Is targets' business experience valuable to acquirers? Evidence from the U.S. grant of PNTR status to China

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Abstract

We exploit the U.S. grant of Permanent Normal Trade Relations (PNTR) status to China as a quasi-policy shock to corporate demand for targets with China-related business experience, and investigate how such a shock affects U.S. acquirers' target selection and performance. U.S. firms are more likely to acquire targets with Chinese experience following PNTR. These acquirers realize better announcement returns and post-acquisition operating performance, enjoy higher synergy gains, and are more likely to avoid large losses than other acquirers after PNTR. Acquisitions of targets with Chinese experience benefit U.S. acquirers by lowering operating expenses, purchasing more inputs from China, selling more outputs to China, and establishing more social networks in China post-PNTR. Overall, this paper reveals that targets with complementary knowledge in local businesses improve decision making for acquirers entering the foreign market via minimizing information gap.

Keywords: Target selection, Acquirers' performance, Permanent normal trade relations, China-related business experience, Information gap

JEL Classification: G14, G32, G34, O24

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1. Introduction

The passage of Permanent Normal Trade Relations (PNTR) status to China in 2000 by U.S. Congress permanently set U.S. duties on Chinese imports at normal trade relations (NTR) levels and provided greater incentives for Chinese firms to enter the U.S. market. Pierce and Schott (2016), Antràs et al. (2017), and Chen et al. (2020) indicate that the elimination of possible sudden tariff spikes and investment uncertainty after PNTR at the same time offered new business opportunities for U.S. firms. The passage of PNTR enhances the incentives for U.S. firms to exploit the Chinese advantages in low-cost labor and growing markets through shifting operations to China or developing business relationships with Chinese firms. The dollar amount of exports to China by U.S. manufacturing firms increased from $10.2 billion in 1991 to $22.0 billion in 2000 and then surged to $120.2 billion in 2018. Their foreign direct investment in China also increased from $0.3 billion in 1991 to $9.6 billion in 2000 and then speeded up to $53.9 billion in 2018.[1]

U.S. firms entering the Chinese market, however, face significant challenges. There exist significant differences in language, the social, cultural, legal, and political landscape, customer preferences, and business practices between China and the U.S. These barriers can impede potential for value creation for U.S. firms pursuing opportunities in China after the passage of PNTR (e.g., Kindleberger 1969; Hymer 1976; Grinblatt and Keloharju 2001; La Porta et al. 2004; Guiso et al. 2009; Siegel et al. 2011; Ahern et al. 2015; Bottazzi et al. 2016; Chen et al. 2020; Ahmad et al. 2021). To overcome these barriers, U.S. firms entering China may have strong incentives to acquire target firms with China-related business experience (hereafter "targets with Chinese experience"), as these targets have a better understanding of the Chinese business environment and can improve acquirers' decisions on China-related matters. For example, U.S.

[1] Data on exports and foreign direct investment are obtained from the UN Comtrade database and the U.S. Bureau of Economic Analysis, respectively. All dollar values are deflated by the consumer price index in 2018.

firms undertaking investments in China have to devote a considerable amount of time and effort in communication and coordination with Chinese firms and central or local governments, which requires substantial firm- and country-specific knowledge. Targets with Chinese experience can help U.S. acquiring firms develop a network in China, minimize production, plant, and equipment setup costs, facilitate human resource management, and mitigate culture clash and legal problems.[2] This, in turn, improves the likelihood for U.S. acquirers to make value-enhancing investments in China. Thus, acquisitions of targets with Chinese experience can increase U.S. acquirers' shareholder value following the passage of PNTR.

In this research, we use the grant of PNTR status to China as a quasi-policy shock to corporate demand for target firms with Chinese experience, and examine how such a shock influences the target selection and performance of U.S. acquiring firms. We use 4,061 completed mergers and acquisitions (M&As) for U.S. manufacturing firms from 1992 to 2018, and perform difference-in-differences (DID) tests around the passage of PNTR in 2000. We follow Pierce and Schott (2016) and Chen et al. (2020) and capture the extent to which a four-digit Standard Industrial Classification (SIC) industry is affected by the passage of PNTR using NTR gap, measured by the difference between the non-NTR tariff rate and the NTR tariff rate that was locked in by PNTR. As U.S. industries with a higher NTR gap face greater investment uncertainty in China, firms in such industries tend to be affected more heavily by the passage of PNTR.

[2] On October 22, 2012, Archer Daniels Midland Co., one of the world's biggest soft-commodity merchants, announced a takeover bid for GrainCorp Ltd., which owns and operates a leading bulk liquid terminal portfolio with terminals and some subsidiaries in China. The announcement stated that "GrainCorp like other suppliers is keen to exploit the shift in economic power from the West to Asia…Given favorable underlying global agricultural market trends, such as growth in populations and protein consumption per capita in emerging markets…agriculture businesses are increasingly attractive acquisition targets." This anecdote suggests that firms have strong incentives to acquire targets with regional business experience to exploit new market opportunities. See https://www.annualreports.com/HostedData/AnnualReportArchive/G/ASX_GNC_2013.pdf; Gillian Tan and Caroline Henshaw, "Archer Daniels Midland Buys Stake in GrainCorp," *Wall Street Journal*, October 18, 2012; and Gillian Tan, "Hurdles to GrainCorp, ADM Deal," *Wall Street Journal*, October 22, 2012.

Our DID analysis shows that after accounting for other potentially influential factors, the likelihood of selecting targets with Chinese experience increases significantly more for U.S. acquirers in high-NTR gap industries than for acquirers in low-NTR gap industries post-PNTR.[3] The evidence indicates that U.S. firms are more likely to acquire targets with Chinese experience following the passage of PNTR. A one-standard-deviation increase in NTR gap leads to a 9.96% increase in the probability of selecting targets with Chinese experience in M&A deals after 2000. Given that the mean proportion of targets with Chinese experience for the whole sample in the pre-PNTR period is 1.01%, the passage of PNTR has an economically large and significant effect on the demand for targets with Chinese experience.

We perform several robustness tests to ensure that our findings are not spurious. First, we construct a more balanced sample by focusing on the three or five years before and after U.S. Congress granted PNTR status to China in 2000. Second, we conduct two-stage least squares (2SLS) regressions and instrument NTR gap using the Smoot-Hawley-based non-NTR tariff rate in 1990, which had not changed much compared to the rate initially set in 1930. Third, we use a matching approach whereby we first split our sample firms according to the median of NTR gap and then match each acquirer in the high-NTR gap group to an acquirer in the low-NTR gap group using firm characteristics. Results of these additional tests corroborate the findings in our research.

We next investigate whether acquisitions of targets with Chinese experience enhance U.S. acquirers' value after the passage of PNTR. We find that after controlling for a variety of firm and deal characteristics, U.S. firms acquiring targets with Chinese experience earn higher cumulative abnormal returns around M&A announcements than other acquirers post-PNTR. These acquirers

[3] A target firm is classified as having China-related business experience if it is a Chinese firm, acquires a Chinese firm, has a Chinese business partner, has a subsidiary in China, or has a Chinese supplier or customer before the M&A announcement.

are also more likely to avoid large losses, experience greater improvements in post-acquisition operating performance, and realize higher synergy gains. We find no evidence, however, that targets with Chinese experience receive higher offer premiums, suggesting that acquirers do not overpay for these targets. Our results indicate that U.S. firms benefit from the acquisition of targets with Chinese experience following the grant of PNTR status to China.

We conduct further analyses to examine whether narrowing information gap between China and the U.S. is the primary mechanism underlying the positive effect of target business experience on U.S. acquirers after the passage of PNTR. If targets with Chinese experience can help U.S. firms make informed decisions on China-related matters, acquisitions of such targets may add value to acquirers by lowering production cost, site preparation cost, employee training cost, and other costs when they enter the Chinese market. We examine the change in operating expenses subsequent to M&As for U.S. acquirers. We find that this change is significantly lower for acquirers targeting firms with Chinese experience than for other acquirers after PNTR. The evidence confirms that the lure of reducing information gap is a major driver underlying the value-enhancing role of target business experience.

A reallocation effect due to a fall in trade costs with China can benefit the producers of goods using Chinese intermediate inputs. For example, U.S. firms may cut their production processes and offshore their lower-skilled tasks to China (Grossman and Rossi-Hansberg 2008; Bloom et al. 2016; Pierce and Schott 2016). This relocation effect is likely to occur for U.S. acquirers targeting firms with China-related business experience after the passage of PNTR because their barriers in information gap to exploit the Chinese advantages are lower. We examine the post-M&A change in the purchase of inputs from China for U.S. acquirers. We show that U.S. firms acquiring targets with Chinese experience tend to purchase more inputs from China than other acquirers post-PNTR.

This finding thus suggests the positive role of targets' business experience in narrowing information gap.

Targets with Chinese experience can also help U.S. acquirers by expanding sales in China post-PNTR because their first-hand knowledge of the local business environment enables acquirers to better exploit the rapidly growing Chinese market. We examine the change in the sales of outputs to China associated with M&As for U.S. acquirers. We show that after the passage of PNTR, U.S. firms acquiring targets with Chinese experience sell more outputs to China than other acquirers. Higher sales to China, in turn, add more value to U.S. acquirers, supporting that the attractiveness of targets with complementary information in local businesses drives our results.

The literature suggests that network connections foster an enhanced flow of information, leading to better decision making and firm performance (e.g., Ingram and Roberts 2000; McPherson et al. 2001; Cai and Sevilir 2012; Fracassi and Tate 2012; Ishii and Xuan 2014; Fracassi 2017). Under this view, social networks in China established through acquisitions of targets with Chinese experience improve U.S. acquirers' value by both reducing the costs of gathering information and providing a means of efficient information exchange after the passage of PNTR. We examine the post-M&A change in social networks with Chinese firms for senior managers and board directors in U.S. acquirers. We find that U.S. firms acquiring targets with Chinese experience establish more social connections in China than other acquirers post-PNTR, especially for senior managers. We also show that senior managers of U.S. firms acquiring such targets increase their social network relationships with political officers in China after PNTR. The results indicate that the value-increasing role of targets' business experience is likely driven by minimizing information gap through establishment of social networks in China.

Finally, we examine whether our study truly documents a channel distinct from that of Chen

et al. (2020), who argue that hiring outside directors with China-related experience in the boardroom can reduce information asymmetry and facilitate resource integration between Chinese and U.S. firms. They find that U.S. firms with such directors realize higher returns around announcements of investments involving Chinese firms. Focusing on a subsample of U.S. acquires that have no outside directors with Chinese experience, we show that the impact of targets' business experience on acquirers' announcement returns associated with M&As post-PNTR is still significantly positive for this subsample. Thus, distinct from the appointment of directors with Chinese experience examined by Chen et al. (2020), acquisitions of targets with Chinese experience offer a separate channel for adding value to U.S. firms that pursue opportunities in China after the passage of PNTR. Our conclusion remains unchanged when we limit to a subsample of U.S. acquirers whose both senior managers and outside directors have no Chinese experience.

Our study contributes to the literature in several ways. First, an increasing number of studies focus on the negative effects of import competition from China, and show significant contraction in employment and deterioration in sales, profitability, and investment for U.S. manufacturing firms (e.g., Autor et al. 2013, 2020; Acemoglu et al. 2016; Bloom et al. 2016; Pierce and Schott 2016; Hombert and Matary 2018). Relatively few studies examine how U.S. firms exploit new business opportunities in China following the grant of PNTR. Pierce and Schott (2016) and Antràs et al. (2017) find within-firm relocation of U.S. production to China and Chen et al. (2020) show significant changes in U.S. firms' board structure after the grant. We contribute to this line of research by investigating the selection of acquisition targets that facilitate U.S. firms' entry into the Chinese market to grab business opportunities after PNTR.

Second, a vast M&A literature has examined the determinants of acquirers' performance. A

strand of research focuses on target characteristics, such as firm size, prior performance, financial leverage, ownership structure, CEO age, cash holdings, and organizational status (e.g., Lang et al. 1989; Stulz et al. 1990; Harford 1999; Moeller et al. 2004; Harford et al. 2012; Erel et al. 2015; Jenter and Lewellen 2015; Flannery et al. 2020). However, the valuation impact of target business experience on acquirers has so far escaped the attention of researchers. This research attempts to fill this gap by showing that firms seeking to expand into foreign markets can benefit from acquisitions of targets with prior related business experience through which a variety of barriers to value creation can be minimized.

Third, another strand of research in the M&A literature examines how firms use mergers and acquisitions to respond to industry and economic shocks (e.g., Gort 1969; Mitchell and Mulherin 1996; Mulherin and Boone 2000; Andrade and Stafford 2004; Breinlich 2008; Srinivasan 2020; Ahmad et al. 2021; Kumar et al. 2021). Particularly, Breinlich (2008), Srinivasan (2020), and Kumar et al. (2021) examine the effect of trade liberalization on firms' propensities to undertake M&As, and Amad et al. (2021) investigate how import tariff cuts and trade sanctions affect the propagation of merger waves across borders. We extend the literature by focusing on a change in trade policy that influences corporate demand for target firms with certain characteristics, and demonstrate that such a policy change can influence acquirers' target selection and performance in M&A deals.

The remainder of the paper is organized as follows. Section 2 develops our hypotheses. Section 3 describes data and methodology. Section 4 examines the influence of PNTR on target selection. Section 5 examines the relation between targets with Chinese experience and the performance of U.S. acquirers after PNTR. Section 6 conducts further analyses to understand the primary underlying mechanism. Section 7 covers additional tests. The final section concludes.

2. Hypotheses development

Under the Smoot-Hawley Tariff Act of 1930, Chinese exports to the U.S. were subject to non-NTR tariff rates, which were often substantially higher than the NTR rates levied by the U.S. on the members of the World Trade Organization (WTO). After 1980, China was granted NTR rates by U.S. Congress on an annually renewable basis. China's NTR status, however, was voted to be withdrawn by the U.S. House in 1990 through 1992 after the Tiananmen Square incident, which increased the likelihood for China to retaliate by raising tariffs or limiting U.S. firms' access to the Chinese market. This threat created an uncertain environment for U.S. firms that would undertake trade and investment in China (Rowley 1993; Pierce and Schott 2016; Chen et al. 2020). U.S. Congress granted PNTR status to China in October 2000, which became effective upon China's admission to the WTO in December 2001. The passage of PNTR, which permanently set U.S. duties on imports from China at NTR levels, eliminated the possibility of sudden tariff spikes on Chinese imports. Thus, Chinese firms had greater incentives to enter the U.S. market, but at the same time U.S. firms had greater incentives to exploit the Chinese comparative advantages of cheaper labor and growing markets by shifting manufacturing and operations to China or developing new networks with Chinese firms (Pierce and Schott 2016; Chen et al. 2020).[4]

There are a number of barriers that U.S. firms may face when entering the Chinese market, such as differences in language, social norms, cultural preferences, legal system, political institution, customer preferences, and business practices between China and the U.S. These challenges can impede potential for value enhancement for U.S. firms pursuing new business

[4] For example, in 2002 NIKE chose SINA, a leading Chinese media and internet services company, as its first strategic partner among Chinese internet companies ("SINA Signs Strategic Alliance with NIKE for Online Marketing Initiative: NIKE Becomes Chief Sponsor of SINA's Sports Channel," *Business Wire*, August 7, 2002).

opportunities in the Chinese market following the passage of PNTR (e.g., Kindleberger 1969; Hymer 1976; Grinblatt and Keloharju 2001; La Porta et al. 2004; Guiso et al. 2009; Siegel et al. 2011; Ahern et al. 2015; Bottazzi et al. 2016; Chen et al. 2020; Ahmad et al. 2021). Several anecdotes support the argument that a failure to grasp the differences in China results in the failure of U.S. business investments in China.[5] For example, Mattel Inc. opened the world's largest "House of Barbie" in Shanghai in 2009. The company failed to recognize that Barbie could not become a cultural icon in China as she was in the U.S. The store was bleeding money, and Mattel closed it in 2011. Thus, U.S. firms entering the Chinese market need to have a sound understanding of the business environment in China.

