

Board Structure, Director Expertise, and Advisory Role of Outside Directors

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A. Additional Tests of the Effects of the Passage of PNTR on Board Composition

In this section we conduct several additional untabulated tests for the effects of the passage of PNTR on board composition. First, we perform probit regressions in which the dependent variable is an indicator that equals one if a firm appoints an outside director with China experience in a given year and zero otherwise. We find that firms in higher NTR gap industries are more likely to appoint an outside director with China experience. Second, we examine whether a firm's demand for directors with China experience increases if its trading partners operate in high-NTR gap industries. We add the interaction between *Upstream NTR gap 1999* and *Post* and the interaction between *Downstream NTR gap 1999* and *Post* to the regression in column (2) of Table 2. *Upstream (Downstream) NTR gap 1999* is the difference between the non-NTR tariff rate of a firm's suppliers (customers) in 1999 and the NTR tariff rate of its suppliers (customers) in 1999. Upstream and downstream industries are identified using the benchmark input-output tables published every five years (i.e., 1992, 1997, 2002, and 2007) by the Bureau of Economic Analysis. We find that the coefficient on the interaction between *NTR gap 1999* and *Post* remains positive and significant, while those on the newly added interaction terms are not significant. Thus, the shock to industries of firms' suppliers and customers does not appear to have any statistically discernable effects on their demand for directors with China experience. Finally, we examine whether a firm's demand

for inside directors with China experience increases for firms operating in higher NTR gap industries. We find no significant increase in the demand for such directors, suggesting that firms rely more on outside directors with China experience when they exploit new opportunities in China arising from the passage of PNTR.

B. Mahalanobis Distance Matching

Since BoardEx covers a large number of firms only after 2003, we are not able to observe these firms' board composition prior to the passage of PNTR in 2000. Our DiD results in Section 4 of the paper may be biased if for some reasons firms that are added to BoardEx after 2003 tend to demand more directors with China experience than do other firms. Thus, as a robustness check, we use a matching approach to obtain a balanced panel surrounding the passage of PNTR in 2000 and then apply the DiD tests in Tables 2 and 3 to this sample. This approach also helps alleviate the concern that *observable* omitted firm characteristics that simultaneously affect both the proportion of directors with China experience on the board and *NTR gap 1999* would result in a spurious correlation between the two measures. Specifically, we first split our sample firms in 2000 according to the median *NTR gap 1999*. We then match each firm in the high-NTR gap group (treatment group) with a firm in the low-NTR gap group (control group) based on the Mahalanobis distance calculated using the following firm characteristics in 1999: *China-director*, board size, the proportion of outside directors on the board, firm size, Tobin's q , stock return volatility, a diversified firm indicator, leverage, ROA, and the ratio of foreign sales to total sales. The final sample comprises 2,739 firm-year observations (96 treatment firms and 96 control firms) from 1996 to 2011.

Panel A of Table A.2 compares mean characteristics of treatment and control firms. We find that none of the mean differences in board and firm characteristics between treatment and control

firms is significant, which indicates that treatment firms and their matched control firms have similar characteristics prior to the passage of PNTR. Fig. A plots the average *China-director* for treatment firms (solid line) and their matched control firms (dashed line) from 1997 to 2003. Prior to 2000, *China-director* for treatment firms is slightly higher than that for control firms, but after the passage of PNTR in 2000, we observe a spike in *China-director* for treatment firms and no significant change in *China-director* for control firms. Given that the variation in *China-director* comes mainly from treatment firms, this result suggests that our DiD approach allows us to identify the proposed treatment effect relatively well.

Panel B of Table A.2 reports results of DiD tests. The regression specifications in columns (1) through (6) correspond to those in columns (1) through (6) of Table 2. In column (7), we restrict the sample to the 1997 to 2003 period excluding 2000 (three years before and three years after the passage of PNTR in 2000). We find that all DiD coefficients are positive and significant.

Table A.3 reports estimates of two-stage least squares (2SLS) regressions in Table 3 using the matched sample. In the first stage (column (1)), we regress the interaction between *NTR gap 1999* and *Post* on the interaction between *Smoot-Hawley non-NTR 1990* and *Post* and the control variables used in column (1) of Table 3. In the second stage, we regress *China-director* on the predicted interaction between *NTR gap 1999* and *Post* estimated from the first-stage regression (column (2)). We find that the coefficient on the DiD term in the second-stage regression continues to be positive and significant. In columns (3) and (4), we add *Revealed NTR* to columns (1) and (2) and find that our results do not change.

If an increase in *China-director* is due to the passage of PNTR in 2000, *NTR gap 1999* should be correlated with *China-director* only after 2000. To examine whether there is a pre-treatment effect prior to 2000, in Table A.4 we replace the interaction between *NTR gap 1999* and *Post* in

Eq. (1) of the paper with interactions between *NTR gap 1999* and separate year indicators. In column (1), we only include the interactions between *NTR gap 1999* and the year indicators, year fixed effects, and firm fixed effects in the regression. In column (2), we add the control variables. In both regressions, the coefficients on the interactions between *NTR gap 1999* and the indicators for 1997, 1998, 1999, and 2000 are statistically indistinguishable from zero, which suggests that there is no pre-treatment effect prior to the passage of PNTR. In contrast, most of the interaction terms involving indicators for years after 2000 are positive and significant, suggesting that granting PNTR status to China does indeed explain the increase in demand for directors with China experience.

