*Review of Accounting and Auditing Studies*
會計審計論叢，第 15 卷第 2 期，2025 年 12 月
第 75-120 頁

# 股價與匯率升值是否有利於主併者股東?來自 G7 國家與中國的證據

**黃筱芳**
國泰人壽保險股份有限公司投資管理部

**徐政義**
國立政治大學國際經營與貿易學系

**魏慧珊***
南臺科技大學企業管理系

收稿日：2025 年 2 月 21 日；接受日：2025 年 6 月 30 日

**摘要**

本研究探討主併公司股價與匯率升值對併購宣告效果與長期股票績效之影響，研究樣本涵蓋 G7 國家與中國之併購交易。實證結果顯示，若主併公司在併購宣告前股價上漲，則其併購宣告異常報酬與長期股票績效顯著較低，顯示此現象可能與管理者過度自信或股價高估有關。相對地，若主併公司本國的實質有效匯率升值，則與併購後績效呈正向關係，顯示貨幣升值有助於提升購買力與併購效率。進一步的穩健性檢驗支持上述結果。首先，分析進一步區分股價上漲是否源自成長機會或高估因素。其次，採用二階段最小平方法處理主要解釋變數的內生性問題。第三，控制各國在法律起源與股東保護制度上的差異。整體而言，研究結果在不同模型設定下均具穩健性。

關鍵詞：購買力、宣告效果、長期股票績效、併購

* 通訊作者，地址：710301 台南市永康區南台街一號，電話：(06)2533131 分機 5523，Email：hswei@stust.edu.tw。作者們感謝總編輯與兩位匿名審查委員提供的寶貴意見和建議。

臺灣期刊論文索引系統期刊資料庫

*Review of Accounting and Auditing Studies*
Vol. 15 No. 2, December 2025
pp.75-120

# Do Appreciations in Equity Price and Currency Benefit the Acquirers' Shareholders? Evidence from G7 Countries and China

**Siao-Fang Huang**
*Division of investment management, Cathay Life Insurance Co., Ltd.*

**Cheng-Yi Shiu**
*Department of International Business, National Chengchi University*

**Hui-Shan Wei***
*Department of Business Administration, Southern Taiwan University of Science and Technology*

Received 21 February 2025; accepted 30 June 2025

**Abstract**

This paper examines the impact of appreciation in the stock price and currency of the acquirer on the announcement effect and long-run stock performance of acquisitions using deals from G7 countries and China. The empirical results show that a rise in stock price prior to the acquisition announcement is associated with significantly lower announcement abnormal returns and long-run stock performance, suggesting the presence of managerial overconfidence or overvaluation. In contrast, an appreciation in the real effective exchange rate of the acquirer's home country is positively associated with post-acquisition performance, indicating that currency strength enhances purchasing power and acquisition efficiency. Further robustness checks confirm these findings. First, additional analysis disentangles stock price appreciation into components driven by growth opportunities versus overvaluation. Second, two-stage least squares regressions address concerns regarding endogeneity. Third, cross-country variations in legal origin and shareholder protection are controlled for. Overall, the results are robust to alternative specifications.

*Keywords:* Purchasing power; Announcement effect; Long-run stock performance; Acquisitions

* Corresponding author. Address: No. 1, Nantai Street, Yungkang District, Tainan City 710301, Taiwan. Tel: +886-6-2533131 ext. 5523. Email: hswei@stust.edu.tw. The authors gratefully acknowledge the valuable comments and suggestions provided by the editor-in-chief and the two anonymous reviewers.

臺灣人文社會期刊資料庫

## 1. Introduction

Mergers and acquisitions (M&A) play a critical role in the current business environment, serving as a mode of firm cooperation and a means for firms to expand their influence. Given the increasing competition among global enterprises, M&A is an important strategic consideration for business managers, raising the question of whether to expand market share or enhance brand diversity through the acquisition of complementary firms. Although M&A may create value for the acquiring firm, it also carries risks and costs that may offset this value creation. Such risks and costs include overpaying for acquisitions, resource conflicts, and financial risks. These challenges necessitate careful risk analysis to ensure that post-M&A synergies benefit shareholders and create additional business value.

One of the focal points in the M&A market is the announcement effect on the acquirer. If the market operates efficiently, investors' reactions are typically reflected in the stock price following an M&A announcement. For example, a rise in the stock price of the acquirer after an M&A announcement reflects market confidence in the transaction, whereas a decline indicates skepticism and disappointment. Another focus is the long-run stock return of the acquirer post-M&A, where investors evaluate the actual synergy generated to determine whether the acquisition was a wise decision. High synergy in the aftermath of an M&A deal can enhance firm value, boosting investor confidence, while low synergy can lead to a lower firm valuation, negatively impacting stock price. Thus, whether the acquirer makes M&A decisions that benefit its shareholders is an important topic for discussion. As M&A becomes increasingly important, understanding the market's reaction to M&A announcements and long-run stock performance and exploring the influencing factors behind these reactions are crucial for both firms and the market. This study is motivated by these considerations.

The M&A premium is a point of interest for investors. The M&A premium refers to the portion of value that the acquirer pays above the market price of the target firm to gain ownership. Conversely, when an acquirer pays less than the market price, this is referred to as a discount. If the M&A premium is too high, it can threaten the acquirer's financial stability. An appreciation or depreciation of the stock price of the acquiring firm prior to the acquisition influences the M&A premium of the deal. Similarly, an appreciation or depreciation of real effective exchange rate may also influence the M&A premium in the cross-border acquisition. How do changes in stock price and real effective exchange rate affect the wealth of

臺灣大學學術期刊資料庫

acquiring shareholders? If the stock price of the acquiring firm or the real effective exchange rate appreciates more prior to acquisition, this suggests the acquiring firm may be able to purchase the target at a lower cost. On the other hand, an appreciation of stock price and real effective exchange rate may lead managers to intentionally expand firms in an aggressive manner, leading to an adverse managerial decision. Thus, it is interesting to evaluate whether an appreciation in stock price and real effective exchange rate benefits the wealth of the acquiring firm's shareholders. We shed light on this issue by examining the market reactions and long-run stock performance of acquisitions made in G7 countries and China in the period from January 2009 through December 2022.

Existing literature suggests several factors influencing the performance of acquisitions, including agency problems (Morck et al. 1990; Masulis et al. 2007) and the hubris hypothesis (Roll 1986; Moeller et al. 2004; Fu et al. 2013), which examine firm's acquisition activities from a corporate governance perspective. These studies suggest that when acquirers experience severe agency problems, or managers exhibit hubris by overpaying for the targets, such transactions negatively impact the value of acquiring firms. Additionally, existing studies explore the impact of exchange rate fluctuations on acquisitions (Dewenter 1995; Blonigen 1997; Georgopoulos 2008; Lin et al. 2014), focusing on whether exchange rate appreciation in the acquirer's home country increases the likelihood of M&A. Broadly, the findings of these studies are inconclusive.

Most studies focus on U.S. M&As. This paper expands the research scope by examining the acquisitions made by listed firms from G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) and China between January 2009 and December 2022. The focus on acquisitions in the G7 and China reflects the economic significance of these countries, which represent major global economies. Based on statistics published by the World Bank, the aggregate Gross Domestic Product (GDP) of these eight countries in 2023 totaled 64.59 trillion U.S. dollars, accounting for 62 percent of global GDP.[1] More importantly, the U.S. dollar, euro, pound sterling, Japanese yen, and Chinese yuan are included in the Special Drawing Rights (SDR) basket.[2] Therefore, examining the announcement

[1] The largest national economies by GDP are the United States, China, Germany, Japan, India, UK, France, Italy, Brazil, and Canada.

[2] The Special Drawing Rights (SDRs) are created by the International Monetary Fund (IMF) and serve as an international reserve asset, with the value of SDRs based on a weighted average of the currencies in a standard basket, including the U.S. dollar, euro, pound sterling, Japanese yen, and Chinese yuan since 2014.

臺灣大學會計期刊資料庫

effect and long-run stock performance of acquisitions by listed firms in these eight countries can enrich our understanding of the determinants of acquisition performance, particularly regarding whether an appreciation in stock price and real effective exchange rate benefits the wealth of acquiring firm shareholders.

The data on acquisition announcements in G7 countries and China is obtained from SDC Platinum, with stock price and financial data for the acquirers obtained from the Datastream database through SDC Platinum's Datastream code (DSCD). The stock market index data for the acquirers' countries are obtained from the Datastream market index, and the real effective exchange rate index data are obtained from the World Bank. After merging these datasets, this paper comprises 1,450 acquisition cases, with Chinese acquisitions being the most numerous (approximately 37.45%), followed by Japanese cases (approximately 29.93%). This indicates that most acquisitions over the past decade are concentrated in East Asian countries, particularly China and Japan, followed by North American countries such as the United States and Canada, with fewer occurring in European countries.

The empirical results of this study indicate that when the acquisition activities of the acquirer are driven by an increase in purchasing power due to a rise in the firm's stock price, there tends to be a lower acquisition announcement effect. There are two possible reasons for this. First, when a firm's stock price increases, the market may perceive that the stock is overvalued, leading to skepticism about the synergies of the acquisition transaction, which in turn reduces investors' willingness to partake in arbitrage. Second, there may be concerns regarding the firm's managerial decision-making, specifically that the management is pursuing acquisition activities merely to expand the scale of the firm rather than maximize shareholder value. This may lead to a more conservative market reaction to the acquisition announcement.

However, when the acquisitions are driven by an increase in purchasing power due to an appreciation of the real effective exchange rate, no significant announcement effect is observed. This is because changes in the real effective exchange rate index mainly reflect the economic conditions and monetary policies of the country, and the stock price reaction to the acquisition announcement is still primarily driven by the fundamentals of the acquirer, without being influenced by exchange rate fluctuations.

Furthermore, it is found that when the acquisitions are driven by an increase in purchasing power due to a rise in the firm's stock price, this negatively affects the cumulative abnormal return (CAR) and buy-and-hold abnormal return (BHAR) for

臺灣人學學術期刊資料庫

up to 36 months following the acquisition announcement. There are two possible reasons for this. First, if management notices that the firm's stock price leads to increased purchasing power, they may interpret this by self-validation, attributing the success to their own abilities, which may lead to an underestimation of the challenges and difficulties associated with the acquisition process. Second, in the context of rising stock prices, management may also pay an excessively high acquisition premium, possibly to meet market expectations or to maintain stock price growth through acquisitions. They may also face personal performance pressure, such as the desire for higher compensation, viewing acquisition as a route to more rapid expansion. However, when the acquisitions are driven by an increase in purchasing power due to real effective exchange rate appreciation, this positively impacts the long-run stock performance of the acquirer, indicating that the acquirer can acquire assets at a lower cost, which benefits the long-term value of the acquirer's shareholders.

Additionally, the results of the interaction between payment methods and target firm status reveals that, compared to acquisitions of public firms using stock payment, those involving private firms or subsidiaries using either stock or all-cash payments, as well as public firms using all-cash payment, are associated with significantly higher announcement abnormal returns and long-run stock performance. These findings suggest that stock-based acquisitions of public target firms are not only less well received by market participants but also detrimental to the long-term value of the acquirer's shareholders.

Moreover, focusing on the sample of cross-border acquisitions, it is found that when the acquirer's cross-border acquisitions are driven by an increase in purchasing power due to a rise in the firm's stock price, there is also a lower acquisition announcement effect and long-run stock performance. However, when the acquirer's cross-border acquisitions are driven by an increase in purchasing power due to real effective exchange rate appreciation, no significant impact on the announcement effect or long-run stock performance is observed. The insignificance of this effect may be attributed not only to the relatively small sample size of cross-border acquisitions, but also to institutional constraints and market frictions that weaken the effect of exchange rate appreciation.

To further ensure the reliability of the empirical findings, this study conducts a series of robustness checks. First, to distinguish whether a rise in the stock price prior to acquisitions reflects genuine growth opportunities or market overvaluation, the analysis introduces interaction terms with growth- and overvaluation-related

臺灣大學學術期刊資料庫

indicators. The results indicate that only stock price increases driven by overvaluation are associated with lower acquisition performance, while those reflecting growth opportunities are not significantly related. Second, a two-stage least squares (2SLS) regression is employed to address potential endogeneity in the key explanatory variables, prior stock return and real effective exchange rate return. The validity of the instruments is confirmed by first-stage F-tests and Hansen J tests, and the results remain consistent with baseline regressions. Finally, the inclusion of legal origin and shareholder protection variables also yields consistent findings, indicating that the main results are robust to institutional differences in legal and corporate governance environments across countries.

