%)	7	(0.97%)
Total	23,146	3,592	(15.52%)	491	(13.67%)

Note: Industry classification is based on the 2012 Chinese Security Regulation Commission (CSRC) industry classification.

Table 2: Summary statistics

Panel A: Descriptive statistics

Variables	N	Mean	Std	P25	Median	P75
Variables of OFDI						
OFDI (0/1)	23,146	0.025	0.155	0.000	0.000	0.000
OFDI amount	23,146	0.515	3.264	0.000	0.000	0.000
Overseas revenue	23,146	0.100	0.190	0.000	0.000	0.112
Variable of managers' foreign experience						
Overseas dummy	23,146	0.155	0.362	0.000	0.000	0.000
Overseas number	23,146	0.217	0.609	0.000	0.000	0.000
Overseas percentage	23,146	0.035	0.104	0.000	0.000	0.000
Overseas CEO	23,146	0.049	0.215	0.000	0.000	0.000
Overseas work dummy	23,146	0.065	0.247	0.000	0.000	0.000
Overseas study dummy	23,146	0.132	0.339	0.000	0.000	0.000
Overseas senior dummy	23,146	0.131	0.337	0.000	0.000	0.000
Overseas junior dummy	23,146	0.036	0.187	0.000	0.000	0.000
Control variables						
Top1	23,146	0.370	0.159	0.244	0.347	0.488
Independence	23,146	0.346	0.087	0.333	0.333	0.375
Managerial ownership	23,146	0.073	0.200	0.000	0.000	0.006
Firm size	23,146	21.629	1.228	20.795	21.487	22.287
Leverage	23,146	0.201	0.161	0.060	0.186	0.310
ROA	23,146	0.029	0.068	0.011	0.032	0.059
Sales growth	23,146	0.215	0.608	-0.031	0.119	0.300
Asset turnover	23,146	0.637	0.465	0.327	0.523	0.798
Firm age	23,146	12.743	5.375	9.000	12.000	16.000

Note: We winsorize all continuous variables at the 1% and 99% tails.

Panel B: Correlation matrices

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) OFDI (0/1)	1	1.00***	0.05***	0.05***	0.05***	0.06***	0.02***	0.15***	0.01	0.04***	0.03***	0.03***	0.03***
(2) OFDI amount	0.99***	1	0.05***	0.05***	0.05***	0.06***	0.02***	0.15***	0.01	0.04***	0.03***	0.04***	0.03***
(3) Overseas dummy	0.05***	0.05***	1	1.00***	-0.03***	0.06***	0.07***	0.07***	-0.04***	0.06***	0.02**	0.01	-0.01
(4) Overseas number	0.05***	0.05***	0.83***	1	-0.03***	0.06***	0.07***	0.07***	-0.04***	0.06***	0.02**	0.01	-0.01
(5) Top1	0.06***	0.06***	-0.03***	-0.01	1	-0.07***	-0.20***	0.17***	0.02*	0.10***	0.06***	0.09***	-0.27***
(6) Independence	0.07***	0.07***	0.07***	0.06***	-0.09***	1	0.07***	0.11***	-0.07***	0.02***	-0.02*	0.02*	0.20***
(7) Managerial ownership	0.01	0.00	0.06***	0.04***	-0.09***	0.13***	1	-0.03***	-0.17***	0.18***	0.07***	0.01	-0.07***
(8) Firm size	0.21***	0.22***	0.08***	0.10***	0.21***	0.14***	-0.11***	1	0.23***	0.07***	0.08***	0.09***	0.22***
(9) Leverage	0.00	0.01	-0.04***	-0.03***	0.00	-0.07***	-0.20***	0.19***	1	-0.40***	-0.02*	-0.07***	0.03***
(10) ROA	0.04***	0.04***	0.05***	0.04***	0.10***	0.05***	0.14***	0.14***	-0.36***	1	0.32***	0.19***	-0.09***
(11) Growth	0.02***	0.02***	0.01*	0.01	0.04***	0.00	0.02**	0.03***	-0.02**	0.19***	1	0.17***	-0.15***
(12) Asset turnover	0.04***	0.04***	-0.01	0.01	0.08***	0.04***	-0.04***	0.08***	-0.08***	0.13***	0.08***	1	-0.02***
(13) Firm age	0.03***	0.03***	-0.01	0.01	-0.27***	0.25***	-0.12***	0.19***	0.04***	-0.05***	-0.03***	0.01	1