To improve information collection about the Chinese business environment, U.S. firms pursuing growth opportunities in China are expected to increase their demand for M&A partners with China-related business experience following the U.S. grant of PNTR status to China. The literature suggests that firms facing significant information challenges can benefit from accessing or learning new capabilities and knowledge from their business partners that would be difficult and costly to accumulate internally. For example, Gulati and Gargiulo (1999) show that firms are likely to undertake cooperative transactions with other organizations that have capabilities and resources to help firms cope with exogenous constraints. Chen and Chen (1998) and Chen et al. (2004) find that firms' business relationships with local customers, suppliers, designers, and subcontractors facilitate information flow and reduce the entry barrier in a foreign market. Zou and Ghauri (2008) and Ahmad et al. (2021) suggest that acquirers tend to obtain complementary knowledge and information from foreign targets and transfer them to their operation.

To the extent that targets with Chinese experience are familiar with the social, cultural, legal,

[5] See Benjamin Carlson, "Why Big American Businesses Fail in China?" *CNBC News*, September 26, 2013.

and political landscape, customer preferences, and business practices in China, we expect these firms to help U.S. acquirers understand the Chinese business environment following the passage of PNTR. Targets with prior business experience in China or business relationships with Chinese firms tend to have first-hand information of the Chinese market and construct a strategic network in China. Thus, these targets are likely to narrow U.S. acquirers' information gap due to differences in business environments between China and the U.S., which in turn increases the potential for value-enhancing investments in China undertaken by U.S. acquirers. After PNTR, U.S. firms should have strong incentives to select targets with Chinese experience to exploit their growth opportunities in China. We posit our first hypothesis (*H1*): *The likelihood of selecting a target with Chinese experience in an M&A deal increases following the passage of PNTR*.

If targets with Chinese experience indeed perform a value-enhancing role, U.S. firms acquiring such targets are more likely to exhibit high M&A announcement returns, post-M&A operating performance, and M&A synergies, and are less likely to suffer large M&A losses than acquirers without such targets post-PNTR. As targets with Chinese experience better understand the Chinese business environment, they can improve acquirers' decisions on China-related matters. Investments in China undertaken by U.S. firms entail a significant amount of time and effort in communication and coordination with Chinese firms, workers, and central or local governments, and hence require considerable firm- and country-specific knowledge. Targets with Chinese experience are therefore likely to help U.S. acquirers reduce production, plant, and equipment setup costs, negotiate contract terms, implement human resource management, establish Chinese networks, and minimize culture clash and legal problems, which, in turn, enables U.S. acquirers to undertaking value-increasing investments in China. Thus, acquisitions of targets with Chinese experience add value to U.S. acquirers after the grant of PNTR to China. To summarize, we have

the second hypothesis (*H2*): *U.S. firms acquiring targets with Chinese experience are more likely to realize higher announcement returns, better post-investment operating performance, and greater synergies associated with M&A deals, and are less likely to suffer a big loss than acquirers without such targets after the passage of PNTR.*

3. Data and methodology

3.1. Sample

Our initial sample is the universe of publicly traded U.S. manufacturing firms (SIC codes 2000–3999) over the period 1992–2018 in Compustat and CRSP databases. We then merge this sample with M&A events conducted by U.S. firms over the same period from Thomson Financial's Securities Data Company (SDC) Platinum database. We require that the M&A deal be completed, the deal value be at least $1 million, the acquirer's pre-M&A ownership be less than 50%, and the acquirer obtain at least 50% of the target's shares. These requirements result in a sample of 4,061 M&A deals conducted by 940 unique firms.

To identify whether a target firm has China-related business experience, we collect data from Compustat Segments, FactSet Revere Supply Chain Relationships, SDC Platinum Joint Ventures, and WRDS Company Subsidiary. We then classify a target as having Chinese experience if it is a Chinese firm, has merged or acquired a Chinese firm, has a Chinese business partner, has a subsidiary in China, or has a Chinese supplier or customer before the M&A announcement.[6] We obtain companies' financial information from Compustat and stock return information from CRSP.

[6] We also manually check deal synopsis in the SDC database and summaries of news in the Capital IQ Key Developments database for M&A deals on the dates of M&A transaction announcements and closings to identify whether a target has any China-related business experience.

3.2. Methodology

We follow Pierce and Schott (2016) and Chen et al. (2020) and use NTR gap to capture the degree to which the passage of PNTR affects a U.S. industry.[7] We define *NTR_gap_99* as the difference between the non-NTR rate to which tariffs would have risen if the annual NTR rate had not been renewed and the NTR tariff rate that was locked in by PNTR in 1999 (the year before the PNTR grant). *NTR_gap_99* for each four-digit SIC industry is measured as the average *NTR_gap_99* across the eight-digit Harmonized System product lines belonging to that industry, which is based on the ad valorem equivalent NTR and non-NTR tariff rates over 1989–2001 provided by Feenstra et al. (2002). U.S. industries associated with a high *NTR_gap_99* are expected to face a greater degree of investment uncertainty in China, and U.S. firms in such industries are hence expected to be affected more heavily by the grant of PNTR to China. After deleting observations without data on *NTR_gap_99*, we have a final sample of 4,029 M&A deals.

To investigate the impact of the passage of PNTR on the choice of target firms by U.S. acquiring firms, we use the difference-in-differences (DID) model estimated by probit regression:

$$Target\ with\ China\_exp_{ijt} = \beta_0 + \beta_1 NTR\_gap\_99_j \times Post_t + \beta_2 NTR\_gap\_99_j + \beta_3 Post_t + \boldsymbol{\beta}_4' \boldsymbol{X}_{ij,t-1} + \varepsilon_{ijt}, \quad (1)$$

where *i*, *j*, and *t* denote firm, industry, and year, respectively. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. *NTR_gap_99* is defined as above. *Post* is an indicator that equals one for a firm in the post-PNTR period (i.e., 2001–2018), and zero otherwise. $\boldsymbol{X}$ is a vector of firm characteristics: firm size, firm age, intangible assets, number of segments, Tobin's *q*,

[7] Data on the NTR gap at the industry level are provided by Peter K. Schott at http://faculty.som.yale.edu/peterschott.

leverage, free cash flow, Herfindahl index, foreign sales ratio, and stock return. Definitions and data sources of these variables are provided in the Appendix. Our choice of control variables is similar to the literature on the determinants of target selection (e.g., Frésard et al. 2020; Fathollahi et al. 2021). The main independent variable of interest is the DID term, *NTR_gap_99* × *Post.* Our first hypothesis *H1* predicts that the coefficient on this interaction term is positive and significant, suggesting that the likelihood of selecting a target firm with China-related business experience increases more for U.S. acquiring firms in high-NTR gap industries than for acquirers in low-NTR gap industries (first difference) following the U.S. grant of PNTR to China (second difference).

3.3. Summary statistics

We present summary statistics for industry-, firm-, and deal-level characteristics used in this research in Panels A, B, and C of Table 1, respectively. The number of observations varies because of data availability. To mitigate the potential effects of outliers, we winsorize all firm- and deal-level continuous variables at the 1% level in both tails. Panel A shows that *NTR_gap_99* has a mean of 0.346, with a standard deviation of 0.102. Panel C shows that 3.6% of targets in the sample have China-related business experience. Panel D provides subsample analysis for *Target with China_exp*. The mean proportions of targets with Chinese experience are 1.01% in the pre-PNTR period (1992–2000) and 5.66% in the post-PNTR period (2001–2018), respectively. The mean difference between these two proportions is 4.65%, which is statistically significant at the 1% level based on a *t*-test. Thus, the demand for targets with Chinese experience increases substantially with the passage of PNTR.

4. Impact of PNTR passage on target selection

4.1. Difference-in-differences analysis

Table 2 reports the results of DID regression estimates of Equation (1), where robust standard errors are clustered at the acquirer level. The number of observations varies across regressions because of data availability. Column (1) includes *NTR_gap_99* × *Post*, *NTR_gap_99*, and *Post* as the explanatory variables. The coefficient on the interaction term, *NTR_gap_99* × *Post*, is significantly positive at the 5% level. The evidence indicates that the passage of PNTR is associated with an increase in the likelihood of selecting targets with Chinese experience for U.S. acquirers. To measure economic impact, we use the marginal effect estimated from column (1), which captures the implied change in the probability of U.S. acquirers targeting firms with Chinese experience in response to a one-standard-deviation change in each independent variable evaluated at the mean value. Column (2) shows that the estimated marginal effect for the interaction term is 12.55%. That is, a one-standard-deviation increase in *NTR_gap_99* leads to a 12.55% increase in the likelihood of selecting targets with Chinese experience in an M&A deal after the passage of PNTR. Given that the mean *Target with China_exp* in the pre-PNTR period is 1.01%, this result suggests that the U.S. grant of PNTR to China has an economically large and significant effect on the demand for targets with Chinese experience.

In column (3), we add the controls for firm characteristics. We find that the coefficient on *NTR_gap_99* × *Post* remains significantly positive. Column (4) shows that the marginal effect for the interaction term is 9.96%, which is still economically large relative to the mean pre-PNTR *Target with China_exp*. In columns (5) and (6), we further control for time-varying industry characteristics by adding the revealed NTR tariff rate, *Revealed NTR*, to capture tariff rate changes arising from the North American Free Trade Agreement (NAFTA) and other preferential trade

agreements post-PNTR. *Revealed NTR* is defined as the ratio of duties paid to custom value for each four-digit SIC industry in a given year. We find that the positive impact of PNTR on the demand for targets with Chinese experience remains statistically and economically significant even after controlling for the revealed NTR tariff rate.

We repeat the DID analysis using linear probability model (LPM) in column (7). We also replace *NTR_gap_99* and *Post* with industry fixed effects and year fixed effects in column (8). We find in both columns that the coefficient on *NTR_gap_99* × *Post* remains significantly positive.

We perform additional tests in Table A.1 in the Online Appendix to ensure the robustness of our DID results. The results in Table 2 may be contaminated by other macro events occurring in the latter part of the sample period (e.g., the 2008 global financial crisis). In columns (1) through (4) of Table A.1, we focus on the three or five years before and after the passage of PNTR (i.e., 1997 through 2003 or 1995 through 2005 excluding 2000) and repeat the analysis in columns (3) and (5) of Table 2. We find that the coefficients on *NTR_gap_99* × *Post* in all columns remain significantly positive.

The results in Table 2 may also be biased if a higher level of NTR tariff rates were set to protect the affected industries pre-PNTR. In columns (5) and (6) of Table A.1, we use the NTR gap in 1990 (*NTR_gap_90*), ten years before PNTR, and repeat the analysis in columns (3) and (5) of Table 2. Our conclusion remains unchanged, suggesting that the results are unlikely driven by the endogeneity of the NTR gaps.

Overall, the findings in Tables 2 and A.1 are consistent with the prediction of our first hypothesis that U.S. firms are more likely to acquire targets with China-related business experience in response to the grant of PNTR.

4.2. Instrumental variables analysis

Our results may be affected by omitted unobservable variables. For example, U.S. firms in an industry that is less able to compete with Chinese firms may have fewer business opportunities in China. These firms are therefore less likely to acquire a target firm with China-related business experience. The U.S. government may increase NTR rates to protect such an industry, which leads to a lower NTR gap. The positive relation between *NTR_gap_99* and *Target with China_exp* we observe is not driven by the grant of PNTR but by industry competition.

We use a two-stage least squares (2SLS) method to reduce the potential bias associated with omitted variables. To perform the 2SLS analysis, it is important to find instrumental variables (IVs) that are related to *NTR_gap_99* but uncorrelated with the dependent variable in the second stage. One such IV suggested in the literature (e.g., Pierce and Schott 2016; Chen et al. 2020) is the Smoot-Hawley-based non-NTR tariff rates in 1990, *Smoot-Hawley non_NTR_90*, which did not change much compared with the rates initially set in 1930. This IV satisfies the relevance criterion because variation in the Smoot-Hawley-based non-NTR tariff rates can explain a substantial proportion of variation in the NTR gaps across industries (Pierce and Schott 2016). It also satisfies the exclusion criterion because the non-NTR tariff rates set 70 years before the grant of PNTR are unlikely to influence the demand for targets with Chinese experience post-PNTR through channels other than the NTR gaps.

Table 3 presents results for 2SLS regressions. Since our main independent variable of interest is *NTR_gap_99* × *Post*, we treat *NTR_gap_99* and its interaction with *Post* are two separate endogenous variables in our first-stage regressions. That is, in the first stage, we regress *NTR_gap_99* and *NTR_gap_99* × *Post* on *Smoot-Hawley non_NTR_90, Post*, and *Smoot-Hawley non_NTR_90* × *Post* in columns (1) and (2), respectively. As expected, the coefficients on *Smoot-*

Hawley non_NTR_90 in column (1) and *Smoot-Hawley non_NTR_90* × *Post* in column (2) are both significantly positive at the 1% level. The Cragg and Donald (1993) statistic is statistically significant at the 1% level in both columns, rejecting the null hypothesis that the IV is weak. In the second stage, we use a probit regression of *Target with China_exp* on the instrumented *NTR_gap_99*, the instrumented *NTR_gap_99* × *Post*, and *Post* in column (3). We show that the coefficient on the instrumented *NTR_gap_99* × *Post* is significantly positive at the 5% level. In columns (4) through (6), we add all the control variables in column (5) of Table 2. Column (6) shows that our conclusion remains unchanged. We further use the instrumental variables approach for the subsample period from 1995 through 2005 excluding 2000, and repeat the analysis in columns (4) through (6). We report the results for the second-stage regression in column (7). The coefficient on the instrumented *NTR_gap_99* × *Post* remains significantly positive.[8] Overall, Table 3 shows that our results are robust to controlling for omitted variables bias.