This study contributes to the literature on mergers and acquisitions. Previous studies on acquisition performance have primarily focused on the U.S. market, using acquirers' stock returns as the main measure of acquisition outcomes. For example, Moeller et al. (2005) analyzed M&A transactions involving U.S. listed firms from 1980 to 2001 and found a significant relationship between acquirer size and short-term stock returns. Similarly, Rau and Vermaelen (1998) observed that acquisitions led by overvalued firms often triggered negative market reactions. However, these findings are largely derived from a single institutional and mature market context, namely the United States, and there remains a lack of systematic comparisons involving other developed countries or emerging markets.

Although some studies have begun to examine cross-border acquisitions and the role of institutional factors, such as Erel et al. (2012), who argue that acquirers from countries with stronger governance are more likely to create value through M&A, their sample mainly focuses on mergers and acquisitions in Europe and North America. There is limited attention given to Asian markets, particularly emerging economies like China. In addition, while exchange rates have been considered an important determinant of acquisition activity, as proposed by Froot and Stein (1991), the interaction between exchange rate movements and acquirers' valuation conditions, and how this interaction influences acquisition performance, has not yet been comprehensively examined in the literature.

To address these gaps, this study uses a sample covering both G7 countries and China, capturing a mix of mature and emerging markets, as well as diverse exchange rate regimes and legal environments. This setting enables an analysis of how stock valuation and exchange rate conditions independently affect post-acquisition abnormal returns, offering insights under institutional contexts that differ from those studied in previous research.

臺灣大學學術期刊資料庫

This study also contributes to the understanding of the factors affecting the acquisition performance. For example, Shleifer and Vishny (1986) find that large shareholders can play a monitoring role in improving the acquisition decision and operating performance post-acquisition. Gaspar et al. (2005), Chen et al. (2007), Lou et al. (2020), and Nguyen and Shiu (2022) document that independent and long-term institutional shareholders can play a more significant role in monitoring management and that firms with higher such institutional ownership tend to have better long-run post-acquisition performance. Similarly, Morck et al. (1990) and Masulis et al. (2007) offer the managerial agency hypothesis. Roll (1986) and Moeller et al. (2004) argue that managerial hubris deteriorates the acquisition performance. We contribute to the literature by exploring the effect of an appreciation in stock price and real effective exchange rate on the acquisition performance and investigating the sample firms from G7 countries and China. We find that an appreciation in real effective exchange rate has a positive effect on the shareholder wealth of the acquiring firm, while an appreciation in stock price has a harmful effect on the long-run stock performance of the acquirer.

The remainder of the paper is organized as follows. Section 2 provides a review of the relevant literature. Section 3 describes the data, sample selection, and variable definitions. Section 4 presents the empirical analysis of acquisition performance. Section 5 reports the results of robustness checks. Section 6 concludes the paper.

## 2. Literature review

Prior studies have identified several determinants of a firm's M&A performance, including corporate governance, stock valuation, exchange rate fluctuations, payment methods, target firm status, acquisition types, and shareholder investment horizons. Research from the corporate governance perspective generally finds that factors such as large shareholders, managerial incentives, and anti-takeover provisions significantly influence a firm's acquisition activities. Shleifer and Vishny (1986) use a sample of 456 Fortune 500 firms that engaged in acquisition and privatization transactions between 1980 and 1984. They find that large shareholders help improve firms' operational strategies, thereby achieving regulatory objectives. Additionally, when large shareholders hold a significant portion of shares, the likelihood of mergers increases, and acquisition premiums tend to be lower. Therefore, the authors argue that large shareholders can effectively prevent agency problems within the firm, highlighting the importance of corporate governance.

臺灣大學學術期刊資料庫

Morck et al. (1990) collect 326 U.S. acquisitions from 1975 to 1987, focusing on friendly acquisitions. They find that two types of acquisitions, namely conglomerate deals and those in which the target firm is in a rapid growth phase, tend to result in poor post-acquisition performance. This suggests that managers may use such acquisitions to expand the size of the acquirer and ensure firm survival. Additionally, they find that acquisitions involving acquirer managers with agency problems also tend to have worse post- acquisition performance, indicating that managers might make acquisition decisions that are not in the best interest of shareholders, possibly due to personal gain.

Masulis et al. (2007) analyze 3,333 U.S. acquisitions from 1990 to 2013 and find that acquirers with more anti-takeover provisions generally receive significantly lower excess returns. This is often because these firms' managers are less restrained by the market in terms of corporate control, increasing the risk that they are pursuing acquisitions for empire-building motives. Moreover, acquirers in highly competitive industries or with a separation of CEO and chairman roles often achieve higher abnormal returns, highlighting the importance of corporate governance in acquisitions.

Additionally, some studies suggest that when managers of acquirers are overly ambitious and incur high acquisition costs, this can negatively impact the value of the acquirer post-acquisition. Roll (1986) tests the hubris hypothesis, which suggests that people in positions of great power may overestimate their capabilities and become more risk-prone, leading to failed acquisitions. The empirical results validate the hubris hypothesis, indicating that acquirers indeed tend to pay excessive premiums during acquisitions due to managers' overconfidence, leading to an overvaluation of the target firm. Furthermore, in such acquisitions, the stock price of the acquirer usually declines post- acquisition, indicating that the market eventually recognizes the decision-making errors of the acquirer and reflects this in stock price performance.

Moeller et al. (2004) analyze U.S. acquisitions from 1980 to 2001 and find that small firms tend to perform better in terms of announcement effects than large firms. The average abnormal return during the announcement period for small firms is 2.32%, whereas it is only 0.08% for large firms. Regardless of whether the acquisition payment is through cash or stock, the majority of large firm acquisitions result in a loss of shareholder wealth. This potentially occurs due to the personality traits of managers at larger firms, who are likely to offer higher acquisition premiums and consequently deliver lower synergies, aligning with the hubris

臺灣大學學術期刊資料庫

hypothesis.

Fu et al. (2013) examine U.S. acquisitions completed between 1985 and 2006 involving firms listed on the NYSE, AMEX, or Nasdaq. They find that overvalued acquirers often pay excessive acquisition premiums without corresponding positive synergistic effects. Additionally, these samples typically involve firms with serious governance issues, meaning that managerial decisions related to acquisitions are greatly influenced by lucrative CEO compensation and not necessarily aimed at creating shareholder value. Thus, this study examines acquisitions in the G7 countries and China. It is hypothesized that acquisitions driven by an increase in the purchasing power of the acquirer, propelled by rising stock prices, may lead to managerial overconfidence. Such overconfidence may result in an overestimation of the target firm's value and the payment of excessive acquisition costs, ultimately undermining the announcement effects and long-run stock performance of the acquirer.

Existing literature explores the impact of exchange rate fluctuations on the willingness to engage in acquisitions, specifically whether acquirers are more likely to pursue acquisitions when their home currency appreciates. Dewenter (1995) studies foreign firms acquiring U.S. targets from 1975 to 1989 and finds no statistically significant relationship between exchange rate movements and cross-border acquisitions after controlling for relative corporate wealth and the overall level of investment. Blonigen (1997) analyzes Japanese firms' acquisitions of U.S. targets between 1975 and 1992, and finds that a depreciation of the U.S. dollar increased the likelihood of such acquisitions, particularly among firms with firm-specific assets. Blonigen (1997) proposes the asset acquisition hypothesis, suggesting that exchange rate fluctuations influence the M&A intent of acquirers because these transactions involve firm-specific assets, which can generate returns in foreign currency.

Georgopoulos (2008) studies bilateral M&As between the U. S. and Canada and finds that real currency depreciation increases the likelihood of cross-border M&As, but this effect is limited to R&D-intensive industries. The results support Blonigen's asset acquisition hypothesis (Blonigen 1997). Additionally, evidence from Canadian firms' acquisitions in Europe also tends to show similar outcomes. Lin et al. (2014) examine global publicly traded firms engaging in cross-border M&As from 1996 to 2012. They find that when the currency of the acquirer's home country appreciates and if the firm has strong corporate governance, both short-term and long-term excess returns are significantly positive. Conversely, if the acquirer's

臺灣大學學術期刊資料庫

governance is poor, this can result in paying excessively high premiums for acquisitions, thereby harming long-term shareholder returns. The related literature on the asset acquisition hypothesis underscores that acquisitions driven by favorable exchange rates can enable acquirers to obtain assets at lower costs and thus significantly enhance long-run stock performance for the acquirers.

Additionally, the valuation of a firm's stock is closely related to the method of payment in M&As. Previous literature has found that firms tend to use stock as a payment method in situations where their stock is overvalued. Loughran and Vijh (1997) analyze U.S. M&As from 1970 to 1989 and find that firms using stock as the method of payment have an average return of -25% within five years after the acquisition, whereas firms that use cash have an average return of 61.7%. Further investigation into why managers might choose to pay with stock suggests that when a firm's stock is overvalued, using stock as a payment method is a lower-cost financing option and is more advantageous at the time. Rhodes-Kropf et al. (2005) examine M&As between 1978 and 2001 and find that firms tend to use overvalued stock as a payment method for acquisitions. This is because, for the acquirer, the purchasing power of their stock has significantly increased compared to other payment methods, leading managers to view stock payment as a more prudent choice.

Shleifer and Vishny (2003) propose a stock market-driven acquisition model, suggesting that firms have strong incentives to overvalue their stocks so they can use them for stock-based acquisitions. Moreover, they note that firms with overvalued stocks are more likely to pursue acquisitions, while those with undervalued or less overvalued stocks are more likely to be acquisition targets. Therefore, driven by the benefits of high stock valuations, acquirers are motivated to boost their stock prices before an acquisition, even if it involves earnings manipulation. From this literature, it is evident that there is a positive correlation between a firm's stock valuation and the use of stock as a payment method, which often leads to negative stock returns for the acquirer after the deal.

However, Savor and Lu (2009) introduce the value creation hypothesis for stock-based acquisitions, utilizing a sample of M&As from 1978 to 2003. They establish a set of failed acquisitions due to exogenous factors and apply a natural experiment method to address endogeneity issues. Their findings indicate that unsuccessful stock-payment acquirers performed significantly worse than successful ones, with this underperformance intensifying over time. This suggests that successful stock-payment acquirers can create long-term value for shareholders.

臺灣人文與學術期刊資料庫

They further posit that stock-payment acquirers could generate long-term shareholder value because they are able to acquire hard assets at relatively low prices using overvalued equity. This result differs from other studies, which suggest that M&As conducted through stock payments can indeed benefit long-term shareholders.

In addition, prior studies have investigated how the target firm's status, the acquisition type, and shareholders' investment horizon affect acquirer performance. Fuller et al. (2002) examine U.S. acquisitions from 1990 to 2000, focusing on firms that completed at least five successful acquisitions within three years. They find that acquisitions of public firms typically result in significantly negative abnormal returns for the acquirer, whereas acquisitions of private firms and subsidiaries yield significantly positive abnormal returns. This is because acquisitions of private firms and subsidiaries often involve assets traded in less liquid markets, where prices reflect a liquidity discount, thereby enhancing shareholder returns for the acquirer.

Hazelkorn et al. (2004) studies U.S. non-financial industry acquisitions between 1990 and 2002 and found that an average announcement effect was -0.4% with a median rate of -0.6%. For the post-acquisition, the median long-run stock performance over two years was 0.6%. Additionally, they discover that cash-based acquisitions outperform stock-based ones, acquisitions of private firms outperform those of public firms, cross-border acquisitions outperform domestic ones, acquisitions of low-expected-growth firms outperform those of high-expected-growth firms, and focused acquisitions (within the same industry) outperform diversified acquisitions (across various industries).

Gaspar et al. (2005) investigate the impact of short-term and long-term shareholders on acquisition performance and acquisition premiums, classifying shareholders based on churn rate, which measures the frequency with which each investor trades stocks. Analyzing U.S. acquisitions from 1980 to 1999, they discover that when short-term shareholders are present in the target firm, they are generally at a disadvantage during negotiations, leading to lower acquisition premiums. Furthermore, acquirers with short-term shareholders exhibit poorer announcement effects and worse long-run performance. This is attributed by the authors to short-term shareholders focusing on immediate returns, thereby compelling managers to pursue acquisitions that do not support long-term value creation.