C. China-Related Social Connections of U.S. Firms' Directors and Firm Value

In this section we examine whether our main results are robust to controlling for the advisory role of outside directors in U.S. firms pursuing *China deals* who are socially connected to managers or directors in Chinese firms. Prior literature suggests that a director's social network affects firm performance (e.g., Cai and Sevilir, 2012; Ishii and Xuan, 2014). For example, directors of U.S. firms who are socially connected to managers or directors in Chinese firms may have access to value-relevant information about China-related investments via their social network, which helps their firms engage in value-increasing *China deals*. To examine whether social connections of U.S. firms' directors are associated with the announcement returns for U.S. firms that pursue *China deals* and whether our main results do not change after controlling for such connections, we augment the regressions in Table 4 with the proportion of outside directors on the board who are socially tied to directors or managers of publicly listed Chinese firms. Using the *Rest of World* file of the BoardEx database, we classify a director as a connected director if she is socially connected to the directors or CEO of a Chinese firm through 1) common educational

background (attended the same university and received the same degree (bachelor, MBA, or PhD)), 2) common membership in a non-profit organization, or 3) common past employment (i.e., worked together in the same firm/institution). In untabulated tests, we find no relation between our measures of social connections and announcement returns, but the coefficients on *China-director* remain positive and significant. Our results also do not change when we identify educational connections using only a bachelor's degree at the same university in the same year.

Social connections due to a common educational background, common non-profit affiliations, and common prior employment may have different effects on firm performance due to their different nature and importance.¹ To examine whether these three types of social connections affect firm value differently, in untabulated tests we reestimate the regressions by including all three social connection measures. We find no significant relation between the different types of social connections and CARs.

Some directors are socially connected to Chinese directors or CEOs who are former or current government officers (ambassador, commissioner, mayor, president, director, secretary general, senator, deputy director, deputy secretary, and deputy secretary general) in China. Previous studies show that firms with political connections have higher firm value than those without such connections (e.g., Agrawal and Knoeber, 2001; Francis, Hasan, and Sun, 2009). To test whether political connections have differential effects on firm value compared to non-political connections, we divide social connections into connections with political officers in China² and non-political connections and reestimate the regressions in columns (1) and (5) of Table 4 Panel A. In

¹ For example, educational ties are expected to be more exogenous than other ties (Cohen, Frazzini, and Malloy, 2008) while social ties based on employment history are more recent, reliable, and free of self-reporting bias (Ishii and Xuan, 2014; El-Khatib, Fogel, and Jandik, 2015).

² We define social connections with political officers in China as the proportion of outside directors on the board who are socially connected to the directors or managers of publicly listed Chinese firms who were former or current government officers in China.

untabulated tests, we find that the coefficients on both types of social connections are insignificant, while the positive and significant coefficient on *China-director* continues to hold.

Overall, these results suggest that *China-director* captures the value-enhancing advisory function of directors with China experience in U.S. firms even after controlling for social ties between U.S. firms' outside directors and Chinese firms' directors/CEOs.

D. Placebo Tests: Announcement Returns for U.S. Firms Pursuing *Non-China Deals*

In this section we conduct placebo tests using domestic (cross-border) M&As, JVs, and SAs by U.S. firms in which their targets or partners are non-Chinese firms (*Non-China deals*). We include both listed and nonlisted targets and partners. There are 4,174 *Non-China deals*, of which 1,784 (690) are domestic (cross-border) M&As, 129 (158) are domestic (cross-border) JVs, and 894 (519) are domestic (cross-border) SAs. If unobservable factors such as firm quality or director talent drive the positive relation between *China-director* and announcement returns for *China deals*, then this relation should also exist when the targets/partners of U.S. firms are non-Chinese firms.

The results are reported in Table A.5. In column (1) (column (2)), we use the pooled sample of domestic (cross-border) M&As, JVs, and SAs involving non-Chinese firms and reestimate the regression in column (1) of Table 4 Panel A.³ The dependent variable is the CAR (-1, 1) and the key independent variable of interest is *China-director*. We find that the coefficient on *China-director* is insignificant in both columns. The results for the subsamples of domestic (cross-border) M&As, JVs, and SAs are presented in columns (3), (5), and (7) (columns (4), (6), and (8)), respectively. We find that none of the coefficients on *China-director* is significantly positive. These findings mitigate the concern that our main results are driven by unobservable firm quality or

³ We do not include *Currency strength* in the regressions using domestic deals (i.e., columns (1), (3), (5), and (7)).

director talent.

E. Additional Tests of Investment Quality

As an alternative test of whether directors with China experience perform a value-increasing role when selecting Chinese targets/partners and assisting in target/partner integration, we examine whether the likelihood of subsequent divestitures or asset sales to a third party for performance-related reasons after an M&A or a JV is related to *China-director* (Park and Russo, 1996; Field and Mkrtchyan, 2017). *Hypothesis 2* suggests that directors with China experience reduce the likelihood of such divestitures or asset sales because they perform a value-enhancing advisory role in selecting Chinese targets/partners. To test this prediction, we first search divestitures or sale events of targets/JVs by our sample of U.S. firms over the five years after announcements of deals involving a Chinese target/partner from SDC, Capital IQ, and Factiva. We then search for “bankruptcy,” “discontinued operation/downsizing,” and “sell/divest” events in the Key Development of Capital IQ database and examine whether these events are due to the U.S. firms’ poor performance. We are able to identify 22 M&As and four JVs that involve subsequent divestitures or sales due to poor performance. Next, in untabulated tests, we estimate linear probability model (LPM) regressions in which the dependent variable is an indicator that equals one if a firm that pursued an M&A or a JV subsequently divests target assets or the JV to a third party within five years due to poor performance and zero otherwise. We find that firms with higher *China-director* are less likely to divest or sell their acquired assets/JVs due to poor performance. These results provide further support for our hypotheses, which hold that directors with China experience facilitate U.S. firms’ value-increasing investment in China.