4.3. Matching approach

To further alleviate the concern that our results are driven by observable omitted firm characteristics, we use a matching approach to obtain a balanced panel sample around the grant of PNTR status to China in 2000. That is, we split the whole sample into the high-NTR gap group (treatment group) and the low-NTR gap group (control group) according to the median *NTR_gap_99*. We match each firm in the high-NTR gap group with a firm in the low-NTR gap group that has the smallest Mahalanobis distance (with replacement), which is calculated using *Target with China_exp* and firm characteristics in 1999.[9] The final sample comprises 1,418 M&As

[8] The results are similar for the subsample period from 1997 through 2003 excluding 2000.

[9] Firm characteristics include firm size, firm age, intangible assets, number of segments, Tobin's *q*, leverage, free cash flow, Herfindahl index, foreign sales ratio, and stock return. We do not use the propensity score matching (PSM) approach because the standard errors and mean square errors of PSM estimators are higher for a small sample size (Zhao 2004).

conducted by U.S. manufacturing firms (67 treatment firms and 67 control firms) over the whole sample period. We then perform DID tests for this matched sample.

Panel A of Table 4 compares mean and median *Target with China_exp* and firm characteristics for the treatment and control groups, where differences in means and medians are assessed using a *t*-test and a Wilcoxon rank-sum test. Columns (3) and (6) show that the mean and median differences in all variables between the treatment and control groups are statistically insignificant at conventional levels.[10] This suggests that both groups have similar characteristics before the grant of PNTR. Panel B presents results of DID tests for the matched sample. In columns (1) and (2), the regression specifications correspond to those in columns (1) and (5) of Table 2. The coefficients on *NTR_gap_99* × *Post* are statistically positive in both columns. In columns (3) and (4), we estimate 2SLS regressions in Table 3 for the matched sample. The coefficients on *NTR_gap_99* × *Post* in the second-stage regressions remain significantly positive. Thus, our findings are unlikely to be subject to endogeneity concerns.

5. Targets with Chinese experience and performance of acquirers

In this section we test our second hypothesis (*H2*) by examining whether targets with Chinese experience perform a value-enhancing role. That is, we investigate whether U.S. acquirers targeting firms with Chinese experience realize higher announcement returns, better post-investment operating performance, and greater synergies associated with M&A deals than other acquirers following the passage of PNTR. We also investigate whether they are less likely to engage in a large-loss M&A deal post-PNTR. Finally, we investigate whether targets with Chinese

[10] The values for *Target with China_exp* in 1999 are equal to zero for all treatment and control firms in the matched sample, so *p*-values are not available for the mean and median difference tests.

experience receive larger premiums because acquirers are more willing to buy them at a higher offer price or premium after PNTR.

5.1. Announcement returns

We use standard event-study methods to examine stock price responses to M&A announcements. The abnormal return is calculated as the difference between the actual return and the expected return generated by the market model. We use the value-weighted CRSP index as a proxy for market returns and estimate the parameters of the market model using data over a period from 210 to 11 days before the announcement date. We calculate the cumulative abnormal return from one day before to two days after the announcement date, *CAR* (−1, 2), for the U.S. acquiring firm.

Table 5 reports results for ordinary least squares (OLS) regressions of M&A announcement returns. Robust standard errors are clustered at the acquiring firm level. The main independent variable of interest is the triple interaction between *NTR gap 1999*, *Post*, and *Target with China_exp*. Our second hypothesis predicts that the coefficient on this triple interaction term is positive and significant, suggesting that U.S. firms acquiring targets with Chinese experience realize higher announcement returns than other acquirers without such targets after the passage of PNTR. In column (1), the explanatory variables include the triple interaction term, *NTR_gap_99*, *Target with China_exp*, a set of control variables suggested in the literature (e.g., Lang et al. 1989; Masulis et al. 2007; Chen 2011), and year by industry fixed effects. Definitions of the controls are listed in the Appendix. In column (2), we further control for the revealed NTR tariff rate (*Revealed NTR*). The coefficients on the triple interaction term in these two columns are significantly positive at the 10% level or better. For robustness, we also use two alternative models to obtain estimates of abnormal stock returns surrounding M&A announcements: the Fama-French (1993) three-factor

model and the Carhart (1997) four-factor model.[11] Columns (3) and (4) show that the coefficients on the triple interaction term remains significantly positive at the 5% level. The overall evidence in Table 5 supports the prediction of our hypothesis *H2*.[12]

5.2. Big loss deals

If targets with Chinese experience can enhance U.S. acquirers' value following the passage of PNTR, there will be less likelihood of a big loss M&A deal. Following Field and Mkrtchyan (2017), we define a big loss deal as a deal in which an acquirer loses more than US$500 million in 2018 dollars during the M&A announcement period (i.e., the market value of equity two trading days after the announcement date minus the market value one trading day before the announcement). *Big loss deal* is an indicator that equals one for a big loss deal, and zero otherwise.

Table 6 presents probit regression analysis of the likelihood that an acquisition incurs a big loss. Columns (1) and (2) include the same control variables as those used in the first two columns of Table 5. Both columns show that the coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly negative at the 5% level. In column (3), we redefine *Big loss deal* as an indicator that equals one if the change in the market value of equity for U.S. acquirers during the M&A announcement period is in the bottom decile. Our main findings do not change. The results in Table 6 suggest that acquisitions of targets with Chinese experience can help U.S. acquirers by avoiding big loss deals post-PNTR, consistent with hypothesis *H2*.

[11] We obtain similar results if announcement abnormal returns are estimated using the CAPM model.

[12] We additionally control for other target characteristics, such as firm size, leverage, free cash flow, sales growth, prior stock returns, institutional ownership, and management ownership. While the sample size is substantially reduced, our conclusion remains unchanged. The results are similar if we replace sales growth by the market-to-book ratio and free cash flow by cash holdings for the target characteristics. We also divide the whole sample by targets with and without Chinese experience and then perform the regression of M&A announcement returns for each subsample. We find that the coefficient on *NTR_gap_99* × *Post* is significantly positive for targets with Chinese experience, while it is not statistically significant for targets without Chinese experience. The difference between the two coefficients is statistically significant. The evidence provides further support for our findings in Table 5.

5.3. Post-M&A operating performance

We examine the change in operating performance subsequent to acquisitions to investigate whether U.S. acquirers targeting firms with Chinese experience enjoy greater improvement in operating efficiency following the grant PNTR. We measure the change in post-M&A operating performance, *Change in ROA*, of acquirers as the difference in operating performance between the average return on assets (ROA) over the two years after acquisition completion and the ROA one year before the acquisition announcement year (as in DeLong and DeYoung 2007; Harford et al. 2012; Field and Mkrtchyan 2017). ROA is defined as earnings before interest and taxes (EBIT) divided by book assets (AT).

Table 7 reports results from OLS regressions of post-M&A change in operating performance. The set of control variables follows the literature (e.g., Chen et al. 2020). The first two columns show that the coefficients on *NTR_gap_99* × *Post* × *Target with China_exp* are significantly positive at the 10% level. Column (3) shows that the coefficient on the triple interaction term is significantly positive at the 5% level if ROA is measured by earnings before interest, taxes, depreciation, and amortization (EBITDA) divided by assets. For robustness, we also use the two-digit SIC industry median-adjusted ROA and total factor productivity (TFP) as our operating performance measures in columns (4)–(6).[13] The coefficients on the triple interaction term remains significantly positive. The results in Table 7 are consistent with our hypothesis *H2*, indicating that after the passage of PNTR, U.S. firms acquiring targets with Chinese experience have better post-investment operating performance than those without such targets.

[13] TFP is measured as the residual from a regression of log(sales) on log(employees) and log(property, plant, and equipment) across all sample firms in the same two-digit SIC industry (as in Giroud and Mueller (2017)).

5.4. M&A synergies

If acquisitions of targets with Chinese experience fit the needs of U.S. acquiring firms entering the Chinese market, we expect these M&A deals to create higher synergies than other M&A deals following the grant of PNTR. Following the literature (e.g., Lin et al. 2011; Harford et al. 2012; Field and Mkrtchyan 2017), we measure synergy benefits in M&As, *Synergies*, as a value-weighted portfolio of announcement-period abnormal returns for both acquirers and targets. The weight is the market value of equity in beginning of the acquisition announcement year. Because we need announcement-period abnormal returns for targets to compute *Synergies*, the sample is restricted to acquisitions of public targets.

Table 8 presents OLS regressions of synergy benefits in M&As. The control variables are the same as those used in Table 5. In columns (1) and (2), abnormal stock returns during the M&A announcement period are estimated using the market model. The coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly positive at the 5% level in both columns. For robustness checks, we use the Fama-French (1993) three-factor model and the Carhart (1997) four-factor model to estimate announcement-period abnormal returns in columns (3) and (4). The coefficients on the triple interaction term remains significantly positive. The evidence again supports our second hypothesis that U.S. firms acquiring targets with Chinese experience enjoy greater M&A synergies than other acquirers following the grant of PNTR, and hence their shareholders benefit more from these acquisitions.

5.5. Offer premium

We examine whether U.S. acquiring firms pay a higher acquisition premium for targets with Chinese experience than for other targets after PNTR. As targets with Chinese experience enable acquirers to have a better understanding of the business environment in China, acquirers entering

the Chinese market might be more willing to buy these targets at a higher offer price. To test this conjecture, we follow prior studies (e.g., Harford and Uysal 2014; Suk and Wang 2021) and measure offer premium for targets, *Premium*, as the ratio of offer price to target stock price one day or four weeks before the M&A announcement date.

Table 9 reports the OLS regression results of offer premium. Columns (1) through (3) show that the coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly negative. In column (4), we use a measure of offer premium developed in Officer (2007), which allows us to include all public and private targets. *Premium* is defined as the average of four target premium multiples: (i) offer price to book equity per share; (ii) offer price to earnings per share; (iii) deal value to EBITDA; and (iv) deal value to sales of the target firm adjusted by the median multiples in the same two-digit SIC industry three years before M&A announcement.[14] The coefficient on the triple interaction term becomes statistically insignificant at conventional levels. Table 9 indicates no evidence for U.S. acquirers to overpay for targets with Chinese experience following the passage of PNTR, thus destroying shareholder value. The results in Table 9 are consistent with the findings in Table 5 for M&A announcement returns.

5.6. Placebo tests

A potential concern in Tables 5 through 9 is that unobservable factors such as firm quality may drive our results. To tackle this potential omitted variable issue, we conduct placebo tests based on the true empirical distribution of the number of targets with Chinese experience in each year. We replace each target firm that has Chinese experience with another firm randomly selected from among targets that have no Chinese experience (i.e., pseudo targets with Chinese experience) in a given year. We then re-estimate the regressions in Tables 5 through 9 by replacing *Target with*

[14] The results are similar if *Premium* is computed using a seven-year window centered on M&A announcement.

China_exp by *Placebo*, which equals one for pseudo targets with Chinese experience, and zero for other targets without Chinese experience. If unobservable factors are driving the positive relation between the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, and acquisition outcomes, we should also observe a positive coefficient on *NTR_gap_99* × *Post* × *Placebo*.

The results are presented in Online Appendix Table A.2. Panel A shows that the coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Placebo*, are not statistically significant at conventional levels for regressions of M&A announcement returns. Panels B through E also show that all the coefficients on this triple interaction term are not statistically significant when the dependent variable is *Big loss deal, Change in ROA*, *Synergies*, and *Premium*, respectively. These results mitigate the concern that our findings in Tables 5 through 9 are driven by unobservable factors.

6. The underlying mechanism for value creation

Our results so far indicate that targets with Chinese experience indeed perform a value-enhancing role for U.S. acquiring firms pursuing opportunities in China. We examine whether minimizing information gap between China and the U.S. is the primary mechanism underlying the positive effect of target business experience on acquirers after the passage of PNTR. If targets with Chinese experience enable U.S. acquires to have a better understanding of the Chinese business environment, acquisitions of such targets are expected to benefit acquirers by lowering operating costs, purchasing more intermediate inputs or final goods from China, selling more outputs or goods to China, and establishing more social networks in China after PNTR. In this section, we provide evidence consistent with all of these predictions.

6.1. Reducing operating costs

U.S. firms entering the Chinese market may exploit China cheaper labor and growing markets by shifting operations to China or establishing new facilities in China. If reducing information gap is a major driver of the value-increasing role of targets' business experience, target firms with Chinese experience should benefit U.S. acquirers in reducing production cost, site preparation cost, employee training cost, and other costs, because they can help acquirers make informed decisions on China-related matters. Thus, we expect to observe that U.S. firms acquiring such targets are associated with lower operating costs than other acquiring firms after the passage of PNTR.

To test this prediction, we first calculate the change in post-M&A operating costs of acquirers as the difference between the average operating expense ratio over the two years after acquisition completion and the operating expense ratio one year before the acquisition announcement year. The operating expense ratio is total operating expenses scaled by sales, where total operating expenses are the sum of cost of goods sold (COGS) and selling, general, and administrative expenses (SGA). We then perform probit regressions of *Change in operating costs*, defined as an indicator that equals one if the change in post-M&A operating costs is above the sample median, and zero otherwise.

Columns (1) and (2) of Table 10 present the results, where the control variables follow those used in Table 7. The coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly negative at the 10% level or better in both columns. The results indicate that the change in post-M&A operating costs is significantly lower for U.S. acquirers targeting firms with Chinese experience than for other acquirers following the passage of PNTR. Our evidence confirms that the lure of narrowing information gap is a major driver underlying the

positive effect of target business experience on acquirers' shareholder value.[15]

6.2. Purchasing inputs from China

Prior literature documents that a reallocation effect arising from a fall in trade costs with China will add value to producers of goods using Chinese intermediate inputs. Grossman and Rossi-Hansberg (2008), Bloom et al. (2016), and Pierce and Schott (2016), for example, show that firms may cut their production process and offshore their lower-skilled tasks to China. As the barriers in information gap to exploit China's comparative advantages are lower for U.S. acquirers targeting firms with Chinese experience, the relocation effect is more likely to occur for these acquirers than for other acquirers following the passage of PNTR.

Following Hoberg and Moon (2017), we calculate the change in the activity of purchasing intermediate inputs or final goods from China subsequent to M&As for U.S. acquirers. We define *Change in inputs from China* as the difference between the average proportion of inputs from China over the two years after completion and the proportion of inputs from China one year before announcement. The proportion of inputs from China is measured by the total number of mentions of the acquirer purchasing inputs from China to the total number of mentions of the acquirer purchasing inputs outside of the U.S.[16]

Columns (3) and (4) of Table 10 present the OLS regression results of *Change in inputs from China*. Both columns show that the coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly positive at the 10% level or better. The findings indicate that after the passage of PNTR, U.S. firms acquiring targets with Chinese experience tend to

[15] We also investigate post-M&A change in operating expenses in China for U.S. acquirers using information from the Compustat segment files. The sample size is substantially reduced due to data availability, and the coefficient on the triple interaction term is still negative but not statistically significant.

[16] Data are provided by Gerard Hoberg and S. Katie Moon at http://faculty.marshall.usc.edu/Gerard-Hoberg/Hoberg MoonDataSite/index.html.

purchase more intermediate inputs or final goods from China than other acquirers. The evidence confirms again the positive effect of target business experience in minimizing information gap between two different countries.

