

## CHINESE COMPANIES LISTED ABROAD

Mark Humphery-Jenner\*

### Table of Contents

|  |     |
|--|-----|
| I. INTRODUCTION .....                    | 256 |
| II. INSTITUTIONAL BACKGROUND .....       | 258 |
| A. General governance requirements ..... | 258 |
| B. Cross-listing requirements .....      | 259 |
| III. DATA .....                          | 260 |
| IV. ANALYSIS .....                       | 261 |
| A. Performance .....                     | 261 |
| B. Governance .....                      | 261 |
| C. Likelihood of delisting .....         | 262 |
| V. CONCLUSION.....                       | 262 |
| VI. TABLES.....                          | 263 |

---

\* Australian School of Business, UNSW. Parts of this analysis and text are based on Mark L Humphery-Jenner, "The Governance and Performance of Chinese Companies Listed Abroad: An Analysis of China's Merits Review Approach to Overseas Listings" (2012) 12:2 Journal of Corporate Law Studies 333. This paper contains updated analysis using a more recent dataset and updated methodology.

## CHINESE COMPANIES LISTED ABROAD

Mark Humphery-Jenner

*Abstract*

*Chinese companies listed in the US have come to the attention of securities regulators and have been subject to a large number of securities class actions in recent years. However, China does have relatively stringent governance requirements and maintains a merits review of applications to list in the US, both of which would suggest that the average cross-listed company should perform adequately. Prior evidence from before 2009 suggests that this is the case. This paper extends such evidence to more recent years. The results suggest that Chinese companies listed in the US perform at least as well as their peers and do not have demonstrably worse corporate governance. The results indicate that mainly high quality companies list in the US, potentially reflecting China's merit's review of applications to list overseas.*

## I. INTRODUCTION

An increasingly large number of Chinese companies are listing in non-mainland exchanges. Such companies seek to gain access to overseas capital, potentially increase their product-market reach, and signal their quality by bonding to overseas markets' stringent regulatory requirements. In order to list overseas, firms must obtain the approval of the Chinese Securities Regulatory Commission (CSRC), which conducts a merits review of the firm's wish to list abroad. However, despite this merits review, a non-trivial number of firms have come under regulatory scrutiny in the US, or have been liable to securities class actions.<sup>1</sup>

China has imposed significant barriers to companies listing abroad. A Chinese company can issue securities only if the CSRC approves it.<sup>2</sup> The CSRC has a wide discretion over whether a company can issue shares abroad. This discretion has advantages and disadvantages. A potential disadvantage is that the CSRC could excessively restrict companies from gaining access to capital. However, the CSRC could also use its discretion to ensure that only well-governed companies list in the US, thereby strengthening China's corporate reputation. This merits review process also exists within a climate of relatively strong corporate governance.

China has also moved to strengthen corporate governance. In 2002, China adopted a "Code of Corporate Governance for Listed

---

<sup>1</sup> Elaine Buckberg & Max Gulker, *Cross-Border Shareholder Class Actions Before and After Morrison* (NERA Economic Consulting, 2011), fig 1.

<sup>2</sup> See Article 2 of the Special Provisions of the State Council on Issuing and Listing of Shares Abroad by Companies Limited by Shares. Available here: [http://www.csrc.gov.cn/pub/csrc\\_en/laws/rfdm/AdministrativeLaws/200907/t20090729\\_119394.htm](http://www.csrc.gov.cn/pub/csrc_en/laws/rfdm/AdministrativeLaws/200907/t20090729_119394.htm), and from: <http://www.asianlii.org/cn/legis/cen/laws/spotsctfalaosblsc1081/>

Companies in China”,<sup>3</sup> which mandates independent directors, and directorial elections. They are reportedly comparable with other national standards.<sup>4</sup> In 2006, China adopted the ‘Basic Accounting Standards for Business Enterprises’, which are broadly in line with IFRS. China has also adopted a set of 48 auditing standards, to closer align Chinese auditing practice with that mandated under the International Standards of Auditing.<sup>5</sup> Overall, these significant governance reforms should reduce the likelihood of corporate malfeasance amongst Chinese companies. This should be especially so for companies that list in the US, where the CSRC could use its discretion to prevent poorly governed companies from listing in the US.

There is some prior evidence on the governance of Chinese companies from prior to 2009.<sup>6</sup> However, much of the scrutiny aimed at Chinese companies has been in recent years, with the preponderance of such securities class actions occurring in 2011. This suggests that it is pertinent to analyze further the governance of Chinese companies listed abroad.

Using a sample that spans both before and after the financial crisis (from 1990-2011), I test whether this institutional background actually limits listings in the US to companies who are strongly performing, as measured by their operating performance, governance, and delisting likelihood. I compare Chinese companies with other companies that are listed in the US, and the sub-set of non-US companies that are listed in the US. I use a sample spanning 1990 to 2011.

The results suggest that Chinese companies perform at least as well as their non-Chinese peers. Their operating performance (i.e. ROA) is at least as good as is that of other firms. They are no more likely to delist than are other non-US firms. Their governance attributes (i.e. board independence, number of directors) are not demonstrably different than are those of other firms. The results tend to suggest that it is mainly high quality Chinese companies that list in the US. These

---

<sup>3</sup> CFA Institute, *China Corporate Governance Survey* (2007); CEIBS, “Towards Mature Corporate Governance Standards in China”, *Forbes India* (2 December 2011), online: <<http://forbesindia.com/article/ceibs/towards-mature-corporate-governance-standards-in-china/30552/1>>; Qiao Liu, “Corporate Governance in China: Current Practices, Economic Effects and Institutional Determinants” (2006) 52:2 CESifo Economic Studies 415.