F. Monitoring Role of Directors with China Experience

It is possible that the positive abnormal announcement returns that we document in the paper are due to the monitoring role of directors. To the extent that directors with China experience are more familiar with China accounting rules, laws and regulations, governance standards, and business practices than other directors, these information advantages may enhance the monitoring capabilities and incentives for directors with China experience. To address this issue, we examine whether *China-director* is related to CEO pay-performance sensitivity, forced CEO turnover-performance sensitivity, and the likelihood of financial restatements. We assess CEO pay-for-performance sensitivity by regressing CEO delta (dollar change in CEO wealth for a one percent change in stock price) (Core and Guay, 2002) on *China-director* and by regressing the natural logarithm of one plus CEO total compensation on the interaction between a firm's past industry-adjusted stock return and *China-director*. To assess CEO turnover-performance sensitivity, we regress an indicator for a CEO forced turnover on the interaction between a firm's past industry-adjusted return and *China-director*. The likelihood of financial restatements is estimated by regressing an indicator for financial restatements that involve fraud (i.e., accounting restatements whose types are fraud, misrepresentation, or an investigation by the SEC according to Audit Analytics) on *China-director*.

The results estimated using OLS, conditional logit, and LPM regressions are reported in Panel A of Table A.7. In columns (1) and (2), we examine the effect of *China-director* on CEO pay-performance sensitivity. In column (1), we use CEO delta as the measure of pay-for-performance sensitivity. Our choice of control variables follows Coles, Daniel, and Naveen (2014) and Guo and Masulis (2015). We also include year and firm fixed effects. We find that the coefficient on *China-director* is negative and insignificant. In column (2), we regress the natural logarithm of one plus CEO total compensation on a firm's past industry-adjusted stock return, *China-director*, their

interaction, and the control variables used in column (1). The coefficient on the interaction term captures the incremental effect of *China-director* on CEO pay-performance sensitivity. We find that the coefficient on the interaction term is insignificant. These results suggest that directors with China experience do not perform a more active governance role in CEO compensation design than those without such experience.

In columns (3) and (4), we examine forced CEO turnover-performance sensitivity. In column (3) (column (4)), we perform a conditional logit (LPM) regression with year and firm fixed effects in which the dependent variable is an indicator that equals one if the firm experiences a forced CEO turnover in a given year and zero otherwise, and the key independent variable of interest is the interaction between *China-director* and past industry-adjusted returns. We find that the coefficient on the interaction term is insignificant in both regressions.

In columns (5) and (6), we examine the likelihood of financial restatements. In column (5) (column (6)), we perform a conditional logit (LPM) regression with year and firm fixed effects in which the dependent variable is an indicator for financial restatements that involve fraud. We find that the coefficient on *China-director* is positive and insignificant, suggesting that the proportion of directors with China experience on the board does not affect the likelihood of financial restatements.

To mitigate potential endogeneity of *China-director*, we also perform 2SLS regressions in which we use *Log (immigrants)* as the instrumental variable for *China-director*. The results are reported in Panel B of Table A.7. Results using CEO delta as the measure of CEO pay-for-performance sensitivity are reported in columns (1) and (2). Consistent with the results in Panel A, we find that the coefficient on instrumented *China-director* is not significant. Results for the regressions in which we use the natural logarithm of one plus CEO total compensation and the

forced CEO turnover indicator as the dependent variable are reported in columns (3) - (5) and columns (6) - (8), respectively. Since our main independent variable of interest in these regressions is the interaction between past stock performance and *China-director*, we treat *China-director* and its interaction with past stock performance as two separate endogenous variables in our first-stage regressions.⁴ We find that the coefficients on the instrumented interaction between *China-director* and prior stock performance are not significant (columns (5) and (8)). Results for the regressions in which we use an indicator for financial restatements as the dependent variable are reported in columns (9) and (10). Again, the coefficient on instrumented *China-director* is not significant. These results suggest that the monitoring function performed by directors with China experience is not different from that performed by directors without such experience.

⁴ Specifically, in the first-stage regressions, we regress *China-director* and its interaction with industry-adjusted stock return on *Log (immigrants)*, industry-adjusted stock return, the interaction between these two variables, and controls. In the second stage, we regress the natural logarithm of one plus CEO total compensation (forced CEO turnover indicator) on the instrumented *China-director*, the instrumented interaction between *China-director* and prior stock performance, prior stock performance, and the controls used in the first-stage regression as independent variables.

