

# **Internationalization and Market Valuation: Evidence from China**

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# **Internationalization and Market Valuation: Evidence from China**

## **Abstract**

We examine whether the market valuation of Chinese firms with international operations differs from that of Chinese firms without such operations. We find that the market valuation of international firms is lower than that of non-international firms. Further analyses reveal that international firms with more foreign subsidiaries have lower market value, and the interactive effects of internationalization and political connections are more negative for state-owned enterprises than for non-state-owned enterprises. Collectively, our findings shed light on the market valuation implications of internationalization in China and the unique institutional features that affect the valuation.

**Keywords:** internationalization; market valuation; political connections; China

**JEL classification:** F23; G38

## **1. Introduction**

How investors value firms with international operations is a question of much interest in finance, accounting, and international business, as evidenced by the many empirical studies conducted on this topic. One group of studies highlights that international operations increase market valuation (e.g., Errunza and Senbet 1984, Morck and Yeung 1991, Bodnar et al. 1999, Gande et al. 2009). In contrast, other studies report a decrease in market valuation of firms with international operations (e.g., Christophe 1997, Denis et al. 2002). Theoretically, the relative costs and benefits of international operations and their net effects on firms with and without such operations could explain these divergent empirical findings. Extant research on this issue has focused more on the time effect and on developed countries such as the U.S. (e.g., Denis et al. 2002, Christophe 2002). Few studies have examined how investors value the international operations of firms in emerging markets, where several firms have recently substantially expanded their foreign operations and, more importantly, where institutional characteristics can differ considerably from those in developed countries. We attempt to fill this gap in the literature by using the leading emerging economy, China, as the setting to examine this issue.

China is well suited for studying the valuation of firms with international operations for several reasons. First, China is now the world's largest exporter and importer and the second largest outward direct foreign investor in flows (WTO 2014, UNCTAD 2015). Intuitively, the benefits of international operations should exceed the costs, and therefore increase the value of firms with international operations relative to firms without such operations. However, the rationales for Chinese firms to move abroad, and the institutions that affect these firms are different from those studied in conventional international business theory (Luo and Tung 2007). Therefore, the market valuation of

international operations is unclear and may be different from the findings of prior studies. For example, unlike conventional international business theory, which suggests that firms expand their operations abroad to utilize their competitive advantages, such as leading-edge technology, most Chinese firms entering the international markets rely on their cost advantages to offer cheaper products and avoid the fierce competition in domestic markets. Second, expropriation of minority shareholders by majority shareholders through activities such as tunneling is rampant in emerging countries like China, and international operations may facilitate such expropriation, thus more than offsetting the advantage of underexploited growth opportunities in international markets (Morck et al. 2008). This issue is especially important given the weak investor protection in China relative to developed economies (Allen et al. 2005). Third, despite the development of the market system in China, the government still exerts considerable influence on the economy through both restricting and supporting activities, thus making Chinese firms institutionally dependent on government policies (Allen et al. 2005). In terms of internationalization, Chinese firms may benefit from government supporting policies by going international. However, the realization of these benefits is uncertain because they are subject to administrative approvals, and the involvement of government in internationalization increases firms' institutional dependence, which could potentially decrease firm value (Morck et al. 2008).

In this study, we investigate how investors value Chinese firms with international operations relative to Chinese firms without such operations. As discussed in the next section, both the motivations of Chinese firms to exploit international markets and the institutional characteristics of China are quite unique, making the relative valuation of firms with and without international operations difficult to predict and, therefore, of considerable empirical interest. Briefly, our results

indicate that the market valuation of firms with international operations is lower than that of firms without such operations, and this finding is robust to alternative measures of firm value and internationalization, as well as to estimation techniques that control for omitted correlated factors and firms' endogenous choice to internationalize. We also find a significant decrease in market valuation when firms first increase international operations substantially and an increase when firms decrease international operations substantially, which further corroborate our main findings.

Lastly, we explore possible reasons why internationalization influences the market valuation of Chinese firms. Our results indicate that international firms have lower operating performance than non-international firms, and the market valuation of international firms is decreasing in the magnitude of outward foreign direct investment (OFDI). We also find that the valuation effects of government involvement in internationalization through political connections are contingent on the ownership of the firm.

We first extend the existing literature by analyzing a large sample of publicly listed firms from 2003 to 2013 and provide a more generalizable analysis of the relationship between internationalization and market valuation in China. Second, we contribute to the international finance literature that analyzes the market valuation of international firms from emerging countries, where the institutions that shape the rationales and strategies for internationalization are different from developed countries for which conventional international business theories are established. The mainstream perspective assumes that firms will internationalize based on a definable monopolistic competitive advantage that allows them to secure enough return to cover the additional costs and risks associated with international operations. However, firms from emerging countries may choose to internationalize for other reasons, such as avoiding fierce domestic competition, acquiring needed

assets, and responding to internationalization promotion policies from the government (Luo and Tung 2007). Such differences in the rationales for internationalization lead to differential valuation of international operations. Third, prior research has uncovered several factors that affect the market valuation of international operations such as international corporate diversification (Errunza and Senbet 1984), investment in company-specific skills (Morck and Yeung 1991), and agency costs (Christophe 2002). Our study complements that research by considering the government involvement in promoting internationalization in emerging countries like China, and the impact of the involvement through political connections on the market valuation of international firms. In this regard, we deepen understanding of the determinants of the valuation of international operations.

## **2. Institutional background and hypothesis development**

### **2.1 Institutional background**

To attract foreign direct investment and modern technology and deepen reintegration with the global economy, China began “open door” policies in 1978. Since then, China has received increasing recognition as a major host country for internationally expanding firms. However, only a few studies have focused on the “outward” internationalization by Chinese firms (e.g., Buckley et al. 2007).

Chinese firms access foreign markets through both export and outward foreign direct investment (OFDI). The Chinese government implemented a series of policies to encourage exports since 1980s. For example, it adopted an export tax rebate policy in 1985, which refunds or exempts value-added and consumption taxes, and increased the export tax rebate rates for certain products in 2009. With these favorable policies and admission to the WTO in 2001, China’s exports have increased substantially, overtaking Germany to become the world’s largest exporter in 2010.<sup>1</sup>

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<sup>1</sup> See WTO Press Release: “Trade to expand by 9.5% in 2010 after a dismal 2009”, March 26<sup>th</sup> 2010, and International

In contrast to exports, the Chinese government's initial policy towards OFDI before 2001 was quite passive and highly regulated, focusing on FDI inflows rather than FDI outflows. It was not until 2001 that the Chinese government started to focus more on OFDI and instituted initiatives aimed at promoting international competitiveness of Chinese firms by further reducing or eliminating foreign-exchange-related fiscal and administrative obstacles to international investment (Buckley et al. 2007). Since then, OFDI has grown rapidly to the point where China is now the world's second largest outward direct foreign investor, with a total of US \$116 billion in flows at the end of 2014 (UNCTAD 2015).

It is worth noting that despite the series of policies to promote exports and OFDI, the Chinese government still maintains tight control over the internationalization of Chinese firms. All state-owned enterprises (SOEs) have to apply for OFDI approval from the Ministry of Commerce. OFDI projects investing in 135 designated countries by Chinese non-state-owned enterprises (NSOEs) need to be approved by the local (provincial-level) branch of the Foreign Economic Relation & Trade Commission. In addition, the Chinese government still maintains relatively strict exchange controls through various regulators such as People's Bank of China and State Administration of Foreign Exchange (Luo et al. 2010).

## **2.2 Related research on internationalization**

Internationalization may enhance shareholder value by exploiting firm-specific assets, increasing operating flexibility, and satisfying investor preferences for holding globally diversified portfolios (Errunza and Senbet 1984, Morck and Yeung 1991, Denis et al. 2002). For firms in emerging markets such as China, India, and Brazil, internationalization may enable firms to circumvent disadvantageous

domestic conditions such as regional protectionism, limited access to capital, and poor local infrastructure, and thereby to acquire the necessary finance, technology, and management inputs (Buckley et al. 2007).

There are also plausible reasons why international operations could reduce firm value. International firms may face differences in laws, tax policy, language, culture, and local competition, which make firms with international operations more complex and difficult to manage than purely domestic firms (Christophe 2002, Denis et al. 2002). Such complexity may lead to increasing transaction costs such as political costs, foreign exchange costs, and coordination costs between units in different geographic regions (Denis et al. 2002; Reeb et al. 2001). The complexity of international operations also makes it more difficult for outside shareholders to understand and scrutinize the firm's activities, thus giving the controlling owners or managers more discretion to act in their own interest at the expense of outside shareholders (Morck and Yeung 1991, Christophe 2002).

The empirical evidence on the benefits of internationalization is mixed. Most studies focus on developed countries such as the U.S. For example, Errunza and Senbet (1984) find a positive relation between market valuation and degree of internationalization, and interpret their finding as a benefit of providing investors with international diversification opportunities. Likewise, Morck and Yeung (1991) find that international operations measured by the number of foreign subsidiaries have a positive impact on Tobin's  $q$  for international firms with higher intangible assets or skills, such as more investment in R&D. In contrast, other studies find a negative relation between market valuation and international operations. For example, Christophe (1997) finds that international operations during the 1980s are associated with decreased firm value because of foreign exchange risk. Denis et al. (2002) report that increase in geographical diversification over time is associated with a reduction in firm



value, and conclude that the costs of global diversification outweigh the benefits.

### **2.3 Hypothesis development**

Much of the early work posits that an international firm from a developed country first grows market share in its domestic market on the back of some market-based or product-based competitive advantages, and then goes abroad using these advantages to compensate for the additional costs of international operations. Unlike that research, the competitive advantages of firms from emerging countries like China, with the exception of a few firms such as Haier, Huawei and Lenovo, are based on price competition, i.e., cost advantage, rather than leading edge technology or product differentiation. Given that the majority of Chinese firms do not have monopolistic advantages in international markets, internationalization may not bring value to investors. This is consistent with Morck and Yeung (1991), who argue that internationalization may not increase market valuation in the absence of company-specific skills such as more investment in R&D. Moreover, it is likely that internationalization could lead to a reduction in market valuation in an emerging country like China.

Investors may place a lower market valuation on Chinese international firms relative to domestic firms because international firms are perceived as more opaque, and the information frictions and monitoring costs are higher due to the different cultural and legal environments and geographical dispersion (Reeb et al. 2001, Denis et al. 2002, Mian 2006). Furthermore, the weaker legal environment, lower investor protection, and lower quality of governance in China can exacerbate these issues (Allen et al. 2005).