6.3. Selling outputs to China

U.S. firms facing challenges in doing business with Chinese firms may acquire targets with Chinese experience to narrow the gap in business practices, regulatory environments, customer preferences, and the social, cultural, and political landscape between China and the U.S. These targets can help U.S. acquirers exploit the rapidly growing Chinese market. Thus, U.S. firms acquiring targets with Chinese experience are expected to have higher sales of outputs or goods to China than other acquires following the passage of PNTR.

Similar to *Change in inputs from China*, we define *Change in outputs to China* as the difference between the average proportion of outputs to China over the two years after M&A completion and the proportion of outputs to China one year before M&A announcement. The proportion of outputs to China is measured by the total number of mentions of the acquirer selling goods to China to the total number of mentions of the acquirer selling goods to nations outside of the U.S. Columns (5) and (6) of Table 10 present results from OLS regressions of *Change in outputs to China*. The coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, are significantly positive at the 10% level in both columns.

We also calculate the post-M&A change in foreign sales to Chinese firms for U.S. acquirers. We obtain data from the Compustat geographic segment and customer segment files, and search whether segment name, customer name, or geographic area contains China-related keywords (e.g., China, Chinese, and CHN) to identify foreign sales to China. We define *Change in foreign sales to China* as the difference between the average ratio of foreign sales to China (scaled by total sales)

over the two years after completion and the ratio of foreign sales to China one year before the announcement year. Column (7) of Table 10 shows that the coefficient on the triple interaction term remains significantly positive at the 5% level.

Overall, the results indicate that U.S. firms acquiring targets with Chinese experience sell more outputs to China than other acquirers following the passage of PNTR. The evidence confirms that the attractiveness of targets with complementary information and knowledge in local businesses is beneficial for firms entering the foreign market.

6.4. Establishing social networks in China

Targets with Chinese experience may perform a value-increasing role in assisting U.S. acquiring firms in developing social networks in China. Previous studies indicate that information flows more freely and at a lower cost through social network connections, which results in better corporate decision making and performance (e.g., Ingram and Roberts 2000; McPherson et al. 2001; Cai and Sevilir 2012; Fracassi and Tate 2012; Ishii and Xuan 2014; Fracassi 2017).[17] Thus, establishment of networks in China through acquiring targets with Chinese experience enhances U.S. acquirers' shareholder value by both reducing the costs of gathering information and providing a means of efficient information exchange following the passage of PNTR. We examine whether U.S. firms acquiring such targets establish more social networks in China than other acquires without such targets after PNTR.

We obtain employment history, educational background, and other professional activities for senior managers and board directors from the BoardEx database. We then use the *Rest of World*

[17] Social connections based on homophily, however, may induce social conformity and groupthink, which leads to inefficient decision-making and poor firm performance (e.g., Ishii and Xuan 2014; Gompers et al. 2016). As targets with Chinese experience tends to improve acquirers' shareholder value, the dark side of social connections is not addressed here.

file of the BoardEx database to identify whether the managers or directors of U.S. acquirers are socially connected to those in Chinese firms through common educational background (i.e., attended the same university and received the same degree (bachelor, MBA, or PhD)), common membership in a non-profit organization, or common past employment (i.e., worked together in the same firm/institution). A manager (director) of U.S. acquirers is classified as a connected manager (director) if the manager (director) is socially connected to the managers or directors of a Chinese firm. We define *Change in Chinese networks* as the difference between the average number of social connections in China for both managers and directors over the two years after M&A completion and the number of connections in China one year before M&A announcement.

Table 11 presents the OLS regression results of *Change in Chinese networks.* Columns (1) and (2) show that the coefficients on the triple interaction term, *NTR_gap_99 × Post × Target with China_exp*, are significantly positive at the 10% level or better. We also separately examine the regression results for connected managers and directors. *Change in Chinese networks for managers* is defined as the difference between the average number of social connections in China for the managers of U.S. acquirers over the two years after completion and the number of connections in China one year before announcement. *Change in Chinese networks for directors* is similarly defined for the directors of U.S. acquirers. Columns (3) and (4) show that the coefficient on the triple interaction term is significantly positive when *Change in Chinese networks for managers* is the dependent variable, while it is statistically insignificant when *Change in Chinese networks for directors* is the dependent variable. These results suggest that U.S. firms acquiring targets with Chinese experience tend to establish more social networks in China than other acquirers after PNTR, especially for the senior managers of acquirers.

We further divide managerial social connections into connections with political officers in

China and non-political connections. The literature shows that politically connected firms tend to have higher value than politically non-connected firms (e.g., Agrawal and Knoeber 2001; Francis et al. 2009). Using the *Rest of World* file of the BoardEx database, we classify a manager of U.S. acquirers as a politically connected manager if the manager is socially connected to the managers or directors of a Chinese firm 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. *Change in Chinese political networks for managers* is defined as the difference between the average number of political connections in China for the managers of U.S. acquirers over the two years after completion and the number of political connections in China one year before announcement. *Change in Chinese non-political networks for managers* is similarly defined for non-political connections. Both columns (5) and (6) show that the coefficients on the triple interaction term are significantly positive at the 10% level or better. The results indicate that senior managers of U.S. firms acquiring targets with Chinese experience increase both political and non-political connections in China relative to those without such targets following the grant of PNTR.[18]

Overall, the results in Table 11 suggest that the value-enhancing role of target business experience is likely to be driven by narrowing information gap through establishing social networks.

[18] We also examine the regression results for the board directors of U.S. firms acquiring targets with Chinese experience. We do not find that they develop more political or non-political connections in China than those of other acquirers post-PNTR.

7. Additional tests

7.1. Corporate governance

The literature suggests that corporate governance mechanisms may affect acquiring firms' stock returns (e.g., Byrd and Hickman 1992; Masulis et al. 2007; Schmidt and Fahlenbrach 2017). We thus take into account governance mechanisms and re-estimate our regressions of acquirer announcement returns in Table 5 to deal with the potential omission of governance related variables. Online Appendix Table A.3 presents the results after additional inclusion of governance variables in our regressions, which substantially reduces the number of observations due to data availability.

In column (1), we include three governance variables: *Board size*, *Board independence*, and *CEO duality*. *Board size* is the total number of directors on the board; *Board independence* is the ratio of the number of outside directors to board size; and *CEO duality* is an indicator that equals one if the CEO also serves as board chairman, and zero otherwise. Data are obtained from BoardEx, RiskMetrics (now ISS Governance), and ExecuComp. The coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, remains significantly positive at the 1% level for all three measures of announcement returns after including these three governance variables.

Previous studies, however, indicate that firms' governance mechanisms may be endogenously determined and that one specific governance feature may not provide a comprehensive picture of governance mechanisms (e.g., Hermalin and Weisbach 1998; Coles et al. 2008; Jenter and Lewellen 2015). To tackle this issue, we use a method in spirit similar to Jenter and Lewellen (2015) and construct a *Residual governance index* using six corporate governance variables: board size; board independence; separation of CEO and chairman; the percentage of shares held by the CEO; the percentage of shares held by institutional investors; and the entrenchment index (E-index) of

Bebchuk et al. (2009).[19] Data on CEO ownership, institutional ownership, and E-index are obtained from ExecuComp, ISS Governance, MSCI GMI, and Thomson Reuters 13F databases. We orthogonalize each governance measure with respect to firm and CEO characteristics and average the residual governance characteristic to form a governance index based on each measure's percentile ranking.[20] We again orthogonalize the resulting index with respect to firm and CEO characteristics. Column (2) reports the results, which show that our conclusion still holds.

7.2. Board directors and senior managers with Chinese experience

Chen et al. (2020) show that U.S. firms hiring outside directors with China-related experience realize higher abnormal stock returns associated with announcements of investments involving Chinese firms. They argue that hiring such directors in the boardroom can mitigate information asymmetry and facilitate resource integration between Chinese and U.S. firms, resulting in higher market value for U.S. firms. To investigate whether our research provides a channel distinct from that of Chen et al. (2020), we focus on a subsample of U.S. acquirers that do not appoint any outside directors with Chinese experience, and then re-estimate the regressions of M&A announcement returns in Table 5.[21] Panel A of Online Appendix Table A.4 shows that the coefficients on the triple interaction term, *NTR_gap_99* × *Post* × *Target with China_exp*, remain significantly positive at the 1% level for all three measures of announcement returns in this subsample. Thus, it is clear that our research documents a separate channel for adding value to U.S. firms pursuing opportunities in China post-PNTR than that examined by Chen et al. (2020).

[19] For the E-index, the reverse ranking is used.
[20] Firm and CEO characteristics include firm size, stock return volatility, annual stock return, number of segments, cash holdings, leverage, M/B, ROA, CEO vega, CEO delta, and CEO tenure.
[21] We follow Chen et al.'s (2020) definition of outside directors having China-related experience: the director has worked in China or has served as a director, CEO, CFO, COO, chairman, president, vice president, manager, chief officer, owner, regional CEO, regional CFO, regional COO, regional president, regional vice president, or regional manager in the Chinese division of a domestic firm or a foreign firm.

Panel B shows that the coefficients on the triple interaction term are still significantly positive for U.S. acquirers whose both senior managers and outside directors have no Chinese experience.

The results in Table A.4 are based on four-day announcement-period abnormal returns, *CAR* (–1, 2), for U.S. acquirers. For robustness checks, we also examine the announcement-period abnormal returns over (–1, 1), (–2, 2), and (–5, 5). Online Appendix Table A.5 shows that our conclusion is unchanged.

7.3. Segment-based NTR gap

Hombert and Matray (2018) and Chen et al. (2021) suggest that segment-based NTR gap may be a less noisy measure of a firm's exposure to PNTR. A firm may operate more than one business segment and different segments within the firm may have different exposures to PNTR. While we have controlled for the number of segments of a firm in the regressions, we examine whether the results remain robust using segment-based NTR gap. Specifically, we define *Segment NTR_gap_99* as the average of *NTR_gap_99* weighted by the sales ratio of each business segment from the Compustat segment files, where *NTR_gap_99* is set to zero for a segment outside manufacturing. To investigate whether the distinct channel provided by our research is robust to this alternative measure of NTR gap, we repeat the regressions of target selection and M&A announcement returns for the subsample of U.S. acquirers that do not have any outside directors or senior managers with Chinese experience.[22] The results are presented in Online Appendix Table A.6. Panel A shows that following PNTR, there is still a higher likelihood for U.S. firms to acquire targets with Chinese experience. Panel B shows that U.S. firms acquiring targets with Chinese experience still earn better announcement returns than other acquirers post-PNTR. Thus, our

[22] Conclusions remain unchanged if we re-estimate the regressions for the whole sample of U.S. acquirers and at the same time control for an indicator that equals one for acquirers whose managers or directors have Chinese experience.

findings are robust to the segment-based measure of firms' exposure to PNTR.

8. Summary and conclusion

This research investigates how the U.S. grant of Permanent Normal Trade Relations (PNTR) status to China in 2000 influences corporate demand for target firms with China-related business experience and whether acquisitions of such targets improve U.S. acquiring firms' performance post-PNTR. The elimination of possible sudden tariff spikes on Chinese imports and investment uncertainty in China after PNTR provides U.S. firms with new business opportunities and increases their incentives to exploit the Chinese advantages in cheap labor and growing markets. U.S. firms entering China, however, face significant challenges due to fundamental differences in language, the social, cultural, legal, and political landscape, customer preferences, and business practices from those in the U.S. To overcome these barriers, U.S. firms entering the Chinese market are expected to have more incentives to acquire targets with Chinese experience post-PNTR, which have a better understanding of the Chinese business environment. We also expect that these targets provide a value-enhancing role by improving acquirers' decisions on China-related matters.

We test these predictions using M&As for U.S. manufacturing firms from 1992 to 2018, and conduct difference-in-differences tests around the passage of PNTR. We show that the likelihood of selecting targets with Chinese experience increases significantly more for U.S. acquirers in high-NTR gap industries than for U.S. acquirers in low-NTR gap industries post-PNTR. The evidence indicates that U.S. firms are more likely to acquire targets with Chinese experience after PNTR, consistent with the prediction. Our findings remain robust when we focus on the three or five years before and after the PNTR, conduct 2SLS regressions, and use a matching approach.

We further show that U.S. firms acquiring targets with Chinese experience realize higher

cumulative abnormal returns around M&A announcements than other acquirers following the passage of PNTR. These acquirers are also more likely to avoid large losses, experience greater improvements in post-acquisition operating performance, and enjoy higher synergy gains. We do not find that these acquirers pay a higher acquisition premium for targets. The evidence indicates that U.S. firms benefit from acquisitions of targets with China-related business experience after PNTR, again consistent with the prediction.

We conduct further analysis to explore the mechanism by which acquisitions of targets with Chinese experience have a positive influence for U.S. acquirers following the passage of PNTR. We examine post-M&A changes in operating expenses, in the purchase of inputs from China, in the sales of outputs to China, and in the establishment of social networks with Chinese firms for acquirers. We show that after PNTR, U.S. firms acquiring targets with Chinese experience tend to have lower operating expenses, purchase more inputs from China, sell more outputs to China, and establish more social connections in China than other acquirers. The results are in line with our argument that targets with Chinese experience perform a value-increasing role for U.S. acquirers pursuing opportunities in China through narrowing acquirers' information gap due to differences in business environments between China and the U.S.

Overall, this research documents that acquiring firms adjust the selection of target firms in response to changes in market demand for companies with complementary knowledge and information in local businesses induced by a change in government trade policy. This research also highlights the importance of target firms' regional business experience for the performance of acquiring firms entering the foreign market.

Appendix A
Variable Definitions

This Appendix provides detailed descriptions of the variables used in the tables.