<sup>4</sup> CFA Institute, *supra* note 3; CEIBS, *supra* note 3; Liu, *supra* note 3.

<sup>5</sup> For a summary of these reforms see: CFA Institute, *supra* note 3; Donald C Clarke, “The Independent Director in Chinese Corporate Governance” (2006) 31:1 Delaware Journal of Corporate Law 125.

<sup>6</sup> For example, there is a pre-financial-crisis analysis in Mark L Humphery-Jenner, “The Governance and Performance of Chinese Companies Listed Abroad: An Analysis of China’s Merits Review Approach to Overseas Listings” (2012) 12:2 Journal of Corporate Law Studies 333.

results are consistent with the possible efficacy of the merits review approach to cross listing.

## II. INSTITUTIONAL BACKGROUND

The institutional background in China has two important aspects: (1) general governance requirements; and, (2) the restrictions on listing in the US. I argue that the combination of these requirements is such that Chinese companies listing abroad are likely to be of relatively high quality.

### A. General governance requirements

The general governance requirements are relatively stringent. A full re-statement of the requirements is beyond the scope of this paper. However, I outline some important aspects of the Chinese governance structure that illustrate that it is similarly stringent to other major countries.

First, in February 2006, China adopted the 'Basic Accounting Standards for Business Enterprises'. These 38 standards are largely similar to those mandated under IFRS.<sup>7</sup> They apply to all listed companies. Thus, they would apply to any Chinese company that lists in both China and the US.

Second, in 2002, China adopted the 'Code of Corporate Governance for Listed Companies in China'. These codes have some similarities with the Sarbanes Oxley Act (SOX) in the United States. Specifically, they mandate that the board have independent directors, and that at least one independent director be a professional accountant. Further, there must be elections at least once every three years. These standards are similar to international governance codes.<sup>8</sup> The requirements are arguably less mandatory and are weaker than are the US standards (the Chinese standards often stating that a company 'may do x' i.e. 'may establish an auditing committee' in Section 52). However, companies that more fully comply, tend to have lower levels

---

<sup>7</sup> For a summary of these reforms see: CFA Institute, *supra* note 3; Clarke, *supra* note 5.

<sup>8</sup> CFA Institute, *supra* note 3; CEIBS, *supra* note 3; Liu, *supra* note 3.

of earnings management.<sup>9</sup> Further, they are less arbitrary than the standards in the UK, which stipulate an arbitrary ideal board size.<sup>10</sup>

Third, China has institute a set of 48 auditing standards with the goal of improving auditing standards to the level imposed by the 'International Standards of Auditing'.<sup>11</sup>

Overall, these governance requirements appear to be relatively stringent. While they may be less stringent than the requirements in the US, they are arguably more stringent than the requirements in the UK. They also create an image that China's regulators assiduously wish to improve corporate governance.

### *B. Cross-listing requirements*

The CSRC has a broad discretion over whether a Chinese company can list stocks in the United States. A Chinese company can issue securities only if the CSRC allows it.<sup>12</sup> If a company attempts to issue shares without the CSRC's approval, then it is liable to both civil and criminal penalties, including imprisonment,<sup>13</sup> fines, and the obligation to refund the money raised.<sup>14</sup>

In relation to the general issuance of shares, Articles 12 and 13 of the PRC Securities Law, indicate when a company can issue shares (with Article 13 pertaining to IPOs). The IPO regulations are the most relevant given that the issuance of shares in a foreign market would be an 'initial' offering in that article. These articles impose relatively stringent prerequisites for the issuance of shares under an IPO: specifically, the company must have a 'complete and well-operated organization', have 'the capability of making profits continuously', and not have a 'false record in its financial statements over the last 3 years'. This is in addition to the company having to satisfy additional requirements that the CSRC imposes.

The regulations are more stringent when the issuance of shares extends to the issuance overseas. A Chinese firm can list abroad only

<sup>9</sup> Qiao Liu & Zhou Lu, "Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective" (2007) 13:5 *Journal of Corporate Finance* 881; Agnes W Y Lo, Raymond M K Wong & Michael Firth, "Can corporate governance deter management from manipulating earnings? Evidence from related-party sales transactions in China" (2010) 16:2 *Journal of Corporate Finance* 225; Martin J Conyon & Lerong He, "Executive compensation and corporate governance in China" (2011) 17:4 *Journal of Corporate Finance* 1158; Michael Firth, Peter M Y Fung & Oliver M Rui, "Corporate performance and CEO compensation in China" (2006) 12:4 *Journal of Corporate Finance* 693.

<sup>10</sup> For a strong criticism of the UK standards see: Renee Adams, *Boards, Regulators and Monkeys*, Working Paper (Australian School of Business, 2012).

<sup>11</sup> For a summary of these reforms see: CFA Institute, *supra* note 3; Clarke, *supra* note 5.