臺灣大學學術期刊資料庫

## 3. Samples and variables

### *3.1. Sample construction*

The study examines the impact of the acquirers' increased purchasing power on the announcement effects and long-run stock performance. The sample is based on acquisition announcements between 2009 and 2022, in which the acquirers originate from G7 countries (Canada, France, Germany, Italy, Japan, United Kingdom, and United States) and China, collected from SDC Platinum. The collected sample is then filtered based on the following criteria: (1) The acquisition transaction must be in a completed state within the sample period; (2) Exclusion of privatizations, acquisitions of remaining interest, stake purchases, repurchases, exchange offers, self-tenders, recapitalizations, spinoffs, tender offers, and leveraged buyouts; (3) The acquirer must hold less than 50% of the target firm's shares before the acquisition announcement, and more than 50% after the deal; (4) To ensure the significance of the acquisition, the transaction value must be greater than 1 million USD. After applying these filters, 3,081 acquisitions are collected.

Next, to calculate variables related to the acquirers' purchasing power, stock performance, and firm characteristics, we further collect the stock price and financial data of the acquirers from the Datastream database. We use the identifier Datastream Code (DSCD) to match the acquisitions in SDC, stock price, and financial data from Datastream. Additionally, data on the stock market indices of the acquiring countries was collected from the Datastream market index, and real effective exchange rate data was obtained from the World Bank website. After merging the data, 1,462 acquisitions were excluded due to missing DSCDs for the acquirers, 123 acquisitions lacked sufficient stock price data before and after the acquisition announcement, and 46 acquisitions had missing financial information. After excluding these cases, the final sample consists of 1,450 acquisitions for the main empirical analysis.

Table 1 shows the distribution of acquisition sample. Panel A depicts the distribution by acquirer country, indicating that China has the most acquisitions, with 543 cases (about 37.45%), followed by Japan with 434 cases (about 29.93%). This shows that acquisitions in the past decade are mainly concentrated in East Asian countries (China and Japan), followed by North American countries (United States and Canada), with relatively fewer cases in European countries. Panel B illustrates the annual distribution of acquisitions, showing little variation in the number of cases each year. Panel C shows the industry distribution of the acquirers based on the Fama and French 12-industry classification, where business equipment

臺灣大學圖書館期刊資料庫

(about 16.34%), manufacturing (about 15.24%), and finance (about 14.83%) are the most represented industries.

**Table 1 Sample distribution**

| Panel A: Distribution of acquirers by country | | |
|---|---|---|
| Country | Number | Percentage |
| Canada | 114 | 7.86 |
| China | 543 | 37.45 |
| France | 22 | 1.52 |
| Germany | 17 | 1.17 |
| Italy | 23 | 1.59 |
| Japan | 434 | 29.93 |
| United Kingdom | 82 | 5.66 |
| United States | 215 | 14.83 |
| Total | 1,450 | 100.00 |
| Panel B: Distribution of acquisitions by cohort year | | |
| Year | Number | Percentage |
| 2009 | 107 | 7.38 |
| 2010 | 96 | 6.62 |
| 2011 | 119 | 8.21 |
| 2012 | 95 | 6.55 |
| 2013 | 100 | 6.90 |
| 2014 | 94 | 6.48 |
| 2015 | 124 | 8.55 |
| 2016 | 112 | 7.72 |
| 2017 | 116 | 8.00 |
| 2018 | 128 | 8.83 |
| 2019 | 93 | 6.41 |
| 2020 | 85 | 5.86 |
| 2021 | 106 | 7.31 |
| 2022 | 75 | 5.17 |
| Total | 1,450 | 100.00 |
| Panel C: Industry distribution of acquirers by Fama-French 12 classification | | |
| Industry | Number | Percentage |
| 1. Consumer Nondurables | 86 | 5.93 |
| 2. Consumer Durables | 52 | 3.59 |
| 3. Manufacturing | 221 | 15.24 |
| 4. Oil, Gas, and Coal Extraction and Products | 52 | 3.59 |
| 5. Chemicals and Allied Products | 76 | 5.24 |
| 6. Business Equipment | 237 | 16.34 |
| 7. Telephone and Television Transmission | 36 | 2.48 |
| 8. Utilities | 49 | 3.38 |
| 9. Wholesale, Retail, and Some Services | 92 | 6.34 |
| 10. Healthcare, Medical Equipment, and Drugs | 96 | 6.62 |
| 11. Finance | 215 | 14.83 |
| 12. Other | 238 | 16.41 |
| Total | 1,450 | 100.00 |

This table presents the distribution of acquisition cases involving acquirers from the G7 countries and China between 2009 and 2022. The sample includes 1,450 acquisitions. Panel A reports the distribution by acquirer country. Panel B shows the annual distribution of acquisitions. Panel C presents the industry distribution of acquirers based on the Fama-French 12-industry classification.

臺灣大學會計學系

*3.2. Variables*

When a firm's purchasing power increases, it implies that the firm is able to acquire the necessary assets at a lower cost, which should enhance the long-term value for the acquirer's shareholders. On the other hand, acquirer managers might make irrational acquisition investment decisions based on the managerial self-interest hypothesis or hubris hypothesis, which could negatively impact long-term shareholder value. Therefore, this study investigates the impact of the increased purchasing power of acquirers on announcement effects and long-run stock performance, using prior stock return and real effective exchange rate return as proxies for the acquirers' purchasing power. The *Prior stock return* is the acquirer's buy-and-hold stock return over the period [-250, -11], where date 0 is the announcement day. The *Real effective exchange rate return* is the real effective exchange rate 11 days before the announcement divided by the real effective exchange rate 250 days before the announcement, minus 1. A positive *Prior stock return* or a positive *Real effective exchange rate return* indicates that the acquirer's purchasing power has increased prior to the announcement. In contrast, a negative *Prior stock return* or a negative *Real effective exchange rate return* indicates a decrease in purchasing power.

Panel A of Table 2 presents the descriptive statistics of the acquirers' purchasing power variables. The average *Prior stock return* is 19.59%, with a median of 6.28%; the average *Real effective exchange rate return* is 0.98%, with a median of 1.15%. This indicates that, on average, the acquirers' purchasing power increases before the acquisition announcements. However, it also shows a large variation exists for the *Prior stock return* and *Real effective exchange rate return*. It would be interesting to investigate the impact of the changes in the acquirer's purchasing power on the acquisition's performance.

臺灣大學學術期刊資料庫

**Table 2 Summary statistics**

| Variables | Mean | Std. Dev. | Q1 | Median | Q3 |
|---|---|---|---|---|---|
| Panel A: Purchasing power of acquirers | | | | | |
| *Prior stock return* (%) | 19.59 | 59.64 | -16.77 | 6.28 | 41.14 |
| *Real effective exchange rate return* (%) | 0.98 | 7.23 | -2.64 | 1.15 | 4.52 |
| Panel B: Firm characteristics of acquirers | | | | | |
| *Ln (Market capitalization)(US$ million)* | 13.96 | 1.94 | 12.87 | 13.93 | 15.13 |
| *Free cash flow* (%) | 0.14 | 8.53 | -1.69 | 1.00 | 4.43 |
| *Financial leverage* (%) | 23.61 | 18.96 | 7.58 | 20.72 | 36.23 |
| Panel C: Deal characteristics | | | | | |
| *Relative size* (%) | 14.54 | 39.05 | 0.87 | 2.72 | 9.34 |
| *Conglomerate* | 0.54 | 0.50 | 0.00 | 1.00 | 1.00 |
| *Cross-border* | 0.17 | 0.38 | 0.00 | 0.00 | 0.00 |
| *Payment stock* | 0.77 | 0.42 | 1.00 | 1.00 | 1.00 |
| *Payment all-cash* | 0.23 | 0.42 | 0.00 | 0.00 | 0.00 |
| *Private target* | 0.49 | 0.50 | 0.00 | 0.00 | 1.00 |
| *Subsidiary target* | 0.32 | 0.47 | 0.00 | 0.00 | 1.00 |
| *Public target* | 0.19 | 0.39 | 0.00 | 0.00 | 0.00 |
| Panel D: Country-level macroeconomic | | | | | |
| Markets | *GDP growth* (%) | | *Export ratio* (%) | | |
| Canada | 1.49 | | 31.10 | | |
| China | 7.61 | | 22.96 | | |
| France | 0.79 | | 30.38 | | |
| Germany | 1.05 | | 41.21 | | |
| Italy | -0.29 | | 28.22 | | |
| Japan | 0.25 | | 16.25 | | |
| United Kingdom | 0.94 | | 29.56 | | |
| United States | 1.81 | | 12.24 | | |

This table presents the descriptive statistics for the acquirers' purchasing power, firm characteristics, deal characteristics, and macroeconomic variables associated with the acquirers' home countries, based on acquisition transactions involving G7 countries and China from 2009 to 2022. The sample includes 1,450 acquisitions. Panel A reports the descriptive statistics for purchasing power variables. Panel B summarizes the firm characteristics of the acquirers. Panel C presents the deal characteristics. Panel D displays country-level macroeconomic variables. Macroeconomic indicators are calculated as time-series averages. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix.

To control for factors affecting acquisition announcement effects and long-run stock performance, this study incorporates variables related to the acquirer characteristics, deal characteristics, and macroeconomics of the acquirers' home country in the regression analysis. Firm characteristics include market capitalization, free cash flow, and financial leverage. Moeller et al. (2004) find that the announcement abnormal returns for small firms are about 2% higher than those for large firms, suggesting that managers of large firms are more prone to overpay due to hubris, leading to lower post-acquisition performance. Demsetz and Lehn (1985) and Bradley et al. (1988) explore the relationship between market capitalization and acquisition performance and find similar results. In this study, *Ln* (*Market capitalization*) is used as a proxy for firm size.

臺灣大學學術期刊資料庫

Jensen (1986) find that excessive free cash flow in a firm could lead to conflicts of interest between shareholders and managers, as managers might invest the funds in projects that do not benefit shareholders. In this study, *Free cash flow* is calculated as the cash flow from operations plus depreciation, depletion, and amortization minus interest expenses, income taxes, and capital expenditures, divided by total assets. Jensen and Meckling (1976) argue that high financial leverage can reduce agency problems and positively impact the firm. In this study, *Financial leverage* is calculated as total debt divided by total assets.

Panel B of Table 2 shows the descriptive statistics for the acquirers' characteristics. The average *Ln* (*Market capitalization*) (in terms of million USD) is 13.96, with a median of 13.93. The average *Free cash flow* is 0.14%, with a median of 1%; the average *Financial leverage* is 23.61%, with a median of 20.72%. These results indicate that most acquirers are large, possess cash flow, and have low debt ratios.

Additionally, deal characteristics include the relative size of the transaction, whether the acquisition is classified as a conglomerate or cross-border transaction, the payment method (stock or all-cash), and the target firm status (private, subsidiary, or public). Asquith et al. (1983) find a positive correlation between relative deal size and post-acquisition performance, but Travlos (1987) finds no significant positive correlation. In this study, *Relative size* is defined as the transaction value of the acquisition divided by the acquirer's market capitalization.

Morck et al. (1990) find that when acquirers engage in diversification, especially when the target firm is in a high-growth phase, managers of acquirers are more likely to engage in reckless acquisitions, affecting post-acquisition synergy. In this study, a dummy variable for conglomerate acquisitions (*Conglomerate*) is created, where if the acquiring and target firms belong to different industries in the Fama and French 49-industry classification, the acquisition is considered a conglomerate, and the dummy variable is set to 1; otherwise, it is set to 0. Chari et al. (2010) find that market reactions and long-run performance of cross-border acquisitions are different from those of domestic acquisitions. In this study, a dummy variable for cross-border acquisitions (*Cross-border*) is set to be 1 if the acquirer and target firms are from different countries and 0 otherwise.

Loughran and Vijh (1997) find that the method of payment in acquisitions is related to post-acquisition performance. Stock-financed acquisitions tend to have significantly negative abnormal returns post-acquisition, while cash-financed deals tend to have significantly positive abnormal returns. In this study, we set a dummy

臺灣大學學術期刊資料庫

variable for the payment method: If the payment method is partially or entirely using stock, the dummy variable (*Payment stock*) is set to 1; otherwise, it is 0. If the payment method is entirely in cash, the dummy variable (*Payment all-cash*) is set to 1; otherwise, it is 0. Fuller et al. (2002) find that acquiring private firms yields higher abnormal returns than acquiring public firms. In this study, there are three statuses of target firms: public firm, private firm, and the subsidiary of a firm, and the interactive variables of payment method with target firm status are meaningful in explaining the abnormal returns and long-run performance (Moeller et al. 2004; Masulis et al. 2007). Thus, we create three dummy variables for the target firm statuses: If the target firm is private, the dummy variable for private target (*Private target*) is set to 1; otherwise, it is set to 0. If the target firm is a subsidiary, the dummy variable for the subsidiary target (*Subsidiary target*) is set to 1; otherwise, it is set to 0. If the target firm is public, the dummy variable for public target (*Public target*) is set to 1; otherwise, it is set to 0.