Note: The left below triangle represents Pearson correlations and the right upper triangle represents Spearman correlations. ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively.

Panel C: Univariate test

	Oversea dummy=1		Overseas dummy=0		Mean
	N	Mean	N	Mean	Difference
OFDI (0/1)	3,592	0.043	19,554	0.021	0.022***
OFDI amount	3,592	0.902	19,554	0.444	0.458***

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 3: The relation between managers' foreign experience and firm's OFDI

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.012***		0.255**	
	(2.71)		(2.57)	
Overseas number $_{i,t-1}$		0.006**		0.131**
		(2.14)		(2.06)
Top1 $_{i,t-1}$	0.017	0.016	0.423*	0.410
	(1.47)	(1.41)	(1.66)	(1.60)
Independence $_{i,t-1}$	0.106***	0.107***	2.303***	2.324***
	(3.08)	(3.10)	(2.96)	(2.98)
Managerial ownership $_{i,t-1}$	0.004	0.004	0.047	0.051
	(0.64)	(0.67)	(0.38)	(0.41)
Firm size $_{i,t-1}$	0.024***	0.024***	0.534***	0.534***
	(8.49)	(8.45)	(8.28)	(8.24)
Leverage $_{i,t-1}$	-0.017	-0.017	-0.386*	-0.393*
	(-1.61)	(-1.64)	(-1.70)	(-1.73)
ROA $_{i,t-1}$	-0.019	-0.018	-0.582	-0.580
	(-1.01)	(-1.00)	(-1.44)	(-1.44)
Growth $_{i,t-1}$	0.005**	0.005**	0.095**	0.096**
	(2.29)	(2.31)	(2.25)	(2.27)
Asset turnover $_{i,t-1}$	0.006	0.006	0.141	0.139
	(1.33)	(1.31)	(1.39)	(1.37)
Firm age $_{i,t-1}$	-0.001*	-0.001*	-0.014	-0.014*
	(-1.66)	(-1.72)	(-1.63)	(-1.69)
Constant	-0.518***	-0.517***	-11.562***	-11.526***
	(-8.07)	(-8.02)	(-7.91)	(-7.86)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,146	23,146
R^2	5.79%	5.76%	6.22%	6.20%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 4: Alternative sampling, measures, and model specification

Panel A: Removing managers with Hong Kong, Macau, and Taiwan experience

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.018***		0.366***	
	(3.45)		(3.28)	
Overseas number $_{i,t-1}$		0.009**		0.182**
		(2.52)		(2.43)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,146	23,146
R^2	5.85%	5.79%	6.26%	6.23%

Panel B: Alternative measures of managers' foreign experience

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas percentage $_{i,t-1}$	0.029**		0.598**	
	(2.18)		(2.08)	
Overseas CEO $_{i,t-1}$		0.013*		0.261*
		(1.86)		(1.76)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,146	23,146
R^2	5.74%	5.74%	6.18%	6.17%

Panel C: Alternative model specification

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	Logit		Tobit	
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.388***		7.038***	
	(2.82)		(2.92)	
Overseas number $_{i,t-1}$		0.103*		2.399**
		(1.73)		(2.12)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,142	23,142	23,146	23,146
R^2	20.89%	20.72%	11.33%	11.26%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 5: Using instrument variable (IV) approach