<sup>12</sup> PRC Securities Law Article 10

<sup>13</sup> PRC Criminal Law Article 179

<sup>14</sup> PRC Securities Law Article 188

if the Securities Commission (CSRC) approves it.<sup>15</sup> There are no stated guidelines for the exercise of this discretion. However, it is likely that the CSRC would exercise its discretion in a similar way to with an ordinary IPO (given that this would be the company's first offering in the foreign market). Further, the CSRC is unlikely to undermine the policy rationale for these regulations by allowing a poor quality company to circumvent domestic requirements by issuing shares overseas. Overall, this suggests that the requirements for issuing shares overseas are at least as stringent as the already tough requirements to list shares in China. Thus, this merits review would restrict the issuance of securities to well governed and profitable companies. The issue is whether the CSRC has effectively exercised this discretion.

### III. DATA

This section details the data that I use for the analysis. The goal is to compare the performance of Chinese companies listed in the US with their counterparts in the US. Subsequently, I collect data on all firms listed in the US. I also identify the sub-sets of firms that are incorporated in China and in other non-US exchanges (so I can compare Chinese cross-listed firms with their other cross-listed peers). I obtain this data from 1990 to 2011. However, governance data is available only from 2001.

I use several data sources. I obtain the set of all firms in the CRSP/Compustat universe of firms listed in the US. I identify 'Chinese' companies as those companies whose headquarters is in China (using the 'loc' variable in Compustat). I similarly identify the set of non-US firms as firms headquartered outside of the US. I then match this sample with governance data from Corporate Library (available from 2001). The sample spans 1990 to 2011 and is in Table 1. I collect data on operating performance, delistings, and a set of control variables that might be correlated with the firm's performance or governance. Table 2 contains the variable definitions and Table 3 contains the summary statistics.

[Insert Table 1 about here]

[Insert Table 2 about here]

[Insert Table 3 about here]

---

<sup>15</sup> See Article 2 of the Special Provisions of the State Council on Issuing and Listing of Shares Abroad by Companies Limited by Shares. Available here: [http://www.csrc.gov.cn/pub/csrc\\_en/laws/rfdm/AdministrativeLaws/200907/t20090729\\_119394.htm](http://www.csrc.gov.cn/pub/csrc_en/laws/rfdm/AdministrativeLaws/200907/t20090729_119394.htm), and from: <http://www.asianlii.org/cn/legis/cen/laws/spotsctfalaosblsc1081/>

#### IV. ANALYSIS

This section contains the analysis. I start by analyzing operating performance. I then examine corporate governance. Finally, I look at the delisting likelihood of firms. Overall, the results suggest that Chinese companies listed in the US perform no worse than do their peer companies.

##### *A. Performance*

This section analyzes the performance of Chinese companies that are listed in the US. I capture performance by obtaining the firm's operating performance, as proxied by the firm's operating income before depreciation scaled by assets, and by its return on assets (net income scaled by assets). I analyze the performance of Chinese companies within a regression framework in which the dependent variable is the firm's performance in year  $t+1$ . The regressors are an indicator for whether the firm is a Chinese firm and other control variables that might influence operating performance. I use several regression techniques: ordinary least squares with year and industry regressions, panel regressions with year and firm fixed effects, Fama-Macbeth regressions, and Arellano-Bond regressions. I run the regression for the full sample of all firms listed in the US and for the sub-sample of non-US firms.

The results are in Table 4 and Table 5. Table 4 contains regressions that analyze the full sample of firms. Table 5 contains regressions that compare the Chinese firms with the set of non-US firms listed in the US. The important result is that the Chinese firms have better (or at least no-worse) operating performance than other firms, including other non-US firms. This is consistent with the idea that the merits review process limits the ability of low quality companies to list in the US. These results are consistent with prior results from before the financial crisis.

##### *B. Governance*

The next issue is whether Chinese firms listed in the US have better governance. An effective merits review process should result in firms having better, or at least not significantly worse, governance than their peers. I examine several governance characteristics. These include whether the firm has a governance policy, its board size, the 'abnormal' number of directors (defined as the absolute value of the residual from a first stage regression to predict the number of directors), the proportion of directors who are independent, the percentage of insider ownership, and whether the firm has an ethics code. The models are variously logit, Tobit, or OLS models as appropriate to the dependent variable. The models include year

dummies, 2-digit SIC dummies, and cluster standard errors by firm. The models also include control variables that might be correlated with the firm's governance attributes.

The results are in Table 6 and Table 7. The results in Table 6 are for the full sample of all firms listed in the US and the results in Table 7 are for the sub-sample of non-US firms that are listed in the US. There are some interesting findings. Chinese companies have fewer directors. This might suggest superior governance (i.e. by having a smaller board of directors; and thus, a lower likelihood that the managers can dominate the board). However, Chinese companies have more directors than would be expected given their size and performance. However, this result is only weakly (statistically) significant, and in all cases, the coefficient is relatively small. Chinese companies appear to have fewer independent directors when compared with US companies but not when compared with other non-US companies. However, the difference is relatively small in economic magnitude. Overall, this suggests that Chinese companies do not have significantly worse governance than do other companies, and is also consistent with pre-financial-crisis findings.

### *C. Likelihood of delisting*

Finally, I examine the likelihood that a firm delists as a result of being dropped from the exchange or from liquidation (represented by CRSP delisting codes 400 through 599). I use both logit and probit models, which include year dummies, SIC 2-digit dummies, and clusters standard errors by firm. The models also include the foregoing control variables. The results are in Table 8. Chinese companies are more likely to delist than are other firms.<sup>16</sup> However, they are not more likely to delist than are other non-US firms. This is consistent with the foregoing performance results, which would indicate that Chinese firms do not perform significantly worse than do other firms.