Panel C of Table 2 shows the descriptive statistics for deal characteristics. The average *Relative size* is 14.54%, with a median of 2.72%, indicating a right-skewed distribution for relative size. Additionally, 54% of the samples are conglomerate acquisitions (*Conglomerate*), 17% are cross-border acquisitions (*Cross-border*), 77% use stock as payment (*Payment stock*), 49% of the targets are private firms (*Private target*), 32% are subsidiaries (*Subsidiary target*), and 19% are public firms (*Public target*).

The macroeconomic variables include *GDP growth* and the *Export ratio*. Panel D of Table 2 reports the average values of these variables for the acquirers' home countries over the sample period. China recorded the highest average *GDP growth*, at approximately 7.61%, while Italy had the lowest, averaging around -0.29%. With respect to the *Export ratio*, Germany ranked highest with an average of about 41.21%, whereas the United States had the lowest, at approximately 12.24%.

We provide the definitions of all variables in Appendix Table A1.

## 4. Analyses of acquisition performance

### *4.1. Announcement abnormal return and long-run stock performance*

Masulis et al. (2007) examine 3,333 U.S. acquisitions from 1990 to 2003 and report that the average cumulative abnormal return during the announcement period (CAR [-2, 2]) is 0.215%, with a median of 0.105%. In a more recent study, Field and Mkrtchyan (2017) analyze 1,766 U.S. acquisitions from 1998 to 2014 and find that

臺灣大學學術期刊資料庫

firms with boards possessing high levels of acquisition experience exhibit significantly higher announcement effects, with an average CAR [-1, 1] of 1.17% and a median of 0.88%. In contrast, firms with boards lacking such experience show insignificant announcement effects, with an average CAR [-1, 1] of -0.18% and a median of -0.01%.

We employ the market model to estimate abnormal returns surrounding the acquisition announcement. The market model is estimated over the period spanning day -210 through day -30, using a regression of the acquirer's daily stock returns on the corresponding market return. The market return is proxied by the Datastream stock market index return of the acquirer's home country. Cumulative abnormal returns (CARs) are then calculated to capture the stock price reactions to the acquisition announcement. *CAR* [-1, 1] represents the cumulative abnormal return over the 3-day interval beginning 1 day prior to the announcement, with day 0 being the announcement day of the acquisition. *CAR* [-3, 3] measures the cumulative abnormal return over the 7-day interval beginning 3 days prior to the announcement.

Panel A of Table 3 shows the descriptive statistics of cumulative abnormal returns during the announcement period. The average *CAR* [-1, 1] is 0.88%, with a median of 0.25%; the average *CAR* [-3, 3] is 0.66%, with a median of -0.04%. These results suggest that acquisitions in G7 countries and China over the past 14 years have generally positive announcement effects, indicating that the stock market tends to respond favorably to acquirers' acquisition activities.

**Table 3 Descriptive statistics for acquisition performance**

| Variables | Mean | Std. Dev. | Q1 | Median | Q3 |
|---|---|---|---|---|---|
| Panel A: Announcement abnormal return | | | | | |
| *CAR* [-1, 1] (%) | 0.88 | 7.00 | -2.13 | 0.25 | 3.14 |
| *CAR* [-3, 3] (%) | 0.66 | 9.10 | -3.44 | -0.04 | 3.69 |
| Panel B: Long-run stock performance | | | | | |
| *CAR* [36] (%) | 9.72 | 72.38 | -29.00 | 6.00 | 48.00 |
| *BHAR* [36] (%) | 2.07 | 73.79 | -45.28 | -9.77 | 31.89 |

This table presents the announcement effects and long-run stock performance of acquisitions involving G7 countries and China between 2009 and 2022. The sample includes 1,450 acquisitions. Panel A reports the descriptive statistics of cumulative abnormal returns during the acquisition announcement period. *CAR* [-1, 1] is the cumulative abnormal returns over the 3-day interval beginning 1 day prior to the announcement, with day 0 being the announcement day of the deals. *CAR* [-3, 3] is the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. We use the market model to calculate the M&A announcement abnormal return. The market model is estimated over the period from day -210 through day -30, with a regression of the acquirer's daily stock returns on the market return. The market return is based on the Datastream market index return of the acquirer's home country. Panel B presents the descriptive statistics of long-run stock performance. *CAR* [36] is the cumulative abnormal return over the 36 months following the announcement date, with abnormal returns calculated as the difference between the monthly stock return and the monthly market index return during the event period. *BHAR* [36] is the buy-and-hold abnormal return over the 36 months following the announcement date, with abnormal returns calculated as the difference between the monthly stock return and the monthly market index return during the event period. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix.

臺灣大學財務金融學系

Chen et al. (2007) find that the buy-and-hold abnormal return for acquirers 36 months after the acquisition (BHAR [36]) is an insignificantly negative value. Loughran and Vijh (1997) find that acquisitions using stock as payment have a significantly negative BHAR [60] of -25% after 60 months, while those using cash as payment experience a significantly positive BHAR [60] of 61.7%.

This study adopts both the cumulative abnormal return (CAR) and buy-and-hold abnormal return (BHAR) approaches to evaluate long-run stock performance. Abnormal monthly returns over the 36 months following the acquisition announcement are computed based on the difference between the monthly stock returns and the corresponding market index returns during the event window. These are then used to calculate the 36-month cumulative abnormal return (*CAR* [36]) and buy-and-hold abnormal return (*BHAR* [36]). Panel B of Table 3 presents the descriptive statistics of long-run stock performance. The average *CAR* [36] is 9.72%, with a median of 6%, while the average *BHAR* [36] is 2.07%, with a median of -9.77%. These results indicate that acquirers in G7 countries and China, on average, experience positive but highly variable abnormal stock returns over the three years following an acquisition.

*4.2. Regression analyses of announcement effect*

In the following analyses, we investigate the determinants of the announcement effect and the long-run stock performance of acquisitions. Table 4 presents the regression analysis of the acquisition announcement effect *CAR* [-3, 3]. According to the results of regression (1), the coefficient on the acquirer's *Prior stock return* over the past year is significantly negative, indicating that the market negatively reacts to acquisition deals when the acquirer is driven by an increase in purchasing power due to the firm's stock price. From an economic perspective, the coefficient on *Prior stock return* is -0.0117. This implies that an increase in *Prior stock return* from the first quartile (Q1, -16.77%) to the third quartile (Q3, 41.14%), representing a rise of 57.91 percentage points, is associated with a 0.68 percentage point decrease in *CAR* [-3, 3] (calculated as 57.91% × -0.0117). There are two possible reasons for this. First, when the firm's stock price rises, this may signal to the market that the stock is overvalued, leading to doubts about the synergy of the acquisition transaction, thereby reducing investors' willingness to partake in arbitrage. Second, a rising stock price may trigger market skepticism about managerial decisions, with the belief that the acquisition is driven more by a desire to expand scale rather than maximizing shareholder value, leading to a more conservative market reaction to the acquisition announcement.

臺灣大學學術期刊資料庫

**Table 4 Regression analysis of announcement abnormal returns**

| Variables | (1) | (2) |
|---|---|---|
| *Prior stock return* | -0.0117*** | -0.0113** |
| | (-2.7100) | (-2.5500) |
| *Real effective exchange rate return* | -0.0066 | -0.0045 |
| | (-0.1800) | (-0.1200) |
| *Ln (Market capitalization)* | -0.1054 | -0.1996*** |
| | (-1.3300) | (-2.8500) |
| *Free cash flow* | 0.0001 | 0.0004 |
| | (0.0000) | (0.0100) |
| *Financial leverage* | -0.0108 | -0.0113 |
| | (-0.9300) | (-0.9700) |
| *Relative size* | 0.0359*** | 0.0355*** |
| | (3.3300) | (3.3200) |
| *Conglomerate* | -0.1542 | -0.2902 |
| | (-0.3700) | (-0.7000) |
| *Cross-border* | -0.4225 | -0.4770 |
| | (-0.4800) | (-0.5400) |
| *Payment stock* | -1.1050* | |
| | (-1.9200) | |
| *Private target* | 3.0251*** | |
| | (4.9600) | |
| *Subsidiary target* | 1.8407** | |
| | (2.5600) | |
| *Payment stock × Private target* | | 3.6944*** |
| | | (5.0300) |
| *Payment stock × Subsidiary target* | | 2.5447*** |
| | | (3.3700) |
| *Payment all-cash × Private target* | | 4.2453*** |
| | | (4.8200) |
| *Payment all-cash × Subsidiary target* | | 3.2593** |
| | | (2.5300) |
| *Payment all-cash × Public target* | | 3.6202*** |
| | | (3.0100) |
| *GDP growth* | -0.0959 | -0.0919 |
| | (-1.2300) | (-1.1700) |
| *Export ratio* | 0.0636 | 0.0490 |
| | (1.5600) | (1.2000) |
| Country fixed effects | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ |
| Number of Observations | 1,450 | 1,450 |
| Adjusted $R^2$ | 0.0439 | 0.0467 |
| F statistics | 6.9700*** | 5.8900*** |

This table presents the regression results of the announcement effects for acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The sample includes 1,450 acquisitions. The dependent variable is *CAR* [-3, 3], which represents the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

臺灣大學學術期刊資訊網

The coefficient on the *Real effective exchange rate return* for the acquirer's home country over the past year is insignificant, indicating that changes in exchange rates have no significant relationship with the acquirer's announcement abnormal returns. The real effective exchange rate returns mainly reflect the country's economic conditions and monetary policy, while the stock price reaction to the acquisition announcement is driven primarily by the acquirer's fundamentals. Therefore, the increase in purchasing power driven by the exchange rate index is not directly reflected in the acquirer's stock announcement effect.

Regarding control variables, the coefficient on *Relative size* is significantly positive, indicating that the stock market views relatively large acquisitions positively, consistent with the findings of Asquith et al. (1983). The coefficient on *Payment stock* is significantly negative, indicating that the market is less optimistic about acquisitions reliant on stock payment compared to those reliant on cash payment. The coefficients on *Private target* and *Subsidiary target* are both significantly positive, indicating that the market tends to view acquisitions involving private firms or subsidiaries more favorably compared to those involving public firms, consistent with the findings of Fuller et al. (2002).

This study further examines the interactive effect of payment methods and target firm status on the acquisition announcement effect. Regression (2) includes interaction terms for payment methods and target firm status. We find that the coefficient on the acquirer's *Prior stock return* is significantly negative, indicating that when the acquisition activity is driven by an increase in purchasing power due to the firm's stock price, the acquisition announcement effect is lower. Additionally, the coefficient on *Ln (Market capitalization)* is significantly negative, indicating that the announcement effect of large firms is lower, consistent with the findings of Moeller et al. (2004), Demsetz and Lehn (1985), and Bradley et al. (1988). Similarly, the coefficient on *Relative size* is significantly positive, indicating that the stock market reacts positively to the announcement of relatively large acquisitions. In general, the results from Regression (2) are qualitatively similar to the ones from Regression (1). Finally, the results of the interaction terms between payment methods and target firm status show that, compared to acquisitions of public firms using stock payment, those involving private firms using stock payment (*Payment stock* × *Private target*), subsidiaries using stock payment (*Payment stock* × *Subsidiary target*), private firms using all-cash payment (*Payment all-cash* × *Private target*), subsidiaries using all-cash payment (*Payment all-cash* × *Subsidiary target*), as well as public firms using all-cash payment (*Payment all-cash* × *Public*

臺灣大學學術期刊資料庫

*target*), are all associated with significantly higher announcement effects. These results suggest that the market reacts less favorably to acquisitions involving stock payments for public target firms.

*4.3. Regression analyses of long-run stock performance*

Table 5 presents the regression analysis of the cumulative abnormal return (CAR) and buy-and-hold abnormal return (BHAR) of acquirers 36 months after the acquisition announcement. The regression (1) for both *CAR* [36] and *BHAR* [36] indicate that the coefficient on the acquirer's *Prior stock return* over the past year is significantly negative, suggesting that when the acquisition motivation of the acquirer is driven by an increase in purchasing power due to the firm's stock price, it is detrimental to the long-run stock performance of the acquirer. The effect of prior stock return on subsequent long-run stock performance is not only statistically significant but also economically meaningful. As shown in regression (1) for *BHAR* [36], the coefficient on *Prior stock return* is -0.1343. This suggests that an increase in *Prior stock return* from the first quartile (Q1, -16.77%) to the third quartile (Q3, 41.14%), representing a rise of 57.91 percentage points, results in a 7.78 percentage point decrease in *BHAR* [36] (57.91% × -0.1343).