Variable	Definition	Source
Big loss deal	Dummy variable that equals one for a big loss deal, and zero otherwise. A big loss deal is defined as a deal in which a U.S. acquirer loses more than US$500 million in 2018 dollars, where the dollar loss is measured as the market value of equity two trading days after the M&A announcement date minus the market value one trading day before the announcement	CRSP
CAR (−1, 2): market model/three-factor model/four-factor model	M&A announcement returns for acquiring firms computed using the market model, the Fama-French (1993) three-factor model, and the Carhart (1997) four-factor model, respectively	CRSP
Cash deal	Dummy variable that equals one if an M&A deal is purely cash-financed, and zero otherwise	SDC
Change in ROA	Difference in operating performance between the average return on assets (ROA) over the two years after M&A completion and the ROA one year before the M&A announcement year, where ROA is defined as earnings before interest and taxes divided by book assets	Compustat
Domestic target	Dummy variable that equals one if the target is headquartered in the U.S., and zero otherwise	SDC
Diversifying M&A	Dummy variable that equals one if the acquirer and the target have different first two-digit standard industrial classification (SIC) codes, and zero otherwise	SDC
Foreign sales ratio	Ratio of foreign sales (non-domestic sales reported in geographic segments) to total sales	Compustat
Free cash flow	Ratio of operating net cash flow minus common and preferred dividends to the book value of total assets	Compustat
Herfindahl index	Ratio of concentration by summing the squares of the individual firm market shares based on total sales for all firms in a two-digit SIC industry	Compustat
Hostile deal	Dummy variable that equals one if the deal is reported as hostile in SDC, and zero otherwise	SDC
Intangible assets	One minus the ratio of property, plant, and equipment to total assets	Compustat
Leverage	Ratio of the book value of debt to total assets, where the book value of debt is the sum of long-term debt and debt in current liabilities	Compustat
Log (firm age)	Natural logarithm of a firm's age, where age is the current year minus the first year the firm appears in Compustat	Compustat
Log (firm size)	Natural logarithm of a firm's book value of total assets	Compustat
Log (number of segments)	Natural logarithm of a firm's number of business segments	Compustat
NTR_gap_99 (NTR_gap_90)	Difference between the non-normal trade relations (NTR) tariff rates and NTR tariff rates in 1999 (1990) for each four-digit SIC code	Peter K. Schott Website
Number of bidders	Number of bidders in a deal reported in SDC	SDC
Post	Dummy variable that equals one for a firm in the 2001–2018 period, and zero otherwise	
Premium: one day/four weeks	Ratio of offer price to target stock price one day and four weeks before the M&A announcement date, respectively	CRSP, SDC
Price run-up	Acquirer's buy-and-hold abnormal stock return from day −210 to day −11 before the M&A announcement, where day 0 is the announcement date. The CRSP value-weighted return is subtracted to compute the abnormal return	CRSP
Public target	Dummy variable that equals one if the target is a publicly traded firm, and zero otherwise	SDC

Variable	Definition	Source
Relative deal size	Ratio of deal value, reported in SDC, divided by an acquirer's market capitalization, measured at the fiscal year end before the M&A announcement	CRSP, SDC
Revealed NTR	Ratio of duties paid to custom value for each four-digit SIC industry in a given year	Peter K. Schott Website
Smoot-Hawley non_NTR_90	Smoot-Hawley-based non-normal trade relations (NTR) tariff rates in 1990	Peter K. Schott Website
Stock return	Market-adjusted annual stock return, measured as a firm's annual stock return minus annual return on the CRSP value-weighted index	CRSP
Synergies: market model/three-factor model/four-factor model	Value-weighted portfolio of announcement-period abnormal returns for both acquirers and targets, where the weight is the market value of equity in beginning of the acquisition announcement year. Announcement-period abnormal returns are estimated using the market model, the Fama-French (1993) three-factor model, and the Carhart (1997) four-factor model, respectively	CRSP, SDC
Target with China_exp	Dummy variable that equals one for a target with any China-related business experience, and zero otherwise. A target is classified as having China-related business experience if it is a Chinese firm, acquires a Chinese firm, has a Chinese business partner, has a subsidiary in China, or has a Chinese supplier or customer before the M&A announcement	Compustat, SDC, FactSet
Tobin's *q*	Ratio of the market value of assets to the book value of total assets, where the market value of assets equals the book value of total assets plus the market value of common equity less the sum of the book value of common equity and balance sheet deferred taxes	Compustat
Toehold	Dummy variable that equals one if the acquirer holds at least 5% of the target shares prior to the M&A announcement, and zero otherwise	SDC

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Table 1
Summary statistics

This table presents summary statistics for industry-, firm-, and deal-level characteristics in Panels A, B, and C, respectively. The final sample consists of 4,029 M&A deals conducted by U.S. manufacturing firms over the 1992 to 2018 period. *NTR_gap_99* for a four-digit SIC industry is the difference between the non-NTR (non-Normal Trade Relations) tariff rate and the NTR tariff rate set by PNTR (Permanent Normal Trade Relations) in 1999. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All dollar values are deflated by the consumer price index in 2018. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Variable definitions are provided in the Appendix. Panel D provides subsample analysis for *Target with China_exp*. Difference in means is assessed using a *t*-test. The number of observations varies because of data availability. *** indicates statistical significance at the 1% level.

Panel A: Industry characteristics

Variable	p25	Median	Mean	p75	S.D.	Obs.
NTR_gap_99	0.333	0.361	0.346	0.378	0.102	4,029
NTR_gap_90	0.245	0.316	0.280	0.330	0.104	4,029
Revealed NTR	0.001	0.012	0.018	0.027	0.023	3,656
Smoot-Hawley non_NTR_90	0.345	0.367	0.361	0.397	0.105	4,029

Panel B: Firm characteristics

Variable	p25	Median	Mean	p75	S.D.	Obs.
Firm size ($millions)	363	1,505	7,200	5,624	15,666	4,029
Firm age	9.000	21.000	25.406	40.000	18.415	4,029
Intangible assets	0.678	0.799	0.757	0.883	0.175	4,029
Number of segments	1.000	3.000	2.655	4.000	1.655	4,029
Tobin's *q*	1.337	1.793	2.266	2.592	1.548	4,029
Leverage	0.077	0.224	0.263	0.371	0.248	4,029
Free cash flow	0.044	0.080	0.076	0.118	0.082	4,029
Herfindahl index	0.033	0.041	0.049	0.056	0.033	4,029
Foreign sales ratio	0.167	0.369	0.410	0.566	0.328	4,029
Stock return	-0.206	0.021	0.149	0.266	0.703	4,029

Panel C: Deal characteristics

Variable	p25	Median	Mean	p75	S.D.	Obs.
Target with China_exp	0.000	0.000	0.036	0.000	0.186	4,029
CAR (−1, 2): market model	-0.021	0.006	0.010	0.036	0.073	3,790
CAR (−1, 2): three-factor model	-0.022	0.004	0.008	0.033	0.073	3,790
CAR (−1, 2): four-factor model	-0.022	0.004	0.008	0.034	0.072	3,790
Big loss deal	0.000	0.000	0.040	0.000	0.197	3,794
Change in ROA	-0.051	-0.012	-0.017	0.017	0.085	3,229
Synergies: market model	-0.017	0.014	0.016	0.045	0.107	479
Synergies: three-factor model	-0.020	0.012	0.013	0.043	0.108	479
Synergies: four-factor model	-0.019	0.009	0.015	0.042	0.062	479
Premium: one day	0.171	0.330	0.399	0.521	0.405	579
Premium: four weeks	0.240	0.413	0.508	0.643	0.488	579
Cash deal	0.000	0.000	0.384	1.000	0.486	3,794
Diversifying MA	0.000	0.000	0.287	1.000	0.453	3,794
Public target	0.000	0.000	0.160	0.000	0.366	3,794
Relative deal size	0.012	0.039	0.132	0.125	0.315	3,794
Hostile deal	0.000	0.000	0.002	0.000	0.043	3,794
Number of bidders	1.000	1.000	1.013	1.000	0.140	3,794
Toehold	0.000	0.000	0.017	0.000	0.128	3,780
Price run-up	-0.150	0.018	0.089	0.209	0.430	3,690
Domestic target	0.000	1.000	0.736	1.000	0.441	3,794

Panel D: Subsample analysis for targets with Chinese experience

	Pre-PNTR period (1992–2000)		Post-PNTR period (2001–2018)		
Variable	Mean	Obs.	Mean	Obs.	Mean difference (Post – Pre)
Target with China_exp	1.01%	1,786	5.66%	2,243	4.65%***

Table 2
Impact of the grant of PNTR on target selection: DID tests

This table presents estimates of difference-in-differences (DID) regressions from the probit model (columns (1), (3), (5), and (8)) and the linear probability model (LPM) (column (7)). The dependent variable is *Target with China_exp*, which is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. Columns (2), (4), and (6) report the marginal effect, which captures the implied change in the probability of U.S. acquirers targeting firms with Chinese experience in response to a one-standard-deviation change in each independent variable evaluated at the mean value. *NTR_gap_99* for a four-digit SIC industry is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

		Marginal		Marginal		Marginal		
	Probit	effect	Probit	effect	Probit	effect	LPM	Probit
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NTR_gap_99 × Post	1.679**	12.55%	1.415*	9.96%	1.882**	13.93%	0.137**	5.859***
	(2.228)		(1.809)		(2.118)		(2.417)	(2.823)
NTR_gap_99	-0.166	-1.24%	-0.150	-1.06%	-0.436	-3.23%	-0.006	
	(-0.295)		(-0.258)		(-0.583)		(-0.264)	
Post	0.136	1.02%	-0.015	-0.11%	-0.170	-1.26%	-0.023	
	(0.491)		(-0.051)		(-0.511)		(-1.141)	
Log (firm size)			0.147***	1.03%	0.149***	1.10%	0.010***	0.183***
			(5.268)		(5.241)		(4.730)	(4.953)
Log (firm age)			0.057	0.40%	0.056	0.41%	0.002	0.107
			(1.037)		(0.968)		(0.520)	(1.485)
Intangible assets			0.259	1.82%	0.237	1.75%	0.023	0.228
			(0.714)		(0.617)		(1.068)	(0.444)
Log (number of segments)			-0.287**	-2.02%	-0.270**	-2.00%	-0.021**	-0.248*
			(-2.419)		(-2.220)		(-1.972)	(-1.805)
Tobin's *q*			-0.019	-0.14%	-0.015	-0.11%	-0.001	0.005
			(-0.497)		(-0.369)		(-0.588)	(0.116)
Leverage			0.336*	2.37%	0.362*	2.68%	0.026	0.581**
			(1.710)		(1.771)		(1.541)	(2.411)
Free cash flow			-0.767	-5.40%	-0.776	-5.75%	-0.052	-1.306
			(-1.070)		(-1.016)		(-1.282)	(-1.645)
Herfindahl index			-0.839	-5.90%	-0.431	-3.19%	-0.042	4.165**
			(-0.885)		(-0.438)		(-0.492)	(2.243)
Foreign sales ratio			0.540***	3.80%	0.548***	4.06%	0.053***	0.112
			(4.549)		(4.583)		(3.484)	(0.541)
Stock return			-0.037	-0.26%	-0.012	-0.09%	-0.002	-0.047
			(-0.604)		(-0.196)		(-0.553)	(-0.595)
Revealed NTR					-3.638	-26.94%	-0.093	-8.130
					(-1.365)		(-0.767)	(-1.207)
Year fixed effects	Absorbed		Absorbed		Absorbed		Absorbed	Yes
Industry fixed effects	Absorbed		Absorbed		Absorbed		Absorbed	Yes
No. of observations	4,029		4,029		3,656		3,656	2,477
Pseudo R^2	0.064		0.125		0.126		—	0.189
Log likelihood	-584.354		-546.082		-519.214		—	-436.737
Adj. R^2	—		—		—		0.034	—

Table 3
Impact of the grant of PNTR on target selection: 2SLS tests

This table presents estimates of two-stage least squares (2SLS) regressions. We report the first- and second-stage results for the full sample period in columns (1) through (6) and the second-stage results for the subsample period from 1995 through 2005 (excluding 2000) in column (7). *NTR_gap_99* for a four-digit SIC industry is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999. *Post* is an indicator that equals one for a firm in the post-PNTR period, and zero otherwise. *Smoot-Hawley non_NTR_90* is the Smoot-Hawley-based non-NTR tariff rates in 1990. In the first stage, the dependent variable is *NTR_gap_99* in columns (1) and (4) and *NTR_gap_99* × *Post* in columns (2) and (5). In the second stage, we use a probit regression in columns (3), (6), and (7), where the dependent variable is *Target with China_exp*, defined as an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Full sample period						Subsample period: 1995–2005
	NTR_gap_99	NTR_gap_99 × Post	Target with China_exp	NTR_gap_99	NTR_gap_99 × Post	Target with China_exp	Target with China_exp
	First stage	First stage	Second stage	First stage	First stage	Second stage	Second stage
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NTR_gap_99 × Post			1.510**			1.678**	4.644***
			(1.978)			(2.059)	(2.684)
Smoot-Hawley non_NTR_90	0.972***	0.000		1.010***	0.015***		
	(99.156)	(0.000)		(121.461)	(4.035)		
Smoot-Hawley non_NTR_90 × Post	-0.037***	0.936***		-0.047***	0.938***	-0.345	0.396
	(-2.651)	(69.435)		(-5.201)	(99.102)	(-0.542)	(0.534)
NTR_gap_99			-0.043			-0.345	0.396
			(-0.084)			(-0.542)	(0.534)
Post	0.014***	0.009*	0.183	0.009***	0.002	-0.087	-1.509**
	(2.828)	(1.802)	(0.648)	(2.689)	(0.574)	(-0.277)	(-2.328)
Log (firm size)				-0.000	-0.000	0.150***	0.176***
				(-1.432)	(-0.714)	(5.333)	(3.508)
Log (firm age)				-0.000	-0.000	0.055	0.153
				(-0.778)	(-0.173)	(0.954)	(1.285)
Intangible assets				0.009***	0.006***	0.221	-0.740
				(3.272)	(3.190)	(0.576)	(-1.077)
Log (number of segments)				-0.003***	-0.002***	-0.282**	-0.158
				(-3.047)	(-2.758)	(-2.271)	(-0.566)
Tobin's *q*				-0.000	-0.001***	-0.014	0.021
				(-1.149)	(-3.533)	(-0.355)	(0.479)
Leverage				-0.004**	-0.002*	0.352*	-0.863
				(-2.415)	(-1.958)	(1.716)	(-1.617)
Free cash flow				0.011***	0.004	-0.782	-2.749**
				(2.875)	(1.282)	(-1.017)	(-2.182)
Herfindahl index				0.009	-0.032*	-0.669	2.086
				(0.782)	(-1.857)	(-0.673)	(0.800)
Foreign sales ratio				0.002*	0.001	0.543***	0.143
				(1.672)	(1.089)	(4.511)	(0.432)
Stock return				0.001*	0.000	-0.012	0.173**
				(1.698)	(1.341)	(-0.203)	(2.434)
Revealed NTR				-0.612***	-0.377***	-2.042	3.144
				(-16.718)	(-11.250)	(-0.874)	(1.213)
Cragg and Donald (1993) *F*-statistic	*p*-value < 0.01	*p*-value < 0.01		*p*-value < 0.01	*p*-value < 0.01		
Year fixed effects	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed
Industry fixed effects	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed
No. of observations	4,029	4,029	4,029	3,656	3,656	3,656	1,554
Adj. R^2	0.970	0.996	—	0.987	0.997	—	—

Table 4
Impact of the grant of PNTR on target selection: Matching approach

This table presents results using a matching approach to obtain a balanced panel around the grant of PNTR in 2000. We split the whole sample into the high-NTR gap group (treatment group) and the low-NTR gap group (control group) according to the median *NTR_gap_99*, where *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. We match each firm in the high-NTR gap group with a firm in the low-NTR gap group that has the smallest Mahalanobis distance calculated using *Target with China_exp* and firm characteristics in 1999, where *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. The final sample comprises 1,418 M&As conducted by U.S. manufacturing firms (67 treatment firms and 67 control firms) over the 1992–2018 period. Panel A compares mean and median *Target with China_exp* and firm characteristics for the treatment and control groups, where differences in means and medians are assessed using a *t*-test and a Wilcoxon rank-sum test. Panel B reports results of DID tests for the matched sample. In columns (1) and (2), the regression specifications correspond to those in columns (1) and (5) of Table 2. In columns (3) and (4), we estimate 2SLS regressions in Table 3 for the matched sample and report results for the second stage. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Mean and median characteristics