## V. CONCLUSION

Chinese companies that are listed in the US have received significant scrutiny, potentially being targeted in securities class actions and regulatory actions. However, China does have a merits review process in relation to cross-listings, which would suggest that such companies should not be demonstrably worse governed or perform significantly worse. Prior literature from before the financial crisis suggests that this is the case.

---

<sup>16</sup> Note, this contrasts with some prior pre-financial-crisis evidence in Humphery-Jenner, *supra* note 6.. If I restrict the time period to before 2009, I obtain consistent results with the prior literature.



I empirically test proxies for the governance of Chinese companies listed in the US using an updated sample that extends past the financial crisis years. I compare these companies with other companies listed in the US, and the sub-set of other non-US companies listed in the US. The results suggest that Chinese companies do not perform worse than their peers, and may perform better. This result would be consistent with the idea that higher quality Chinese companies list in the US, potentially as a result of the regulations involved in such cross-listings.

## VI. TABLES

Table 1: Sample Composition by Year

This table contains the number of observations by year.

| Year  | Full Sample | Chinese Firms | Non-Chinese Firms | Non-US Firms |
|-------|-------------|---------------|-------------------|--------------|
| 1990  | 4,496       | 6             | 4,490             | 292          |
| 1991  | 4,682       | 6             | 4,676             | 313          |
| 1992  | 4,874       | 5             | 4,869             | 333          |
| 1993  | 5,352       | 8             | 5,344             | 394          |
| 1994  | 5,690       | 11            | 5,679             | 445          |
| 1995  | 5,933       | 14            | 5,919             | 483          |
| 1996  | 6,468       | 13            | 6,455             | 577          |
| 1997  | 6,549       | 15            | 6,534             | 647          |
| 1998  | 6,178       | 17            | 6,161             | 663          |
| 1999  | 5,962       | 17            | 5,945             | 674          |
| 2000  | 5,825       | 25            | 5,800             | 738          |
| 2001  | 5,270       | 25            | 5,245             | 729          |
| 2002  | 4,867       | 26            | 4,841             | 678          |
| 2003  | 4,595       | 27            | 4,568             | 664          |
| 2004  | 4,571       | 35            | 4,536             | 667          |
| 2005  | 4,498       | 48            | 4,450             | 661          |
| 2006  | 4,446       | 58            | 4,388             | 656          |
| 2007  | 4,335       | 98            | 4,237             | 605          |
| 2008  | 4,108       | 117           | 3,991             | 574          |
| 2009  | 3,894       | 164           | 3,730             | 541          |
| 2010  | 3,816       | 217           | 3,599             | 538          |
| 2011  | 3,739       | 200           | 3,539             | 556          |
| Total | 110,148     | 1,152         | 108,996           | 12,428       |

Table 2: Variable definitions

| Variable            | Description |
|---------------------|-------------|
| Dependent Variables |             |

|                          |  |
|--------------------------|--|
| OP                       | The firm's operating cash flow before depreciation scaled by its book assets.  |
| ROA                      | The firm's net income scaled by its book assets.   |
| Gov Policy               | An indicator that equals one if the firm has a governance policy, as reported in Corporate Library.  |
| Num Directors            | The number of directors, as reported in Corporate Library.   |
| Abs(Abnormal Directors)  | The absolute value of the 'abnormal' number of directors. This is the absolute value of the residual from a first-stage regression predicting the number of directors. |
| Prop Indep Dir           | The proportion of directors who are 'independent', as indicated in Corporate Library.  |
| Pct Insider Own          | The percentage stock ownership of insiders/managers, as reported in corporate library.   |
| Ethics Code              | An indicator that equals one if the firm has an ethics code.   |
| Delists                  | An indicator that equals one if the firm delists in the given year. These are recorded as firms to which CRSP assigns a listing code between 400 and 599.              |
| <b>Control Variables</b> |  |
| Firm Size                | The natural log of the firm's book assets .  |
| Debt/Assets              | The firm's long term debt scaled by its book assets  |
| Cash/Assets              | The firm's cash holdings scaled by its book assets   |
| R&D/Sales                | The firm's R&D expenditure scaled by its sales   |
| Advertising/Sales        | The firm's advertising expenditure scaled by its sales   |
| Makes Acquisition        | An indicator that equals one if the firm makes an acquisition in that year.  |
| Tobin's Q                | The firm's market capitalization scaled by its book assets   |
| CAPEX/Sales              | The firm's CAPEX scaled by its sales   |

Table 3: Sample Statistics

This table contains the sample statistics for the full sample of companies (Column 1) and for sub-samples of Chinese companies (Column 2), non-Chinese companies (Column 3) and non-US companies (Column 4). All figures are sample means. Table 2 contains the variable definitions.