臺灣大學學術期刊資料庫

**Table 5 Regression analysis of long-run stock performance**

| Variables | *CAR* [36] | | *BHAR* [36] | |
|---|---|---|---|---|
| | (1) | (2) | (1) | (2) |
| *Prior stock return* | -0.0967** | -0.0946** | -0.1343*** | -0.1328*** |
| | (-2.3000) | (-2.2500) | (-3.3000) | (-3.2300) |
| *Real effective exchange rate return* | 0.7267** | 0.7261** | 0.5837** | 0.5884** |
| | (2.4400) | (2.4400) | (2.1900) | (2.2100) |
| *Ln (Market capitalization)* | -0.7066 | -0.9332** | -1.1580** | -1.3666*** |
| | (-1.3700) | (-2.0700) | (-2.1700) | (-2.7600) |
| *Free cash flow* | 0.2980 | 0.2871 | 0.7752*** | 0.7708*** |
| | (0.90 00) | (0.8800) | (2.9200) | (2.8900) |
| *Financial leverage* | -0.0737 | -0.0745 | -0.0712 | -0.0723 |
| | (-0.5900) | (-0.5900) | (-0.6000) | (-0.6100) |
| *Relative size* | -0.0033 | 0.0011 | -0.0978 | -0.0964* |
| | (-0.0400) | (0.0100) | (-1.5800) | (-1.6700) |
| *Conglomerate* | -1.1424 | -1.7704 | -3.8754 | -4.3327 |
| | (-0.3100) | (-0.4800) | (-1.1100) | (-1.2600) |
| *Cross-border* | -2.2667 | -2.8804 | -2.0880 | -2.4322 |
| | (-0.3500) | (-0.4500) | (-0.3600) | (-0.4200) |
| *Payment stock* | 0.7503 | | -0.9630 | |
| | (0.1500) | | (-0.1800) | |
| *Private target* | 12.7074*** | | 9.6911** | |
| | (3.1000) | | (2.3700) | |
| *Subsidiary target* | 14.5049*** | | 13.1721*** | |
| | (3.1100) | | (3.0800) | |
| *Payment stock × Private target* | | 18.9388*** | | 13.2578*** |
| | | (3.4000) | | (2.6800) |
| *Payment stock × Subsidiary target* | | 18.5017*** | | 15.9890*** |
| | | (3.3800) | | (3.3500) |
| *Payment all-cash × Private target* | | 11.6819** | | 10.6223* |
| | | (2.5300) | | (1.7400) |
| *Payment all-cash × Subsidiary target* | | 22.0355*** | | 17.5117* |
| | | (2.7700) | | (1.9700) |
| *Payment all-cash × Public target* | | 17.3363*** | | 11.9053* |
| | | (2.9200) | | (1.7800) |
| *GDP growth* | 3.3676*** | 3.3760*** | 2.7191*** | 2.7249*** |
| | (6.2700) | (6.3900) | (4.4600) | (4.4900) |
| *Export ratio* | 0.0390 | 0.0041 | 0.4193 | 0.3860 |
| | (0.1400) | (0.0100) | (1.3000) | (1.2000) |
| Country fixed effects | ✓ | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ | ✓ |
| Number of Observations | 1,450 | 1,450 | 1,450 | 1,450 |
| Adjusted $R^2$ | 0.0694 | 0.0712 | 0.0522 | 0.0520 |
| F statistics | 9.0100*** | 8.1300*** | 7.9900*** | 6.7200*** |

This table presents the regression results of long-run stock performance for acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The sample includes 1,450 acquisitions. The dependent variables are *CAR* [36] and *BHAR* [36]. *CAR* [36] represents the cumulative abnormal return over the 36 months following the announcement date, while *BHAR* [36] represents the buy-and-hold abnormal return over the same period, both calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

臺灣人壽保險股份有限公司

There are two possible explanations for the negative impact of prior stock return on post-acquisition long-run stock performance. First, if management notices that variation in the firm's stock price results in increased purchasing power, they may become overconfident, attributing the success to their own abilities, which can lead to an underestimation of the challenges and difficulties of the acquisition process. Second, in the context of rising stock prices, management may also pay an excessively high acquisition premium to meet market expectations or to maintain stock price growth through acquisitions. They may also experience performance pressure, including a desire for higher compensation, viewing acquisition as a route to achieving rapid expansion.

Additionally, the coefficient on the *Real effective exchange rate return* for the acquirer's home country over the past year is significantly positive, indicating that when the acquisition activity is driven by an increase in purchasing power due to the appreciation of the currency, this benefits the long-run stock performance of the acquirer, allowing the firm to acquire assets at a lower cost. As shown in regression (1) for *BHAR* [36], the coefficient on the *Real effective exchange rate return* is 0.5837. This indicates that an increase in the *Real effective exchange rate return* from the first quartile (Q1, -2.64%) to the third quartile (Q3, 4.52%), representing a rise of 7.16 percentage points, leads to a 4.18 percentage point increase in *BHAR* [36] (7.16% × 0.5837). This result underscores the economic significance of changes in the real effective exchange rate on acquirers' post-acquisition performance.

With respect to the control variables, the coefficients on *Private target* and *Subsidiary target* are both significantly positive, indicating that acquisitions involving private firms or subsidiaries are associated with superior long-run stock performance compared to those involving public firms. Additionally, the coefficient on *GDP growth* is significantly positive, implying that a higher GDP growth rate in the acquirer's home country contributes to improved long-run stock performance.

This study further examines the interactive effect of the payment methods and target firm status on long-run stock performance. In regression (2) for *CAR* [36] and *BHAR* [36], the significantly negative coefficient on the acquirer's *Prior stock return* and the significantly positive effect of the *Real effective exchange rate return* on long-run stock performance remain intact. The interaction terms for payment methods and target firm status also show that, compared to acquisitions of public firms using stock payment, those involving private firms using stock payment (*Payment stock* × *Private target*), subsidiaries using stock payment (*Payment stock* × *Subsidiary target*), private firms using all-cash payment (*Payment all-cash* × *Private*

臺灣人文與學術期刊資料庫

*target*), subsidiaries using all-cash payment (*Payment all-cash* × *Subsidiary target*), as well as public firms using all-cash payment (*Payment all-cash* × *Public target*) all exhibit significantly better long-run stock performance. These results suggest that acquisitions in which the acquirer uses stock payment to acquire a public firm are indeed detrimental to the firm's long-run stock performance.

*4.4. Regression analyses of cross-border acquisitions*

One may question why changes in the purchasing power of the acquirer affect the acquisition performance, which is strong in the case of cross-border acquisitions but less so for domestic acquisitions. An appreciation in the real effective exchange rate of the acquirer can lead to a lower cost when acquiring the desired foreign assets. To address the issue, we rerun the analyses in Table 4 and Table 5 for cross-border acquisitions, with the results presented in Table 6 and Table 7. The sample size was reduced from 1,450 to 246 for cross-border acquisitions. Table 6 presents the regression analysis of the announcement effect. The empirical results from both regression (1) and regression (2) show that the coefficient on the acquirer's *Prior stock return* over the past year is significantly negative, indicating that when the acquirer's cross-border acquisition behavior is driven by an increase in purchasing power due to the firm's stock price, the announcement effect is lower. In contrast, the coefficient on the *Real effective exchange rate return* for the acquirer's home country over the past year is insignificant, indicating that fluctuations in real effective exchange rates are not related to the acquirer's announcement abnormal returns. Additionally, the coefficient on *Financial leverage* is significantly negative, while the coefficient on *Conglomerate* is significantly positive. These results indicate that the stock market is less favorable toward cross-border acquisitions undertaken by highly leveraged acquirers, but tends to respond more positively to cross-border deals involving firms from different industries.

臺灣大學學術期刊資料庫

**Table 6 Regression analysis of announcement abnormal returns for cross-border acquisitions**

| Variables | (1) | (2) |
|---|---|---|
| *Prior stock return* | -0.0321** | -0.0305** |
| | (-2.5700) | (-2.6000) |
| *Real effective exchange rate return* | -0.0335 | -0.0303 |
| | (-0.3800) | (-0.3500) |
| *Ln (Market capitalization)* | 0.0674 | 0.0989 |
| | (0.4300) | (0.6700) |
| *Free cash flow* | 0.0538 | 0.0481 |
| | (0.6700) | (0.5800) |
| *Financial leverage* | -0.0699** | -0.0713** |
| | (-2.0700) | (-2.1400) |
| *Relative size* | 0.0400 | 0.0421 |
| | (1.4300) | (1.5200) |
| *Conglomerate* | 2.1455** | 2.0804** |
| | (2.0000) | (2.0000) |
| *Payment stock* | 0.6685 | |
| | (0.4100) | |
| *Private target* | 0.3797 | |
| | (0.2700) | |
| *Subsidiary target* | -0.1276 | |
| | (-0.0800) | |
| *Payment stock × Private target* | | 0.3293 |
| | | (0.2000) |
| *Payment stock × Subsidiary target* | | 1.1665 |
| | | (0.8900) |
| *Payment all-cash × Private target* | | 2.8662 |
| | | (1.4300) |
| *Payment all-cash × Subsidiary target* | | -2.7113 |
| | | (-0.8700) |
| *Payment all-cash × Public target* | | 0.6525 |
| | | (0.3200) |
| *GDP growth* | -0.1165 | -0.1029 |
| | (-0.4700) | (-0.4400) |
| *Export ratio* | -0.0366 | -0.0515 |
| | (-0.5000) | (-0.7400) |
| Country fixed effects | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ |
| Number of Observations | 246 | 246 |
| Adjusted $R^2$ | 0.0514 | 0.0610 |
| F statistics | 4.1500*** | 4.3800*** |

This table presents the regression results of the announcement effects for cross-border acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The sample includes 246 cross-border acquisitions. The dependent variable is *CAR* [-3, 3], which represents the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

臺灣大學學術期刊資料庫

**Table 7 Regression analysis of long-run stock performance for cross-border acquisitions**

| Variables | *CAR* [36] | | *BHAR* [36] | |
|---|---|---|---|---|
| | (1) | (2) | (1) | (2) |
| *Prior stock return* | -0.1741** | -0.1788** | -0.1551*** | -0.1538** |
| | (-2.3500) | (-2.4600) | (-2.8100) | (-2.6700) |
| *Real effective exchange rate return* | 0.1450 | 0.1097 | -0.2936 | -0.3177 |
| | (0.3100) | (0.2400) | (-0.5600) | (-0.6200) |
| *Ln (Market capitalization)* | 0.7861 | 0.3799 | -0.3101 | -0.3343 |
| | (0.8900) | (0.3500) | (-0.3400) | (-0.3600) |
| *Free cash flow* | 0.0332 | 0.0832 | 0.4369 | 0.4496 |
| | (0.0300) | (0.0800) | (0.6700) | (0.6900) |
| *Financial leverage* | -0.5302* | -0.5265* | -0.2369 | -0.2374 |
| | (-1.7300) | (-1.7400) | (-0.9300) | (-0.9500) |
| *Relative size* | 0.1886 | 0.1711 | 0.0463 | 0.0409 |
| | (0.7500) | (0.6900) | (0.2500) | (0.2300) |
| *Conglomerate* | 4.8207 | 4.7514 | -0.9233 | -1.0661 |
| | (0.5100) | (0.5100) | (-0.1200) | (-0.1400) |
| *Payment stock* | -4.1065 | | 2.2739 | |
| | (-0.5700) | | (0.2800) | |
| *Private target* | 13.5662 | | -3.4707 | |
| | (1.1900) | | (-0.3300) | |
| *Subsidiary target* | 10.1585 | | 4.9182 | |
| | (1.1800) | | (0.6100) | |
| *Payment stock × Private target* | | 18.8939 | | 1.0852 |
| | | (1.4100) | | (0.0700) |
| *Payment stock × Subsidiary target* | | 8.3162 | | 6.6595 |
| | | (0.6600) | | (0.6100) |
| *Payment all-cash × Private target* | | -2.5860 | | -14.4322 |
| | | (-0.1200) | | (-0.8100) |
| *Payment all-cash × Subsidiary target* | | 23.4293* | | 5.8405 |
| | | (1.7600) | | (0.3600) |
| *Payment all-cash × Public target* | | 7.4570 | | 2.8003 |
| | | (0.3500) | | (0.1500) |
| *GDP growth* | 2.0933* | 2.0141* | 0.8871 | 0.8731 |
| | (1.8300) | (1.8000) | (0.7800) | (0.7600) |
| *Export ratio* | -0.5135 | -0.4537 | 0.1597 | 0.1901 |
| | (-0.8800) | (-0.7500) | (0.3400) | (0.4000) |
| Country fixed effects | ✓ | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ | ✓ |
| Number of Observations | 246 | 246 | 246 | 246 |
| $R^2$ | 0.0601 | 0.0679 | 0.0273 | 0.0298 |
| Adjusted $R^2$ | 0.0119 | 0.0116 | -0.0225 | -0.0288 |
| F statistics | 2.5300** | 2.3100** | 1.900* | 1.6800* |

This table presents the regression results of long-run stock performance for cross-border acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The sample includes 246 cross-border acquisitions. The dependent variables are *CAR* [36] and *BHAR* [36]. *CAR* [36] represents the cumulative abnormal return over the 36 months following the announcement date, while *BHAR* [36] represents the buy-and-hold abnormal return over the same period, both calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream market index of the acquirer's home country. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

臺灣大學圖書館 版權所有

Table 7 presents the regression analysis of the cumulative abnormal return (CAR) and buy-and-hold abnormal return (BHAR) of acquirers 36 months after the cross-border acquisition announcement. In both regression (1) and regression (2), the coefficient on the acquirer's *Prior stock return* over the past year is significantly negative, indicating that when the acquirer's cross-border acquisition behavior is driven by an increase in purchasing power due to the firm's stock price, it is detrimental to the firm's long-run stock performance. In contrast to the results displayed in Table 5, the coefficient on the *Real effective exchange rate return* for the acquirer's home country over the past year is insignificant, indicating that when the cross-border acquisition behavior is driven by an increase in purchasing power due to the real effective exchange rates increases, the long-run stock performance of the acquirer is not significantly affected.