APPENDIX REFERENCES

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APPENDIX FIGURE

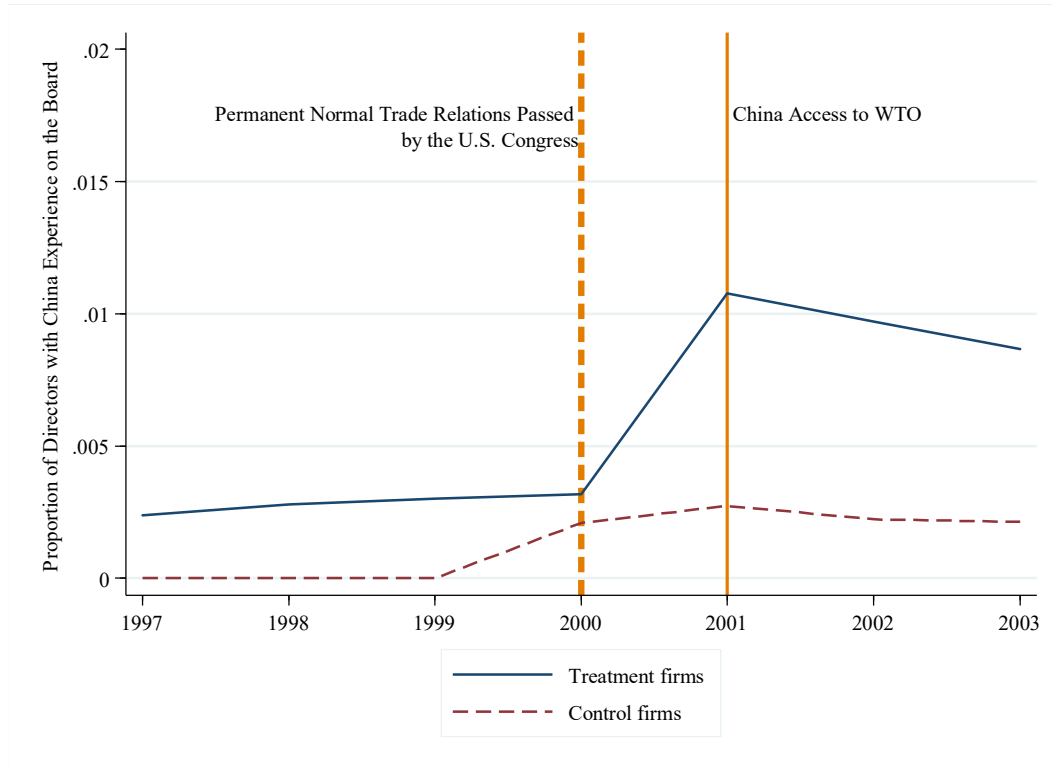


Fig. A. Proportion of outside directors with China experience on the board. This figure depicts the average ratio of the number of outside directors who have China-related experience to the total number of directors on the board from 1997 to 2003 for treatment firms (solid line) and their matched control firms (dashed line). We first split the sample firms in 2000, the year in which U.S. Congress granted permanent normal trade relations (PNTR) status to China, according to the median NTR gap in 1999. We then match each firm in the high-NTR gap group (treatment group) with a firm in the low-NTR gap group (control group) according to the Mahalanobis distance calculated using firm characteristics in 1999. The variables used in the matching include the proportion of outside directors with China experience on the board (*China-director*), board size, the proportion of outside directors on the board, firm size, Tobin's q , stock return volatility, a diversified firm indicator, leverage, ROA, and the ratio of foreign sales to total sales.

APPENDIX TABLES

Table A.1

Normal Trade Relations gap and imports from China by U.S. Firms.

Panel A of this table reports the normal trade relations (*NTR*) gap 1999, defined as the difference between the non-NTR tariff rate and the NTR tariff rate in 1999 by industry classified according to two-digit standard industrial classification (SIC) codes. Panel B presents the change in China import penetration (*CIP*) from 1997 to 2003 for each two-digit SIC industry in the U.S. *CIP* is the ratio of imports from China by U.S. firms to domestic absorption (industry shipments plus imports minus exports) in 1991 in the U.S.

<i>Panel A: NTR gap 1999</i>		
SIC code	Industry	NTR gap 1999
22	Textile Mill Products	0.5404
23	Apparel, Finished Products from Fabrics and Similar Materials	0.5224
39	Miscellaneous Manufacturing Industries	0.4405
24	Lumber and Wood Products, Except Furniture	0.4322
31	Leather and Leather Products	0.3743
27	Printing, Publishing and Allied Industries	0.3741
38	Measuring, Photographic, Medical, and Optical Goods, and Clocks	0.3683
25	Furniture and Fixtures	0.3622
34	Fabricated Metal Products	0.3489
36	Electronic and Other Electrical Equipment and Components	0.3458
32	Stone, Clay, Glass, and Concrete Products	0.3400
35	Industrial and Commercial Machinery and Computer Equipment	0.3272
37	Transportation Equipment	0.3172
28	Chemicals and Allied Products	0.3146
33	Primary Metal Industries	0.2579
26	Paper and Allied Products	0.2512
30	Rubber and Miscellaneous Plastic Products	0.2467
29	Petroleum Refining and Related Industries	0.2075
21	Tobacco Products	0.1953
20	Food and Kindred Products	0.1304
<i>Panel B: Changes in CIP in the U.S. from 1997 to 2003</i>		
SIC code	Industry	Change in CIP
31	Leather and Leather Products	0.1336
39	Miscellaneous Manufacturing Industries	0.1039
25	Furniture and Fixtures	0.0801
23	Apparel, Finished Products from Fabrics and Similar Materials	0.0711
36	Electronic and Other Electrical Equipment and Components	0.0685
35	Industrial and Commercial Machinery and Computer Equipment	0.0451
32	Stone, Clay, Glass, and Concrete Products	0.0345
34	Fabricated Metal Products	0.0247
29	Petroleum Refining and Related Industries	0.0224
38	Measuring, Photographic, Medical, and Optical Goods, and Clocks	0.0213
37	Transportation Equipment	0.0171
24	Lumber and Wood Products, Except Furniture	0.0167
26	Paper and Allied Products	0.0149
30	Rubber and Miscellaneous Plastic Products	0.0125
22	Textile Mill Products	0.0098
27	Printing, Publishing and Allied Industries	0.0079
28	Chemicals and Allied Products	0.0067
33	Primary Metal Industries	0.0060
20	Food and Kindred Products	0.0031
21	Tobacco Products	0.0001

Table A.2

Effects of the passage of Permanent Normal Trade Relations (PNTR) on board composition: difference-in-differences tests using the matched sample.