|                 | Full<br>Sample | Chinese<br>Firms | Non-<br>Chinese<br>Firms | Non-<br>US<br>Firms |
|-----------------|----------------|------------------|--------------------------|---------------------|
| Gov Policy      | 0.619          | 0.273            | 0.619                    | 0.599               |
| Num Directors   | 8.679          | 6.409            | 8.682                    | 9.685               |
| Prop     Indep  | 0.707          | 0.631            | 0.707                    | 0.721               |
| Directors       |                |                  |                          |                     |
| Prop     Inside | 0.153          | 0.473            | 0.152                    | 0.151               |
| Directors       |                |                  |                          |                     |
| Ethics Policy   | 0.869          | 0.955            | 0.869                    | 0.801               |
| Delists         | 0.035          | 0.038            | 0.035                    | 0.042               |
| ROA             | -              | 0.020            | -0.067                   | -                   |
|                 | 0.066          |                  |                          | 0.044               |
| OP              | 0.038          | 0.088            | 0.037                    | 0.050               |
| Makes           | 0.331          | 0.370            | 0.330                    | 0.349               |
| Acquisition     |                |                  |                          |                     |
| Firm Size       | 5.255          | 5.699            | 5.251                    | 6.500               |
| Current         | 3.010          | 3.998            | 3.000                    | 2.789               |
| Assets/Current  |                |                  |                          |                     |
| Liabilities     |                |                  |                          |                     |
| Cash/Assets     | 0.138          | 0.262            | 0.137                    | 0.136               |
| R&D/Sales       | 0.208          | 0.086            | 0.210                    | 0.155               |
| Advertising/Sal | 0.011          | 0.017            | 0.010                    | 0.007               |
| es              |                |                  |                          |                     |
| CAPEX/Sales     | 0.138          | 0.134            | 0.138                    | 0.208               |
| Tobin's Q       | 1.641          | 1.528            | 1.642                    | 1.559               |

Table 4: Performance regressions examining the full sample of firms

This table contains regressions that examine the full sample of firms listed in the US. The regression technique is listed in the column header. The variables are defined in Table 2. Brackets contain p-values and superscripts \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively. The tables contain fixed effects as indicated in the table footer.

| Dependent<br>Variable | ROA |
|-----------------------|-----|
|-----------------------|-----|

| Technique                                | OLS           | Panel         | Fama<br>-<br>Macbeth | Arellano-<br>Bond |
|--|---------------|---------------|----------------------|-------------------|
|  | [1]           | [2]           | [3]                  | [4]               |
| Chinese Co                               | 0.035<br>***  | 0.083<br>***  | 0.014                | 0.360             |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.30<br>8]          | [0.112]           |
| ROA                                      | 0.585<br>***  | 0.384<br>***  | 0.603<br>***         | 0.185***          |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.000]           |
| Makes<br>Acquisition                     | -<br>0.012*** | -<br>0.015*** | -<br>0.012**         | 0.012***          |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.01<br>1]          | [0.000]           |
| Firm Size                                | 0.013<br>***  | 0.019<br>***  | 0.012<br>***         | -0.186***         |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.000]           |
| Current<br>Assets/Current<br>Liabilities | -<br>0.003*** | -<br>0.004*** | -<br>0.002***        | -0.009***         |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.000]           |
| Cash/Asset<br>s                          | -<br>0.094*** | -<br>0.068*** | -<br>0.097***        | 0.033***          |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.000]           |
| R&D/Sales                                | -<br>0.034*** | -<br>0.035*** | -<br>0.035***        | 0.011***          |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.000]           |
| Advertising<br>/Sales                    | -<br>0.311*** | -<br>0.579*** | -<br>0.190**         | -0.107            |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.02<br>4]          | [0.104]           |
| CAPEX/Sal<br>es                          | -<br>0.046*** | -<br>0.042*** | -<br>0.036***        | -0.012***         |
|  | [0.00<br>0]   | [0.00<br>0]   | [0.00<br>0]          | [0.003]           |
| Tobin's Q                                | 0.003<br>***  | 0.006<br>***  | 0.004<br>***         | 0.009***          |

2012]

CHINESE COMPANIES LISTED ABROAD

267

|                        |         |             |             |             |         |
|------------------------|---------|-------------|-------------|-------------|---------|
|                        |         | [0.00<br>0] | [0.00<br>0] | [0.00<br>3] | [0.000] |
| Year Fixed Effects     | Yes     | Yes         | Yes         | Yes         | Yes     |
| Industry Fixed Effects | Yes     | No          | No          | No          | No      |
| Firm Fixed Effects     | No      | Yes         | No          | No          | No      |
| Observations           | 100,322 | 100,322     | 100,322     | 100,322     | 76,013  |
| R-squared              | 0.462   |             | 0.472       |             |         |

Table 5: Performance regressions examining the sub-sample of non-US firms

This table contains regressions that examine the sample of firms listed in the US that are based in countries outside of the US. The regression technique is listed in the column header. The variables are defined in Table 2. Brackets contain p-values and superscripts \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively. The tables contain fixed effects as indicated in the table footer.

| Dependent Variable  | Sample Technique | ROA Non-US Firms |         |              |               |
|---------------------|------------------|------------------|---------|--------------|---------------|
|                     |                  | OLS              | Panel   | Fama-Macbeth | Arellano-Bond |
|                     |                  | [1]              | [2]     | [3]          | [4]           |
| Chinese Co          |                  | 0.035*           | 0.073*  |              |               |
|                     | **               |                  | **      | 0.022*       | 0.165         |
|                     |                  | [0.000]          | [0.000] | [0.085]      | [0.424]       |
| ROA                 |                  | 0.520*           | 0.348*  | 0.553*       | 0.157*        |
|                     | **               |                  | **      | **           | **            |
|                     |                  | [0.000]          | [0.000] | [0.000]      | [0.000]       |
| Makes Acquisition   | -                | -                | -       | -            | -             |
|                     | 0.011***         | 0.017***         | -0.007  | 0.001        |               |
|                     |                  | [0.004]          | [0.000] | [0.158]      | [0.874]       |
| Firm Size           |                  | 0.015*           | 0.022*  | 0.014*       | -             |
|                     | **               |                  | **      | **           | 0.158***      |
|                     |                  | [0.000]          | [0.000] | [0.000]      | [0.000]       |
| Current Assets/Curr | -                | -                | -       | -            | -             |
|                     | 0.003***         | 0.003***         | 0.003** | 0.006***     |               |