The insignificance of this effect may be attributed not only to the relatively small sample size of cross-border acquisitions, but also to institutional constraints and market frictions that weaken the effect of real effective exchange rate appreciation. First, the exchange rate regimes and capital market environments in China and Japan differ significantly from those of other G7 countries. China adopts a managed floating exchange rate system and imposes various restrictions on cross-border capital flows (Cheung et al. 2007; Klein and Shambaugh 2015), which means that even if the RMB appreciates and purchasing power increases, such advantages may not be immediately translated into improved acquisition performance. Additionally, outbound acquisitions by Chinese firms typically require multiple layers of government approvals, including from the National Development and Reform Commission (NDRC) and the Ministry of Commerce, which may further dilute the performance-enhancing effect of currency appreciation (Deng 2009). Second, even in a relatively mature institutional environment like Japan, cross-border M&A often faces challenges such as cultural integration, governance conflicts, and limited market receptiveness (Bebenroth 2015). As a result, the impact of exchange rate fluctuations on acquisition outcomes may be offset by these non-financial factors. This stands in contrast to countries like the United States and Canada, where capital markets are more liberalized and legal transparency is higher.

Furthermore, the literature has emphasized that the positive effects of exchange rate appreciation on cross-border acquisitions often depend on the openness of the target market and the degree of regulatory flexibility. Froot and Stein (1991) suggest that the benefit of home currency appreciation in enhancing purchasing power presupposes efficient capital markets. Erel et al. (2012) further argue that in

臺灣人文與藝術期刊資料庫

emerging markets with more institutional barriers, the link between exchange rates and acquisition value tends to be weakened or even non-linear. In summary, the absence of a significant real effective exchange rate effect in cross-border acquisitions observed in this study may be driven not only by sample size and composition but also by the asymmetric or diluted effects resulting from differing institutional frameworks and market frictions.

## 5. Robustness

### *5.1. Growth opportunity and overvaluation*

An increase in a firm's stock price prior to an acquisition may be driven by various factors, including overvaluation, improvements in firm fundamentals, or market expectations regarding future synergies. To further disentangle whether the pre-acquisition stock price increase reflects genuine overvaluation or other forms of growth opportunity, Table 8 presents an extended analysis.

**Table 8 Growth opportunity and overvaluation**

| Variables | *CAR* [-3, 3] | *CAR* [36] | *BHAR* [36] |
|---|---|---|---|
| *Prior stock return × Growth* | -0.0060 | -0.0887 | -0.1026* |
| | (-0.7700) | (-1.6200) | (-1.9200) |
| *Prior stock return × Overvaluation* | -0.0191*** | -0.1031* | -0.1769*** |
| | (-2.7500) | (-1.9200) | (-3.6700) |
| *Real effective exchange rate return* | 0.0010 | 0.7321** | 0.6191** |
| | (0.0300) | (2.4900) | (2.3500) |
| *Ln (Market capitalization)* | -0.2005*** | -0.9342** | -1.3716*** |
| | (-2.7900) | (-2.0700) | (-2.7800) |
| *Free cash flow* | 0.0043 | 0.2913 | 0.7928*** |
| | (0.1000) | (0.8900) | (2.9900) |
| *Financial leverage* | -0.0131 | -0.0764 | -0.0821 |
| | (-1.0600) | (-0.6000) | (-0.6800) |
| *Relative size* | 0.0361*** | 0.0018 | -0.0931 |
| | (3.4100) | (0.0200) | (-1.6100) |
| *Conglomerate* | -0.2591 | -1.7364 | -4.1568 |
| | (-0.6500) | (-0.4700) | (-1.2100) |
| *Cross-border* | -0.4741 | -2.8772 | -2.4156 |
| | (-0.5300) | (-0.4500) | (-0.4100) |
| *Payment stock × Private target* | 3.6445*** | 18.8843*** | 12.9762*** |
| | (5.0100) | (3.3700) | (2.6500) |
| *Payment stock × Subsidiary target* | 2.5361*** | 18.4923*** | 15.9401*** |
| | (3.3800) | (3.3600) | (3.3100) |
| *Payment all-cash × Private target* | 4.2583*** | 11.6961** | 10.6957* |
| | (4.8600) | (2.5300) | (1.7600) |
| *Payment all-cash × Subsidiary target* | 3.2509** | 22.0263*** | 17.4643* |
| | (2.5300) | (2.7700) | (1.9500) |
| *Payment all-cash × Public target* | 3.6161*** | 17.3317*** | 11.8818* |

臺灣大學學術期刊資料庫

| | | | |
|---|---|---|---|
| | (3.0000) | (2.9200) | (1.7900) |
| *GDP growth* | -0.0883 | 3.3799*** | 2.7449*** |
| | (-1.1100) | (6.3900) | (4.5200) |
| *Export ratio* | 0.0499 | 0.0050 | 0.3906 |
| | (1.1800) | (0.0200) | (1.2500) |
| Country fixed effects | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ |
| Number of Observations | 1,450 | 1,450 | 1,450 |
| Adjusted $R^2$ | 0.0480 | 0.0706 | 0.0522 |
| F statistics | 6.1100*** | 7.9900*** | 6.4100*** |

This table presents the regression results of the announcement effects and long-run stock performance for acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The dependent variables are *CAR* [-3, 3], *CAR* [36] and *BHAR* [36]. *CAR* [-3, 3] represents the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. *CAR* [36] represents the cumulative abnormal return over the 36 months following the announcement date, while *BHAR* [36] represents the buy-and-hold abnormal return over the same period, both calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

In Table 8, two interaction terms are introduced: *Prior stock return* × *Growth* and *Prior stock return* × *Overvaluation*. The variable *Growth* is a dummy equal to one if, in the year prior to the acquisition, the firm's long-term borrowing exceeds the net proceeds from the sale or issuance of common and preferred stock. This condition indicates that the firm is more likely to possess growth opportunities. Otherwise, the value is set to zero. The variable *Overvaluation* is also a dummy, defined such that when *Growth* equals one, *Overvaluation* is zero, and when *Growth* equals zero, *Overvaluation* is one. This specification allows the decomposition of the effect of prior stock returns into two parts: The interaction term *Prior stock return* × *Growth* captures the excess return of firms with growth potential, while *Prior stock return* × *Overvaluation* captures the excess return of firms that are more likely overvalued.

This empirical design is grounded in the Pecking Order Theory proposed by Myers and Majluf (1984), which posits that firms with better fundamentals and higher growth potential are more likely to prefer debt financing over equity issuance. In such cases, a rise in stock price is more likely to reflect positive internal information rather than market mispricing. Therefore, if the stock price increase is driven by improved fundamentals, the interaction with growth opportunity should capture this distinction.

The results presented in Table 8 support this interpretation. In the regression for *CAR* [-3, 3], the coefficient on *Prior stock return* × *Growth* is -0.0060 and statistically insignificant, while the coefficient on *Prior stock return* × *Overvaluation* is significantly negative at -0.0191. In the regressions for *CAR* [36] and *BHAR* [36], the coefficient on *Prior stock return* × *Growth* is -0.0887 (statistically insignificant) and -0.1026

臺灣大學學術期刊資料庫

(marginally significant), respectively. In contrast, the coefficient on *Prior stock return* × *Overvaluation* remains significantly negative, estimated at -0.1031 for *CAR* [36] and -0.1769 for *BHAR* [36]. These findings suggest that when the pre-acquisition stock price increase is driven by growth opportunities or improved fundamentals, it does not significantly affect announcement abnormal returns or long-run stock performance. However, when the increase is likely due to overvaluation, it results in significantly lower announcement effects and long-run stock performance.

*5.2. Two-Stage Least Squares (2SLS) regression analysis*

This study focuses on two key explanatory variables: *Prior stock return* and *Real effective exchange rate return*. Both variables may suffer from endogeneity in relation to acquisition performance, as measured by CAR and BHAR. To address this issue and obtain consistent parameter estimates, the Two-Stage Least Squares (2SLS) estimation method is adopted.

According to the standard requirements for valid instrumental variables, the instruments must be strongly correlated with the endogenous regressors and uncorrelated with the dependent variable. For *Prior stock return*, two instrumental variables are selected. The first is the acquirer's market-to-book ratio (*Market-to-book*), a commonly used financial indicator reflecting firm valuation and market expectations. This variable is closely associated with stock price performance but is unlikely to directly influence post-acquisition abnormal returns. The second instrument is the median industry return in the year preceding the acquisition announcement (*Prior industry return*), which captures market-level dynamics at the industry level independent of firm-specific performance. This variable is strongly correlated with the firm-level prior stock return and is plausibly exogenous to post-acquisition performance.

For *Real effective exchange rate return*, two macroeconomic indicators are employed as instruments: the ratio of current account balance to GDP (*Current account balance*) and the inflation rate (*Inflation*). Both are primary determinants of exchange rate fluctuations and exhibit strong correlation with real effective exchange rate returns. Their direct effect on firm-level acquisition performance is expected to be limited, thereby satisfying the exogeneity condition.

The 2SLS estimation procedure consists of two stages. In the first stage, all selected instruments are used to predict the two endogenous regressors, namely prior stock return and real effective exchange rate return, generating fitted values. In the second stage, these fitted values replace the original endogenous variables in the regression models used to estimate acquisition performance (CAR and BHAR). Following the empirical

臺灣博碩士學位論文期刊資料庫

guidance of Wooldridge (2010) and Angrist and Pischke (2009), all instruments are jointly included in both first-stage regressions. This approach ensures proper model identification and satisfies the condition for overidentification, thereby allowing application of the Hansen J test to assess instrument exogeneity.

Table 9 reports the results of the 2SLS estimations. In the first-stage regressions, the F-statistics for *Prior stock return* and *Real effective exchange rate return* are 17.69 and 21.38, respectively, both exceeding the conventional threshold of 10 used to detect weak instruments. The Kleibergen–Paap rk Wald F-statistic for the overall model is 22.29, further supporting the strength and validity of the instruments. The Hansen J overidentification test is then conducted to assess instrument exogeneity. The J-statistics for the second-stage regressions on *CAR* [-3, 3], *CAR* [36], and *BHAR* [36] are 3.838, 1.941, and 2.468, respectively, with all corresponding p-values above conventional significance levels. These findings indicate that the null hypothesis of instrument exogeneity cannot be rejected, thereby supporting the appropriateness of the chosen instruments.