Panel A: First stage	Overseas dummy $_{i,t}$	Panel B: Second stage	OFDI (0/1) $_{i,t}$	OFDI amount $_{i,t}$
	(1)		(1)	(2)
Mean overseas $_{i,t-1}$	0.905***	Instrumented overseas Dummy $_{i,t-1}$	0.120**	2.141*
	(4.06)		(2.04)	(1.75)
Policy $_{i,t-1}$	0.130***	Top1 $_{i,t-1}$	0.027***	0.596***
	(2.66)		(2.92)	(3.09)
Top1 $_{i,t-1}$	-0.441***	Independence $_{i,t-1}$	0.095***	2.122***
	(-6.21)		(4.93)	(5.30)
Independence $_{i,t-1}$	0.479***	Managerial ownership $_{i,t-1}$	0.005	0.064
	(2.74)		(0.79)	(0.52)
Managerial ownership $_{i,t-1}$	0.099**	Firm size $_{i,t-1}$	0.022***	0.493***
	(1.96)		(10.69)	(11.72)
Firm size $_{i,t-1}$	0.121***	Leverage $_{i,t-1}$	-0.016**	-0.380**
	(12.15)		(-1.99)	(-2.29)
Leverage $_{i,t-1}$	-0.149*	ROA $_{i,t-1}$	-0.032*	-0.832**
	(-1.94)		(-1.81)	(-2.23)
ROA $_{i,t-1}$	0.589***	Growth $_{i,t-1}$	0.004**	0.085**
	(3.29)		(2.24)	(2.29)
Growth $_{i,t-1}$	0.019	Asset turnover $_{i,t-1}$	0.007**	0.151***
	(1.13)		(2.49)	(2.71)
Asset turnover $_{i,t-1}$	-0.058**	Firm age $_{i,t-1}$	0.007**	0.001
	(-2.29)		(2.49)	(0.08)
Firm age $_{i,t-1}$	-0.018***			
	(-7.56)			
Constant	-3.492***	Constant	-0.508***	-11.451***
	(-14.17)		(-16.04)	(-17.36)
Year and industry FEs	Yes	Year and industry FEs	Yes	Yes
Observations	23,131	Observations	23,131	23,131
Adjusted R^2	3.75%	Adjusted R^2	4.82%	5.32%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 6: Using propensity score matching (PSM) approach

Panel A: Covariate balance check

	Means		P values
	Firms having returnee managers	Matched firms having no returnee managers	
State control $_{i,t-1}$	0.171	0.170	0.926
Top1 $_{i,t-1}$	0.361	0.366	0.205
Board size $_{i,t-1}$	9.062	9.034	0.553
Board independence $_{i,t-1}$	0.358	0.357	0.486
Firm age $_{i,t-1}$	12.61	12.524	0.494
Size $_{i,t-1-1}$	21.825	21.829	0.903
Leverage $_{i,t-1}$	0.185	0.186	0.782
ROA $_{i,t-1}$	0.038	0.036	0.364
MB $_{i,t-1}$	4.100	4.123	0.810
Sales growth $_{i,t-1}$	0.237	0.235	0.890
Mean overseas	0.249	0.249	0.863
Policy	0.945	0.945	0.918

Panel B: Regression results using PSM sample

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.015**		0.308**	
	(2.57)		(2.46)	
Overseas number $_{i,t-1}$		0.005		0.112
		(1.39)		(1.38)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	7,572	7,572	7,572	7,572
R^2	8.30%	8.21%	8.93%	8.85%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 7: Using Heckman two-stage selection model