|             |          |          |          |          |
|-------------|----------|----------|----------|----------|
| ent         |          |          |          |          |
| Liabilities |          |          |          |          |
|             | [0.003]  | [0.001]  | [0.021]  | [0.000]  |
| Cash/Ass    |          |          |          |          |
| ets         | -0.007   | -0.010   | -0.039*  | 0.039    |
|             | [0.747]  | [0.684]  | [0.056]  | [0.132]  |
| R&D/Sal     | -        | -        | -        | -        |
| es          | 0.049*** | 0.048*** | 0.046*** | -0.004   |
|             | [0.000]  | [0.000]  | [0.000]  | [0.455]  |
| Advertisi   | -        | -        | -        | -        |
| ng/Sales    | 0.233*   | 0.561*** | -0.209*  | 0.543*** |
|             | [0.064]  | [0.001]  | [0.096]  | [0.004]  |
| CAPEX/      | -        | -        | -        | -        |
| Sales       | 0.032*** | 0.034*** | 0.024*** | 0.026*** |
|             | [0.000]  | [0.000]  | [0.005]  | [0.003]  |
| Tobin's     | 0.005*   | 0.007*   | 0.008*   |          |
| Q           | **       | **       | **       | 0.003    |
|             | [0.004]  | [0.000]  | [0.000]  | [0.112]  |
| Year        |          |          |          |          |
| Fixed       |          |          |          |          |
| Effects     | Yes      | Yes      | Yes      | Yes      |
| Industry    |          |          |          |          |
| Fixed       |          |          |          |          |
| Effects     | Yes      | No       | No       | No       |
| Firm        |          |          |          |          |
| Fixed       |          |          |          |          |
| Effects     | No       | Yes      | No       | No       |
| Observat    |          |          |          |          |
| ions        | 12,386   | 12,386   | 12,386   | 8,893    |
| R-          |          |          |          |          |
| squared     | 0.414    |          | 0.439    |          |

Table 6: Governance Regressions - Full Sample

This table contains regressions that analyze corporate governance attributes. All models contain year dummies, 2-digit SIC industry dummies, and cluster standard errors by firm. The Column header contains the regression technique and the dependent variable. The sample contains all firms that are listed in the US. Table 2 contains the variable definitions. Brackets contain p-values. Superscripts \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively.

2012]

## CHINESE COMPANIES LISTED ABROAD

269

| Dependent Variable                 | Governance Policy | Num Directors | Num Directors | Abs(Abnorma Num Directors) | Prop Indep Directors | Prop Inside Directors | Ethics Code |
|------------------------------------|-------------------|---------------|---------------|----------------------------|----------------------|-----------------------|-------------|
| Technique                          | logit             | OLS           | OLS           | OLS                        | Tobit                | Tobit                 | Logit       |
|                                    | [1]               | [2]           | [3]           | [4]                        | [5]                  | [6]                   | [7]         |
| Chinese Co                         | -                 | -             |               | 0.                         | -                    | 0.                    | 0           |
|                                    | 1.436**           | 1.111**       |               | 485*                       | 0.081***             | 298**                 | .213        |
|                                    | [0.013]           | [0.019]       |               | [0.063]                    | [0.004]              | [0.000]               | [0.825]     |
| OP                                 | 0.160             | -             |               | -                          | 0.014                | 0.021                 | 0.050       |
|                                    |                   | 0.706***      |               | 0.274*                     |                      |                       |             |
|                                    | [0.529]           | [0.000]       |               | [0.021]                    | [0.352]              | [0.294]               | [0.859]     |
| Makes Acquisition                  | -                 | -             | -             | -                          | -                    | -                     | 0           |
|                                    | 0.054             | 0.161***      | 0.161**       | 0.013                      | 0.002                | 0.004                 | .124        |
|                                    | [0.391]           | [0.001]       | [0.000]       | [0.640]                    | [0.662]              | [0.438]               | [0.201]     |
| Firm Size                          | 0.771***          | 0.805***      | 0.787**       | 0.075*                     | 0.018***             | -                     | 0.455***    |
|                                    |                   |               |               |                            |                      | 0.037***              |             |
|                                    | [0.000]           | [0.000]       | [0.000]       | [0.000]                    | [0.000]              | [0.000]               | [0.000]     |
| Current Assets/Current Liabilities | -                 | -             | -             | -                          | -                    | 0.000                 | 0.014       |
|                                    | 0.050***          | 0.048***      | 0.052**       | 0.005                      | 0.002***             |                       |             |
|                                    | [0.002]           | [0.000]       | [0.000]       | [0.440]                    | [0.009]              | [0.755]               | [0.502]     |
| Cash/Assets                        | 0.560*            | -             | -             | -                          | 0.058                | -                     | 0.174       |
|                                    |                   | 0.162         | 0.046         | 0.189*                     | ***                  | 0.067***              |             |
|                                    | [0.053]           | [0.407]       | [0.729]       | [0.090]                    | [0.000]              | [0.002]               | [0.632]     |
| R&D/Sales                          | 0.                | 0.            | 0.2           | -                          | 0.                   | -                     | 0           |
|                                    | 125*              | 134**         | 17***         | 0.036                      | 005                  | 0.007                 | .162*       |
|                                    |                   | *             |               |                            |                      |                       | *           |
|                                    | [0.052]           | [0.001]       | [0.000]       | [0.108]                    | [0.173]              | [0.101]               | [0.021]     |
| Advertising/Sales                  | 1.414             | 1.431         | 1.537**       | -                          | 0.029                | 0.628                 | 0.726       |
|                                    |                   |               | *             | 0.623                      |                      | ***                   |             |