臺灣大學學術期刊資料庫

**Table 9 Regression analysis of Two-Stage Least Squares (2SLS)**

| | First-stage | | Second-stage | | |
|---|---|---|---|---|---|
| Variables | *Prior stock return* | *Real effective exchange rate return* | *CAR* [-3, 3] | *CAR* [36] | *BHAR* [36] |
| *Prior stock return_pred* | | | 0.0018 | -0.1889 | -0.2190* |
| | | | (0.1100) | (-1.4300) | (-1.8300) |
| *Real effective exchange rate return_pred* | | | -0.0616 | 7.2357*** | 6.2201*** |
| | | | (-0.4000) | (5.4100) | (4.3800) |
| *Market-to-book* | 6.1210*** | -0.0395 | | | |
| | (7.9600) | (-0.6100) | | | |
| *Prior industry return* | -3.8059 | 1.2828** | | | |
| | (-0.9100) | (2.3000) | | | |
| *Current account balance* | 83.3737 | 1.8006 | | | |
| | (1.2100) | (0.2300) | | | |
| *Inflation* | -1.2053 | 1.0801*** | | | |
| | (-0.8900) | (7.5500) | | | |
| *Ln (Market capitalization)* | 1.6237* | 0.1180 | -0.3101* | -3.4539** | -2.4875* |
| | (1.8100) | (1.0100) | (-1.8200) | (-2.2700) | (-1.7800) |
| *Free cash flow* | 0.5043** | -0.0238 | -0.0050 | 0.6119* | 1.0114*** |
| | (2.3000) | (-1.1100) | (-0.1000) | (1.7400) | (3.0500) |
| *Financial leverage* | -0.2374*** | 0.0092 | -0.0077 | -0.1638 | -0.1483 |
| | (-2.7100) | (0.8900) | (-0.5100) | (-1.2500) | (-1.2700) |
| *Relative size* | 0.0352 | 0.0071 | 0.0345*** | -0.0852 | -0.1526** |
| | (0.6400) | (1.4800) | (2.8300) | (-1.0600) | (-2.1000) |
| *Conglomerate* | 1.9875 | 0.1872 | -0.3848 | -2.8249 | -4.6571 |
| | (0.6800) | (0.5000) | (-0.8000) | (-0.6300) | (-1.0500) |
| *Cross-border* | -5.4943 | -0.9910* | -0.3660 | 3.3494 | 2.3444 |
| | (-1.3100) | (-1.7300) | (-0.5200) | (0.4900) | (0.3600) |
| *Payment stock × Private target* | -2.1710 | -0.7650 | 3.3382*** | 20.5009** | 17.2344** |
| | (-0.4900) | (-1.1200) | (4.1000) | (2.5500) | (2.3400) |
| *Payment stock × Subsidiary target* | -2.4515 | -0.2924 | 2.3121*** | 17.6221** | 17.2869** |
| | (-0.5100) | (-0.4200) | (2.8000) | (2.1400) | (2.2100) |
| *Payment all-cash × Private target* | 2.1667 | 1.2171 | 3.9873*** | 0.3296 | 3.4450 |
| | (0.3500) | (1.3400) | (4.0600) | (0.0300) | (0.3600) |
| *Payment all-cash × Subsidiary target* | -0.7548 | 1.7860* | 3.1671*** | 6.3872 | 6.0809 |
| | (-0.1300) | (1.8400) | (2.7500) | (0.5900) | (0.6000) |
| *Payment all-cash × Public target* | -7.2011 | 0.9160 | 3.6587*** | 7.3686 | 4.6960 |
| | (-0.9100) | (0.7400) | (3.1400) | (0.6100) | (0.4000) |
| *GDP growth* | -0.9291* | -0.0292 | -0.0747 | 2.6247*** | 2.0055*** |
| | (-1.9300) | (-0.5300) | (-0.9700) | (4.4500) | (3.5400) |
| *Export ratio* | 0.8579*** | 0.0193 | 0.0319 | -0.6166 | -0.0186 |
| | (3.2700) | (0.6800) | (0.7100) | (-1.6000) | (-0.0500) |
| Number of Observations | 1,450 | 1,450 | 1,450 | 1,450 | 1,450 |
| F statistic | 17.6900*** | 21.3800*** | 2.4900*** | 7.0700*** | 4.9800*** |
| Kleibergen–Paap rk Wald F | 22.2900 | | | | |
| Hansen J statistic | | | 3.8380 | 1.9410 | 2.4680 |
| Hansen J p-value | | | 0.1467 | 0.3789 | 0.2911 |

This table presents the Two-Stage Least Squares (2SLS) regression results of the announcement effects and long-run stock performance for acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The dependent variables in the first-stage regression are prior stock return and real effective exchange rate return. Prior stock

臺灣人文社會期刊資料庫

return is defined as the acquirer's buy-and-hold stock return over the period [-250, -11], where day 0 is the announcement day. Real effective exchange rate return is calculated as the real effective exchange rate 11 days before the announcement divided by the real effective exchange rate 250 days before the announcement, minus 1. The dependent variables in the second-stage regression are *CAR* [-3, 3], *CAR* [36], and *BHAR* [36]. *CAR* [-3, 3] represents the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. *CAR* [36] represents the cumulative abnormal return over the 36 months following the announcement date, while *BHAR* [36] represents the buy-and-hold abnormal return over the same period, both calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

The second-stage regression results show that in the *CAR* [36] and *BHAR* [36], the fitted values of prior stock return (*Prior stock return_pred*) have coefficients of -0.1889 and -0.2190, respectively, with the latter being statistically significant. These results suggest that acquisition decisions driven by increased purchasing power from stock price appreciation are associated with weaker long-run stock performance. In contrast, the fitted values of real effective exchange rate return (*Real effective exchange rate return_pred*) yield significantly positive coefficients of 7.2357 and 6.2201 in the *CAR* [36] and *BHAR* [36], respectively. This indicates that acquisitions motivated by increased purchasing power due to real effective exchange rate appreciation are linked to improved long-run stock performance.

In summary, the application of the two-stage least squares (2SLS) method with carefully selected instrumental variables effectively mitigates concerns related to endogeneity and reverse causality. The results from the first-stage F-tests and Hansen J tests jointly support the validity of the instruments by confirming their relevance and exogeneity. Overall, the findings demonstrate strong model identification and robustness, thereby enhancing the credibility of the empirical analysis.

### *5.3. Legal and corporate governance*

Given that variations in legal systems and corporate governance environments across countries may result in heterogeneous effects on acquisition announcement abnormal returns and long-run stock performance, additional robustness checks are conducted by incorporating legal and corporate governance-related variables into the regression models. Specifically, the baseline regressions for *CAR* [-3, 3], *CAR* [36], and *BHAR* [36] are extended to include variables capturing cross-country differences in legal origin (*Common law*) and shareholder protection (*Anti-self-dealing index* and *Revised anti-director index*), as documented by La Porta et al. (1998) and Djankov et al. (2008). The results, presented in Appendix Table A2, indicate that the coefficients of the main explanatory variables, including *Prior stock return* and *Real effective exchange rate*

臺灣大學學術期刊資訊庫

*return*, remain consistent in terms of both sign and statistical significance. These findings confirm that the main results are robust to the inclusion of institutional factors related to legal and corporate governance frameworks.

## 6. Conclusions

This study examines the impact of increased purchasing power of acquirers on acquisition announcement effects and long-run stock performance, focusing on the deal announcements between 2009 and 2022 involving acquirers from G7 countries and China. The prior stock return and real effective exchange rate return over the period [-250, -11] are used as proxies for the acquirers' purchasing power. The empirical results show that when an acquisition is driven by an increase in purchasing power due to the firm's rising stock price, this leads to weaker acquisition announcement abnormal returns and long-run stock performance. This indicates that acquisitions driven by a firm's increased purchasing power due to stock price growth may lead managers to become overconfident, overestimating the value of the target firm, and overpaying for the acquisition, ultimately resulting in poorer announcement effects and long-run stock performance for the acquirer. On the other hand, when an acquisition is driven by increased purchasing power due to rising exchange rates, it positively impacts the long-run stock performance of the acquirer, suggesting that the acquirer can acquire assets at a lower cost, thereby enhancing long-term shareholder value.

Furthermore, the interaction between payment methods and target firm status reveals that, compared to acquisitions of public firms using stock payment, those involving private firms or subsidiaries using either stock or all-cash payments, as well as public firms using all-cash payment, are associated with significantly higher announcement abnormal returns and long-run stock performance. These findings suggest that stock-based acquisitions of public target firms are not only less well received by market participants but also detrimental to the long-term value of the acquirer's shareholders.

For cross-border sample, we find that when cross-border acquisitions are driven by increased purchasing power due to the firm's rising stock price, the acquisition announcement effects and long-run stock performance are lower. However, the lack of a significant exchange rate effect in cross-border acquisitions observed in this study may be attributed not only to limitations in sample size and composition but also to asymmetric or diluted effects stemming from differences in institutional frameworks and market frictions.

臺灣博碩士學位論文學術期刊資料庫

To further ensure the reliability of the empirical findings, this study conducts a series of robustness checks. First, to distinguish whether the pre-acquisition stock price increase reflects genuine growth opportunities or market overvaluation, the analysis introduces interaction terms with growth- and overvaluation-related indicators. The results indicate that only stock price increases driven by overvaluation are associated with lower acquisition performance, while those reflecting growth opportunities are not significantly related. Second, a two-stage least squares (2SLS) regression is employed to address potential endogeneity in the key explanatory variables, prior stock return and real effective exchange rate return. The validity of the instruments is confirmed by first-stage F-tests and Hansen J tests, and the results remain consistent with baseline regressions. Third, the inclusion of legal origin and shareholder protection variables also yields consistent findings, indicating that the main results are robust to institutional differences in legal and corporate governance environments across countries.

Finally, the industrial structure and degree of external economic dependence may vary across countries, potentially leading to heterogeneous effects of exchange rate movements on acquisition outcomes. Future research may consider developing multilevel models or incorporating interaction terms to explore how different national economic characteristics moderate the relationship between exchange rates and acquisition performance.

臺灣大學學術期刊資料庫

**Appendix A**

**Table A1 Variable definitions**

| Variables | Definition |
|---|---|
| Acquisition Performance | |
| Announcement abnormal return | |
| *CAR* [-1, 1] | Cumulative abnormal returns over the 3-day interval beginning 1 day prior to the announcement, with day 0 being the announcement day of the deals. The abnormal returns are calculated using the market model, which is estimated over the period from day -210 through day -30, regressing the acquirer's daily stock returns on the market return from the acquirer's home country. (Datastream) |
| *CAR* [-3, 3] | Cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement, with day 0 being the announcement day of the deal. The abnormal returns are calculated using the market model, which is estimated over the period from day -210 through day -30, regressing the acquirer's daily stock returns on the market return from the acquirer's home country. (Datastream). |
| Long-run stock performance | |
| *CAR* [36] | Cumulative abnormal return over the 36 months following the announcement date. The abnormal returns are calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. (Datastream) |
| *BHAR* [36] | Buy-and-hold abnormal returns over the 36 months following the announcement date. The abnormal returns are calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. (Datastream) |
| Purchasing Power of Acquirers | |
| *Prior stock return* | Buy-and-hold stock return of the acquirer over the [-250, -11] trading-day window, where date 0 is the acquisition announcement date. (Datastream) |
| *Real effective exchange rate return* | Real effective exchange rate 11 days before the announcement divided by the real effective exchange rate 250 days before the announcement, minus 1. (World Bank website) |

臺灣大學學術期刊資料庫

| | |
|---|---|
| Firm Characteristics of Acquirers | |
| *Ln (Market capitalization)* | Natural logarithm of the acquirer's market capitalization in USD (Datastream MVC). |
| *Free cash flow* | Operating cash flow (Worldscope 01250) plus depreciation, depletion, and amortization (Worldscope 01151) minus interest expenses (Worldscope 01251), income taxes (Worldscope 01451), and capital expenditures (Worldscope 04601), divided by total assets (Worldscope 02999). |
| *Financial leverage* | Total debt (Worldscope 03255) divided by total assets (Worldscope 02999). |
| Deal Characteristics | |
| *Relative size* | Transaction value of the acquisition (SDC Platinum) divided by the acquirer's market capitalization (Datastream MVC). |
| *Conglomerate* | Conglomerate is a dummy variable indicating a cross-industry acquisition. Set to 1 if the acquirer and target belong to different parent industries according to the Fama and French 49 industry classification, and 0 otherwise. |
| *Cross-border* | Cross-border is a dummy variable. Set to 1 if the acquirer and target are from different countries, and 0 otherwise. |
| *Payment stock* | Payment stock is a dummy variable. Set to 1 if the payment method includes part or full payment in stock and 0 otherwise. |
| *Payment all-cash* | Payment all-cash is a dummy variable. Set to 1 if the payment method is entirely in cash and 0 otherwise. |
| *Private target* | Private target is a dummy variable. Set to 1 if the target firm is private and 0 otherwise. |
| *Subsidiary target* | Subsidiary target is a dummy variable. Set to 1 if the target firm is a subsidiary and 0 otherwise. |
| *Public target* | Public target is a dummy variable. Set to 1 if the target firm is public and 0 otherwise. |
| Macroeconomic | |
| *GDP growth* | GDP growth (annual %). (World Bank website) |
| *Export ratio* | Exports of goods and services (% of GDP). (World Bank website) |