The complexity associated with the geographic dispersion of sales, assets, and personnel, and the differences in laws, tax policies, languages, and cultures may significantly increase information asymmetry between outsiders and insiders as the cost of gathering and interpreting the information on

international operations is higher than that of domestic operations (Reeb et al. 2001, Denis et al. 2002). For example, Thomas (1999) finds that investors do not fully understand (or trust) foreign earnings, and one explanation for his findings is that the costs to access databases and analytical tools for average investors are too high because of the relative paucity of information on foreign operations (Callen et al. 2005). Complementing the finance literature, research in management argues that information asymmetry related to internationalization also stems from agents having more localized and specific knowledge developed during the internationalization process than principals and because interpreting that knowledge needs more information about the laws, tax policies, languages, and cultures in which the firm is diversified (Nohria and Ghoshal 1994), which is costly to the principals, i.e., managers in the headquarters and outside shareholders.

The complexity of international operations is also associated with greater discretion for managers and controlling shareholders, leading to higher agency costs within the international firm (e.g., Christophe 1997, 2002, Denis et al. 2002). Managers may have incentives to adopt and maintain value-reducing diversification strategies, even if doing so reduces shareholder wealth (Denis et al. 2002). This is so because managing a multinational firm gives executives greater power and prestige and more opportunities to enjoy executive perquisites (Jensen 1986), increases the level of executive compensation (Jensen and Murphy 1990), and reduces the risk of the relatively undiversified personal portfolios held by executives (Amihud and Lev 1981). This discretion may also facilitate earnings manipulation through international business in order to protect the controlling shareholders' private benefits, even though the cost of this protection is often borne by the minority shareholders (Callen et al., 2005; Christophe 2002). In our setting, as prior literature conjectures, higher agency cost is one of the reasons that corporate diversification reduces firm value (e.g., Scharfstein and Stein 2000). The

international activity could serve as a channel through which blockholders can expropriate substantial gains from the firm; in particular, this expropriation would be more severe in China where investor protection is lower.

An additional consideration for Chinese international firms is institutional dependence associated with the government's tight control over the economy. Although economic reforms to transition from a command economy to a market economy have been in process for three decades, the government still plays a major role in the economy. Among the most salient roles of the government is promoting economic development and maintaining social stability. Thus, the government has an incentive to intervene in the activities of firms under its jurisdiction (Lin and Li 2008, Xu 2011). However, the intervention and involvement of the government in firms' operations might distort their objectives from maximizing shareholder wealth to serving the government's goals, thereby reducing firms' profitability and efficiency (Fan et al. 2007, Lin and Li 2008, Chen et al. 2008, Chen et al. 2011). Given that the promotion of internationalization is one of the more recent strategies and frameworks proposed by the Chinese government and the systems related to internationalization are under government control through administrative approval, Chinese firms' international operations inevitably are influenced by the government, leading to high institutional dependence. This institutional dependence could reduce firm value in two ways: (1) the distortion of internationalization's objectives weakens firms' incentives to enhance value such as by investing in R&D and advertising-related intangible assets (Morck et al. 2008) as pleasing politicians has become one of the vital tasks for these firms, and (2) the exacerbation of moral hazard because of the government subsidies (Lin and Li 2008) because the benefits from such government subsidies and lower costs of capital for internationalization ex post would result in decreased effort from the

manager, thus increasing the agency costs within the firm. The preceding discussion suggests that the valuation effect of international operations is more likely to be negative. Accordingly, we formulate our hypothesis (in alternate form) as follows:

**Hypothesis:** The market valuation of international firms is lower than that of non-international firms.

### **3. Research Method**

#### **3.1 Data sources and sample selection**

We test our hypothesis using a sample of publicly listed firms on the Shanghai and Shenzhen stock exchanges. Our sample period begins in 2003, when all the firms in the China Securities Market and Accounting Research (CSMAR) database provide detailed information based on which we can identify their ultimate controlling shareholders, and ends in 2013, the most recent year for which we have data. We obtain data on geographic segments from the Wind Information Co., Ltd (WIND) database. We manually construct a panel data set of OFDI by Chinese listed firms from their annual reports. We define OFDI as an overseas subsidiary in which a listed firm holds at least 20% of the equity. We exclude subsidiaries located in Hong Kong, Singapore, Macau, and the Caribbean tax havens (Bermuda, Virgin Islands, and Cayman Islands), because OFDI from China to these destinations is likely to be driven by tax considerations. We obtain other financial data from the CSMAR database. Because some of our variables, including sales growth and standard deviation of return on assets, require several years of prior data, we use data from as early as 1999.

We eliminate 286 observations for firms from the financial sector, 4,184 observations with insufficient data to calculate sales growth and standard deviation of return on assets, and 155 observations for firms that we were unable to identify the ultimate controlling shareholder. We then

eliminate 1,874 firm-years whose foreign sales are nonzero but less than five percent of total reported firm sales in that year, due to the ambiguity in classifying these firms as international or non-international firms.<sup>2</sup> We also delete 157 observations with missing data. Our final sample includes 13,089 firm-years for 1,962 firms. Panel A of Table 1 summarizes our sample selection procedure.

Our analyses call for separating international firms and non-international firms. We classify a firm as international if it has sales outside mainland China of at least five percent of total reported firm sales in that year, and as non-international if it does not have sales outside mainland China.

Our sample is representative, covering 67.26 percent of the population of CSMAR A-share firms. Table 1, Panel B shows that the percentage of international firms increases over time, from 25.89% in 2003 to 45.49% in 2013. Untabulated results show that the industry composition of our sample is similar to that of the CSMAR population, with over half the observations (55.34%) representing manufacturing firms.

## **3.2 Variable measurement and research design**

### **3.2.1 Measuring market value**

Following prior studies (e.g., Morck and Yeung 1991, Dowell et al. 2000), we use Tobin's  $q$  ( $Tq$ ), which we compute using market value of common equity plus book value of total liabilities divided by book value of total assets, as our measure of a firm's market valuation. One difficulty with this measure is that a large proportion of the shares of listed firms in China cannot be traded freely and therefore do not have market prices during our sample period. Given this constraint, one straightforward approach is to use the price of the tradable shares as a proxy for the price of the

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<sup>2</sup> In a sensitivity test, we repeat our main analyses after including these 1,874 firm-year observations. The untabulated results show that the inferences are consistent with those reported for the main tests.

non-tradable shares. However, this method is likely to overstate the market value of the firm because non-tradable shares should have a lower value than tradable shares. Thus, following Bai et al. (2004), we define two additional valuation measures:  $Tq_{70}$  and  $Tq_{80}$ , which we compute by taking a 70% and an 80% discount, respectively, for non-tradable shares.

### **3.2.2 Measuring internationalization**

Following prior literature (Denis et al. 2002; Gande et al. 2009), we use an indicator variable to denote a firm's engagement in international operations. This variable, *Intn*, equals 1 if the firm has sales outside mainland China (i.e., international firm), and 0 otherwise (i.e., non-international firm). In robustness checks, we also measure the extent of internationalization using a continuous variable, *Fsales*, which is the ratio of a firm's sales outside mainland China to its total sales.

In addition, Johanson and Vahlne (1977, 2009) find that a firm's engagement in a specific country market develops according to the following established chain: (1) initially, there are no regular export activities performed in the market; (2) next, export takes place via independent representatives and later through a sales subsidiary; (3) eventually, manufacturing follows. Drawing on Johanson and Vahlne's theory and findings, we use the following two measures to reflect a firm's stage of internationalization: (1) the percentage of total sales derived from the firm's activities outside China (*Fsales*), and (2) whether the firm has overseas trading or manufacturing subsidiaries. We create the following binary internationalization process variables: (1) *INTNPCS1*, which equals 1 if the firm has no sales outside China (i.e.,  $Fsales = 0$ ) and no overseas trading or manufacturing subsidiaries, and 0 otherwise; (2) *INTNPCS2*, which equals 1 if the firm has *Fsales* greater than 5 percent in the last three years and no overseas trading or manufacturing subsidiaries, and 0 otherwise; (3) *INTNPCS3*, which equals 1 if the firm has *Fsales* greater than 5 percent in the last three years and

overseas trading subsidiaries but no manufacturing subsidiaries, and 0 otherwise; (4) *INTNPCS4*, which equals 1 if the firm has *Fsales* greater than 5 percent in the last three years and manufacturing subsidiaries (and does or does not have trading subsidiaries), and 0 otherwise. Panel B of the Appendix presents detailed definitions of the internationalization process variables.

*Intn* indicates whether a firm has *international operations*, and *INTNPCS1* to *INTNPCS4* identify the stage of the *internationalization process*.

### 3.3 Model specification

Our empirical model draws on prior work by Morck and Yeung (1991) and Gande et al. (2009), who investigate the market valuation of international firms relative to non-international firms. We specify the model as follows:

$$\begin{aligned}
 Tq = & \alpha_0 + \alpha_1 Intn + \alpha_2 Size + \alpha_3 Lev + \alpha_4 Capex + \alpha_5 Ros + \alpha_6 Intang \\
 & + \alpha_7 Turnover + \alpha_8 Growth + \alpha_9 Beta + \alpha_{10} Sd\_Roa + \alpha_{11} IndDiv \\
 & + \sum \eta_t Year_t + \sum \theta_j Industry_j + \varepsilon
 \end{aligned} \tag{1}$$

The dependent variable, *Tq*, is Tobin's *q*, and the independent variable of interest is the indicator variable *Intn*. A positive (negative) value of  $\alpha_1$ , the coefficient of interest, will indicate that the market valuation of international firms is higher (lower) than that of non-international firms.

We also use the following model specification to examine the effects of the stage of the internationalization process on market valuation:

$$\begin{aligned}
 Tq = & \alpha_0 + \alpha_1 INTNPCS2 + \alpha_2 INTNPCS3 + \alpha_3 INTNPCS4 + \alpha_4 Size + \alpha_5 Lev + \alpha_6 Capex \\
 & + \alpha_7 Ros + \alpha_8 Intang + \alpha_9 Turnover + \alpha_{10} Growth + \alpha_{11} Beta + \alpha_{12} Sd\_Roa \\
 & + \alpha_{13} IndDiv + \sum \eta_t Year_t + \sum \theta_j Industry_j + \varepsilon
 \end{aligned} \tag{2}$$

The independent variables of interest are *INTNPCS2*, *INTNPCS3* and *INTNPCS4*. Positive (negative) values of  $\alpha_2$ ,  $\alpha_3$ , and  $\alpha_4$  will indicate that the market valuation is higher (lower) for firms at different stages of the internationalization process relative to firms with no international activity.