|             |  |              |              |              |             |                  |             |                  |
|-------------|--|--------------|--------------|--------------|-------------|------------------|-------------|------------------|
|             |  | [0.38<br>4]  | [0.17<br>1]  | [0.008]      | [0.274<br>] | [0.75<br>1]      | [0.00<br>0] | [0.69<br>7]      |
| CAPEX/Sales |  | -            | -            | -            | 0.080       | -                | 0.021       | -                |
|             |  | 0.571<br>*** | 0.344<br>*** | 0.336**<br>* |             | 0.027<br>***     | *<br>***    | 0.374<br>**      |
| Tobin's Q   |  | [0.00<br>0]  | [0.00<br>3]  | [0.000]      | [0.167<br>] | [0.00<br>3]      | [0.05<br>3] | [0.03<br>0]      |
|             |  | -<br>0.044   | 0.023        | 0.009        | 0.019       | -<br>0.003<br>** | -<br>0.002  | -<br>0.069<br>** |
|             |  | [0.12<br>5]  | [0.26<br>1]  | [0.465]      | [0.103<br>] | [0.03<br>2]      | [0.42<br>3] | [0.02<br>7]      |
| Observation |  | 1            | 1            | 14,          | 14          | 1                | 1           | 1                |
| S           |  | 5,059        | 4,889        | 908          | ,889        | 4,873            | 4,894       | 4,079            |
| R-squared   |  | 0.292        | 0.392        | 0.389        | 0.052       | 0.134            | 0.135       | 0.15             |

Table 7: Governance regressions - non-US firms

This table contains regressions that analyze corporate governance attributes. All models contain year dummies, 2-digit SIC industry dummies, and cluster standard errors by firm. The Column header contains the regression technique and the dependent variable. The sample contains all non-US firms that are listed in the US. Table 2 contains the variable definitions. Brackets contain p-values. Superscripts \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively.

| Dependent Variable | Governance Policy | Num Directors    | Num Directors | Abs(Abnormal Num Directors) | Prop Independent Directors | Prop Inside Directors | Ethics Codes |
|--------------------|-------------------|------------------|---------------|-----------------------------|----------------------------|-----------------------|--------------|
| Technique          | logit             | OLS              | OLS           | OLS                         | Tobit                      | Tobit                 | Logit        |
|                    | [1]               | [2]              | [3]           | [4]                         | [5]                        | [6]                   | [7]          |
| Chinese Co         | -                 | -                |               | 0.199                       | 0.050                      | 0.173**               | 1.894        |
|                    | 1.626*<br>[0.097] | 0.931<br>[0.120] |               | 0.661                       | 0.266                      | 0.032                 | 0.163        |
| OP                 | 1.783             | -                | 0.678         | 1.602                       | -                          | 0.196                 | -            |
|                    |                   |                  |               |                             | 0.157                      |                       | 1.389        |



2012]