臺灣大學學術期刊資料庫

| | |
|---|---|
| Growth Opportunity and Overvaluation | |
| *Growth* | Growth is a dummy variable. Set to 1 if long-term borrowing exceeds the net proceeds from sale or issue of common and preferred and 0 otherwise. Long-term borrowing is long-term borrowing (Worldscope 04401; in the Funds Flow Statement) divided by total assets (Worldscope 02999). Net proceeds from sale or issue of common and preferred is net proceeds from sale or issue of common and preferred (Worldscope 04251; in the Funds Flow Statement) divided by total assets (Worldscope 02999). |
| *Overvaluation* | Overvaluation is a dummy variable. Set to 1 if Growth is 0 and 0 otherwise. |
| Instrumental Variables | |
| *Market-to-book* | Market value of equity (Worldscope 08001) divided by book value of equity (Worldscope 03501). |
| *Prior industry return* | Median buy-and-hold return of firms in the same Fama-French 12 industry as the acquirer over the [-250, -11] trading-day window, where date 0 is the acquisition announcement date. (Datastream) |
| *Current account balance* | Current account balance (IMF website) divided by GDP (World Bank website). |
| *Inflation* | Inflation, consumer prices (annual %). (World Bank website) |
| Legal and Corporate Governance | |
| *Common law* | Common law is a dummy variable. Set to 1 if the origin of the commercial law of a country is English Common Law and 0 otherwise. (La Porta et al. 1998; Djankov et al. 2008) |
| *Anti-self-dealing index* | Anti-self-dealing index is the measure of legal protection of minority shareholders against expropriation by corporate insiders. (Djankov et al. 2008) |
| *Revised anti-director index* | Revised anti-director index is revised estimates of the anti-director rights index of La Porta et al. (1997, 1998). (Djankov et al. 2008) |

臺灣大學學術期刊資料庫

**Table A2 Legal and corporate governance**

| Variables | *CAR* [-3, 3] | *CAR* [36] | *BHAR* [36] |
|---|---|---|---|
| Panel A: Common law | | | |
| *Prior stock return* | -0.0103** | -0.1166** | -0.1438*** |
| | (-2.0600) | (-2.6200) | (-3.1100) |
| *Real effective exchange rate return* | -0.0115 | 0.8194*** | 0.6897** |
| | (-0.3300) | (2.7000) | (2.3900) |
| *Common law* | -1.1150* | -15.1421*** | -15.5353*** |
| | (-1.6700) | (-2.9800) | (-3.7400) |
| Controls | ✓ | ✓ | ✓ |
| Country fixed effects | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ |
| Number of Observations | 1336 | 1336 | 1336 |
| Adjusted $R^2$ | 0.0430 | 0.0921 | 0.0670 |
| F statistics | 6.8200*** | 9.8300*** | 9.5900*** |
| Panel B: Anti-self-dealing index | | | |
| *Prior stock return* | -0.0100* | -0.1162** | -0.1427*** |
| | (-1.9900) | (-2.5900) | (-3.0700) |
| *Real effective exchange rate return* | -0.0136 | 0.6953** | 0.5804** |
| | (-0.3900) | (2.3000) | (2.0700) |
| *Anti-self-dealing index* | -2.5024 | 19.0630 | 9.6497 |
| | (-1.3300) | (1.0800) | (0.7100) |
| Controls | ✓ | ✓ | ✓ |
| Country fixed effects | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ |
| Number of Observations | 1336 | 1336 | 1336 |
| Adjusted $R^2$ | 0.0420 | 0.0870 | 0.0609 |
| F statistics | 5.0900*** | 10.6900*** | 6.7400*** |
| Panel C: Revised anti-director index | | | |
| *Prior stock return* | -0.0099* | -0.1200*** | -0.1484*** |
| | (-1.9600) | (-2.7200) | (-3.2600) |
| *Real effective exchange rate return* | -0.0149 | 0.6747** | 0.5287* |
| | (-0.4500) | (2.2400) | (1.8700) |
| *Revised anti-director index* | 0.1292 | -2.2141 | -2.7778* |
| | (0.6500) | (-1.1200) | (-1.9000) |
| Controls | ✓ | ✓ | ✓ |
| Country fixed effects | ✓ | ✓ | ✓ |
| Industry fixed effects | ✓ | ✓ | ✓ |

臺灣大學學術期刊資料庫

| | | | |
|---|---|---|---|
| Year fixed effects | ✓ | ✓ | ✓ |
| Number of Observations | 1336 | 1336 | 1336 |
| Adjusted $R^2$ | 0.0410 | 0.0870 | 0.0625 |
| F statistics | 4.0900*** | 10.5000*** | 6.7400*** |

This table presents the regression results of the announcement abnormal returns and long-run stock performance for acquirers in acquisitions involving G7 countries and China between 2009 and 2022. The models additionally control for country-level legal and corporate governance characteristics, based on La Porta et al. (1998) and Djankov et al. (2008), respectively. The dependent variables are *CAR* [-3, 3], *CAR* [36] and *BHAR* [36]. *CAR* [-3, 3] represents the cumulative abnormal returns over the 7-day interval beginning 3 days prior to the announcement. *CAR* [36] represents the cumulative abnormal return over the 36 months following the announcement date, while *BHAR* [36] represents the buy-and-hold abnormal return over the same period, both calculated as the difference between the monthly stock return and the monthly market index return during the event period, with the market return derived from the Datastream index of the acquirer's home country. All variables are winsorized at the 1st and 99th percentiles, and variable definitions are provided in Table A1 in the Appendix. Standard errors are clustered at the country and industry levels, and the robust t-statistics are reported in parentheses. ***, **, and * indicate statistical significance based on two-sided tests at the 1%, 5%, and 10% levels, respectively.

臺灣大學學術期刊資料庫

## References


Angrist, J. D., and J.-S. Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.

Asquith, P., R. F. Bruner, and D. W. Mullins Jr. 1983. The gains to bidding firms from merger. *Journal of Financial Economics* 11 (1-4): 121-139.

Bebenroth, R. 2015. *International Business Mergers and Acquisitions in Japan*. Tokyo, Japan: Springer Tokyo.

Blonigen, B. A. 1997. Firm-specific assets and the link between exchange rates and foreign direct investment. *The American Economic Review* 87 (3): 447-465.

Bradley, M., A. Desai, and E. H. Kim. 1988. Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms. *Journal of Financial Economics* 21 (1): 3-40.

Chari, A., P. P. Ouimet, and L. L. Tesar. 2010. The value of control in emerging markets. *The Review of Financial Studies* 23 (4): 1741-1770.

Chen, X., J. Harford, and K. Li. 2007. Monitoring: Which institutions matter?. *Journal of Financial Economics* 86 (2): 279-305.

Cheung, Y.-W., M. D. Chinn, and E. Fujii. 2007. The overvaluation of Renminbi undervaluation. *Journal of International Money and Finance* 26 (5): 762-785.

Demsetz, H., and K. Lehn. 1985. The structure of corporate ownership: Causes and consequences. *Journal of Political Economy* 93 (6): 1155-1177.

Deng, P. 2009. Why do Chinese firms tend to acquire strategic assets in international expansion?. *Journal of World Business* 44 (1): 74-84.

Dewenter, K. L. 1995. Do exchange rate changes drive foreign direct investment?. *The Journal of Business* 68 (3): 405-433.

Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2008. The law and economics of self-dealing. *Journal of Financial Economics* 88 (3): 430-465.

Erel, I., R. C. Liao, and M. S. Weisbach. 2012. Determinants of cross-border mergers and acquisitions. *The Journal of Finance* 67 (3): 1045-1082.

Field, L. C., and A. Mkrtchyan. 2017. The effect of director experience on acquisition performance. *Journal of Financial Economics* 123 (3): 488-511.

Froot, K. A., and J. C. Stein. 1991. Exchange rates and foreign direct investment: An imperfect capital markets approach. *The Quarterly Journal of Economics* 106 (4): 1191-1217.

Fu, F., L. Lin, and M. S. Officer. 2013. Acquisitions driven by stock overvaluation: Are they good deals?. *Journal of Financial Economics* 109 (1): 24-39.

Fuller, K., J. Netter, and M. Stegemoller. 2002. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. *The Journal of Finance* 57 (4): 1763-1793.

Gaspar, J.-M., M. Massa, and P. Matos. 2005. Shareholder investment horizons and the market for corporate control. *Journal of Financial Economics* 76 (1): 135-165.

Georgopoulos, G. J. 2008. Cross-border mergers and acquisitions: Does the exchange rate matter? Some evidence for Canada. *Canadian Journal of Economics/Revue canadienne d'économique* 41 (2): 450-474.

Hazelkorn, T., M. Zenner, and A. Shivdasani. 2004. Creating value with mergers and acquisitions. *Journal of Applied Corporate Finance* 16 (2-3): 81-90.


臺灣大學學術期刊資料庫

Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76 (2): 323-329.

Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.

Klein, M. W., and J. C. Shambaugh. 2015. Rounding the corners of the policy trilemma: Sources of monetary policy autonomy. *American Economic Journal: Macroeconomics* 7 (4): 33-66.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny. 1997. Legal determinants of external finance. *The Journal of Finance* 52 (3): 1131-1150.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny. 1998. Law and finance. *Journal of Political Economy* 106 (6): 1113-1155.

Lin, C., M. S. Officer, and B. Shen. 2014. Currency appreciation shocks and shareholder wealth creation in cross-border mergers and acquisitions. Working paper, University of Hong Kong, Loyola Marymount University, and Chinese University of Hong Kong.

Lou, K.-R., Y.-K. Lu, and C.-Y. Shiu. 2020. Monitoring role of institutional investors and acquisition performance: Evidence from East Asian Markets. *Pacific-Basin Finance Journal* 59: 101244.

Loughran, T., and A. M. Vijh. 1997. Do long-term shareholders benefit from corporate acquisitions?. *The Journal of Finance* 52 (5): 1765-1790.

Masulis, R. W., C. Wang, and F. Xie. 2007. Corporate governance and acquirer returns. *The Journal of Finance* 62 (4): 1851-1889.

Moeller, S. B, F. P Schlingemann, and R. M Stulz. 2004. Firm size and the gains from acquisitions. *Journal of Financial Economics* 73 (2): 201-228.

Moeller, S. B., F. P. Schlingemann, and R. M. Stulz. 2005. Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *The Journal of Finance* 60 (2): 757-782.

Morck, R., A. Shleifer, and R. W. Vishny. 1990. Do managerial objectives drive bad acquisitions?. *The Journal of Finance* 45 (1): 31-48.

Myers, S. C., and N. S. Majluf. 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13 (2): 187-221.

Nguyen, N. H., and C.-Y. Shiu. 2022. Stewardship, institutional investors monitoring, and firm value: Evidence from the United Kingdom. *Journal of Multinational Financial Management* 64: 100732.

Rau, P. R., and T. Vermaelen. 1998. Glamour, value and the post-acquisition performance of acquiring firms. *Journal of Financial Economics* 49 (2): 223-253.

Rhodes-Kropf, M., D. T. Robinson, and S. Viswanathan. 2005. Valuation waves and merger activity: The empirical evidence. *Journal of Financial Economics* 77 (3): 561-603.

Roll, R. 1986. The hubris hypothesis of corporate takeovers. *The Journal of Business* 59 (2): 197-216.

Savor, P. G., and Q. Lu. 2009. Do stock mergers create value for acquirers?. *The Journal of Finance* 64 (3): 1061-1097.

Shleifer, A., and R. W. Vishny. 1986. Large shareholders and corporate control. *Journal of Political Economy* 94 (3): 461-488.

Shleifer, A., and R. W. Vishny. 2003. Stock market driven acquisitions. *Journal of Financial Economics* 70 (3): 295-311.

臺灣大學學術期刊資料庫

Travlos, N. G. 1987. Corporate takeover bids, methods of payment, and bidding firms' stock returns. *The Journal of Finance* 42 (4): 943-963.
Wooldridge, J. M. 2010. *Econometric Analysis of Cross Section and Panel Data* (2nd ed.). Cambridge, MA: MIT Press.

臺灣大學學術期刊資料庫

臺灣大學學術期刊資料庫