	Mean			Median		
	Treatment firms	Control firms	Difference (*p*-value)	Treatment firms	Control firms	Difference (*p*-value)
	(1)	(2)	(3)	(4)	(5)	(6)
Target with China_exp	0.000	0.000	—	0.000	0.000	—
Firm size ($millions)	3,829	3,845	0.9924	679	1,093	0.2202
Firm age	2.436	2.624	0.2749	2.565	2.773	0.2727
Intangible assets	0.743	0.753	0.7351	0.786	0.778	0.7843
Number of segments	1.186	1.197	0.8872	1.099	1.386	0.8685
Tobin's *q*	2.892	2.613	0.4352	2.128	1.691	0.1733
Leverage	0.209	0.230	0.5134	0.169	0.243	0.5433
Free cash flow	0.059	0.066	0.7076	0.723	0.063	0.8500
Herfindahl index	0.044	0.041	0.5264	0.034	0.029	0.1129
Foreign sales ratio	0.397	0.366	0.3853	0.403	0.348	0.5347
Stock return	0.221	0.186	0.7605	0.061	0.088	0.6937

Panel B: OLS and 2SLS regressions

	OLS		2SLS (second stage)	
Independent variable	(1)	(2)	(3)	(4)
NTR_gap_99 × Post	3.810*	4.064*	5.911**	5.117**
	(1.831)	(1.953)	(2.019)	(2.170)
NTR_gap_99	-0.051	0.342	-0.083	0.386
	(-0.043)	(0.224)	(-0.062)	(0.248)
Post	-0.679	-1.347	-1.520	-1.738*
	(-0.781)	(-1.527)	(-1.265)	(-1.692)
Control variables (Column (5) of Table 2)	No	Yes	No	Yes
Year fixed effects	Absorbed	Absorbed	Absorbed	Absorbed
Industry fixed effects	Absorbed	Absorbed	Absorbed	Absorbed
No. of observations	1,418	1,336	1,418	1,336
Pseudo R^2	0.071	0.158	—	—
Log likelihood	-236.552	-211.279	—	—

Table 5
Impact of targets with Chinese experience on M&A announcement returns for U.S. acquirers after PNTR

This table presents ordinary least squares (OLS) regression analysis of M&A announcement returns for U.S. acquiring firms. The dependent variable is the cumulative abnormal return from one day before to two days after the M&A announcement date, *CAR (–1, 2)*. In columns (1) and (2), the abnormal return is calculated as the difference between the actual return and the expected return generated by the market model, where the value-weighted CRSP index is used as a proxy for market returns and the parameters of the market model are estimated using data over a period from 210 to 11 days before the announcement date. In columns (3) and (4), we use the Fama-French three-factor model and the Carhart four-factor model to obtain estimates of abnormal stock returns surrounding M&A announcements. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	CAR (–1, 2): market model	CAR (–1, 2): market model	CAR (–1, 2): three-factor model	CAR (–1, 2): four-factor model
Independent variable	(1)	(2)	(3)	(4)
NTR_gap_99 × Post	0.075*	0.104**	0.101**	0.102**
× Target with China_exp	(1.816)	(2.073)	(2.058)	(2.047)
NTR_gap_99	-0.013	-0.017	-0.016	-0.016
	(-0.649)	(-0.813)	(-0.868)	(-0.835)
Target with China_exp	-0.024	-0.037*	-0.036*	-0.035*
	(-1.513)	(-1.885)	(-1.835)	(-1.790)
Log (firm size)	-0.002	-0.001	-0.001	-0.001
	(-1.469)	(-1.249)	(-1.055)	(-1.087)
Log (firm age)	0.002	0.003	0.003	0.003
	(0.779)	(1.408)	(1.217)	(1.151)
Intangible assets	-0.027*	-0.027*	-0.023	-0.022
	(-1.910)	(-1.749)	(-1.573)	(-1.535)
Log (number of segments)	-0.001	-0.000	0.001	-0.000
	(-0.258)	(-0.085)	(0.221)	(-0.074)
Tobin's *q*	0.002	0.002*	0.000	0.000
	(1.526)	(1.648)	(0.464)	(0.429)
Leverage	0.005	0.004	0.005	0.004
	(0.550)	(0.484)	(0.533)	(0.430)
Free cash flow	-0.033	-0.036	-0.028	-0.029
	(-1.301)	(-1.300)	(-1.050)	(-1.116)
Foreign sales ratio	-0.002	-0.006	-0.004	-0.005
	(-0.383)	(-0.990)	(-0.681)	(-0.777)
Cash deal	0.011***	0.011***	0.010***	0.010***
	(4.103)	(3.884)	(3.710)	(3.685)
Diversifying MA	-0.006**	-0.004	-0.004	-0.005*
	(-2.309)	(-1.621)	(-1.542)	(-1.769)
Public target	-0.021***	-0.020***	-0.022***	-0.022***
	(-4.462)	(-4.229)	(-4.500)	(-4.676)
Relative deal size	0.030**	0.041***	0.041***	0.041***
	(2.552)	(2.903)	(2.938)	(2.966)
Hostile deal	0.001	-0.003	-0.008	-0.007
	(0.061)	(-0.140)	(-0.384)	(-0.359)
Number of bidders	0.004	0.002	0.003	0.002
	(0.808)	(0.377)	(0.502)	(0.396)
Toehold	-0.003	-0.004	0.001	0.002
	(-0.510)	(-0.633)	(0.138)	(0.293)
Price run-up	-0.000	0.007	0.001	0.002
	(-0.020)	(1.363)	(0.310)	(0.753)
Domestic target	0.003	0.003	0.003	0.003
	(1.089)	(1.125)	(1.082)	(0.966)
Revealed NTR		0.010	0.015	0.013
		(0.132)	(0.199)	(0.178)
Year × Industry fixed effects	Yes	Yes	Yes	Yes
No. of observations	3,556	3,217	3,217	3,217
Adj. R^2	0.033	0.041	0.041	0.041

Table 6
Impact of targets with Chinese experience on the likelihood of big losses for U.S. acquirers after PNTR

This table presents probit regression analysis of the likelihood that an acquisition incurs a big loss. The dependent variable is *Big loss deal*, defined as an indicator that equals one for a big loss deal, and zero otherwise. In columns (1) and (2), a big loss deal is defined as a deal in which a U.S. acquirer loses more than US$500 million in 2018 dollars, where the dollar loss is measured as the market value of equity two trading days after the M&A announcement date minus the market value one trading day before the announcement. In column (3), *Big loss deal* is defined as an indicator that equals one if the change in the market value of equity during the M&A announcement period is in the bottom decile. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001−2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Big loss deal: US$500 million	Big loss deal: US$500 million	Big loss deal: bottom decile
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	-4.119**	-4.011**	-2.981*
× Target with China_exp	(-2.454)	(-2.071)	(-1.868)
NTR_gap_99	-1.064	-1.362	0.244
	(-1.180)	(-1.505)	(0.274)
Target with China_exp	1.401**	1.419**	1.184*
	(2.337)	(2.054)	(1.948)
Log (firm size)	0.552***	0.554***	0.559***
	(9.913)	(9.181)	(11.236)
Log (firm age)	-0.180**	-0.184**	-0.140*
	(-2.063)	(-2.136)	(-1.844)
Intangible assets	-0.275	-0.594	-0.514
	(-0.604)	(-1.368)	(-1.231)
Log (number of segments)	-0.202	-0.093	-0.404***
	(-1.302)	(-0.599)	(-3.120)
Tobin's *q*	0.082**	0.104**	0.097**
	(2.131)	(2.536)	(2.349)
Leverage	-0.159	-0.224	0.140
	(-0.625)	(-0.769)	(0.617)
Free cash flow	1.303	1.222	0.489
	(1.259)	(1.126)	(0.546)
Foreign sales ratio	0.640**	0.720***	0.503**
	(2.439)	(2.590)	(2.041)
Cash deal	-0.066	-0.025	-0.170*
	(-0.659)	(-0.230)	(-1.853)
Diversifying MA	-0.130	-0.173	0.010
	(-1.050)	(-1.314)	(0.086)
Public target	0.055	-0.028	0.029
	(0.413)	(-0.192)	(0.235)
Relative deal size	0.318	0.431*	0.278
	(1.541)	(1.887)	(1.413)
Number of bidders	-0.051	0.000	-0.006
	(-0.147)	(0.001)	(-0.031)
Toehold	0.255	0.292	-0.126
	(1.107)	(1.273)	(-0.466)
Price run-up	0.117	-0.006	0.255**
	(1.062)	(-0.053)	(2.127)
Domestic target	0.039	-0.023	0.027
	(0.310)	(-0.165)	(0.263)
Revealed NTR		-16.531***	-6.299*
		(-3.446)	(-1.813)
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	1,815	1,680	2,274
Pseudo R^2	0.320	0.335	0.295
Log likelihood	-383.514	-352.729	-553.740

Table 7
Impact of targets with Chinese experience on post-M&A operating performance for U.S. acquirers after PNTR

This table presents ordinary least squares (OLS) regression analysis of post-M&A operating performance for U.S. acquiring firms. The dependent variable is *Change in ROA*, defined as the difference in operating performance between the average return on assets (ROA) over the two years after completion and the ROA one year before the announcement year. In columns (1) and (2), ROA is defined as earnings before interest and taxes (EBIT) divided by book assets (AT). In column (3), ROA is measured by earnings before interest, taxes, depreciation, and amortization (EBITDA) divided by assets. In columns (4)–(6), we use the two-digit SIC industry median-adjusted ROA and total factor productivity (TFP) as our operating performance measures, where TFP is measured as the residual from a regression of log(sales) on log(employees) and log(property, plant, and equipment) across all sample firms in the same two-digit SIC industry. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Change in ROA: EBIT/AT	Change in ROA: EBIT/AT	Change in ROA: EBITDA/AT	Change in ROA: industry-adj. EBIT/AT	Change in ROA: industry-adj. EBITDA/AT	Change in TFP
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
NTR_gap_99 × Post	0.076*	0.103*	0.093**	0.093*	0.082*	0.503*
× Target with China_exp	(1.720)	(1.944)	(1.967)	(1.718)	(1.687)	(1.867)
NTR_gap_99	-0.034**	-0.045**	-0.041**	-0.042**	-0.038**	-0.180*
	(-2.121)	(-2.302)	(-2.386)	(-2.111)	(-2.135)	(-1.809)
Target with China_exp	-0.050**	-0.055**	-0.051**	-0.055**	-0.049*	-0.069
	(-2.031)	(-2.181)	(-2.105)	(-2.046)	(-1.913)	(-0.595)
Log (firm size)	-0.001	-0.001	-0.001	0.000	0.000	-0.021***
	(-0.472)	(-0.652)	(-0.616)	(0.187)	(0.263)	(-3.039)
Log (firm age)	0.002	0.002	0.002	0.004	0.004	-0.011
	(0.804)	(0.662)	(0.560)	(1.171)	(1.164)	(-0.830)
Intangible assets	0.052***	0.062***	0.066***	0.055**	0.058**	0.089
	(2.908)	(3.041)	(3.259)	(2.338)	(2.528)	(1.110)
Log (number of segments)	0.003	0.002	0.001	0.002	0.001	0.003
	(0.619)	(0.398)	(0.139)	(0.372)	(0.143)	(0.127)
Tobin's *q*	0.003	0.002	-0.001	0.002	-0.001	-0.001
	(0.820)	(0.611)	(-0.588)	(0.590)	(-0.642)	(-0.119)
Leverage	0.012	0.015	0.008	0.018	0.011	0.021
	(1.153)	(1.340)	(0.703)	(1.454)	(0.901)	(0.438)
Foreign sales ratio	0.020**	0.021**	0.025**	0.022*	0.026**	-0.003
	(1.976)	(2.054)	(2.386)	(1.705)	(2.058)	(-0.071)
Stock return	0.015**	0.018**	0.020***	0.017**	0.020***	0.044**
	(2.182)	(2.453)	(4.718)	(2.119)	(3.816)	(2.534)
Domestic target	-0.003	-0.002	-0.001	-0.000	0.001	0.033***
	(-0.975)	(-0.646)	(-0.462)	(-0.039)	(0.128)	(2.924)
Revealed NTR		0.099	0.047	0.146	0.085	-0.267
		(0.887)	(0.457)	(1.161)	(0.733)	(-0.625)
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	3,118	2,789	2,770	2,789	2,770	2,738
Adj. R^2	0.148	0.162	0.178	0.151	0.178	0.106

Table 8
Impact of targets with Chinese experience on M&A synergies for U.S. acquirers after PNTR

This table presents ordinary least squares (OLS) regressions of M&A synergies. The dependent variable is *Synergies*, defined as a value-weighted portfolio of announcement-period abnormal returns for both acquirers and targets. The weight is the market value of equity in beginning of the acquisition announcement year. The sample is restricted to acquisitions of public targets. In columns (1) and (2), abnormal stock returns during the M&A announcement period are estimated using the market model. In columns (3) and (4), we use the Fama-French (1993) three-factor model and the Carhart (1997) four-factor model to estimate announcement-period abnormal returns. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001−2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Synergies: market model	Synergies: market model	Synergies: three-factor model	Synergies: four-factor model
Independent variable	(1)	(2)	(3)	(4)
NTR_gap_99 × Post	0.123**	0.138**	0.112*	0.120*
× Target with China_exp	(2.255)	(2.023)	(1.701)	(1.902)
NTR_gap_99	-0.045	0.002	-0.026	-0.050
	(-0.443)	(0.016)	(-0.277)	(-0.577)
Target with China_exp	-0.046**	-0.052**	-0.037*	-0.039*
	(-2.583)	(-2.260)	(-1.684)	(-1.776)
Log (firm size)	-0.006	-0.006	-0.005	-0.006
	(-1.445)	(-1.571)	(-1.473)	(-1.625)
Log (firm age)	0.001	0.002	0.003	0.002
	(0.184)	(0.237)	(0.356)	(0.344)
Intangible assets	-0.040	-0.039	-0.027	-0.029
	(-0.897)	(-0.847)	(-0.668)	(-0.689)
Log (number of segments)	-0.011	-0.006	-0.009	-0.007
	(-0.852)	(-0.510)	(-0.754)	(-0.660)
Tobin's *q*	-0.001	-0.003	-0.006*	-0.006*
	(-0.303)	(-0.939)	(-1.855)	(-1.917)
Leverage	-0.025	-0.033	-0.022	-0.017
	(-0.718)	(-0.802)	(-0.707)	(-0.638)
Free cash flow	-0.022	-0.053	-0.044	-0.025
	(-0.296)	(-0.666)	(-0.572)	(-0.355)
Foreign sales ratio	0.020	0.007	0.006	0.009
	(0.731)	(0.259)	(0.261)	(0.405)
Cash deal	0.020**	0.018**	0.019**	0.021***
	(2.248)	(2.083)	(2.223)	(2.611)
Diversifying MA	0.004	0.002	0.002	0.003
	(0.427)	(0.229)	(0.255)	(0.368)
Public target	0.011	0.015	0.015	0.003
	(0.715)	(0.809)	(0.829)	(0.175)
Relative deal size	0.028	0.030	0.023	0.021
	(1.056)	(1.015)	(0.849)	(0.952)
Hostile deal	0.059	0.056	0.055*	0.061**
	(1.553)	(1.469)	(1.782)	(2.004)
Number of bidders	0.007	0.009	0.005	0.005
	(0.480)	(0.602)	(0.348)	(0.386)
Toehold	-0.031**	-0.029*	-0.029**	-0.026**
	(-2.176)	(-1.912)	(-2.150)	(-2.042)
Price run-up	-0.028	-0.016	-0.016*	-0.012
	(-1.512)	(-0.954)	(-1.666)	(-1.457)
Domestic target	0.018	0.018	0.025	0.027
	(1.003)	(0.967)	(1.205)	(1.361)
Revealed NTR		0.071	0.073	-0.052
		(0.160)	(0.184)	(-0.160)
Year × Industry fixed effects	Yes	Yes	Yes	Yes
No. of observations	390	358	358	358
Adj. R^2	0.041	0.028	0.076	0.072