Panel A of this table presents mean characteristics of treatment and control firms in a matched sample in 1999 and Panel B presents estimates of ordinary least squares (OLS) difference-in-differences regressions in which the dependent variable is the ratio of the number of outside directors who have China-related experience to the total number of directors on the board (*China-director*). The sample consists of 2,739 U.S. manufacturing firm-year observations (96 treatment firms and 96 control firms) covered in BoardEx, Capital IQ, Compustat, CRSP, Edgar, and RiskMetrics from 1996 to 2011. We first split the sample firms in 2000, the year in which U.S. Congress granted PNTR status to China, according to the median *NTR gap 1999*. We then match each firm in the high-NTR gap group (treatment group) with a firm in the low-NTR gap group (control group) according to the Mahalanobis distance calculated using firm characteristics in 1999. The variables used in the matching include *China-director*, board size, the proportion of outside directors on the board, firm size, Tobin's *q*, stock return volatility, a diversified firm indicator, leverage, ROA, and the ratio of foreign sales to total sales. Columns (1) through (6) use the full sample period and column (7) uses the subsample period from 1997 to 2003 excluding 2000 (i.e., three years before and after 2000 in which U.S. Congress granted PNTR status to China). In columns (3) and (6), we control for *Revealed NTR*, which is the ratio of duties paid to custom value for each four-digit SIC industry in a given year. *NTR gap 1999* is the difference between the non-NTR tariff rate in 1999 and the NTR tariff rate in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2000–2011 period and zero otherwise. All firm-level continuous variables except *China-director* are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Mean firm characteristics

Variable	Treatment firms	Control firms	Test of difference (<i>p</i> -value)
China-director	0.003	0.000	0.127
Board size	9.260	9.646	0.241
Board independence	0.651	0.647	0.677
Firm size (\$millions)	2,602	2,178	0.264
Tobin's <i>q</i>	2.611	2.471	0.604
Return volatility	0.141	0.033	0.155
Diversification (indicator)	0.510	0.500	0.886
Leverage	0.221	0.260	0.151
ROA	0.112	0.132	0.267
Foreign sales ratio	0.305	0.273	0.135

Panel B: OLS regressions (dependent variable = China-director)

Independent variable	Full sample period						Subsample period (year -3 to year +3)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NTR gap 1999	0.054**	0.052**	0.036**				0.038**
× Post	(2.161)	(2.109)	(2.450)				(1.980)
NTR gap 1990				0.038**	0.038**	0.033**	
× Post				(2.234)	(2.286)	(2.547)	
Revealed NTR	No	No	Yes	No	No	Yes	No
Control variables (column (2) of Table 2)	No	Yes	Yes	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	2,739	2,727	2,727	2,739	2,727	2,727	1,078
Adj. <i>R</i> ²	0.515	0.517	0.520	0.511	0.514	0.517	0.585

Table A.3

Effects of the passage of Permanent Normal Trade Relations (PNTR) on board composition: instrumental variables approach using the matched sample.

This table presents estimates of two-stage least squares regressions in which the Smoot-Hawley-based non-NTR tariff rate in 1990 (*Smoot-Hawley non-NTR 1990*) is used as the instrumental variable for *NTR gap 1999* (the difference between the non-NTR tariff rate in 1999 and the NTR tariff rate in 1999 in a four-digit SIC industry). The sample consists of 2,727 U.S. manufacturing firm-year observations (96 treatment firms and 96 control firms) covered in BoardEx, Capital IQ, Compustat, CRSP, Edgar, and RiskMetrics from 1996 through 2011. We first split the sample firms in 2000, the year in which U.S. Congress granted PNTR status to China, according to the median *NTR gap 1999*. We then match each firm in the high-NTR gap group (treatment group) with a firm in the low-NTR gap group (control group) according to the Mahalanobis distance calculated using firm characteristics in 1999. The variables used in the matching include the proportion of outside directors with China-related experience on the board (*China-director*), board size, the proportion of outside directors on the board, firm size, Tobin's *q*, stock return volatility, a diversified firm indicator, leverage, ROA, and the ratio of foreign sales to total sales. In the first-stage regressions, the dependent variable is the interaction between *NTR gap 1999* and *Post* (columns (1) and (3)). In the second-stage regressions, the dependent variable is *China-director* (columns (2) and (4)). *Revealed NTR* is the ratio of duties paid to custom value for each four-digit SIC industry in a given year. *Post* is an indicator that equals one for a firm in the 2000–2011 period and zero otherwise. All firm-level continuous variables except *China-director* are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	Without controlling for revealed NTR		Controlling for revealed NTR	
	NTR gap 1999 × Post	China-director	NTR gap 1999 × Post	China-director
	First stage	Second stage	First stage	Second stage
	(1)	(2)	(3)	(4)
NTR gap 1999 × Post		0.053** (2.313)		0.045** (2.529)
Smoot-Hawley non-NTR 1990 × Post	0.632*** (52.355)		0.659*** (7.663)	
Log (board size)	0.036*** (5.553)	0.009 (1.501)	0.025 (1.566)	0.009 (1.524)
Board independence	0.004 (0.500)	0.005 (0.643)	0.006 (0.178)	0.003 (0.556)
Log (firm size)	0.009*** (4.386)	-0.001 (-0.557)	0.006 (0.877)	-0.001 (-0.498)
Tobin's <i>q</i>	-0.004*** (-6.132)	0.000 (0.105)	-0.003* (-1.912)	-0.000 (-0.154)
Return volatility	0.003 (0.930)	0.002 (0.651)	-0.000 (-0.228)	0.002 (0.900)
Diversification (indicator)	-0.004 (-1.315)	0.002 (0.748)	0.000 (0.025)	0.002 (0.767)
Leverage	0.010* (1.723)	0.000 (0.050)	0.014 (1.151)	-0.000 (-0.006)
ROA	-0.005 (-0.500)	-0.010 (-1.206)	-0.001 (-0.019)	-0.008 (-1.201)
Foreign sales ratio	-0.021*** (-3.114)	-0.009 (-1.217)	-0.025* (-1.881)	-0.009 (-1.241)
Revealed NTR			2.505*** (5.252)	-0.095 (-0.832)
Cragg and Donald (1993) <i>F</i> -statistic	<i>p</i> -value < 0.001	–	<i>p</i> -value < 0.001	–
Year fixed effects	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
No. of observations	2,727	2,727	2,727	2,727
Adj. <i>R</i> ²	0.963	–	0.958	–

Table A.4

Pre-treatment effects of the passage of Permanent Normal Trade Relations (PNTR) on board composition: using the matched sample.