We control for several factors that prior research indicates could affect firm value. These factors include size, leverage, capital expenditures-to-sales ratio, operating margin, intangible assets-to-sales ratio,<sup>3</sup> turnover, growth and risk. We present detailed definitions of these variables in Panel A of the Appendix. We also include year and industry indicator variables to control for variations in market valuation over time and across industries. We winsorize each continuous variable at its 1<sup>st</sup> and 99<sup>th</sup> percentile to mitigate the undue influence of extreme values.

## 4. Results

### 4.1 Descriptive statistics

Table 2 presents descriptive statistics for the full sample (Panel A) and the international and non-international firm subsamples (Panel B). As shown in Panel A, the mean of Tobin's  $q$  is 2.21 if we do not discount non-tradable shares, and 1.83 (1.77) if we discount non-tradable shares at 70% (80%). These results are consistent with prior studies on Chinese capital markets (e.g., Bai et al. 2004). Various performance and risk measures such as  $Lev$  and  $Ros$  indicate that our sample firms are financially healthy.

Table 2, Panel B shows that the means of all three Tobin's  $q$  measures for the international firms are significantly lower than their corresponding values for the non-international firms. The lower valuation for international firms relative to non-international firms is in line with the findings of Denis et al. (2002) and Christophe (2002). Generally, international firms are larger ( $Size$ ), less leveraged ( $Lev$ ), have higher capital expenditures ( $Capex$ ), higher asset turnover ( $Turnover$ ), lower sales growth ( $Growth$ ), higher  $Beta$ , lower volatility of return on assets ( $Sd\_Roa$ ), are less industrially diversified

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<sup>3</sup> Prior studies (e.g., Morck and Yeung 1991, Gande et al. 2009) use R&D and advertising expenditures as proxies for investment in intangibles. However, because the disclosure of R&D and advertising expenditures is not mandatory in China, the non-availability of data on R&D expenditures and advertising expenditures prevents us from doing so. Therefore, we use the ratio of book value of intangible assets to total sales as an alternative measure.



(*IndDiv*), and are less likely to be SOEs. The results show that when compared to non-international firms, international firms have higher mean *Ros* and lower mean *Intang*.

## 4.2 Univariate correlations

For brevity, we do not tabulate the correlation matrix and only discuss the correlations between the market valuation variable and the internationalization variables. Consistent with the descriptive statistics in Table 2, we find a significant negative correlation between *Intn* and Tobin's *q* regardless of whether we discount non-tradable shares (the coefficient = -0.08, -0.07, -0.06;  $p < 0.01$ ). We also find a significant positive correlation between Tobin's *q* and *INTNPCS1* (coefficient = 0.06;  $p < 0.01$ ), and significant negative correlations between Tobin's *q* and *INTNPCS2*, *INTNPCS3* and *INTNPCS4* (coefficient = -0.03, -0.05, -0.03;  $p < 0.01$ ), indicating that firms engaged in advanced stages of the internationalization process are associated with lower market valuation.

## 4.3 Regression results

### 4.3.1 Main results

Since a firm can appear several times in our sample and the residuals may be correlated over time and across firms, we report t-values for regression coefficients based on standard errors adjusted for clustering at the firm and year levels throughout the paper. Table 3 presents the regression results using the three variants of Tobin's *q* as the dependent variable. As shown in the table, the coefficient on *Intn* is negative and significant at the 1% level in columns (1) - (3), and discounts for international firms are 0.23, 0.19 and 0.18 when using *Tq*, *Tq\_70* and *Tq\_80*, respectively, as the dependent variable. The lower valuation for international firms suggests that the assessed costs of internationalization exceed the benefits.

We present the multivariate results relating market valuation to the stage of the internationalization process in columns (4) - (6) of Table 3. The results indicate that the coefficients on *INTNPCS2*, *INTNPCS3* and *INTNPCS4* are *each* negative and significant at the 1% level. These results indicate that the market discounts the value of firms that are at more advanced stages of internationalization. Also relevant is that the magnitudes of the coefficients on the three internationalization variables become progressively more negative as the stage of internationalization progresses from no internationalization to having a foreign manufacturing subsidiary. When the dependent variable is *Tq*, the coefficient on *INTNPCS2* is -0.1648, indicating that firms with foreign sales exceeding 5% and no foreign subsidiaries are valued lower than firms with no foreign sales. By comparison, the coefficient on *INTNPCS4* is considerably lower at -0.2455, indicating that firms with foreign sales and a foreign manufacturing subsidiary are valued even lower. The results in Table 4 are consistent with our hypothesis that internationalization is associated with lower market valuation, and the stage of internationalization is negatively associated with market valuation.

For the sake of brevity, we restrict our discussion of the results of this and the other models to the relations between the dependent variable and the primary independent variables of interest and do not discuss the relations with the control variables.<sup>4</sup>

#### **4.3.2 Valuation effect of changes in internationalization**

To complement our cross-sectional analysis, we also examine whether changes in internationalization are associated with changes in market valuation. From the full sample, we identify the years in which a firm significantly changes its level of internationalization. Since we use international operations

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<sup>4</sup> As defined earlier, we use the percentage of a firm's total sales outside mainland China (*Fsales*) as an alternative measure of internationalization. The untabulated results indicate that the coefficient on *Fsales* is negative and statistically significant at the 5% level or better, which further corroborates our main findings.

(*Intn*) and internationalization process (*INTNPCS1* to *INTNPCS4*) to measure internationalization, we define changes in internationalization in the following two ways: (1) the firm experiences a change in *Fsales* above (below) 5 percent; (2) the firm experiences a change to *INTNPCS3* or *INTNPCS4* or ceases conducting OFDI.

We then employ a difference-in-differences approach to test whether market valuation changes are associated with changes in internationalization. We first match each treatment firm (i.e., a firm that experiences a change in internationalization) with a control firm (i.e., a firm that does not experience a change in internationalization) by year, industry, and firm size (measured as the natural logarithm of total assets) and then estimate the following regression to test our hypothesis:

$$y_{it} = \alpha_0 + \alpha_1 CHG_i + \alpha_2 AFT_t + \alpha_3 CHG_i * AFT_t + X_{it} \quad (3)$$

where  $i$  and  $t$  are firm and time subscripts, respectively. The dependent variable,  $y_{it}$ , represents the change in market valuation.  $CHG_i$  is an indicator variable that equals 1 if firm  $i$  experiences a change in internationalization, and 0 otherwise;  $AFT_t$  is an indicator variable that equals 1 for observations after the change in internationalization, and 0 otherwise; and  $X_{it}$  is a vector of control variables which were defined previously. The estimate of the effect of change in internationalization on change in market valuation is  $\alpha_3$ .

We present the difference-in-differences analysis results based on *Fsales* in columns (1) - (3) of Panel A Table 5. The treatment sample includes 632 firm-years representing 316 firms that increased international operations substantially, and the control sample comprises 603 firm-years. As expected, the coefficients on  $CHG_i * AFT_t$  are negative, and significant at the 5% level in all columns. We present the results for the effects of increases in internationalization based on changes in *INTNPCS3* and *INTNPCS4* in columns (4) - (6) of Panel A. The treatment sample includes 450 firm-years

representing 225 firms that first appeared as international firms, and the control sample comprises 427 firm-years. The coefficients on *CHG\*AFT* are negative and significant at the 1% level in all columns.

Panel B presents corresponding results for the effects of decreases in internationalization. The results in columns (1) - (3), are based on a treatment sample that includes 463 firm-years, representing 232 firms that decreased international operations substantially, and a control sample that includes 439 firm-years. We find that the coefficients on *CHG\*AFT* are positive and significant at least at the 5% level in all columns, indicating that the reduction in internationalization is associated with an increase in market value. In columns (4) - (6), we present results based on a treatment sample of 116 firm-years representing 58 firms that no longer have OFDI and a control sample of 114 firm-years. Once again, we find that the coefficients on *CHG\*AFT* are positive and significant at least at the 10% level in the last two columns.

We also conduct additional analysis on the reasons for the changes in internationalization. The untabulated results indicate that firms experiencing increases in firm size (measured as the natural logarithm of sales), growth and industrial diversification, and decreases in turnover are more likely to exhibit an increase in internationalization. Increasing industrial diversification and decreasing turnover indicate that increasing the extent of internationalization may not be associated with higher efficiency.<sup>5</sup> In addition, we fail to find any clear evidence why a firm decreases its internationalization.

#### **4.3.3 Effect of internationalization on firm's operating performance**

We next examine whether the operating performance of the firm decreases following internationalization. We test the difference in operating margin, defined as earnings before interest

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<sup>5</sup> Several studies document that industrial diversification is negatively related to market valuation. See, for example, Lang and Stulz (1994), Servaes (1996), and Denis et al. (2002).

and taxes (EBIT) divided by sales, between international companies and domestic companies, and expect international companies to have lower operating performance than domestic companies.

Table 5 reports the regression results.<sup>6</sup> The coefficients on *Intn*, *INTNPCS3* and *INTNPCS4* are each negative and statistically significant at least at the 10% level. These results are in line with our expectations and further support our main findings regarding why internationalization is associated with lower market value. The results are qualitatively the same if we use *Fsales* as the independent variable.

#### **4.4 Robustness checks**

##### **4.4.1 Endogeneity**

One major concern is that firm valuation and the decision to internationalize may be endogenously determined. In other words, other underlying factors could drive firm valuation and the decision to internationalize. We use three approaches to alleviate this potential concern. First, following Lu et al. (2014), we include the lagged value of the dependent variable (i.e., *Lag\_Tq*, *Lag\_Tq\_70* or *Lag\_Tq\_80*) as an additional control variable to control for the effects of the underlying variables, assuming that those effects are relatively stable. One concern with this approach is that the lagged dependent variable might suppress the contribution of the included regressors, if those regressors are also relatively stable over time, which in turn could bias against finding support for our hypothesis (Lu et al. 2014). The untabulated results show that the coefficient on *Intn* and *INTNPCS2*, *INTNPCS3*, *INTNPCS4* remain significant in the presence of controls for the lagged dependent variable, indicating that our main results are robust to these controls.

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<sup>6</sup> Our sample is reduced to 13,088 observations due to missing data of *Size*, which is defined as the natural logarithm of total sales.

Second, we use a firm fixed-effects regression, which controls for time-invariant firm-specific factors that relate to both firm performance and international operations and the internationalization process, and thus mitigates concerns about omitted variables. The untabulated results indicate that the coefficients on *Intn* are negative and significant at least at the 5% level, and the coefficients on *INTNPCS2*, *INTNPC3* and *INTNPCS4* remain negative and significant at least at the 10% level.