Table 9
Impact of targets with Chinese experience on offer premium for U.S. acquirers after PNTR

This table presents ordinary least squares (OLS) regressions of offer premium for target firms. The dependent variable is *Premium*, defined as the ratio of offer price to target stock price one day or four weeks before the M&A announcement date in columns (1) through (3). In column (4), we use a measure of offer premium developed in Officer (2007). *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Premium: one day	Premium: one day	Premium: four weeks	Premium: Officer (2007)
Independent variable	(1)	(2)	(3)	(4)
NTR_gap_99 × Post	-0.683**	-0.727*	-1.343**	83.284
× Target with China_exp	(-2.018)	(-1.746)	(-2.235)	(1.349)
NTR_gap_99	-0.432	-0.624	-0.213	20.642
	(-1.007)	(-1.542)	(-0.459)	(0.615)
Target with China_exp	0.194	0.201	0.302	-25.480
	(1.633)	(1.284)	(1.355)	(-1.026)
Log (firm size)	-0.007	0.004	0.023	1.447
	(-0.405)	(0.243)	(1.111)	(0.683)
Log (firm age)	0.029	0.007	-0.015	-2.201
	(0.840)	(0.209)	(-0.414)	(-0.609)
Intangible assets	0.050	0.095	0.287	13.609
	(0.343)	(0.574)	(1.485)	(0.575)
Log (number of segments)	0.014	0.006	-0.019	-3.050
	(0.253)	(0.114)	(-0.312)	(-0.364)
Tobin's *q*	-0.015	-0.014	-0.020	3.545*
	(-1.130)	(-1.018)	(-1.102)	(1.863)
Leverage	0.044	0.026	-0.054	-0.414
	(0.454)	(0.251)	(-0.484)	(-0.037)
Free cash flow	-0.064	-0.316	-0.323	34.923
	(-0.183)	(-0.984)	(-0.797)	(1.009)
Foreign sales ratio	0.005	0.035	-0.010	3.462
	(0.058)	(0.398)	(-0.102)	(0.262)
Cash deal	-0.024	-0.027	-0.018	3.512
	(-0.356)	(-0.356)	(-0.171)	(0.664)
Diversifying MA	-0.080*	-0.096**	-0.108*	11.750*
	(-1.821)	(-2.105)	(-1.765)	(1.899)
Public target	0.103	0.095	0.076	5.420
	(1.086)	(0.909)	(0.648)	(0.784)
Relative deal size	-0.047	-0.089	-0.016	1.547
	(-0.602)	(-1.024)	(-0.143)	(0.178)
Hostile deal	-0.105	-0.140	-0.182	2.194
	(-0.861)	(-1.027)	(-1.073)	(0.129)
Number of bidders	0.100	0.153**	0.100	2.451
	(1.577)	(2.369)	(1.517)	(0.330)
Toehold	-0.034	0.022	-0.253*	11.913
	(-0.267)	(0.182)	(-1.882)	(0.468)
Price run-up	0.045	0.066	0.131*	5.353
	(0.820)	(1.053)	(1.761)	(0.800)
Domestic target	-0.083	-0.052	-0.113*	102.294
	(-1.447)	(-0.896)	(-1.955)	(0.775)
Revealed NTR		3.451*	3.513*	4.565
		(1.870)	(1.685)	(0.673)
Year × Industry fixed effects	Yes	Yes	Yes	Yes
No. of observations	484	447	447	1,160
Adj. R^2	0.119	0.133	0.136	0.168

Table 10
Effects of targets with Chinese experience on post-M&A changes in operating expenses, inputs from China, and outputs to China for U.S. acquirers after PNTR

This table presents cross-sectional regressions of post-M&A changes in operating expenses, purchasing inputs from China, and selling outputs to China for U.S. acquiring firms. In columns (1) and (2), the dependent variable is *Change in operating costs*, defined as an indicator that equals one if the change in post-M&A operating costs of acquirers is above the sample median, and zero otherwise. The change in post-M&A operating costs is the difference between the average operating expense ratio over the two years after acquisition completion and the operating expense ratio one year before the acquisition announcement year, where the operating expense ratio is total operating expenses (the sum of cost of goods sold and selling, general, and administrative expenses) scaled by sales. In columns (3) and (4), the dependent variable is *Change in inputs from China*, defined as the difference between the average proportion of inputs from China over the two years after M&A completion and the proportion of inputs from China one year before M&A announcement. The proportion of inputs from China is measured by the total number of mentions of the acquirer purchasing inputs from China to the total number of mentions of the acquirer purchasing inputs outside of the U.S. In columns (5) and (6), the dependent variable is *Change in outputs to China*, defined as the difference between the average proportion of outputs to China over the two years after M&A completion and the proportion of outputs to China one year before M&A announcement. The proportion of outputs to China is measured by the total number of mentions of the acquirer selling goods to China to the total number of mentions of the acquirer selling goods to nations outside of the U.S. In column (7), the dependent variable is *Change in foreign sales to China*, defined as the difference between the average ratio of foreign sales to China (scaled by total sales) over the two years after completion and the ratio of foreign sales to China one year before the announcement year. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Change in operating costs		Change in inputs from China		Change in outputs to China		Change in foreign sales to China
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NTR_gap_99 × Post	-2.265**	-2.272*	1.131**	1.394*	1.463*	1.730*	0.044**
× Target with China_exp	(-2.229)	(-1.825)	(2.042)	(1.864)	(1.796)	(1.649)	(2.294)
NTR_gap_99	0.035	0.146	-0.197	-0.211	-0.127	-0.147	0.001
	(0.075)	(0.307)	(-0.872)	(-0.900)	(-0.452)	(-0.556)	(0.187)
Target with China_exp	0.747**	0.752*	-0.346*	-0.443	-0.308	-0.404	-0.007
	(2.072)	(1.651)	(-1.803)	(-1.632)	(-1.132)	(-1.041)	(-1.186)
Log (firm size)	-0.022	-0.028	-0.057***	-0.061***	-0.032	-0.038	0.001***
	(-0.874)	(-1.044)	(-2.947)	(-2.945)	(-1.084)	(-1.191)	(2.805)
Log (firm age)	-0.073	-0.068	0.047	0.052	0.035	0.041	-0.001
	(-1.570)	(-1.336)	(1.087)	(1.141)	(0.968)	(1.057)	(-1.577)
Intangible assets	-0.159	-0.252	-0.214	-0.200	-0.093	-0.077	-0.002
	(-0.600)	(-0.852)	(-0.917)	(-0.827)	(-0.490)	(-0.385)	(-0.305)
Log (number of segments)	-0.065	-0.039	0.129**	0.131**	0.106*	0.095	-0.000
	(-0.715)	(-0.401)	(2.212)	(2.133)	(1.677)	(1.446)	(-0.218)
Tobin's *q*	-0.016	-0.016	0.006	0.006	0.000	-0.000	-0.000
	(-0.694)	(-0.656)	(0.384)	(0.331)	(0.022)	(-0.020)	(-0.639)
Leverage	-0.153	-0.125	0.082	0.094	-0.044	-0.020	-0.006***
	(-0.989)	(-0.724)	(0.749)	(0.804)	(-0.484)	(-0.204)	(-2.775)
Free cash flow	0.672	0.741	-0.187	-0.156	0.065	0.254	-0.001
	(1.521)	(1.542)	(-0.337)	(-0.243)	(0.120)	(0.406)	(-0.075)
Foreign sales ratio	-0.283**	-0.296**	0.031	0.009	0.165	0.145	0.017***
	(-2.046)	(-2.061)	(0.262)	(0.078)	(1.288)	(1.110)	(5.089)
Stock return	-0.264***	-0.318***	0.001	0.013	0.046	0.060	0.001
	(-5.293)	(-5.851)	(0.029)	(0.254)	(1.031)	(1.201)	(1.509)
Domestic target	-0.035	-0.028	0.050	0.044	-0.092**	-0.094**	0.001
	(-0.649)	(-0.511)	(1.209)	(1.071)	(-2.041)	(-2.073)	(0.556)
Revealed NTR		-3.425		-0.352		0.519	0.005
		(-1.514)		(-0.280)		(0.394)	(0.179)
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	3,246	2,945	2,182	2,084	1,811	1,720	3,184
Pseudo R^2	0.097	0.108	—	—	—	—	—
Log likelihood	-2,008.550	-1,802.223	—	—	—	—	—
Adj. R^2	—	—	-0.004	-0.004	-0.013	-0.014	0.260

Table 11
Impact of targets with Chinese experience on post-M&A change in social networks in China for U.S. acquirers after PNTR

This table presents ordinary least squares (OLS) regressions of post-M&A change in Chinese social connections for U.S. acquirers. In columns (1) and (2), the dependent variable is *Change in Chinese networks*, defined as the difference between the average number of social connections in China for both managers and directors of U.S. acquirers over the two years after M&A completion and the number of connections in China one year before M&A announcement. A manager (director) of U.S. acquirers is classified as a connected manager (director) if the manager (director) is socially connected to the managers or directors of a Chinese firm through common educational background (i.e., attended the same university and received the same degree (bachelor, MBA, or PhD)), common membership in a non-profit organization, or common past employment (i.e., worked together in the same firm/institution). In columns (3) and (4), we separately examine the regression results for connected managers and directors. *Change in Chinese networks for managers* is defined as the difference between the average number of social connections in China for the managers of U.S. acquirers over the two years after completion and the number of connections in China one year before announcement. *Change in Chinese networks for directors* is similarly defined for the directors of U.S. acquirers. In columns (5) and (6), we divide managerial social connections into connections with political officers in China and non-political connections. We classify a manager of U.S. acquirers as a politically connected manager if the manager is socially connected to the managers or directors of a Chinese firm 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. *Change in Chinese political networks for managers* is defined as the difference between the average number of political connections in China for the managers of U.S. acquirers over the two years after completion and the number of political connections in China one year before announcement. *Change in Chinese non-political networks for managers* is similarly defined for non-political connections. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Change in Chinese networks	Change in Chinese networks	Change in Chinese networks for managers	Change in Chinese networks for directors	Change in Chinese political networks for managers	Change in Chinese non-political networks for managers
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
NTR_gap_99 × Post	21.370**	21.599*	20.796*	-0.472	0.764**	19.435*
× Target with China_exp	(2.051)	(1.768)	(1.775)	(-0.312)	(2.063)	(1.697)
NTR_gap_99	-1.718	-0.411	-0.418	-0.020	-0.013	-0.244
	(-0.298)	(-0.068)	(-0.070)	(-0.060)	(-0.109)	(-0.041)
Target with China_exp	-0.314	-0.623	-0.582	0.347	-0.166	-0.689
	(-0.090)	(-0.132)	(-0.129)	(0.753)	(-1.392)	(-0.154)
Log (firm size)	4.228***	4.584***	4.461***	0.109***	0.042***	4.429***
	(6.074)	(6.157)	(6.087)	(3.295)	(3.472)	(6.100)
Log (firm age)	-2.253***	-2.425***	-2.366***	-0.049	-0.014	-2.370***
	(-2.901)	(-2.817)	(-2.802)	(-1.035)	(-0.811)	(-2.840)
Intangible assets	4.232	3.729	4.035	-0.171	0.147	3.834
	(0.838)	(0.642)	(0.716)	(-0.483)	(1.398)	(0.691)
Log (number of segments)	1.032	0.999	0.696	0.234*	0.010	0.684
	(0.562)	(0.512)	(0.362)	(1.849)	(0.221)	(0.362)
Tobin's q	0.301	0.264	0.208	0.054**	0.011	0.192
	(1.114)	(0.906)	(0.733)	(2.426)	(1.097)	(0.681)
Leverage	-5.913***	-6.498***	-6.330***	-0.172	-0.003	-6.362***
	(-2.901)	(-2.771)	(-2.731)	(-1.354)	(-0.068)	(-2.775)
Free cash flow	0.152	0.744	0.704	-0.273	0.142	0.372
	(0.022)	(0.097)	(0.094)	(-0.696)	(0.860)	(0.051)
Foreign sales ratio	-2.268	-2.330	-2.448	0.155	0.053	-2.643
	(-0.847)	(-0.826)	(-0.880)	(0.928)	(0.800)	(-0.965)
Stock return	0.232	0.233	0.168	0.052	-0.004	0.189
	(0.528)	(0.462)	(0.336)	(1.316)	(-0.175)	(0.382)
Domestic target	0.595	0.586	0.501	0.055	0.014	0.472
	(0.712)	(0.659)	(0.570)	(0.719)	(0.566)	(0.537)
Revealed NTR		-65.961***	-66.399***	-0.690	-0.667	-66.094***
		(-2.908)	(-3.018)	(-0.381)	(-1.329)	(-3.034)
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	3,161	2,832	2,832	2,832	2,832	2,832
Adj. R^2	0.355	0.361	0.355	0.118	0.110	0.356

Are targets' business experience valuable to acquirers? Evidence from the U.S. grant of PNTR status to China