This table presents pre-treatment effects of PNTR on the ratio of the number of outside directors who have China-related experience to the total number of directors on the board (*China-director*). The sample consists of 2,739 U.S. manufacturing firm-year observations (96 treatment firms and 96 control firms) covered in BoardEx, Capital IQ, Compustat, CRSP, Edgar, and RiskMetrics from 1996 to 2011. We first split the sample firms in 2000, the year in which U.S. Congress granted PNTR status to China, according to the median *NTR gap 1999*. We then match each firm in the high-NTR gap group (treatment group) with a firm in the low-NTR gap group (control group) according to the Mahalanobis distance calculated using firm characteristics in 1999. The variables used in the matching include *China-director*, board size, the proportion of outside directors on the board, firm size, Tobin's *q*, stock return volatility, a diversified firm indicator, leverage, ROA, and the ratio of foreign sales to total sales. *NTR gap 1999* is the difference between the non-NTR tariff rate in 1999 and the NTR tariff rate in 1999 in a four-digit SIC industry. All firm-level continuous variables except *China-director* are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	(1)	(2)
NTR gap 1999 × 1997	-0.001 (-0.047)	-0.008 (-0.368)
NTR gap 1999 × 1998	-0.004 (-0.150)	-0.007 (-0.241)
NTR gap 1999 × 1999	-0.018 (-0.557)	-0.016 (-0.495)
NTR gap 1999 × 2000	-0.015 (-0.491)	-0.020 (-0.606)
NTR gap 1999 × 2001	0.040** (2.159)	0.032* (1.693)
NTR gap 1999 × 2002	0.019** (2.259)	0.015* (1.720)
NTR gap 1999 × 2003	0.019** (2.191)	0.016 (1.653)
NTR gap 1999 × 2004	0.019** (2.121)	0.016 (1.494)
NTR gap 1999 × 2005	0.028 (1.539)	0.022 (0.943)
NTR gap 1999 × 2006	0.074** (2.418)	0.070** (2.438)
NTR gap 1999 × 2007	0.045* (1.919)	0.043* (1.769)
NTR gap 1999 × 2008	0.062** (2.120)	0.058* (1.958)
NTR gap 1999 × 2009	0.067** (2.261)	0.064** (2.069)
NTR gap 1999 × 2010	0.065** (2.101)	0.063** (1.986)
NTR gap 1999 × 2011	0.027 (0.734)	0.027 (0.785)
Control variables (column (2) of Table 2)	No	Yes
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
No. of observations	2,739	2,727
Adj. <i>R</i> ²	0.517	0.519

Table A.5

Effects of outside directors with China experience on announcement returns for U.S. firms pursuing *non-China deals*.

This table presents the estimates of OLS regressions in which the dependent variable is the cumulative abnormal returns for U.S. firms that pursue mergers and acquisitions (M&As), joint ventures (JVs), or strategic alliances (SAs) involving non-Chinese firms (*Non-China deals*) from one day before to one day after the announcement date (CARs (-1, 1)). The sample consists of 4,174 *Non-China deals* (1,784 domestic M&As and 690 cross-border M&As, 129 domestic JVs and 158 cross-border JVs, and 894 domestic SAs and 519 cross-border SAs) conducted by U.S. firms from 1996 to 2011. All firm-level continuous variables except the proportion of outside directors with China-related experience on the board (*China-director*) are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	M&As + JVs + SAs		M&As		JVs		SAs	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
China-director	-0.013 (-0.518)	-0.018 (-0.690)	-0.039 (-0.960)	-0.056 (-1.111)	0.104 (0.860)	-0.226* (-1.769)	-0.061 (-0.820)	-0.088 (-0.889)
Log (board size)	-0.006 (-1.165)	0.003 (0.396)	0.007 (0.785)	0.003 (0.214)	-0.025 (-0.645)	0.031 (1.337)	-0.016 (-1.130)	0.009 (0.208)
Board independence	0.010 (1.244)	-0.033*** (-2.732)	-0.002 (-0.173)	-0.032 (-1.392)	0.063 (1.246)	-0.059* (-1.895)	0.007 (0.274)	-0.031 (-0.323)
Log (firm size)	-0.004*** (-5.053)	-0.002 (-1.646)	-0.005*** (-3.218)	-0.001 (-0.623)	0.005 (0.799)	-0.007* (-1.814)	-0.004** (-2.010)	-0.004 (-0.579)
Tobin's <i>q</i>	-0.001 (-1.051)	0.000 (0.027)	-0.002 (-1.284)	-0.002 (-0.674)	-0.005 (-0.942)	0.000 (0.136)	-0.001 (-0.660)	-0.014 (-1.440)
R&D	0.011 (0.571)	0.031 (1.052)	-0.098 (-1.416)	0.082 (1.429)	-0.027 (-0.230)	-0.001 (-0.005)	0.061 (1.627)	0.423* (1.860)
Leverage	0.008 (1.085)	0.003 (0.262)	0.012 (1.010)	0.004 (0.159)	-0.047 (-1.061)	-0.050 (-1.309)	0.005 (0.264)	-0.114 (-1.172)
Free cash flow	0.016 (1.329)	-0.041** (-2.347)	0.000 (0.020)	0.008 (0.194)	-0.020 (-0.206)	-0.067 (-1.291)	0.027 (1.245)	0.072 (1.072)
Foreign sales ratio	-0.002 (-0.436)	-0.006 (-0.951)	0.015* (1.730)	0.019* (1.791)	-0.013 (-0.295)	0.038 (1.494)	-0.029** (-2.551)	-0.019 (-0.790)
High tech (indicator)	0.001 (0.442)	-0.002 (-0.387)	0.005 (0.952)	0.006 (0.899)	-0.020 (-0.796)	-0.010 (-0.547)	-0.001 (-0.117)	-0.038** (-2.114)
M&A (indicator)	-0.002 (-0.701)	-0.001 (-0.241)						
Joint venture (indicator)	0.002 (0.545)	0.003 (0.677)						
Currency strength (indicator)		0.007** (2.414)		0.011** (2.163)		0.001 (0.157)		0.024 (1.149)
Price run-up			-0.002 (-0.505)	-0.004 (-0.387)				
Industry M&A			0.046 (0.670)	0.182 (0.343)				
Private target (indicator)			0.020*** (3.828)	-0.001 (-0.105)				
All cash deal (indicator)			0.005 (1.411)	-0.003 (-0.627)				
Stock deal (indicator)			0.006 (0.753)	0.012 (0.400)				
Diversifying M&A (indicator)			-0.005 (-1.056)	-0.005 (-0.756)				
Licensing agreement (indicator)					0.008 (0.358)	-0.002 (-0.108)	-0.005 (-0.834)	-0.015 (-0.484)
Manufacturing agreement (indicator)					-0.022* (-1.908)	0.005 (0.588)	-0.001 (-0.102)	-0.008 (-0.414)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	2,807	1,367	1,784	690	129	158	894	519
Adj. <i>R</i> ²	0.020	0.061	0.015	-0.007	-0.097	0.116	0.023	-0.004