Third, we construct two exogenous proxies (instrumental variables, IVs) for international operations and internationalization process to control for potential endogeneity. The first variable (*Airpdis*) is the distance from the headquarters of the firm to the nearest top-15 airport in China. This variable captures the intuition that it is easier for firms located closer to a major airport to conduct international business.<sup>7</sup> The second variable (*IFDI*) is the annual amount of inward foreign direct investment (IFDI) attracted by the province (autonomous region or municipality) where the firm is located. This variable captures the fact that most of the Chinese firms start the internationalization process by cooperating with foreign firms to gain technology and expertise (Child and Rodrigues 2005). We hand collect the distance data from Google map and obtain IFDI data from the National Bureau of Statistics of China (<http://www.stats.gov.cn/>).

Due to missing data on the IVs, our sample is reduced to 12,893 firm-years, representing 1,906 firms. In the first stage, we estimate a model with *Intn* as the dependent variable. The coefficients on *Airpdis* are significantly negative, and the coefficients on *IFDI* are significantly positive, indicating

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<sup>7</sup> A growing body of research uses geography-based variables to explain cross-sectional variations in firm characteristics and policies (See e.g., Kedia and Rajgopal 2009, Hochberg and Lindsey 2010, Becker et al. 2011, Masulis et al. 2012). For example, Becker et al. (2011) argue that lower monitoring costs or asymmetric information is one possible reason why blockholders exhibit a preference for firms headquartered near where they live; thus they use the number of high net worth individuals in the state where the firm is headquartered divided by the number of public firms headquartered in the state as an instrumental variable. Masulis et al. (2012) argue that foreign independent directors may prefer to sit on boards of firms whose headquarters they can more easily reach; thus they use the distance from a firm's headquarters to the nearest top-10 international airport in the U.S. as an instrumental variable.

that our IVs satisfy the validity requirement.<sup>8</sup> the untabulated results indicate that the coefficients on *Intn* are negative, and significant at least at the 10% level.

We are unable to implement the two-stage regression for the internationalization process variables because we have only two IVs. Given that these variables reflect the increase in international involvement, we therefore create a continuous variable, *INTNPCS*, which equals 1 to 4 when *INTNPCS1* to *INTNPCS4* equals 1. The untabulated first stage regression results indicate that the coefficients on *Airpdis* are significantly negative and those on *IFDI* are significantly positive. The untabulated second stage regression results show that the coefficients on *INTNPCS* are negative and significant at least at the 10% level.

#### **4.4.2 Degree of internationalization**

We next examine whether the degree of internationalization, measured as the percentage of a firm's sales outside mainland China to its total revenues (*Fsales*), is related to the previously documented (see Table 3) lower market valuation of international firms. We do so by estimating model (1) using a sample of firms with *Fsales* greater than zero (i.e., the firm has international operations). The untabulated results document that the coefficient on *Fsales* is negative and statistically significant at the 5%, 1%, and 1% level when using *Tq*, *Tq\_70*, and *Tq\_80*, respectively, as the dependent variable. We also find that the coefficients on *INTNPCS3* and *INTNPCS4* are significantly negative.

#### **4.4.3 Alternative estimation technique**

Denis et al. (2002) argue that pooling of cross-sectional and time-series data creates a lack of independence in the regression model errors, which results in deflated standard errors and, therefore, inflated t-statistics. To control for this potential bias, we follow Denis et al. and estimate the

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<sup>8</sup> To qualify as a proper instrument, these instrumental variables must be correlated with the independent variable but not with the dependent variable.

regression models separately for each of the eleven years in our sample, and then use the mean and standard error of the estimated coefficients from these twelve regressions to test our hypothesis. The untabulated results are similar to our previously reported findings; the mean coefficients on *Intn* and *INTNPCS2*, *INTNPCS3* and *INTNPCS4* are significantly negative.<sup>9</sup>

#### **4.4.4 Alternative measure of Tobin's $q$**

We also measure Tobin's  $q$  as the market value of total equity at the end of April following the fiscal year end when the annual reports should be publicly available in China, plus book value of total liabilities divided by book value of total assets. We also define two additional valuation measures of Tobin's  $q$  by taking the 70% and 80% discount for non-tradable shares. The untabulated results show that our findings are insensitive to this alternative definition of Tobin's  $q$ . *Intn*, *Fsales*, and *INTNPCS2*, *INTNPCS3* and *INTNPCS4* are each significantly negatively associated with Tobin's  $q$ .

### **5. Further Analyses**

Given that the results presented in the previous section provide robust evidence that firms engaged in international operations exhibit lower valuation than non-international firms, we next conduct cross-sectional analyses to identify reasons for the observed decrease in valuation. As discussed earlier, potential reasons include concerns about information asymmetry, agency costs, and political uncertainty associated with international operations. We therefore examine the factors related to these concerns: number of foreign subsidiaries and political connections. We also investigate the institutional quality effects of internationalization on market valuation.

#### **5.1 Effect of number of foreign subsidiaries on market valuation**

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<sup>9</sup> Additionally, all yearly coefficients on *Intn* are negative and nine of those eleven coefficients are statistically significant.



We posit that firms experience increased transaction costs as they engage more in international operations. One example of such a cost is the coordination cost incurred to exploit potential economies of scope with information-based assets between units in different geographic regions (Denis et al. 2002). Another cost is the increased potential for tunneling by controlling shareholders because it is more difficult for outside stakeholders to monitor overseas operations (Callen et al. 2005, Denis et al. 2002). We utilize OFDI data to provide further evidence on this issue. Our sample includes 1,946 firm-years, representing 500 firms. Following Sullivan (1994), we define *NUMSUB* as the natural logarithm of the number of overseas subsidiaries of a firm. The results presented in Table 6 support our prediction; the coefficient on *NUMSUB* is significantly less than zero at least at the 5% level for all three Tobin's *q* measures, which is consistent with coordination costs increasing with the number of overseas subsidiaries and/or reflecting investors' increased concern about the expropriation of assets by controlling shareholders.

## **5.2 Interactive effect of internationalization and political connections on market valuation**

A unique feature of Chinese firms' internationalization is government intervention (Morck et al. 2008), which could increase firms' dependence on the government. We investigate how dependence on the government relates to the market valuation of Chinese firms' internationalization, with particular focus on political connections. The literature provides evidence that political connections can make valuable resources available to firms (Khwaja and Mian 2005) and increase the likelihood of a bailout (Faccio et al. 2006). Other research also finds that politically connected firms have lower earnings quality (Chaney et al. 2011). How, in Chinese setting, Fan et al. (2007) argue that political connections reduce firm value because they use a lower percentage of professional executives and directors. Given prior studies present contrasting evidence on the valuation effects of political

connections, whether such connections increase or decrease the market valuation of international firms warrants further analysis. Consistent with extant research that the valuation effects of political connections vary with the type of ownership, i.e., SOE and NSOE (Hung et al. 2012, Piotroski and Zhang 2014), we propose that the interactive effects of internationalization and political connections on firm market valuation are contingent on firm ownership.

The Chinese government retains control over SOEs after privatization through the appointment and promotion of the CEO and/or the chairman of the board (Fan et al. 2007). SOE managers therefore have an incentive to achieve the government's objects because doing so would facilitate appointment to government positions (Hung et al. 2012). However, catering to the government's objectives by politically connected SOEs often results in deviation from the firm's goal of shareholder wealth maximization, and thus decreases firm value (Bai et al. 2007). As internationalization is a vital policy of the government (Morck et al. 2008), we argue that the international operations conducted by politically connected SOEs are to favor the government rather than the shareholders. Unlike for SOEs, political connections are more likely to be a "safety net" for NSOEs, because such connections help avoid expropriation by the government and facilitate access to valuable resources controlled by the government (Allen et al. 2005, Li et al. 2008). Hence, political connections might be more likely to bring benefits to NSOEs to promote internationalization. The divergent roles of political connections in internationalization for SOEs and NSOEs lead us to conjecture that the negative effect of internationalization is attenuated by political connections for NSOEs. Accordingly, we expect a positive interactive effect of internationalization and political connections on firm market valuation for NSOEs but not for SOEs.

Following Fan et al. (2007) and Chen et al. (2011), we define a firm as being politically

connected if the chairman of the board or the CEO served as a current or former government bureaucrat, i.e., a current or former officer of the central or local governments or the military. We manually collect the political connection data from 2008 to 2013.<sup>10</sup> Of the 7,844 observations in the international firm sample from 2008 to 2013, we find that 2,700 are politically connected. We estimate the following models using subsamples of SOEs and NSOEs:

$$Tq = \alpha_0 + \alpha_1 Intn + \alpha_2 PC + \alpha_3 Intn * PC + X + \varepsilon \quad (4)$$

$$Tq = \alpha_0 + \alpha_1 INTNPCS2 + \alpha_2 INTNPCS3 + \alpha_3 INTNPCS4 + \alpha_4 PC + \alpha_5 INTNPCS2 * PC + \alpha_6 INTNPCS3 * PC + \alpha_7 INTNPCS4 * PC + X + \varepsilon \quad (5)$$

where  $PC$  is an indicator variable that equals 1 if the firm is politically connected, and 0 otherwise;  $Intn$  and  $INTNPCS2$  to  $INTNPCS4$  are dependent variables and  $X$  is a set of control variables, which were defined before.

We present the regression results in Table 7.<sup>11</sup> In Panel A, the coefficients on the interaction between  $Intn$  and  $PC$  are positive but insignificant in columns (1) - (3), indicating that political connections do not have a significant impact on the relationship between international operations and market value for SOEs, whereas in columns (4) - (6) the corresponding coefficients are positive and significant at the 5% level for NSOEs. These results indicate that political connections have a significant impact on the relationship between international operations and market value for NSOEs. Further tests show that the difference between the coefficients on  $Intn * PC$  for NSOEs and SOEs is significant at the 5% level. In sum, these results suggest that the negative effect of internationalization on market valuation is attenuated by political connections only for NSOEs. Panel B indicates that our

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<sup>10</sup> We thank Jingjing Pan for providing the personal profile data of the CEOs and the board of directors. One reason the sample starts from 2008 is that it is a year that Chinese government has issued a lot of policies to promote the internationalization of Chinese firms, especially OFDI, and the Chinese OFDI has been increasing substantial since that year.

<sup>11</sup> The untabulated results show that there is a significant negative relationship between political connections and market valuation, which is consistent with Fan et al. (2007).

results remain robust when we use *INTNPCS2*, *INTNPCS3* and *INTNPCS4* as alternative measures of internationalization.