Sheng-Syan Chen and Shu-Cing Peng

Online Appendix

Table A.1
Impact of the grant of PNTR on target selection: Additional tests

This table performs additional tests to ensure the robustness of the DID results in Table 2. The dependent variable is *Target with China_exp*, which is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. In columns (1) through (4), we focus on the three or five years before and after the passage of PNTR (i.e., 1997 through 2003 or 1995 through 2005 excluding 2000) and repeat the analysis in columns (3) and (5) of Table 2. In columns (5) and (6), we use the NTR gap in 1990, ten years before PNTR, and repeat the analysis in columns (3) and (5) of Table 2. *NTR_gap_99* (*NTR_gap_90*) for a four-digit SIC industry is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 (1990). *Post* is an indicator that equals one for a firm in the post-PNTR period, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	Subsample period: 1997–2003		Subsample period: 1995–2005		Full sample period	
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
NTR_gap_99 × Post	4.774*	5.541**	3.652**	4.136**		
	(1.703)	(2.204)	(2.101)	(2.470)		
NTR_gap_99	1.303	0.917	0.823	0.534		
	(1.575)	(0.877)	(1.553)	(0.873)		
NTR_gap_90 × Post					1.854**	1.813*
					(2.088)	(1.833)
NTR_gap_90					0.081	0.170
					(0.111)	(0.200)
Post	-1.738	-1.882*	-1.293**	-1.351**	-0.021	0.016
	(-1.597)	(-1.880)	(-1.965)	(-2.158)	(-0.074)	(0.053)
Log (firm size)	0.157***	0.210***	0.147***	0.174***	0.181***	0.187***
	(2.800)	(3.457)	(2.948)	(3.387)	(5.855)	(5.862)
Log (firm age)	0.116	0.152	0.147	0.141	0.062	0.058
	(0.888)	(0.977)	(1.443)	(1.204)	(1.124)	(0.989)
Intangible assets	0.192	-0.249	-0.551	-0.734	0.254	0.234
	(0.271)	(-0.293)	(-0.939)	(-1.063)	(0.712)	(0.624)
Log (number of segments)	-0.357	-0.161	-0.275	-0.160	-0.356***	-0.342***
	(-1.125)	(-0.379)	(-1.184)	(-0.586)	(-2.991)	(-2.795)
Tobin's *q*	0.020	0.043	-0.006	0.016	-0.006	0.000
	(0.444)	(0.929)	(-0.138)	(0.364)	(-0.163)	(0.001)
Leverage	-0.317	-1.421	-0.524	-0.867	0.381*	0.403**
	(-0.572)	(-1.260)	(-1.227)	(-1.607)	(1.950)	(1.979)
Free cash flow	-1.964	-2.926**	-2.261**	-2.713**	-0.925	-0.951
	(-1.500)	(-1.992)	(-2.075)	(-2.127)	(-1.261)	(-1.209)
Herfindahl index	3.090	2.691	1.517	1.819	-1.938*	-1.676
	(0.968)	(0.802)	(0.588)	(0.718)	(-1.677)	(-1.391)
Foreign sales ratio	0.211	0.172	0.156	0.113	0.503***	0.509***
	(0.707)	(0.421)	(0.544)	(0.346)	(4.219)	(4.212)
Stock return	0.059	0.154*	0.102	0.168**	-0.048	-0.024
	(0.725)	(1.762)	(1.470)	(2.436)	(-0.772)	(-0.385)
Revealed NTR		6.269***		3.176		-2.372
		(2.590)		(1.556)		(-0.953)
Year fixed effects	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed
Industry fixed effects	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed	Absorbed
No. of observations	1,058	932	1,773	1,554	4,029	3,656
Pseudo R^2	0.091	0.151	0.081	0.109	0.132	0.132
Log likelihood	-82.890	-65.182	-136.122	-110.368	-542.023	-515.595

Table A.2
Effects of targets with Chinese experience for U.S. acquirers after PNTR: Placebo tests

This table presents placebo tests for regression estimates in Tables 5 through 9 based on the true empirical distribution of the number of target firms with China-related business experience in each year. We replace each target firm that has Chinese experience with another firm randomly selected from among targets that have no Chinese experience (i.e., pseudo targets with Chinese experience) in a given year. We then re-estimate the regressions in Tables 5 through 9 by replacing *Target with China_exp* by *Placebo*, which equals one for pseudo targets with Chinese experience, and zero for other targets without Chinese experience. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: M&A announcement returns

	CAR (–1, 2): market model	CAR (–1, 2): three-factor model	CAR (–1, 2): four-factor model
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	-0.035	-0.008	-0.009
× Placebo	(-0.583)	(-0.145)	(-0.169)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	3,087	3,087	3,087
Adj. R^2	0.044	0.046	0.046

Panel B: Big loss deals

	Big loss deal: US$500 million	Big loss deal: bottom decile
Independent variable	(1)	(2)
NTR_gap_99 × Post	0.093	1.601
× Placebo	(0.054)	(1.065)
Control variables	Column (2) of Table 6	Column (3) of Table 6
Year × Industry fixed effects	Yes	Yes
No. of observations	1,526	2,147
Pseudo R^2	0.334	0.297
Log likelihood	-325.046	-516.587

Panel C: Post-M&A operating performance

	Change in ROA: EBIT/AT	Change in ROA: EBITDA/AT	Change in ROA: industry-adj. EBIT/AT	Change in ROA: industry-adj. EBITDA/AT	Change in TFP
Independent variable	(1)	(2)	(3)	(4)	(5)
NTR_gap_99 × Post	0.008	-0.020	-0.011	-0.034	-0.234
× Placebo	(0.108)	(-0.250)	(-0.128)	(-0.386)	(-0.869)
Control variables	Column (2) of Table 7	Column (3) of Table 7	Column (4) of Table 7	Column (5) of Table 7	Column (6) of Table 7
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	2,689	2,670	2,689	2,670	2,638
Adj. R^2	0.154	0.172	0.149	0.176	0.101

Panel D: M&A synergies

	Synergies: market model	Synergies: three-factor model	Synergies: four-factor model
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	-0.057	0.142	0.134
× Placebo	(-0.312)	(1.176)	(1.180)
Control variables	Column (2) of Table 8	Column (3) of Table 8	Column (4) of Table 8
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	265	265	265
Adj. R^2	-0.032	0.007	0.017

Panel E: Offer premium

	Premium: one day	Premium: four weeks	Premium: Officer (2007)
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	0.530	-0.171	107.902
× Placebo	(1.287)	(-0.279)	(1.232)
Control variables	Column (2) of Table 9	Column (3) of Table 9	Column (4) of Table 9
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	341	341	1,051
Adj. R^2	0.138	0.139	0.182

Table A.3
Impact of targets with Chinese experience on M&A announcement returns for U.S. acquirers after PNTR: Accounting for corporate governance

This table presents ordinary least squares (OLS) regression analysis of M&A announcement returns for U.S. acquiring firms after additional inclusion of corporate governance variables. In column (1), we include three governance variables: *board size*, *board independence*, and *CEO duality*. *Board size* is the total number of directors on the board; *Board independence* is the ratio of the number of outside directors to board size; and *CEO duality* is an indicator that equals one if the CEO also serves as board chairman, and zero otherwise. In column (2), we construct a *Residual Governance Index* using six corporate governance variables: board size; board independence; separation of CEO and chairman; the percentage of shares held by the CEO; the percentage of shares held by institutional investors; and the entrenchment index (E-index) of Bebchuk et al. (2009). We orthogonalize each governance measure with respect to firm and CEO characteristics and average the residual governance characteristic to form a governance index based on each measure's percentile ranking. We again orthogonalize the resulting index with respect to firm and CEO characteristics. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: CAR (–1, 2): market model		
Independent variable	(1)	(2)
NTR_gap_99 × Post	0.254***	0.247**
× Target with China_exp	(2.918)	(2.160)
Board size	0.009	
	(1.164)	
Board independence	-0.016	
	(-1.485)	
CEO duality	0.001	
	(0.393)	
Residual governance index		0.010
		(0.652)
Other controls	Column (2) of Table 5	Column (2) of Table 5
Year × Industry fixed effects	Yes	Yes
No. of observations	2,045	1,378
Adj. R^2	0.047	0.060
Pane B: CAR (–1, 2): three-factor model		
Independent variable	(1)	(2)
NTR_gap_99 × Post	0.255***	0.235**
× Target with China_exp	(2.869)	(2.044)
Board size	0.009	
	(1.159)	
Board independence	-0.014	
	(-1.296)	
CEO duality	0.000	
	(0.060)	
Residual governance index		0.003
		(0.185)
Other controls	Column (3) of Table 5	Column (3) of Table 5
Year × Industry fixed effects	Yes	Yes
No. of observations	2,045	1,378
Adj. R^2	0.035	0.050
Panel C: CAR (–1, 2): four-factor model		
Independent variable	(1)	(2)
NTR_gap_99 × Post	0.265***	0.241**
× Target with China_exp	(3.008)	(2.079)
Board size	0.008	
	(1.030)	
Board independence	-0.017	
	(-1.579)	
CEO duality	0.000	
	(0.011)	
Residual governance index		0.002
		(0.110)
Other controls	Column (4) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes
No. of observations	2,045	1,378
Adj. R^2	0.034	0.046

Table A.4
Impact of targets with Chinese experience on M&A announcement returns after PNTR: U.S. acquirers whose directors and managers have no China-related experience

This table presents ordinary least squares (OLS) regressions of M&A announcement returns for a subsample of U.S. acquirers that do not appoint any outside directors with China-related experience in Panel A, and for a subsample of U.S. acquirers whose both senior managers and outside directors have no Chinese experience in Panel B. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Acquirers that have no outside directors with Chinese experience			
	CAR (−1, 2): market model	CAR (−1, 2): three-factor model	CAR (−1, 2): four-factor model
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	0.249***	0.242***	0.254***
× Target with China_exp	(2.777)	(2.676)	(2.818)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	1,813	1,813	1,813
Adj. R^2	0.045	0.040	0.040
Panel B: Acquirers whose both senior managers and outside directors have no Chinese experience			
	CAR (−1, 2): market model	CAR (−1, 2): three-factor model	CAR (−1, 2): four-factor model
Independent variable	(1)	(2)	(3)
NTR_gap_99 × Post	0.272***	0.266***	0.278***
× Target with China_exp	(2.748)	(2.647)	(2.812)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	1,634	1,634	1,634
Adj. R^2	0.050	0.045	0.044

Table A.5

Impact of targets with Chinese experience on M&A announcement returns for U.S. acquirers after PNTR: Various event windows

This table presents ordinary least squares (OLS) regressions of M&A announcement returns during various event windows for a subsample of U.S. acquirers that do not appoint any outside directors with China-related experience in Panel A, and for a subsample of U.S. acquirers whose both senior managers and outside directors have no Chinese experience in Panel B. *NTR_gap_99* is the difference between the non-NTR tariff rate and the NTR tariff rate set by PNTR in 1999 in a four-digit SIC industry. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Acquirers that have no outside directors with Chinese experience

	Market model			Three-factor model			Four-factor model		
	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NTR_gap_99 × Post	0.213***	0.246***	0.219**	0.198***	0.240***	0.255***	0.209***	0.252***	0.278***
× Target with China_exp	(3.043)	(2.857)	(2.513)	(3.015)	(2.698)	(2.630)	(3.098)	(2.838)	(2.819)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	1,813	1,813	1,813	1,813	1,813	1,813	1,813	1,813	1,813
Adj. R^2	0.061	0.044	0.014	0.055	0.045	0.023	0.057	0.044	0.019

Panel B: Acquirers whose both senior managers and outside directors have no Chinese experience

	Market model			Three-factor model			Four-factor model		
	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)	CAR (–1, 1)	CAR (–2, 2)	CAR (–5, 5)
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NTR_gap_99 × Post	0.221***	0.274***	0.233**	0.202***	0.270***	0.274**	0.212***	0.281***	0.298***
× Target with China_exp	(2.751)	(2.913)	(2.318)	(2.678)	(2.747)	(2.434)	(2.757)	(2.913)	(2.658)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	1,634	1,634	1,634	1,634	1,634	1,634	1,634	1,634	1,634
Adj. R^2	0.067	0.050	0.014	0.062	0.052	0.025	0.064	0.051	0.021

Table A.6
Robustness checks using segment-based NTR gap

This table examines whether the results are robust to the segment-based measure of firms' exposure to PNTR. *Segment NTR_gap_99* is defined as the average of *NTR_gap_99* weighted by the sales ratio of each business segment from the Compustat segment files, where *NTR_gap_99* is set to zero for a segment outside manufacturing. Panel A re-estimates the DID regression in column (5) of Table 2 and the 2SLS regression in columns (4)–(6) of Table 3. Panel B re-estimates the OLS regressions in columns (2)–(4) of Table 5. We report the results for a subsample of U.S. acquirers that do not appoint any outside directors with China-related experience and for a subsample of U.S. acquirers whose both senior managers and outside directors have no Chinese experience, respectively. *Post* is an indicator that equals one for a firm in the 2001–2018 period, and zero otherwise. *Target with China_exp* is an indicator that equals one for a target firm with China-related business experience before the M&A announcement, and zero otherwise. All continuous variables except the industry-level variables are winsorized at the 1% level in both tails. Definitions of other variables are provided in the Appendix. *T*-statistics based on robust standard errors clustered at the acquirer level are reported in parentheses. The number of observations varies across regressions because of data availability. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Target selection

A.1: Acquirers that have no outside directors with Chinese experience

	OLS	2SLS (second stage)
Independent variable	(1)	(2)
Segment NTR_gap_99 × Post	10.357***	32.315*
	(3.261)	(1.907)
Control variables	Column (5) of Table 2	Column (6) of Table 3
Year × Industry fixed effects	Yes	Yes
No. of observations	1,995	1,995
Pseudo R^2	0.105	—
Log likelihood	-368.050	—

A.2: Acquirers whose both senior managers and outside directors have no Chinese experience

	OLS	2SLS (second stage)
Independent variable	(1)	(2)
Segment NTR_gap_99 × Post	10.370***	32.370*
	(3.267)	(1.941)
Control variables	Column (5) of Table 2	Column (6) of Table 3
Year × Industry fixed effects	Yes	Yes
No. of observations	1,806	1,806
Pseudo R^2	0.108	—
Log likelihood	-321.716	—

Panel B: M&A announcement returns

B.1: Acquirers that have no outside directors with Chinese experience

	CAR (–1, 2): market model	CAR (–1, 2): three-factor model	CAR (–1, 2): four-factor model
Independent variable	(1)	(2)	(3)
Segment NTR_gap_99 × Post	0.256***	0.249***	0.267***
× Target with China_exp	(2.620)	(2.517)	(2.728)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	1,811	1,811	1,811
Adj. R^2	0.045	0.040	0.040

B.2: Acquirers whose both senior managers and outside directors have no Chinese experience

	CAR (–1, 2): market model	CAR (–1, 2): three-factor model	CAR (–1, 2): four-factor model
Independent variable	(1)	(2)	(3)
Segment NTR_gap_99 × Post	0.266***	0.261**	0.275***
× Target with China_exp	(2.596)	(2.503)	(2.684)
Control variables	Column (2) of Table 5	Column (3) of Table 5	Column (4) of Table 5
Year × Industry fixed effects	Yes	Yes	Yes
No. of observations	1,632	1,632	1,632
Adj. R^2	0.049	0.044	0.043