Table A.6

Effects of outside directors with China experience on long-term operating performance of U.S. firms that pursue *China deals*.

This table presents estimates of ordinary least squares (OLS) regressions (columns (1) and (2)) and two-stage least squares (2SLS) regressions (columns (3) through (6)). The sample consists of 219 U.S. firms that conduct mergers and acquisitions (M&As), joint ventures (JVs), or strategic alliances (SAs) over the 1996 to 2011 period in which the targets/partners are Chinese firms (90 M&As, 54 JVs, and 75 SAs). In columns (1) and (2), the dependent variable is *Change in ROA* for U.S. firms that engage in M&As, JVs, or SAs in which the targets/partners are Chinese firms. *Change in ROA* is the difference in operating performance between the average industry-median-adjusted ROA over the three years after completion and the industry-median-adjusted ROA one year before the announcement year. The dependent variable in the first-stage regressions is the proportion of outside directors with China experience on the board (*China-director*) (columns (3) and (5)) and the dependent variable in the second-stage regressions is *Change in ROA* (columns (4) and (6)). We use the natural logarithm of the number of immigrants from China in a given year in the state in which the firm is headquartered (*Log (immigrants)*) as an instrument for *China-director*. All firm-level continuous variables except *China-director* are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	OLS			2SLS		
	Change in ROA for U.S. firms		China-director	Change in ROA for U.S. firms		Change in ROA for U.S. firms
	(1)	(2)	First stage (3)	Second stage (4)	First stage (5)	Second stage (6)
China-director	0.208** (2.095)	0.203* (1.807)		1.845* (1.797)		1.644** (2.038)
Log (immigrants)			0.007** (2.242)		0.008** (2.510)	
Control variables	Column (1) of Table 4 Panel A	Column (5) of Table 4 Panel A	Column (1) of Table 4 Panel A	Column (1) of Table 4 Panel A	Column (5) of Table 4 Panel A	Column (5) of Table 4 Panel A
Cragg and Donald (1993) <i>F</i> -statistic	–	–	<i>p</i> -value = 0.027	–	<i>p</i> -value = 0.016	–
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	219	219	219	219	219	219
Adj. <i>R</i> ²	0.063	0.037	0.124	–	0.151	–

Table A.7

Monitoring role of outside directors with China experience.

Panel A of this table presents estimates of ordinary least squares (OLS), conditional logit, and linear probability model (LPM) regressions in which the dependent variables are CEO delta (column (1)), the natural logarithm of one plus CEO total compensation (column (2)), an indicator that equals one if the firm experiences a forced CEO turnover in a given year and zero otherwise (columns (3) and (4)), and an indicator that equals one if the U.S. firm's quarterly or annual financial report is subsequently restated due to fraud, misrepresentation, and/or an investigation by the SEC in a given year and zero otherwise (columns (5) and (6)). Panel B presents estimates of two-stage least squares (2SLS) regressions in which *Log (immigrants)* and the interaction between *Log (immigrants)* and industry-adjusted return are used as the instrumental variables for the proportion of outside directors with China experience on the board (*China-director*) and the interaction between *China-director* and industry-adjusted return, respectively. In columns (1) - (4) of Panel A and columns (1) - (8) of Panel B, the sample consists of S&P 1500 manufacturing firms from 1996 to 2011. In columns (5) and (6) of Panel A and columns (9) and (10) of Panel B, the sample consists of all U.S. manufacturing firms from 1996 to 2011. CEO delta is measured as the expected dollar change in CEO wealth for a one percent change in stock price. We classify a turnover event as a forced turnover if: 1) news articles on Factiva report that the CEO has been fired, has been forced to depart from the position, or has departed due to unspecified policy differences; 2) the departing CEO is under the age of 60 and the stated reason for the departure is not death, poor health, or the acceptance of another position (elsewhere or within the firm); or 3) the departing CEO is under the age of 60 and the stated reason for the departure is retirement but the firm does not announce it at least six months before the departure. In Panel B, the dependent variables in the first-stage regressions are *China-director* (columns (1), (3), (6), and (9)) and the interaction between *China-director* and industry-adjusted return (columns (4) and (7)). The dependent variables in the second-stage regressions are CEO delta (column (2)), the natural logarithm of one plus CEO total compensation (column (5)), an indicator for forced CEO turnover (column (8)), and an indicator for financial restatements (column (10)). *Log (immigrants)* is the natural logarithm of the immigrants from China in a given year in the state where the firm is headquartered. All firm-level continuous variables except *China-director* are winsorized at the 1% level in both tails. The appendix provides a detailed description of the construction of the other variables. *T*-statistics based on robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: OLS, conditional logit, and LPM regressions