### **5.3 Interactive effect of internationalization and institutional quality on market valuation**

Prior literature documents that the valuation effects of corporate diversification could vary depending on institutional quality (e.g., Fauver et al. 2003), and be affected by the country in which the firm diversifies. Luez et al. (2003) find lower earnings management in countries with better investor protection, suggesting that the valuation effect of firms with subsidiaries in countries with stronger investor protection may be higher than that of firms with subsidiaries in countries with weaker investor protection. These investors would benefit from higher earnings quality, and thus place a higher valuation on such firms (Bushman et al. 2004). Consistent with this argument, Gande et al. (2009) find that valuation of international diversification is higher if the firm diversifies into countries with creditor rights that are stronger than those of the United States. We therefore examine the interaction effect of international diversification and institutional quality on market valuation.

Measuring institutional quality is a challenge because many Chinese firms conduct internationalization only through export via independent representatives or domestic international trade subsidiaries, which involves relatively less commitment of resources to the international markets, and thus obscures the effect of institutional quality. In contrast, OFDI requires firms to invest, manage, and operate overseas, fully exposing themselves to the institutional environments into which they diversify. We therefore use the data on OFDI to examine the interactive effects of internationalization and institutional quality on market valuation of firms.<sup>12</sup>

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<sup>12</sup> In order to give the readers a whole picture of the OFDI of Chinese firms, we also examined the OFDI destinations of Chinese firms in the period of 2001 to 2013 in which we include OFDI located in Hong Kong, Singapore, Macau, and Caribbean tax heavens. The untabulated results show that Hong Kong is the most common destination of OFDI, comprising 37.15% of the sample firms. Chinese firms also conduct OFDI in developed countries such as the U.S., the U.K., and Australia, as well as in emerging countries such as Thailand, India, and Russia.

Our sample includes 2,443 firm-year observations with OFDI.<sup>13</sup> We employ propensity score matching to control for potential endogeneity of OFDI. We first use a probit model to estimate a firm's propensity to conduct OFDI. The dependent variable is a dichotomous variable that equals 1 if the firm has OFDI and 0 if it is a non-international firm, and the explanatory variables are the natural logarithm of total sales ( $Ln(sales)$ ),  $Fsales$ ,  $Lev$ ,  $Age$ ,  $Roa$ ,  $Intang$ , ownership of the largest shareholder ( $Fshare$ ), a dummy variable indicating whether or not the firm is a SOE ( $SOE$ ), a dummy variable indicating whether the firm is located in a coastal area ( $Coast$ ), and year and industry dummies following Gande et al. (2009) and Lu et al. (2014). The untabulated results indicate that larger firms, firms with a large fraction of sales overseas, and firms located in coastal areas are more likely to conduct OFDI, while SOEs, profitable firms, firms with higher leverage, and firms whose largest shareholder has higher ownership are less likely to conduct OFDI.

We then match the OFDI firms with non-OFDI firms based on the predicted propensity scores using one-to-one matching, and estimate the following model on the OFDI and control firms:

$$Tq = \beta_0 + \beta_1 Intn + \beta_2 CRdummy + \beta_3 Intn * CRdummy + X + \varepsilon \quad (6)$$

where  $CRdummy$  indicates whether the countries in which the firm has OFDI have stronger/weaker creditor rights than those of China;  $X$  is a set of control variables, which were defined before. Following Gande et al. (2009), we construct this variable as follows. For each firm-year, we calculate the weighted average of the creditor rights variable across all countries in which the firm has OFDI, the weights being the amount of OFDI in that country divided by the firm's total amount of OFDI during the same year. If this weighted average is larger than 2 (since the creditor rights variable for China is 2), the creditor rights dummy variable equals 1, and 0 otherwise. The creditor rights data

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<sup>13</sup> As indicated earlier, we exclude firms located in Hong Kong, Singapore, Macau, and the Caribbean (Bermuda, Virgin Islands, and Cayman Islands) tax havens.

(scale of 0–4, with a higher value indicating stronger creditor rights) used for constructing the creditor rights dummy variable is from La Porta et al. (1998) and Allen et al. (2005). Other variables are as defined earlier.

We restrict the OFDI sample to firms with a ratio of foreign sales to total sales greater than 5%. Our final sample comprises 1,806 OFDI firm-year observations and 1,805 propensity score matched non-OFDI firm-year observations. We present the regression results in Table 8. As shown in this table, the coefficient on the interaction of *Intrn* and *CRdummy* is positive and significant at the 5% level in all columns, indicating that firms diversified into countries with higher creditor rights exhibit increases in market valuation. The results are qualitatively similar if we use *Fsales* to measure internationalization. These results are consistent with Gande et al. (2009) conjecture that international diversification can benefit firms through the corporate governance channel.

## **6. Conclusions**

Although we have ample knowledge and empirical evidence on how investors in developed economies value international operations, we know relatively little about how the market values international operations in emerging economies, where many firms are seeking international markets. We examine this issue using the leading emerging economy, China, as our setting. With but a few exceptions, the underlying rationales for most Chinese firms to internationalize are to avoid a range of disadvantageous domestic conditions, gain competitive strength, obtain support from the government, and exploit their cost advantage. However, international markets may also present additional risks and barriers to entry above and beyond those faced domestically, which are hard for firms from China to overcome, and the benefits from the government could be weakened by the way firms remain beholden to administrative approval and bear a legacy of institutional dependence. In addition, the

lower investor protection in China may facilitate expropriation of assets from the controlling shareholders through international operations.

We present evidence that the market valuation of international firms is lower than that of non-international firms. These results are robust to a variety of sensitivity checks. We also investigate some viable reasons for this observed lower valuation, such as the lower operating performance and higher transaction costs. We also find that valuation effects of the government's involvement in internationalization through political connections are contingent on the ownership of the firm.

## References

- Allen, F., J. Qian, M. Qian. 2005. Law, finance, and economic growth in China. *Journal of Financial Economics* **77** 57-116.
- Amihud, Y., B. Lev. 1981. Risk reduction as a managerial motive for conglomerate mergers. *Bell Journal of Economics* **12** 605-617.
- Bai, C., Q. Liu, J. Lu, F. Song, J. Zhang. 2004. Corporate governance and market valuation in China. *Journal of Comparative Economics* **32** 599-616.
- Bai, C., J. Lu, Z. Tao. 2006. The multitask theory of state enterprise reform: empirical evidence from China. *American Economic Review* **96** 353-357.
- Bartov, E., G. Bodnar, A. Kaul. 1996. Exchange rate variability and the riskiness of U.S. multinational firms: Evidence from the breakdown of the Bretton Woods system. *Journal of Financial Economics* **42** 105-132.
- Becker, B., H. Cronqvist, R. Fahlenbrach. 2011. Estimating the effects of large shareholders using a geographic instrument. *Journal of Financial and Quantitative Analysis* **46** 907-942.
- Bodnar, G., C. Tang, J. Weintrop. 1999. Both sides of corporate diversification: The value impacts of geographic and industrial diversification. *Johns Hopkins University Working Paper*.
- Buckley, P., J. Clegg, A. Cross, X. Liu, V. Hinrich, P. Zheng. 2007. The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies* **38** 499-518.
- Bushman, R., Q. Chen, E. Engel, A. Smith. 2004. Financial accounting information, organizational complexity and corporate governance systems. *Journal of Accounting and Economics* **37** 167-201.
- Callen, J., O. Hope, D. Segal. 2005. Domestic and foreign earnings, stock return variability, and the impact of investor sophistication. *Journal of Accounting Research* **43** 377-412.



- Chaney, P., M. Faccio, D. Parsley. 2011. The quality of accounting information in politically connected firms. *Journal of Accounting and Economics* **51** 58-76.
- Chen, G., M. Firth, Y. Xin, L. Xu. 2008. Control transfers, privatization, and corporate performance: Efficiency gains in China's listed companies. *Journal of Financial and Quantitative Analysis* **43** 161-190.
- Chen, S., Z. Sun, S. Tang, D. Wu. 2011. Government intervention and investment efficiency: Evidence from China. *Journal of Corporate Finance* **17** 259-271.
- Christophe, S. 1997. Hysteresis and the value of the U.S. multinational corporation. *Journal of Business* **70** 435-462.
- Christophe, S. 2002. The value of U.S. MNC earnings changes from foreign and domestic operations. *Journal of Business* **75** 67-93.
- Denis, D., D. Denis, K. Yost. 2002. Global diversification, industrial diversification, and firm value. *Journal of Finance* **57** 1951-1979.
- Dowell, G., S. Hart, B. Yeung. 2000. Do corporate global environmental standards create or destroy market value. *Management Science* **46** 1059-1074.
- Errunza, V., L. Senbet. 1984. International corporate diversification, market valuation, and size-adjusted evidence. *Journal of Finance* **39** 727-745.
- Faccio, M., R. W. Masulis, J. McConnell. 2006. Political Connections and Corporate Bailouts. *Journal of Finance* **61** 2597-2635.
- Fan, J., T. J. Wong, T. Zhang. 2007. Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics* **84** 330-357.

- Fauver, L., J. Houston, A. Naranjo. 2003. Capital market development, international integration, legal systems, and the value of corporate diversification: A cross-country analysis. *Journal of Financial and Quantitative Analysis* **38** 135-157.
- Gande, A., C. Schenzler, L. Senbet. 2009. Valuation effects of global diversification. *Journal of International Business Studies* **40** 1515-1532.
- Hung, M., T. J. Wong, T. Zhang. 2012. Political considerations in the decision of Chinese SOEs to list in Hong Kong. *Journal of Accounting and Economics* **53** 435-449.
- Jensen, M. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* **76** 323-29.
- Jensen, M., K. Murphy. 1990. Performance pay and top-management incentives. *Journal of Political Economy* **98** 225-264.
- Johanson, J., J. Vahlne. 1977. The internationalization process of the firm-A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* **8** 23-32.
- Johanson, J., J. Vahlne. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* **40** 1411-1431.
- Kedia, S., S. Rajgopal. 2009. Neighborhood matters: The impact of location on broad based stock option plans. *Journal of Financial Economics* **92** 109-127.
- Khwaja, A., A. Mian. 2005. Do lenders favor politically connected firms? Rent provision in an emerging financial market." *The Quarterly Journal of Economics* **120** 1371-1411.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, R. Vishny. 1998. Law and finance. *Journal of Political Economy* **106** 1113-1155.