## CHINESE COMPANIES LISTED ABROAD

271

|              |             |             |             |             |             |              |             |
|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
|              | [0.3<br>70] | [0.600<br>] |             | [0.11<br>4] | [0.2<br>04] | [0.21<br>6]  | [0.6<br>68] |
| Makes        | 0.30        | 0.024       | 0.05        | 0.03        | -           | 0.0          | -           |
| Acquisition  | 8           |             | 5           | 1           | 0.009       | 38           | 0.062       |
|              | [0.4<br>20] | [0.934<br>] | [0.81<br>9] | [0.86<br>4] | [0.6<br>88] | [0.34<br>7]  | [0.9<br>29] |
| Firm Size    | 0.48        | 1.06        | 1.07        | -           | 0.04        | -            | 0.1         |
|              | 0**         | 7***        | 3***        | 0.017       | 1***        | 0.067*<br>** | 84          |
|              | [0.0<br>13] | [0.000<br>] | [0.00<br>0] | [0.86<br>0] | [0.0<br>00] | [0.00<br>0]  | [0.5<br>10] |
| Current      | 0           | 0.1         | 0.15        | 0.033       | 0.0         | -            | 0.37        |
| Assets/Curr  | .098        | 49          | 4**         |             | 05          | 0.003        | 9**         |
| Liabilities  |             |             |             |             |             |              |             |
|              | [0.3<br>67] | [0.186<br>] | [0.04<br>0] | [0.74<br>7] | [0.3<br>91] | [0.74<br>9]  | [0.0<br>22] |
| Cash/Assets  | 2.36        | 0.308       | -           | -           | -           | -            | -           |
|              | 0           |             | 0.14        | 1.119       | 0.04        | 0.05         | 7.35        |
|              |             |             | 1           |             | 9           | 5            | 8**         |
|              | [0.3<br>10] | [0.844<br>] | [0.91<br>4] | [0.39<br>3] | [0.6<br>70] | [0.81<br>4]  | [0.0<br>13] |
| R&D/Sales    | -           | -           | 0.          | 0.          | 0           | 0.           | -           |
|              | 1.02        | 0.040       | 142         | 484**       | .007        | 010          | 4.98        |
|              | 2           |             |             | *           |             |              | 2           |
|              | [0.1<br>53] | [0.874<br>] | [0.58<br>8] | [0.00<br>3] | [0.7<br>76] | [0.77<br>7]  | [0.3<br>17] |
| Advertising  | 6.6         | -           | -           | 0.0         | 0.4         | -            | 19.4        |
| /Sales       | 06          | 10.913      | 11.611**    | 48          | 91          | 0.328        | 24          |
|              | [0.5<br>08] | [0.183<br>] | [0.03<br>8] | [0.99<br>1] | [0.4<br>10] | [0.68<br>5]  | [0.1<br>04] |
| CAPEX/Sal    | 0.98        | 0.964*      | 0.98        | 0.084       | -           | 0.0          | 0.14        |
| es           | 3*          | *           | 1***        |             | 0.003       | 11           | 2           |
|              | [0.0<br>97] | [0.028<br>] | [0.00<br>4] | [0.80<br>6] | [0.9<br>43] | [0.82<br>2]  | [0.8<br>07] |
| Tobin's Q    | -           | 0.1         | 0.          | -           | 0           | -            | -           |
|              | 0.06        | 37          | 127         | 0.142       | .000        | 0.01         | 0.33        |
|              | 4           |             |             | *           |             | 0            | 9*          |
|              | [0.7<br>09] | [0.232<br>] | [0.19<br>7] | [0.06<br>2] | [0.9<br>86] | [0.50<br>4]  | [0.0<br>53] |
| Observations | 269         | 313         | 314         | 313         | 313         | 243          | 199         |
| R-squared    | 0.24        | 0.701       | 0.69        | 0.248       | 0.64        | 0.14         | 0.29        |
|              | 1           |             | 4           |             | 9           | 1            | 3           |

Table 8: Delisting likelihood regressions

This table contains logit models that examine the probability that a firm delists from the stock market in year t+1. All models are logit or probit models (as indicated in the column header) and include year dummies, 2-digit SIC industry dummies, and cluster standard errors by firm. Table 2 contains the variable definitions. Brackets contain p-values and superscripts \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10%, respectively

| Dependent Variable<br>Technique          | Delists in year t+1          |                              |                              |                              |
|--|------------------------------|------------------------------|------------------------------|------------------------------|
|  | Logit                        | Probit                       | Logit                        | Probit                       |
| Chinese Co                               | 0.605**<br>*<br>[0.000]      | 0.318**<br>*<br>[0.000]      | -<br>0.097<br>[0.558]        | -<br>0.062<br>[0.454]        |
| OP                                       | -<br>2.449**<br>*<br>[0.000] | -<br>1.291**<br>*<br>[0.000] | -<br>1.757**<br>*<br>[0.000] | -<br>0.826**<br>*<br>[0.000] |
| Makes Acquisition                        | -<br>0.178**<br>*<br>[0.000] | -<br>0.079**<br>*<br>[0.000] | -<br>0.020<br>[0.846]        | -<br>0.022<br>[0.636]        |
| Firm Size                                | -<br>0.431**<br>*<br>[0.000] | -<br>0.181**<br>*<br>[0.000] | -<br>0.251**<br>*<br>[0.000] | -<br>0.109**<br>*<br>[0.000] |
| Current<br>Assets/Current<br>Liabilities | -<br>0.098**<br>*<br>[0.000] | -<br>0.037**<br>*<br>[0.000] | -<br>0.044**<br>*<br>[0.035] | -<br>0.017**<br>*<br>[0.009] |
| Cash/Assets                              | -<br>1.250**<br>*<br>[0.000] | -<br>0.547**<br>*<br>[0.000] | -<br>0.597*<br>[0.099]       | -<br>0.255*<br>[0.082]       |
| R&D/Sales                                | -<br>0.074**<br>*<br>[0.002] | -<br>0.048**<br>*<br>[0.000] | 0.02<br>7<br>[0.613]         | 0.02<br>6<br>[0.297]         |
| Advertising/Sales                        | 0.648<br>[0.261]             | 0.482*<br>[0.061]            | -<br>5.160**<br>[0.044]      | -<br>1.634*<br>[0.072]       |
| CAPEX/Sales                              | 0.093*<br>[0.037]            | 0.037*<br>[0.037]            | 0.037<br>[0.037]             | -<br>0.016                   |

2012]

*CHINESE COMPANIES LISTED ABROAD*

273

|                        |         |         |         |         |
|------------------------|---------|---------|---------|---------|
|                        | [0.084] | [0.095] | [0.750] | [0.724] |
| Tobin's Q              | -       | -       | -       | -       |
|                        | 0.369** | 0.169** | 0.284** | 0.114** |
|                        | *       | *       | *       | *       |
|                        | [0.000] | [0.000] | [0.000] | [0.000] |
| Year Fixed Effects     | Yes     | Yes     | Yes     | Yes     |
| Industry Fixed Effects | Yes     | Yes     | Yes     | Yes     |
| Observations           | 109,787 | 109,886 | 13,348  | 13,501  |
| Pseudo R-squared       | 0.218   | 0.24    | 0.129   | 0.105   |