Independent variable	CEO pay-performance sensitivity		Forced CEO turnover-performance sensitivity		Financial	
	CEO delta	Log (1 + CEO total	Forced CEO turnover (indicator)		restatement (indicator)	
		compensation)	Conditional logit	LPM	Conditional logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)
China-director : a	-0.928 (-1.450)	-0.076 (-0.154)	-14.632* (-1.664)	-0.144 (-0.882)	6.119 (0.886)	0.091 (0.316)
Industry-adjusted return: b		0.016 (0.807)	-0.760** (-2.376)	-0.011** (-2.097)		
a × b		0.298 (0.276)	-9.288 (-0.355)	0.011 (0.040)		
Log (board size)	-0.309* (-1.676)	-0.289** (-2.371)	0.379 (0.404)	0.025 (0.743)	1.828 (1.537)	0.007 (1.379)
Board independence	0.301 (1.368)	0.129 (0.878)	0.178 (0.128)	0.016 (0.535)	1.186 (0.931)	0.006 (0.630)
Log (firm size)	0.292*** (4.287)	0.290*** (5.454)	0.715** (2.049)	0.014 (1.490)	0.195 (0.592)	0.002 (1.292)
Foreign sales ratio	0.116*** (5.208)	0.079*** (3.884)	0.711 (0.757)	0.012 (0.354)	0.741 (0.551)	0.003 (0.593)
Tobin's <i>q</i>	0.179 (0.311)	-0.047 (-0.109)			0.104 (1.158)	0.001 (1.440)
Leverage	0.074 (0.381)	0.062 (0.491)			-0.242 (-0.262)	-0.004 (-0.563)
R&D	-0.847***	-0.573***				

Log (idiosyncratic volatility)	(-3.743)	(-3.780)							
	0.220**	0.012							
	(2.557)	(0.211)							
Capex	1.960**	0.130							
	(2.296)	(0.223)							
CEO tenure	0.039***	-0.001	0.035	0.001					
	(6.719)	(-0.159)	(1.177)	(0.961)					
CEO-chair duality (indicator)	-0.045	0.006	-0.011	0.005					
	(-0.894)	(0.195)	(-0.036)	(0.552)					
E-index	0.004	0.024	-0.194	-0.003					
	(0.125)	(1.254)	(-1.026)	(-0.648)					
Outside director shares	1.417**	-0.461	5.305	0.140					
	(2.340)	(-1.490)	(1.303)	(1.025)					
Female board (indicator)	0.044	-0.027	-0.157	-0.010					
	(0.687)	(-0.639)	(-0.378)	(-0.919)					
Busy board	-0.038	-0.028	-0.495	-0.011					
	(-0.480)	(-0.644)	(-0.868)	(-0.989)					
CEO with block ownership (indicator)			0.121	-0.008					
			(0.126)	(-0.461)					
Old CEO (indicator)			-0.566	-0.009					
			(-1.052)	(-1.196)					
Diversification (indicator)							-0.046	0.001	
							(-0.086)	(0.203)	
Return volatility							0.840	0.007	
							(1.339)	(0.894)	
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
No. of observations	3,899	3,857	756	4,068	642	13,675			
Adj. R^2	0.775	0.744	–	0.058	–	-0.010			
Log-likelihood	–	–	-193.969	–	-126.222	–			
Pseudo R^2	–	–	0.084	–	0.129	–			

Panel B: 2SLS regressions

Independent variable	CEO pay-performance sensitivity					Forced CEO turnover-performance sensitivity			Financial restatement	
	China-director	CEO delta	China-director	China-director × industry-adjusted return	Log (1 + CEO total compensation)	China-director	China-director × industry-adjusted return	Forced CEO turnover (indicator)	China-director	Financial restatement (indicator)
	First stage	Second stage	First stage	First stage	Second stage	First stage	First Stage	Second stage	First stage	Second stage
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Log (immigrants): a	0.003***		-0.003	0.001		0.001	0.001		-0.000	
	(2.673)		(-1.071)	(1.283)		(0.314)	(1.120)		(-0.622)	

China-director: b		-47.063 (-0.551)				-4.586 (-0.228)			9.502 (0.695)		-5.941 (-0.393)
Industry-adjusted return: c			-0.000 (-0.426)	0.001*** (4.393)		-0.013 (-0.230)	-0.001 (-0.747)	0.001** (2.147)		0.028 (0.287)	
a × c			0.001 (1.142)	0.001*** (3.282)			0.002 (1.474)	0.000 (0.340)			
b × c						18.157 (0.551)			-28.633 (-0.438)		
Control variables	Column (1) of Panel A	Column (1) of Panel A	Column (2) of Panel A	Column (2) of Panel A	Column (2) of Panel A	Column (4) of Panel A	Column (4) of Panel A	Column (4) of Panel A	Column (6) of Panel A	Column (6) of Panel A	
Cragg and Donald (1993) <i>F</i> -statistic	<i>p</i> -value < 0.001	–	<i>p</i> -value = 0.027	–	–	<i>p</i> -value = 0.065	–	–	<i>p</i> -value = 0.258	–	
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
No. of observations	3,887	3,887	3,845	3,845	3,845	4,056	4,056	4,056	13,675	13,675	
Adj. <i>R</i> ²	0.098	–	-0.130	-0.120	–	0.023	0.024	–	0.615	–	