- Larry, H., R. Stulz, 1994. Tobin's  $q$ , corporate diversification, and firm performance. *Journal of Political Economy* **102** 1248-1280.
- Leuz, C., D. Nanda, P. D. Wysocki. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics* **69** 505-527.
- Lin, J., Z. Li. 2008. Policy burden, privatization and soft budget constraint. *Journal of Comparative Economics* **36** 90-102.
- Lu, J., X. Liu, M. Wright, I. Filatotchev. 2014. International experience and FDI location choices of Chinese firms: The moderating effects of home country government support and host country institutions. *Journal of International Business Studies* **45** 428-449.
- Luo, Y., R. Tung. 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies* **38** 481-498.
- Luo, Y., Q. Xue, B. Han. 2010. How emerging market governments promote outward FDI: Experience from China." *Journal of World Business* **45** 68-79.
- Masulis, R., C. Wang, F. Xie. 2012. Globalizing the boardroom--The effects of foreign directors on corporate governance firm performance. *Journal of Accounting and Economics* **53** 527-554.
- Mian, A. 2006. Distance constraints: The limits of foreign lending in poor economies. *Journal of Finance* **61** 1465-1505.
- Morck, R., B. Yeung. 1991. Why investors value multinationality. *Journal of Business* **64** 165-187.
- Morck, R., B. Yeung, M. Zhao. 2008. Perspectives on China's outward foreign direct investment. *Journal of International Business Studies* **39** 337-350.
- Nohria, N., S. Ghoshal. 1994. 1994. Differentiated fit and shared values: Alternatives for managing headquarters-subsidiary relations. *Strategic Management Journal* **15** 491-502.

- Piotroski, J. D., T. Zhang. 2014. Politicians and the IPO decision: The impact of impending political promotions on IPO activity in China. *Journal of Financial Economics* **111** 111-136.
- Reeb, D., S. Mansi, J. Allee. 2001. Firm internationalization and the Cost of debt financing: Evidence from non-provisional publicly traded debt. *Journal of Financial and Quantitative Analysis* **36** 395-414.
- Servaes, H. 1996. The value of diversification during the conglomerate merger wave. *Journal of Finance* **51** 1201-1225.
- Scharfstein, D., J. Stein. 2000. The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance* **55** 2537-2564.
- Thomas, W. 1999. A test of the market's mispricing of domestic and foreign earnings. *Journal of Accounting and Economics* **28** 243-267.
- Xu, C. 2011. The fundamental institutions of China's reforms and development. *Journal of Economic Literature* **49** 1076-1151.
- United Nations Commission on Trade and Development (UNCTAD). 2015. *World Investment Report*. Geneva, Switzerland.
- World Trade Organization (WTO). 2014. *International Trade Statistics*. Geneva, Switzerland.

## Appendix: Variable Definitions

### Panel A

Variable	Definition
Tq	Tobin's $q$ , defined as firms' market value of common equity plus debt book value, over total assets.
Tq_70	Modified Tobin's $q$ , defined as firms' market value of common equity by taking a 70% discount for non-tradable shares, plus debt book value, over total assets.
Tq_80	Modified Tobin's $q$ , defined as firms' market value of common equity by taking an 80% discount for non-tradable shares, plus debt book value, over total assets.
Fsales	The percentage of a firm's sales outside mainland China to its total sales.
Intrn	A dummy variable that equals 1 if the firm has revenues outside mainland China, and its $Fsales$ is larger than ten percent, and 0 otherwise.
Size	The natural logarithm of book value of total assets or market value of common equity.
Lev	The total liabilities over the total assets.
Capex	The capital expenditures over the total sales.
Ros	The operating income over total sales.
Intang	The book value of intangible assets over total sales.
Turnover	The total sales over total assets.
Growth	The average growth in total sales over the last three years.
Beta	The systematic risk reported in CSMAR.
Sd_Roa	The standard deviation of Roa in the last three years, and Roa is return on assets.
IndDiv	The natural logarithm of the number of industry segments reported by the firm plus 1.
EBIT/Sales	Earnings before interest and taxes (EBIT) divided by sales.
Cfo	The cash flow from operations divided by beginning total assets.
Fshare	The percentage of ownership held by the largest shareholder.
Board	The natural logarithm of number of directors.
Indep	The percentage of independent directors on the board.
Comp	The natural logarithm of sum of total compensation for the three highest-paid managers.
Mhold	Percentage of firm stocks held by top management team
PC	A dummy variable equals 1 if the chairman of the board or CEO served as a current or former government bureaucrat, and 0 otherwise.

SOE	A dummy variable that equals 1 if a firm is owned by the State Asset Management Bureaus or other SOEs, and 0 otherwise.
CRdummy	A dummy variable that equals 1 if the weighted average of the creditor rights variable across all countries in which the firm has OFDI is larger than 2, and 0 otherwise.
Age	The natural logarithm of number of years since the firm was founded.
Roa	The net income over total assets.
Coast	A dummy variable that equals 1 if the firm is located in a coastal area, and 0 otherwise.
Industry	The classification of industry follows the CSRC document, Guidance on Listed Firms' Industries, issued on April, 2001. There are altogether 13 industries coded from A to M, and 10 subindustries under C. We classify all the listed firms into 22 industries as we treat the 10 subindustries under manufacturing as distinct industries.

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Panel B Definition of internationalization process variables

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Variable	Fsales=0%	3- years average Fsales>=5%	Overseas trading subsidiaries	Manufacturing subsidiaries
INTNPCS1=1, 0 otherwise if	Yes	No	No	No
INTNPCS2=1, 0 otherwise if	No	Yes	No	No
INTNPCS3=1, 0 otherwise if	No	Yes	Yes	No
INTNPCS4=1, 0 otherwise if	No	Yes	Yes/No	Yes

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**Table 1 Descriptive information on sample selection, industry and year distribution**

<b>Panel A: Sample selection</b>					
Total firm-year observations available on CSMAR from 2003-2013					19,745
Less:					
Observations of firms in the financial industry					286
Observations with insufficient data to calculate growth of total sales and standard deviation of return on assets					4,184
Observations for firms whose ultimate controlling shareholder cannot be identified					155
Observations for firms whose total foreign sales are nonzero but account for less than ten percent of total reported firm sales					1,874
Observations with missing data to calculated variables					157
Final sample					13,089
<b>Panel B: Trend of Internationalization over the Sample Period</b>					
Year	International firms	% of firm-years in sample	Non-international firms	% of firm-years in sample	Total
2003	239	25.89	684	74.11	923
2004	283	28.97	694	71.03	977
2005	345	33.05	699	66.95	1,044
2006	378	34.65	713	65.35	1,091
2007	429	36.92	733	63.08	1,162
2008	446	38.82	703	61.18	1,149
2009	440	37.93	720	62.07	1,160
2010	503	40.30	745	59.70	1,248
2011	531	41.61	745	58.39	1,276
2012	585	41.94	810	58.06	1,395
2013	757	45.49	907	54.51	1,664
Total	4,936	37.71	8,153	62.29	13,089

Table 1 reports information related to sample selection and distribution. Panel A explains the sample selection process. Panel B reports the trend of internationalization of all listed firms from 2003 to 2013.



**Table 2 Descriptive statistics**

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**Panel A:** Full sample (n=13,089)

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Variables	Mean	Median	Std. Dev	Q1	Q3
Tq	2.2134	1.6785	1.6182	1.2541	2.4946
Tq_70	1.8275	1.3868	1.3198	1.0457	2.0711
Tq_80	1.7720	1.3386	1.2877	1.0112	2.0210
Intn	0.3771	0.0000	0.4847	0.0000	1.0000
Size	22.2662	22.1251	1.0602	21.5077	22.8791
Lev	0.5291	0.5229	0.2510	0.3705	0.6594
Capex	0.0543	0.0370	0.0548	0.0134	0.0767
Ros	0.0174	0.0501	0.3627	0.0097	0.1195
Intang	0.0478	0.0285	0.0619	0.0088	0.0597
Turnover	0.6570	0.5446	0.4760	0.3289	0.8368
Growth	1.3015	1.1610	0.7590	1.0527	1.3035
Beta	1.0862	1.0935	0.2556	0.9382	1.2440
Sd_Roa	0.0410	0.0165	0.0794	0.0074	0.0390
IndDiv	0.9965	1.0986	0.7427	0.0000	1.6094
SOE	0.6338	1.0000	0.4818	0.0000	1.0000

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**Table 2 (continued)**

<b>Panel B: International firms vs. non-international firms</b>						
Variables	International firms (n=4,936)		Non-international firms (n= 8,153)		Test for difference	
	Mean	Median	Mean	Median	Mean	Median
Tq	2.0499	1.6568	2.3124	1.6944	-0.2625***	-0.0376***
Tq_70	1.7201	1.3867	1.8925	1.3868	-0.1724***	-0.0001
Tq_80	1.6730	1.3414	1.8319	1.3368	-0.1589***	0.0046
Size	22.3510	22.1736	22.2148	22.0943	0.1362***	0.0793***
Lev	0.5108	0.5092	0.5401	0.5329	-0.0293***	-0.0237***
Capex	0.0599	0.0439	0.0509	0.0326	0.0090***	0.0113***
Ros	0.0243	0.0384	0.0132	0.0589	0.0111*	-0.0205***
Intang	0.0420	0.0315	0.0512	0.0256	-0.0092***	0.0059***
Turnover	0.7597	0.6561	0.5948	0.4556	0.1649***	0.2005***
Growth	1.2340	1.1581	1.3424	1.1633	-0.1084***	-0.0052
Beta	1.1199	1.1207	1.0658	1.0756	0.0541***	0.0451***
Sd_Roa	0.0343	0.0163	0.0452	0.0165	-0.0109***	-0.0002**
IndDiv	0.8950	1.0986	1.0579	1.0986	-0.1629***	0.0000***
SOE	0.6114	1.0000	0.6474	1.0000	-0.0360***	0.0000***

Table 2 reports sample descriptive statistics. Panel A provides descriptive statistics for the full sample. Panel B presents descriptive statistics for the subsamples of international firms and non-international firms. All variables are as defined in the Appendix. T-tests are used to test differences between the variable means of international firms and non-international firms. Wilcoxon two-sample tests are used to test differences between the variable medians of international firms and non-international firms.