Panel A: First stage	Overseas dummy $_{i,t}$	Panel B: Second stage	OFDI (0/1) $_{i,t}$	OFDI amount $_{i,t}$
	(1)		(1)	(2)
State control $_{i,t-1}$	-0.192***	Overseas dummy $_{i,t-1}$	0.012**	0.244**
	(-3.21)		(2.55)	(2.45)
Top1 $_{i,t-1}$	-0.384**	Top1 $_{i,t-1}$	0.037***	0.790***
	(-2.34)		(3.04)	(3.00)
Board size $_{i,t-1}$	0.011	Independence $_{i,t-1}$	0.083**	1.893**
	(0.75)		(2.37)	(2.36)
Board independence $_{i,t-1}$	0.610*	Managerial ownership $_{i,t-1}$	0.003	0.039
	(1.88)		(0.55)	(0.31)
Firm age $_{i,t-1}$	-0.020***	Firm size $_{i,t-1}$	0.020***	0.458***
	(-3.52)		(5.27)	(5.32)
Firm size $_{i,t-1}$	0.140***	Leverage $_{i,t-1}$	-0.011	-0.288
	(5.63)		(-0.97)	(-1.16)
Leverage $_{i,t-1}$	-0.193	ROA $_{i,t-1}$	-0.043**	-1.033**
	(-1.25)		(-2.25)	(-2.50)
ROA $_{i,t-1}$	0.470	Growth $_{i,t-1}$	0.003*	0.073*
	(1.56)		(1.66)	(1.65)
MB $_{i,t-1}$	0.017***	Asset turnover $_{i,t-1}$	0.006	0.149
	(3.79)		(1.39)	(1.44)
Growth $_{i,t-1}$	0.015	Firm age $_{i,t-1}$	0.000	-0.001
	(0.90)		(0.14)	(-0.08)
Mean overseas $_{i,t-1}$	0.926***	Inverse Mills Ratio	0.106**	1.925*
	(3.51)		(2.15)	(1.79)
Constant	-4.038***	Constant	-0.474***	-10.781***
	(-7.10)		(-6.68)	(-6.60)
Year and industry FEs	Yes	Year and industry FEs	Yes	Yes
Observations	22,874	Observations	22,877	22,877
Pseudo R^2	4.00%	R^2	5.89%	6.30%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 8: Further exploratory tests

Panel A: The effect of state ownership

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	SOE	Non-SOE	SOE	Non-SOE
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.005	0.014***	0.082	0.286***
	(0.36)	(3.05)	(0.24)	(3.09)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	5,283	17,698	5,283	17,698
R^2	17.65%	3.79%	18.67%	3.86%

Panel B: The effect of managerial position

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas senior dummy $_{i,t-1}$	0.011**		0.225**	
	(2.21)		(2.11)	
Overseas junior dummy $_{i,t-1}$		0.014		0.288
		(1.42)		(1.40)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,146	23,146
R^2	5.76%	5.73%	6.20%	6.17%

Panel C: Overseas work experience vs. study experience

	OFDI (0/1) $_{i,t}$		OFDI amount $_{i,t}$	
	(1)	(2)	(3)	(4)
Overseas work dummy $_{i,t-1}$	0.573***		0.302**	
	(3.46)		(2.36)	
Overseas study dummy $_{i,t-1}$		0.286*		0.218**
		(1.91)		(1.97)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,146	23,146
R^2	5.76%	5.75%	6.19%	6.19%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively

Table 9: The effect of managerial foreign experience on overseas revenue

	Overseas revenue $_{i,t}$			
	(1)	(2)	(3)	(4)
Overseas dummy $_{i,t-1}$	0.041***			
	(4.60)			
Overseas number $_{i,t-1}$		0.034***		
		(5.29)		
Overseas percentage $_{i,t-1}$			0.197***	
			(4.81)	
Overseas CEO $_{i,t-1}$				0.070***
				(4.07)
Control variables	Yes	Yes	Yes	Yes
Year and industry FEs	Yes	Yes	Yes	Yes
Observations	23,146	23,146	23,137	23,146
R^2	10.46%	11.05%	11.04%	10.50%

Note: ***, **, * indicates significance levels at 0.01, 0.05, and 0.10, respectively.