\*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 3 The relation between internationalization and firm valuation**

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Tq	Tq_70	Tq_80	Tq	Tq_70	Tq_80
Intercept	5.1851*** (3.81)	4.2068*** (4.25)	3.8430*** (4.14)	5.0884*** (3.69)	4.1265*** (4.12)	3.7595*** (4.02)
Intn	-0.2334*** (-5.05)	-0.1892*** (-4.50)	-0.1839*** (-4.37)			
INTNPCS2				-0.1648*** (-3.38)	-0.1416*** (-3.29)	-0.1373*** (-3.22)
INTNPCS3				-0.2738*** (-4.53)	-0.2229*** (-4.30)	-0.2193*** (-4.24)
INTNPCS4				-0.2455*** (-2.82)	-0.2362*** (-3.95)	-0.2404*** (-4.18)
Size	-0.0893 (-1.47)	-0.0887** (-2.17)	-0.0779** (-2.06)	-0.0854 (-1.39)	-0.0853** (-2.06)	-0.0743* (-1.94)
Lev	-0.9883*** (-3.52)	-0.5009** (-2.08)	-0.4407* (-1.85)	-0.9916*** (-3.54)	-0.5031** (-2.09)	-0.4429* (-1.86)
Capex	0.0596 (0.20)	-0.0166 (-0.05)	-0.0518 (-0.17)	0.0512 (0.17)	-0.0213 (-0.07)	-0.0555 (-0.18)
Ros	-0.1862* (-1.85)	-0.2117** (-2.51)	-0.2192*** (-2.64)	-0.1884* (-1.87)	-0.2133** (-2.53)	-0.2209*** (-2.66)
Intang	0.5924 (1.41)	0.4516 (1.29)	0.4425 (1.29)	0.5981 (1.42)	0.4499 (1.29)	0.4394 (1.28)
Turnover	0.0720 (1.49)	0.0748* (1.92)	0.0741* (1.93)	0.0712 (1.47)	0.0747* (1.92)	0.0742* (1.94)
Growth	0.0793 (1.63)	0.0042 (0.09)	-0.0074 (-0.16)	0.0801* (1.65)	0.0047 (0.11)	-0.0069 (-0.15)
Beta	-1.2547*** (-6.86)	-0.8926*** (-7.12)	-0.8367*** (-7.04)	-1.2584*** (-6.86)	-0.8945*** (-7.12)	-0.8383*** (-7.04)
Sd_Roa	7.5643*** (12.25)	5.5430*** (11.74)	5.2802*** (11.66)	7.6011*** (12.26)	5.5731*** (11.73)	5.3098*** (11.65)
IndDiv	-0.0727** (-2.10)	-0.0594** (-2.05)	-0.0581** (-2.03)	-0.0714** (-2.06)	-0.0581** (-2.00)	-0.0567** (-1.98)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted $R^2$	0.392	0.395	0.393	0.392	0.395	0.393
F	101.12	124.26	129.21	96.44	118.82	123.61
Number of obs.	13089	13089	13089	13089	13089	13089

Table 3 reports the OLS regression results relating market valuation to level of internationalization. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 4 Changes in internationalization and firm valuation**

	Based on <i>Fsales</i>			Based on <i>INTNPCS3</i> or <i>INTNPCS4</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
	Tq	Tq_70	Tq_80	Tq	Tq_70	Tq_80
Panel A: Increase in internationalization						
Intercept	5.3248*** (3.33)	4.8049*** (3.51)	4.7306*** (3.51)	5.7343*** (3.56)	4.8065*** (3.60)	4.6749*** (3.59)
CHG	0.0310 (0.20)	0.0163 (0.11)	0.0141 (0.10)	-0.0576 (-0.85)	-0.0961 (-1.42)	-0.1015 (-1.47)
AFT	0.0316 (0.21)	0.0154 (0.11)	0.0131 (0.10)	0.0384 (0.33)	0.0290 (0.33)	0.0253 (0.30)
CHG*AFT	-0.4112** (-2.17)	-0.3349** (-2.01)	-0.3240** (-1.98)	-0.3581*** (-3.44)	-0.2502*** (-3.35)	-0.2320*** (-3.40)
Size	-0.1647* (-1.89)	-0.1802** (-2.32)	-0.1824** (-2.37)	-0.1233* (-1.90)	-0.1190** (-2.37)	-0.1184** (-2.44)
Lev	1.2379 (1.41)	1.5146* (1.83)	1.5541* (1.89)	-1.0465** (-2.07)	-0.4710 (-1.15)	-0.3977 (-1.00)
Capex	-1.1948 (-1.03)	-1.2507 (-1.16)	-1.2586 (-1.18)	1.0799 (1.32)	0.6613 (0.86)	0.5851 (0.77)
Ros	-0.6478 (-0.88)	-0.7618 (-1.05)	-0.7781 (-1.07)	0.1564 (0.42)	0.0242 (0.07)	0.0083 (0.02)
Intang	2.3795 (0.82)	2.8913 (1.03)	2.9644 (1.06)	1.9284 (1.33)	1.9541 (1.62)	1.9750* (1.66)
Turnover	-0.0710 (-0.37)	-0.0068 (-0.04)	0.0024 (0.01)	0.1034 (0.99)	0.1133* (1.76)	0.1138* (1.84)
Growth	0.7119** (2.21)	0.5814** (1.99)	0.5627* (1.95)	0.0833 (1.51)	-0.0322 (-0.52)	-0.0473 (-0.73)
Beta	-1.4610*** (-5.28)	-1.1182*** (-4.81)	-1.0692*** (-4.68)	-1.3846*** (-4.74)	-1.1025*** (-4.45)	-1.0580*** (-4.36)
Sd_Roa	3.5686* (1.92)	2.1580 (1.28)	1.9565 (1.17)	10.2091*** (6.47)	7.9200*** (4.57)	7.5623*** (4.29)
IndDiv	-0.0257 (-0.34)	-0.0491 (-0.72)	-0.0524 (-0.78)	-0.1711** (-2.27)	-0.1219** (-2.33)	-0.1154** (-2.34)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted $R^2$	0.333	0.339	0.339	0.400	0.400	0.397
Number of obs.	1235	1235	1235	877	877	877

**Table 4 (continued)**

Panel B: Decrease in internationalization						
Intercept	10.7861***	9.0416***	8.7924***	6.5634***	5.3906***	5.2124***
	(4.30)	(3.55)	(3.43)	(3.98)	(5.36)	(5.48)
CHG	-0.0162	-0.0333	-0.0357	0.0094	0.0379	0.0416
	(-0.22)	(-0.38)	(-0.39)	(0.03)	(0.21)	(0.25)
AFT	-0.0502	-0.0467	-0.0461	-0.2336	-0.1528	-0.1415
	(-0.36)	(-0.51)	(-0.55)	(-0.71)	(-0.80)	(-0.81)
CHG*AFT	0.3416**	0.3503**	0.3515**	0.1536	0.1131*	0.1071**
	(2.14)	(2.38)	(2.41)	(0.77)	(1.73)	(2.50)
Size	-0.3907***	-0.3635***	-0.3597**	-0.2630***	-0.2294***	-0.2243***
	(-2.81)	(-2.59)	(-2.56)	(-3.71)	(-4.52)	(-4.54)
Lev	2.2067	2.4309*	2.4629*	0.5435	0.5549	0.5417*
	(1.60)	(1.79)	(1.82)	(1.01)	(1.63)	(1.67)
Capex	0.2209	0.5229	0.5660	-1.2842	-0.3757	-0.2515
	(0.20)	(0.53)	(0.58)	(-0.84)	(-0.35)	(-0.25)
Ros	0.1520	0.1064	0.0999	0.0117	0.0325	0.0287
	(0.83)	(0.87)	(0.88)	(0.06)	(0.25)	(0.24)
Intang	-0.7671	-0.0261	0.0797	0.1622	-0.8025	-0.9527
	(-0.58)	(-0.02)	(0.07)	(0.08)	(-0.49)	(-0.61)
Turnover	-0.3636*	-0.2708	-0.2576	0.1562	0.1298	0.1279
	(-1.95)	(-1.64)	(-1.59)	(0.94)	(0.77)	(0.73)
Growth	0.1698	0.1294	0.1237	-0.0258	-0.0308**	-0.0316**
	(0.72)	(0.52)	(0.49)	(-1.43)	(-2.27)	(-2.29)
Beta	-1.7898***	-1.2020***	-1.1180***	-0.5498	-0.1691	-0.1197
	(-4.34)	(-3.68)	(-3.51)	(-1.09)	(-0.53)	(-0.40)
Sd_Roa	4.4531**	3.1735*	2.9907*	6.9466***	5.1349***	4.8477***
	(2.53)	(1.96)	(1.87)	(2.65)	(2.70)	(2.66)
IndDiv	-0.2100**	-0.2163**	-0.2172**	-0.2652	-0.1949	-0.1845
	(-2.01)	(-2.02)	(-2.01)	(-1.36)	(-1.28)	(-1.25)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted $R^2$	0.524	0.526	0.524	0.534	0.546	0.541
Number of obs.	902	902	902	230	230	230

Table 4 presents the OLS regression results relating market valuation to changes in internationalization. Panel A reports the results for increases in internationalization. Panel B reports the results for decreases in internationalization. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 5 International diversification and operating income**

	(1)	(2)
	EBIT/Sales	EBIT/Sales
Intercept	-0.4400*** (-4.28)	-0.4532*** (-4.28)
Intn	-0.0165* (-1.78)	
INTNPCS2		-0.0046 (-0.49)
INTNPCS3		-0.0245** (-2.20)
INTNPCS4		-0.0326* (-1.94)
Size	0.0341*** (5.79)	0.0346*** (5.76)
Lev	-0.3137*** (-7.54)	-0.3133*** (-7.55)
Capex	0.3392*** (5.44)	0.3397*** (5.46)
Intang	-0.1406*** (-2.72)	-0.1411*** (-2.75)
Turnover	-0.0690*** (-6.98)	-0.0693*** (-6.99)
Growth	0.0371*** (7.29)	0.0370*** (7.38)
Beta	-0.1387*** (-3.66)	-0.1389*** (-3.68)
Sd_Roa	-0.5544** (-2.50)	-0.5492** (-2.48)
IndDiv	0.0032 (0.63)	0.0034 (0.67)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Adjusted $R^2$	0.193	0.193
F	43.10	40.76
Number of obs.	13088	13088

Table 5 presents the OLS regression results relating operating performance to level of internationalization. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix.

\*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 6 The effect of number of overseas subsidiaries on firm valuation**

	(1)	(2)	(3)
	Tq	Tq_70	Tq_80
Intercept	3.9564*** (2.83)	2.4079** (2.42)	1.9997** (2.12)
NUMSUB	-0.0997** (-2.33)	-0.0913*** (-2.74)	-0.0937*** (-2.86)
Size	-0.0418 (-0.65)	-0.0006 (-0.01)	0.0147 (0.34)
Lev	-1.2848*** (-3.60)	-0.8310*** (-3.13)	-0.7820*** (-3.05)
Capex	0.8189** (2.11)	0.7244** (2.34)	0.6937** (2.27)
Ros	0.2606 (1.03)	0.1676 (0.90)	0.1462 (0.82)
Intang	0.7229 (0.72)	0.5784 (0.79)	0.5691 (0.81)
Turnover	0.0554 (0.60)	0.0952 (1.13)	0.1013 (1.20)
Growth	0.1822** (2.01)	0.0029 (0.03)	-0.0226 (-0.24)
Beta	-0.8795*** (-4.35)	-0.6483*** (-3.88)	-0.6164*** (-3.75)
Sd_Roa	7.4677*** (3.53)	5.6194*** (3.53)	5.3816*** (3.54)
IndDiv	-0.0192 (-0.43)	-0.0374 (-1.11)	-0.0400 (-1.22)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Adjusted $R^2$	0.342	0.334	0.331
F	19.00	22.61	23.21
Number of obs.	1946	1946	1946

Table 6 presents the OLS regression results relating market valuation to number of overseas subsidiaries. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 7 The interactive effect of international diversification and political connections on firm valuation**

	SOE subsample			NSOE subsample		
	(1)	(2)	(3)	(4)	(5)	(6)
	Tq	Tq_70	Tq_80	Tq	Tq_70	Tq_80
Panel A: Based on <i>Intn</i>						
Intercept	7.3159*** (6.94)	6.5367*** (7.19)	6.2133*** (7.17)	5.7877*** (3.12)	4.6124*** (3.00)	4.1030*** (2.76)
Intn	-0.1853** (-2.49)	-0.1524*** (-2.74)	-0.1475*** (-2.74)	-0.6050*** (-5.43)	-0.5476*** (-5.43)	-0.5443*** (-5.41)
PC	-0.1001* (-1.69)	-0.0697 (-1.34)	-0.0657 (-1.28)	-0.3708*** (-3.16)	-0.3753*** (-3.36)	-0.3840*** (-3.44)
Intn*PC	-0.0519 (-0.60)	-0.0567 (-0.76)	-0.0592 (-0.81)	0.2992** (2.29)	0.3018** (2.49)	0.3094** (2.56)
Size	-0.1498*** (-3.16)	-0.1385*** (-3.52)	-0.1275*** (-3.39)	0.0085 (0.12)	0.0351 (0.63)	0.0546 (1.01)
Lev	-0.9700*** (-3.63)	-0.7097*** (-3.34)	-0.6844*** (-3.29)	-1.0207*** (-2.92)	-0.7111** (-2.39)	-0.6807** (-2.32)
Capex	-0.8024 (-1.26)	-0.6527 (-1.32)	-0.6535 (-1.37)	-0.2466 (-0.31)	-0.9067 (-1.27)	-1.0293 (-1.45)
Ros	-0.1837 (-0.97)	-0.2580* (-1.91)	-0.2758** (-2.15)	-0.4491*** (-3.84)	-0.4353*** (-4.90)	-0.4390*** (-4.95)
Intang	0.6981 (1.28)	0.4122 (1.02)	0.3840 (0.97)	1.6670* (1.70)	1.6840* (1.87)	1.6990* (1.92)
Turnover	0.0566 (0.83)	0.0947* (1.74)	0.1009* (1.90)	0.0827 (0.73)	0.0764 (0.76)	0.0749 (0.75)
Growth	0.1573** (2.32)	0.0635 (1.04)	0.0497 (0.81)	-0.0232 (-0.24)	-0.1113 (-1.26)	-0.1244 (-1.42)
Beta	-0.8753*** (-4.88)	-0.6175*** (-5.36)	-0.5744*** (-5.33)	-1.8602*** (-5.18)	-1.5192*** (-5.18)	-1.4675*** (-5.20)
Sd_roa	7.2217*** (8.07)	5.1312*** (8.21)	4.8596*** (8.16)	7.5071*** (9.70)	5.8955*** (8.43)	5.7296*** (8.26)
Multi	-0.0435 (-1.42)	-0.0441* (-1.89)	-0.0447** (-1.97)	-0.2876*** (-4.45)	-0.2463*** (-4.19)	-0.2422*** (-4.16)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted $R^2$	0.354	0.340	0.334	0.401	0.389	0.385
F	36.87	40.21	40.14	33.11	34.48	34.32
Number of obs.	4614	4614	4614	3230	3230	3230
Difference in coefficients	(1)-(4)		(2)-(5)		(3)-(6)	
Diff: Intn*PC	-0.3509**		-0.3585**		-0.3686***	
Z-statistics	-2.24		-2.52		-2.61	



**Table 7 (continued)**

Panel B: Based on <i>INTNPCS</i>						
	Tq	Tq_70	Tq_80	Tq	Tq_70	Tq_80
Intercept	7.2393*** (6.80)	6.4629*** (7.04)	6.1321*** (7.01)	5.5262*** (3.00)	4.4258*** (2.91)	3.9173*** (2.66)
INTNPCS2	-0.0818 (-0.97)	-0.0708 (-1.14)	-0.0671 (-1.12)	-0.3513** (-2.32)	-0.3443*** (-2.62)	-0.3449*** (-2.67)
INTNPCS3	-0.2874*** (-2.59)	-0.2246*** (-2.67)	-0.2186*** (-2.69)	-0.6526*** (-5.62)	-0.6225*** (-5.85)	-0.6255*** (-5.83)
INTNPCS4	-0.0538 (-0.32)	-0.1080 (-0.93)	-0.1199 (-1.08)	-0.8865*** (-4.22)	-0.7652*** (-4.01)	-0.7578*** (-3.95)
PC	-0.0813 (-1.36)	-0.0547 (-1.06)	-0.0515 (-1.01)	-0.3446*** (-2.91)	-0.3629*** (-3.26)	-0.3738*** (-3.36)
INTNPCS2*PC	-0.1864* (-1.92)	-0.1704** (-2.07)	-0.1694** (-2.07)	0.1030 (0.68)	0.1187 (0.96)	0.1305 (1.07)
INTNPCS3*PC	0.0383 (0.27)	0.0033 (0.03)	-0.0008 (-0.01)	0.3539** (2.33)	0.4186*** (2.86)	0.4335*** (2.95)
INTNPCS4*PC	0.0037 (0.02)	0.0379 (0.24)	0.0376 (0.24)	0.4939* (1.95)	0.4488* (1.83)	0.4494* (1.83)
Size	-0.1476*** (-3.08)	-0.1362*** (-3.43)	-0.1248*** (-3.29)	0.0191 (0.28)	0.0429 (0.77)	0.0624 (1.15)
Lev	-0.9746*** (-3.65)	-0.7104*** (-3.34)	-0.6844*** (-3.29)	-1.0340*** (-2.92)	-0.7242** (-2.40)	-0.6938** (-2.33)
Capex	-0.8217 (-1.28)	-0.6651 (-1.32)	-0.6639 (-1.37)	-0.2780 (-0.35)	-0.9184 (-1.33)	-1.0385 (-1.52)
Ros	-0.1863 (-1.00)	-0.2603* (-1.95)	-0.2782** (-2.20)	-0.4453*** (-3.76)	-0.4308*** (-4.79)	-0.4345*** (-4.84)
Intang	0.7119 (1.33)	0.4116 (1.03)	0.3797 (0.98)	1.7162* (1.74)	1.7220* (1.90)	1.7365* (1.95)
Turnover	0.0547 (0.79)	0.0932* (1.70)	0.0996* (1.86)	0.0888 (0.79)	0.0815 (0.81)	0.0803 (0.81)
Growth	0.1598** (2.35)	0.0651 (1.06)	0.0510 (0.83)	-0.0234 (-0.24)	-0.1110 (-1.26)	-0.1241 (-1.42)
Beta	-0.8796*** (-4.87)	-0.6184*** (-5.28)	-0.5744*** (-5.23)	-1.8809*** (-5.23)	-1.5397*** (-5.24)	-1.4882*** (-5.26)
Sd_roa	7.2533*** (8.06)	5.1647*** (8.18)	4.8944*** (8.12)	7.6091*** (9.61)	5.9834*** (8.41)	5.8161*** (8.24)
Multi	-0.0419 (-1.38)	-0.0421* (-1.81)	-0.0426* (-1.88)	-0.2870*** (-4.38)	-0.2463*** (-4.08)	-0.2424*** (-4.05)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted $R^2$	0.354	0.340	0.334	0.400	0.389	0.385
F	33.61	36.55	36.47	29.91	31.10	30.97
Number of obs.	4614	4614	4614	3230	3230	3230
Difference in coefficients	(1)-(4)		(2)-(5)		(3)-(6)	
Diff: INTNPCS2*PC	-0.2894		-0.2891*		-0.2999**	
Z-statistics	-1.61		-1.95		-2.04	

Diff: INTNPCS3*PC	-0.4153	-0.4343**	-0.3156***
Z-statistics	-1.52	-2.27	-2.59
Diff:INTNPCS4*PC	-0.4902	-0.4109	-0.4118
Z-statistics	-1.51	-1.41	-1.41

Table 7 presents the OLS regression results relating market valuation to level of internationalization, state ownership status, manager's political connections and their interaction effects. Panel A reports the results when the level of internationalization is measured using whether the firm has foreign sales larger than 10% of total sales. Panel B reports the results when the level of internationalization is measured using the stages of firm's internationalization process. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).

**Table 8 The institutional quality effect of international diversification on the market valuation**

	(1)	(2)	(3)
	Tq	Tq_70	Tq_80
Intercept	5.0955*** (5.55)	3.6650*** (5.28)	3.3120*** (5.02)
Intn	-0.2276*** (-3.10)	-0.1902*** (-3.45)	-0.1846*** (-3.40)
CRdummy	-0.1321 (-1.59)	-0.1051 (-1.63)	-0.1011 (-1.58)
CRdummy*Intn	0.2243** (2.30)	0.1760** (2.21)	0.1674** (2.12)
Size	-0.0880** (-2.54)	-0.0586** (-2.10)	-0.0470* (-1.71)
Lev	-1.4526*** (-5.31)	-0.8875*** (-4.01)	-0.8272*** (-3.76)
Capex	0.0865 (0.18)	-0.1638 (-0.37)	-0.2267 (-0.52)
Ros	1.0659*** (3.90)	0.7249*** (2.71)	0.6594** (2.45)
Intang	-0.2157 (-0.32)	-0.0820 (-0.20)	-0.0429 (-0.11)
Turnover	0.0781 (1.11)	0.0796 (1.23)	0.0800 (1.23)
Growth	0.1597* (1.91)	-0.0012 (-0.02)	-0.0231 (-0.32)
Beta	-0.7735*** (-4.04)	-0.5497*** (-3.96)	-0.5150*** (-3.90)
Sd_Roa	7.5462*** (5.78)	5.8865*** (6.01)	5.6830*** (6.05)
IndDiv	-0.0180 (-0.46)	-0.0340 (-1.04)	-0.0362 (-1.14)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.367	0.351	0.345
F	30.03	30.67	30.60
Number of obs.	3611	3611	3611

Table 8 presents the OLS regression results relating market valuation to the level of internationalization, creditor rights for countries in which the firm has OFDI, and their interaction effects. Numbers in parentheses represent t-values computed using standard errors corrected for clustering at firm and year levels. All variables are as defined in the Appendix. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed).