

LONG-TERM AND SHORT-TERM WEALTH EFFECTS OF ASIAN BANKS' M&A

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Abstract

This paper covers Asian stock exchanges to empirically examine market responses to M&A announcements, and changes in management strategy made by listed banks from long-term and short term aspects. We get difference results between short term analysis and long term analysis.

The long term results suggest that banks wealth effects from acquisitions need long terms, at least three years. The promotion or demotion of every strategy is widely difference among legal systems and regulation system and each combination. The courtiers whom adapted English origin legal system and high rating and private monitoring refutation systems tented to solute credit risk problems, tend to become being sound banks.

The short term cross-sectional results suggest that a cross-border diversification strategy anticipates value creation and that investors are not interested in industry diversification. Investors evaluate banks with a purpose of future expanding loan business through a mutually complementary acquisition. And we can explain the short term cross-border effect through national characteristics: it is strongly related to national credit ratings. Investors welcome IMF relief programs and expect weak economies to strengthen. The effect is also strongly positively related to the degree of a country's economic freedom and has relationships with cross-sectional coefficient values and Asia's legal and market systems. Furthermore, in case of alliance acquirers, loosen sting circumstance of barriers to foreign-bank entry, loosen bank action restrictions and large private monitoring promote better banking sector outcomes though cross-border transactions.

JEL Codes: G34, G21 and G15

Key word: Asian Bank M&A, Strategy, Long term and Short term, Cross-border, Diversification

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1. INTRODUCTION

Since the 1990s, most large Asian and European financial institutions have aggressively promoted alliances and M&A within Asian financial markets. Asian financial institutions just followed their own global client firms where client firms expand their business place. However recently, the business strategies of such financial institutions have changed and they promote strategic business for themselves not for clients, in response not only to M&A but also financial alliances.

This paper, representing research that began in 2000, empirically examines the effects of the Asian stock market's response to and management strategies for banks' alliance and M&A announcements, from long-term and short term aspects. We examine the strategic management factor as performed in Altunbas and Marques (2008). And for the short term investments, we explain the cross-border effect by testing whether cross-border country characteristics are related to bank returns.

We get difference results between short term analysis and long term analysis.

We get difference results between short term analysis and long term analysis. The long term results, first, suggest that banks wealth effects from acquisitions need long terms from announcements at least three years and long term DID (Difference In Difference estimation) results suggest that cross-border diversification strategies don't value creation at all. Second, the promotion or demotion of every bank's acquisitions strategy is widely difference among legal systems and regulation systems. If we know the legal and regulation system for acquisition banks countries, we would understand which strategies are advantages and which strategy are disadvantage. The courtiers whom adapted English origin legal system and high rating and private monitoring refutation systems tented to solute credit risk problems(non-performing loan problems), tend to become being sound banks, in short, they can proceed to be sound banks by M&A or alliance in Asia area.

The short term cross-sectional alliance results suggest that cross-border diversification strategies usually target value creation. Investors value banks with low loan ratios as ways to purchase larger loans for business through mutually complementary alliances between acquirers and targets. But simultaneously efficient management acquisition banks, with lower total costs but high IT literacy, acquire inefficient targets with high costs. Finally, investors are not interested in industrial diversification strategies, a significant difference from Europe and the U.S., with their conglomerates. The M&A results suggest that domestic strategies usually target value creation. Compared to their Australian counterparts, Asian investors expect significantly more value creation, especially in counties that have received IMF emergency assistance. Asian banks' M&A tools appear to be relief methods for unsound banks.

We can explain the short term cross-border effect through national characteristics: it is related to national credit ratings. Investors welcome IMF relief programs and expect weak target economies to strengthen. The effect is also strongly positively related to the degree of a country's economic freedom

and has relationships with cross-sectional coefficient values and Asia's legal and market systems. In case of alliance acquirers loosen sting circumstance of barriers to foreign-bank entry, loosen bank action restrictions and large private monitoring promote better banking sector outcomes though cross-border transactions.

The structure of this paper is as follows. Section 1 discusses the research motivation and section 2 the relevant literature. Section 3 outlines three key discussion issues. Section 4 describes the study's data and empirical methods. Section 5 presents Asian banks' data description. Section 6 provides the study's empirical results, and section 7 concludes the paper.

2. LITERATURE

We now present below a survey of studies on market evaluation in M&A.

Many studies have been conducted on financial conglomerates. Laeven and Levine(2007) find the diversification discount in financial conglomerate. They find that the Tobin's Q of financial conglomerates that have engaged in multiple activities is lower than specialize in the individual activities banks. And more detailed analysis, Baele et al. (2007) find that the relationship between diversification and bank returns is different in Europe relative to other developed markets, notably the U.S. They find a positive relationship between franchise value and the degree of functional diversification. Artikis et al. (2008) offer an intuitive explanation for the market dynamics of and incentives for bank-insurance collaboration, they argue, gives banking firms the opportunity to utilize their network of branches. Moreover, banks seek to enhance profitability by expanding their business and selling new products through so-called "one-stop shopping." Recently, increased monitoring allows lower capital requirements for financial conglomerates. Recently, the focus of research is not only diversifications but also cross-border bank M&A activities. As comprehensive empirical literature research of cross-border bank M&A is shown in Caiazza et al.(2012), many studies reveal that banks are likely to integrate over-seas banks are stronger, however Caiazza et al.(2012) empirically find support for the "acquire to restructure" hypothesis which posits targets are typically less efficient banks that are acquired to be restructured and made more profitable.

A wide variety of empirical studies have examined the firm value of financial conglomerates. These can be classified into three main groups: first, studies on creating firm value (Field et al. (2007) and Staikouras (2009)); second, studies on destroying firm value (Laeven and Levine (2007), Schmid and Walter (2009), Lelyveld and Knot (2009)); third, studies on neutral firm value (Allen and Jagtiani (2000)).

Of the studies on creating firm value, Field et al. (2007) examine the effects of M&A events on

U.S. and European bank-insurance from January 1997 to December 2002. They find positive bidder wealth effects that are significantly related to economies of scale. Staikouras (2009) expands the results of Field et al. (2007) by applying it to the global market. He uses the event study method to examine international M&A events for 51 countries from 1990 to 2006; his findings reveal significant abnormal returns. Bank-bidders appear to earn a significant positive return after an event's announcement. A cross-section regression shows that the Abnormal Return (AR) exhibits a positive relationship with profitability (ROE) and size (relative size) but a negative relationship with diversification (non-interest income/total operating income).

Contrariwise, many studies examine the destruction of firm value. Laeven and Levine (2007), confined to the banking industry, examine 836 banks from 43 countries and study their diversification discounts using a regression of Tobin's q . The study concludes that all diversification of bank-based financial service firms is fundamentally value-destroying. Schmid and Walter (2009) advance the work of Laeven and Levine (2007) by considering diversification across the entire range of financial institutions—commercial banking, investment banking, insurance, and asset management, among other sectors—and analyzing 4,060 U.S. events between 1985 and 2004 from a diversification perspective. They employ three kinds of diversification measure: the first is a dummy variable, equal to 1 if a firm reports more than one segment; the second is the number of segments, and the third is the sales- and assets-based Herfindahl-Hirschman Index (HHI). Schmid and Walter's (2009) empirical results show that diversified firms trade at a discount of either approximately 9% or 16%. Though significant conglomerate discounts exist in the three main activity areas (credit intermediation, securities, and insurance), two notable exceptions in which positive excess value accrues occur for collaborations between commercial banks and insurance companies and between commercial and investment banks. They find that profitability, like ROA, seems to affect the firm value of only insurance companies, not that of intermediaries or securities firms.

Now, we consider Asia's bad loan problems. Studies on Japanese financial institutions have examined their changing business strategies by targeting only the banking sector, which has suffered because of nonperforming loans for a long time (Yamori et al. (2003), Sakai et al. (2009)). Most studies are nothing more than defensive M&A analyses of defensive nonperforming loans problems, business restructuring, and efficiency. In this study, we comprehensively consider the aggressive business strategies of financial institutions, especially those of large insurance companies, and analyze not only M&A but also aggressive strategic alliances.

Rossi and Volpin (2004), Moeller and Schlingmann (2005), and Fauver et al. (2003) empirically show that differences in nationality, legal and market systems, regulatory systems, and bidder/target maturity vary according to firm value. Steigner and Sutton(2011) shows greater cultural distance has appositive influence on the long term performance. By contrast, we comprehensively examine

financial institutions' aggressive business strategies, analyzing not only M&A but also aggressive strategic alliances in Asia. My study thus expands the scope of the previous research. Stingner and Sutton(2011) shows the greater culture distance has a positive influence on the long term performance. Barth et al.(2001,2004,2008) empirically show the difference between broad array of bank regulations and supervisory practice and bank development, performance and stability. And some literature shows the evidence that regulatory and cultural barriers limit the international expansion of banks (e.g., De Haas and Van Ieyveldt (2010)), more profitable and larger banks find it easier to overcome such barriers (Calzolari and Liranth(2011), proposed policy measures to increase supervision of banks' international activities (Ongena et al.(2013)).

Finally many studies on changing business strategies focus on M&A. Recent studies on changing business strategies and the difference between M&A and alliances have been conducted by Makimoto (2007) and Chiou and White (2005). Makimoto (2007), using a covariance structure analysis on 1,714 Japanese listed business companies, defines the difference between M&A and alliances as follows: while the purpose of M&A is improved financial statements, the purpose of alliances is improved research and development (R&D). Chiou and White (2005) examine the wealth effects of Japanese financial institutions' strategic alliances (i.e., single-business, multi-business, comprehensive, domestic/foreign, intra-keiretsu, and inter-industry) occurring between 1997 and 1999. They find that, first, strategic alliances increase the value of partner firms, second, the smaller partner experiences a larger percentage of gain, and, third, inter-group alliances result in increased market value.

3. DISCUSSION ISSUES

This paper presents three main discussion issues pertaining to the Asian stock market's response to and management strategies for alliance and M&A announcements. We define "alliance" as cases involving less than 50% cumulative share/asset holdings and "M&A" as cases involving more than 50% cumulative share holdings.

[Discussion]

Discussion 1: How does the Asian stock market respond when acquisitions by listed banks are announced? We empirically investigate this question for both terms: long term aspects and short term aspect.

Discussion 2: what are the strategic purposes of banks acquisitions in Asia? What strategic factors have impacts acquisitions? We examine the six strategic management factors introduced by Altunbas and Marques (2008): earning diversification strategy, risk strategy, cost controlling strategy, capital adequacy level strategy, liquidity risk

strategy, and technology and innovation strategy. We empirically investigate this question for both terms: long term aspects and short term aspect.

Discussion 3: We comprehensively study the differences among Asia's financial, economic and regulatory systems. One of this paper's goals is to assess whether a cross-border effect exists; the available evidence on cross-sectional differences according to country characteristics could help us understand some of the economic factors in the cross-border effect. We empirically investigate this question for short term and long term aspects.

4. DATA AND METHODOLOGY

4.1 Data

Data on alliance and M&A announcements were drawn from Thomson ONE Investment Banking and cover the period between 2000 and 2011. We collect all the transactions of Asian listed banks that have at least acquired or targeted either the equity or assets of domestic or foreign firms. We require at least one of the firms to be a bank, while the target could be a company in another industry. The investigation uses Asian data from all the Asia-Pacific countries: Australia, Bangladesh, Bhutan, Brunei, Cambodia, China, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Hong Kong, India, Indonesia, Kiribati, Laos, Macau, Malaysia, Maldives, Marshall Islands, Mongolia, Myanmar, N. Mariana Islands, Nauru, Nepal, New Caledonia, New Zealand, Norfolk Islands, North Korea, Pakistan, Palau, Papua New Guinea, Philippines, Singapore, Solomon Islands, Samoa (US), South Korea, Sri Lanka, Taiwan, Timor-Leste, Thailand, Tokelau, Tonga, Tuvalu, Vanuatu, Vietnam, Wallis/Futuna Island, and Western Samoa. All sample transactions have a dollar value and announcement and completion data.

All equity return data are from the Thomson One Stock Priced Daily Data. Accounting data are from Thomson One Investment Banking. The data necessary to calculate the geographical and industrial diversification measures come from the Standard Industrial Classifications (SIC) codes and its geographic segment.

The event sample comprises 1907 bank transactions. Either the acquirer or target have a regular common stock listing on Asian stock markets and have accounting data based on dollar values.

The market index data, consisting of every company's listed geographic stock market index, are obtained from the DataStream, composed of the SMC WORLD Index, TOPIX Index, HANG SENG Index, SHANGHAI SE COMPOSITE Index, TAIWAN SE WEIGHTED Index, KOSPI Index, ASX Index, S&P/ASX 200 Index, EX NZX 50 Index, COLOMBO SE MILANKA Index, BANGKOK S.E.T. 50 Index, IDX COMPOSITE Index, STRAITS TIMES Index, FTSE BURSA MALAYSIA

KLCI Index, PHILIPPINE SE ALL SHARES Index, HO CHI MIN VSE Index, SENSEX 30 Index, S&P CNX DEFTY (50) Index, and BANGLADESH SE ALL SHARE Index.

The SMB and HML index data, using of MSCI BIG index, MSCI SMALL index, MSCI VALUE index and MSCI GROWTH index. The risk-free rates data, consisting of every company's geographic government bond 10-year or 5-year rates, are obtained from the DataStream, composed of JP10YT, HK10YT, CN10YT, TW10YT, KR10YT, AU10YT, NZ10YT, PK10YT, LK5YT, TH10YT, ID10YT, SG10YT, MY10YT, PH10YT, VN10YT, IN10YT, and US10YT.

We use PPP based on GDP growth rates taken from the Penn World Table², countries' credit ratings obtained from S&P long term foreign currency sovereign rating and legal systems obtained from La Porta et al.(1997), Fauver et al. (2003) and Beck et al. (2003). Additionally, we employ country's EFW index³, obtained from Moeller et al. (2005)⁴. Barth et al.(2008) derive the available dataset of bank regulatory environment by the World Bank Website⁵, we use it.

4.2 Event study: short term analysis

In discussion 1 for short term analysis, our econometric study's methods are based on a traditional event study. We empirically examine stock responses to bank alliance or M&A announcements.

Cumulative abnormal returns (CAR) are examined for various intervals within a 5-day period using CAPM before and after the event date ($t = 0$), $AR_{it} = R_{it} - \left(\hat{\alpha}_i + \hat{\beta}_i (R_{mt} - R_{ft}) \right)$.

The standardized abnormal return (SAR) is given by method of Patell (1976) as below.

$$CAR_{it} = \sum SAR_{it} = \sum \frac{AR_{it}}{\hat{\sigma}_{it}}$$

SCAR_{it} is data that accumulate vertically over the time series data of SAR_{it}. Next, we test the SCAR_{it} using two kinds of tests: the z-test for the value of mean=0 and the sign-test, a non-parametric method, for the value of median=0. We then establish null hypotheses. In the first, H0: mean or median of SCAR=0, and, in the alternative hypothesis, H1: mean or median of SCAR≠0.

The "estimation window" is set from -100 days (100 days before an event) to -11 day (11 days before an event), and the "event window" is set from -5 days (5 day before event) to +5 days (5 days after an event). We calculate the SCAR during the term of the event window. To determine any pre-leaked information, we use thorough event windows, setting additional estimation windows

² https://pwt.sas.upenn.edu/php_site/pwt_index.php. The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries/territories for some or all of the years 1950-2010.

³ The Economic Freedom of the World (EFW) index, maintained by the World Bank, measures the overall level of a country's restrictiveness in terms of its economic, institutional, and developmental environments.

⁴ Moeller et al. (2005) has obtained EFW index from the World Bank.

⁵ <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20345037%7EpagePK:64214825%7EpiPK:64214943%7EtheSitePK:469382,00.html>

before and after the event day.

4.3 CTPR: long term analysis

In discussion 1 for long term analysis, our econometric study's methods are based on a calendar time portfolio regressions (CTPR). While the stock market reacts to new information and does so fairly quickly, there is some evidence of poor in stock prices. Capital market players may need the time to revise their judgments based on new information about the acquisition integration and response of rivals. This implies that the wealth effects from acquisitions may need to be assessed over long-run event windows. The windows we used one and three years after announcements and used methodologies implied are CTPR. The CTAR is then given by the universal average of all mean monthly abnormal return observations.

We also estimate monthly abnormal returns for a period of one and three years following the acquisition announcement using CTPRs of the following form,

$$R_{pt} - R_{ft} = \alpha_t + \beta_i (R_{mt} - R_{ft}) + S_p SMB_t + h_p HML_t + \varepsilon_{it}$$

where $R_{pt} - R_{ft}$ is the equally-weighted, monthly calendar time portfolio excess return and the independent variables are MSCI index of world. we test the α_t using the t-test.

And to adjust the local market index with market index, MSCI WORLD index, we estimate another form shown by Pratt and Grabowski(2010) as below.

$$R_{pt} - R_{ft} = \alpha_t + \beta_i (R_{mt} - R_{ft}) \times \frac{\sigma_{locali}}{\sigma_{world}} + S_p SMB_t + h_p HML_t + \varepsilon_{it}$$

where σ_{locali} is the volatility of ith country's local market index return, and σ_{world} is the volatility of MSCI WORLD index return.

4.4 Cross-sectional residual SCAR regressions: short term analysis

For discussion 2 for short term analysis, we regression analyze the SCAR, which has been recognized as statistically significant by event studies as an independent variable, along with the eight strategic variables shown by Altunbas and Marques (2008). We employ the step-wise regression method to avoid multicollinearity.

We adapt Altunbas and Marques' (2008) strategic variables to Asian bank cases and adjust them to our research. As Asian countries use accounting systems different from those in the U.S. and Europe, we cannot use the same strategic accounting variables used in Altunbas and Marques (2008). We present eight strategic variables along with their proxy variables in the bank industry case, as seen in Table 1.

(Insert Table 1 about here.)

We employ the ratio of other operational income and two kinds of dummy variables, the other industry dummy variable and the gross border dummy variables as the proxy variables for “1, Earning diversification strategy” as a representative index for diversified activities, diversified industries, or geographic cross border activities. For “2, Risk strategy”, we employ provisions ratio = loan loss provisions / net interest revenue, non-performing loans ratio = non-performing loans / total loans for credit risk. We employ the loan ratios = total loans / total assets, deposit-loans ratio = total loans / total deposits for deposit activity. The total cost ratio = total costs / operating income for the current year is a proxy variable for “3, Cost controlling strategy.” For “4, Capital adequacy level strategy,” we employ three kinds of variables: total capital / total assets, Tier 1 capital / risk assets, and BIS standard. For “5, Liquidity risk strategy,” we calculate liquidity asset / total assets. For “6, Technology and innovation strategy”, we employ two kinds of variables, the standard error of total cash flows (total cash flow being the sum of the bank’s cash flow) and investment and financial cash flows, as in Minton and Scharand (1999). Minton and Scharand (1999) indicate that companies with highly volatile cash flows tend to invest less and engage in fewer R&D and advertising activities. I employ the standard error of total cash flows (insurance cash flow + investment cash flow + financial cash flow) as a proxy for R&D. The equipment cost ratio = Equipment Expense / operating income, as a generally IT-related cost, is regarded as the cost of equipment in the banking accounting system. Additionally, we employ ROA = net income / total asset and size = log(Bank Asset) as control variables.

Finally, we use Asian country dummy variables to capture the cross-sectional variations across Asian countries’ characteristics.

4.5 Before and After Comparison: long term analysis

For discussion 2 for long term analysis, we regression analyze using before and after comparison estimations (BAC). We set the independent variables shown by Table1. The strategic variables after one year or three year values, post- acquisitions, after acquisitions with trend dummy one are set and same strategic variables just before acquisitions values, pre- acquisitions, with trend dummy zero are set. We regression analyze the independent variables are post- and pre- every strategic variables and dependent variables are intercept term and trend dummy variable. We assess the significance of coefficient of trend dummy variables.

We adapt Altunbas and Marques’ (2008) strategic variables to Asian bank cases and adjust them to our research as same as short term analysis.

4.6 Difference in Difference Methods

In difference in difference estimation (DID) methods, it is better to employ group data similar to treatment group's outcome distributions⁶. We set all Asian listed bank's data as treatment group, and all M&A transactions as control group. We adapt Altunbas and Marques' (2008) strategic variables to this research. The Econometric model is below.

$$StrategicVariable_{it} = \alpha_0 + \alpha_1 (Time)_{it} + \alpha_2 (Trend)_{it} + \alpha_3 (Trend \times Time)_{it} + \varepsilon_{it}$$

where, $StrategicVariable_{it}$ is the Altunbas and Marques' (2008) every strategic variable, $Time_{it}$ is year dummy, if pre-acquisition are zero and post one year or three year acquisitions are one, $Trend_{it}$ is dummy variable if acquisitions data are one, non-acquisitions data are zero and $Trend \times Time$ is cross term. We hope to assess whether good effects of acquisitions or not, then we test the sign and significant of coefficients of cross terms.

5. SAMPLE DESCRIPTION

Graph 1 shows the share of acquirer and target countries. Panel A shows the acquirer share. The four largest countries are Japan (17%), Thailand (16%), Australia (15%), and India (14%). The top five counterparty industries are banks (35.35%), consumer credit business (9.33%), securities (7.28%), investment advisory services (6.93%) and life insurance (6.04%). Asian banks are almost tied with trade banks, at about 45%. Panel B shows the target share. The five largest countries are Japan (17%), Indonesia (13%), India (12%), Taiwan (9%), and Korea (8%). The top five counterparty industries are banks (54.29%), other investments (21.36%), investment advisory services (4.29%), securities (3.45%), and life insurance (2.89%). Asian banks are tied with trade banks, at over 50%.

(Insert Graph 1 about here.)

Table 2 presents the means for alliance transactions and compares them with the means for M&A transactions for both acquirers and targets.

⁶ See Meyer(1995)

(Insert Table 2 about here.)

In the mean values of alliance transactions, we find a large difference between acquirers and targets for three ratios: the deposit-loans ratio, equipment cost ratio, and cross border dummy. Acquirers' deposit-loans ratio is low, while that of the targets is a little higher. Acquirers' equipment cost ratio is surprisingly high, while that of targets is very low. The equipment cost ratio is considered a surrogate variable for IT costs in the banking industry because banks belong to the information industry and take huge IT costs as object costs (object costs are the same as equipment costs in Thomson's data base). The cross-border dummy means of both the acquirers and targets are relatively higher than in M&A. In alliance cases, then, we may say that banks with high information technology literacy promote alliances to acquire loan businesses with banks with many loans while banks with less IT literacy use cross-border transactions.

The next column focuses on the means of M&A transactions. We find a large difference between acquirers and targets for three ratios: bad loan ratio, deposit-loans ratio, and the "other industry" dummy. Acquirers' bad loan ratio is low while the targets' is higher, indicating that it is a relief policy for unsound banks. As with alliances, acquirers' deposit-loans ratio of acquirer is low, while that of target is a little higher. The means of the "other industry" dummy for both acquires and targets are relatively lower than for alliances. In M&A, then, we may say that domestic and non-diversified banks purchase unsound banks with many loans for relief policy purposes.

6. EMPIRICAL RESULTS

6.1 Discussion 1: Stock performances

6.1.1 Short term Bank cases

We empirically examine the effects of Asian listed bank's strategic business changes, such as alliances and M&A, using the event study econometric method, focusing on short-term analyses.

The results of the empirical analyses for all data are shown in Table 3. We conduct two kinds of sub-sample analyses⁷, on acquirers in Panel A and targets in Panel B. The persistence of statistically significant SCAR seems to dominate, on the mean and/or median and for almost all combinations, from the 9-day [-5, +3] to the 4-day [-2, +1] event window. We conduct two kinds of statistical test, the SCAR's Z-test, testing the value of mean=0, and the sign test, testing the value of median=0. Bank acquirers have a small average SCAR of 0.453% on the day [-5, +3], which is statistically significant at the 1% level in the Z-test and the 5% level in the sign test. Bank targets have a large SCAR of

⁷ In empirical analyses, banks include original bank, national commercial bank, saving bank, mutual bank, other commercial bank and other deposit bank.

1.707%, four times that of bank acquirers, significant at the 1% level. The target banks' SCAR is much larger than the acquirers'.

(Insert Table 3 about here.)

Table 4 presents the results of bank alliance transactions and two sub-sample cases, acquirers in Panel A and targets in Panel B. All target results are statistically significant at a high level in the Z-test and sign test. A few acquirer results are significant at a low (5% or 10%) level. Alliance transactions in the bank acquirer case have a small average SCAR of 0.399% on the day [-5, +3], significant at the 10% level; the bank target case has a larger average SCAR of 1.783%, significant at the 1% level.

(Insert Table 4 about here.)

We now discuss cross-border alliances. Surprisingly, bank targets' SCAR has the highest value, with an average SCAR of 1.783% on the day [-5, +3], while bank acquirers display no significant combination. In contrast, both the acquirer and target SCAR for all combinations in the domestic case are smaller than those in cross-border transactions.

Comparing the average SCAR on the day [-5, +3] in the alliance cases, the largest SCAR (4.573%) is driven by the targets' cross-border case, while the smallest (0.328%) is driven by the acquirers' domestic case. We rank the alliance SCAR in descending order as follows: target's cross border case > target's industry diversification case (same as tie up with other industries cases) > target's all alliance > target's domestic case > acquirer's industry diversification case > acquirer's all alliance > acquirer's domestic case. The targets' SCAR is larger than the acquirers', and cross-border SCAR dominant diversification and domestic SCAR.

(Insert Table 5 about here.)

Table 5 presents the results of bank M&A transactions and of two sub-sample cases, acquirers in Panel A and targets in Panel B. All target results are statistically significant at a high level in the Z-test and the sign test, but a few acquirer results are significant at a low level, as in the alliance cases. Among bank acquirer M&A transactions, the small average SCAR of 0.467% on the day [-5, +3], significant at the 5% level, is the same as in alliance transactions. The bank target case shows a larger average SCAR of 2.684%, significant at the 1% level, higher than in alliance transactions.

The bank target SCAR has a large value, with an average of 3.175% on the day [-5, +3], significant in almost all combinations, while the bank acquirer case shows no significance and has

negative signs. In the domestic case, by contrast, the target average SCAR of 2.436% is larger than in the alliance transactions. We rank the SCAR of M&A transactions in descending order as follows: target's cross border case> target's industry diversification case (same as tie up with other industries cases)> target's all alliance> target's domestic case> acquirer's industry diversification case> acquirer's all alliance > acquirer's domestic case. This ranking is similar to that of the alliance transactions.

We now summarize the effects of the stock market response to listed banks' announcements of alliances or M&A. First, the targets' SCAR is larger than the acquirers' in both alliances and M&A. Second, in cross-border target cases, the SCAR in both alliances and M&A dominate diversification and domestic SCAR. Third, cross-border alliance targets' SCAR is 1.5 times larger than M&A's SCAR. By contrast, M&A domestic targets' SCAR is three times larger than alliance's SCAR.

6.1.2 Long term Bank cases

We empirically examine the long term effects, using CTPR econometric methods.

The results of the empirical analyses for all data are shown in Table 6, which is acquiring cases, and Table 7, which are targeted cases. We conduct five kinds of analyses, 12 month effects, 36 12month effects, market adjusted 12 month effects, market adjusted 36 month effects and every country effects.

We check the statically signification of intercept variables in Table6 for acquirers' banks. There is little difference between non market adjusted results and market adjusted results. While in 12 month cases, only domestic case significantly positive, in 36month cases, domestic, diversification and monopoly cases are significantly positive. We can say that for acquires cases, players price banks stock higher in case of domestic acquisition, diversification acquisition and monopoly acquisition for long term investmens.

Indonesia, India, Malaysia and Philippine acquisition are priced higher than other Asian countries'.

(Insert Table 6 about here.)

We check the statically signification of intercept variables in Table7 for targets' banks. There is little difference between non market adjusted results and market adjusted results. While in 12 month cases, no case significantly, in 36month cases, only cross border cases is significantly positive. We can say that for targets cases, players price banks stock higher in case of cross- border acquisition for long term investments.

Only Indonesia is priced higher than other Asian countries'.

(Insert Table 7 about here.)

In summary, view from long term respects, investors favorite relatively long term investments, three years, and acquires stocks are significantly over-priced in domestic acquisition, diversification acquisition and monopoly acquisition, especially in Indonesia, India, Malaysia and Philippine. These results are far different from short term results.

6.2 Discussion 2: Strategic factors

We empirically extract the strategic factors from the SCAR in bank alliances and M&A. The market-adjusted return for the significant bank SCAR presented in section 6.1 from nine days $[-5, +3]$ to four days $[-2, +1]$ surrounding the announcement day is the dependent variable in each cross-sectional regression model. As shown in Altunbas and Marques (2008), the independent variables are strategic factors and include earning diversification strategies, risk strategies, cost controlling strategies, capital adequacy level strategies, liquidity risk strategies, and technology and innovation strategies. In examining these factors, we employ the step-wise regression method to avoid multicollinearity problems and use White's (1980) heteroscedasticity-adjusted standard errors.

6.2.1 Short Term Alliances

Table 8 shows the results of the short term cross-section of alliance acquirers. Acquirer gains are roughly 1.2% to 1.7% higher for transactions classified as cross-border acquisitions than for domestic acquisitions as a diversification strategy. The coefficient on the cross-border dummy in equations (1), (2), and (5) is significant at the 10% level.

Some equations show that acquirer returns are negatively associated with the credit risk ratio, loan ratio, and deposit-loans ratio as risk strategies, indicating that investors value sound banks with a low provisions ratio and a small loan business. We consider the combination of cost controlling and technology strategies. The sign of the total cost ratio is negative while that of the equipment cost ratio is positive, indicating that markets value efficient management banks with low total costs but with high IT literacy. Compared to Australian investors, Asian investors expect significantly less value creation from banks in countries like Indonesia, Singapore, Thailand, and the Philippines. Australia uses common law but other countries showing significant results do not. Market players appear to value bank transactions in common law countries.

(Insert Table about 8 here.)

Table 9 shows the results of the short term cross-section in alliance targets. Target gains show a higher return than acquirer gains as a diversification strategy. The coefficient of the cross-border dummy in most equations is significant at the 1% or 5% level. Thus, investors, on average, expect significantly more value creation (from 5.5% to 6.5%) from a bank's target cross-border transaction than a domestic one.

Most equations show that the target return is positively associated with the loan ratio as a risk strategy and the total cost ratio as a cost strategy, adverse signs of acquirer return. That indicates investors value banks, with a low loan ratio to promote purchases of bigger loan business through mutually complementary alliances, between acquirers and targets. The sign of the total cost ratio is positive, but that of the equipment cost ratio is neutral. The combination of this result and the previous acquisition results, indicating investors value efficiently run acquisition banks with lower total costs but that those with high IT literacy, banks align with inefficient targets in a mutually complementary way. As with acquirers, Asian investors expect significantly less value creation from banks than Australian investors do; this is especially true of investors in Japan, Indonesia, Malaysia, Korea, the Philippines, Hong Kong, and Taiwan.

(Insert Table 9 about here.)

We now summarize the short term cross-sectional alliance results for both acquirers and targets. A cross-border diversification strategy is expected to produce more value creation, and investors value banks with low loan ratios to promote the purchase of larger loan business through mutually complementary alliances between acquirers and targets, but simultaneously efficiently management acquisition banks with lower total costs but high IT literacy take over inefficient targets with high costs. Finally, investors are not interested in industrial diversification strategies, a significant difference from Europe and the U.S., with their conglomerates and bancassurance systems.

6.2.2 Short Term M&A

Table 10 presents the results of the short term cross-section for M&A acquirers, and Table 11 presents the results for M&A targets.

(Insert Table 10 about here)

(Insert Table 11 about here)

Cross-border diversification strategies are expected to produce less value creation than domestic

ones, as shown by the negative coefficient for the cross-border dummy in Table 10. Investors value unsound (low capital ratio) acquisition banks with efficient cost management, large loan, and much cash holdings. Compared to Australia, the coefficient of the dummy variables for Indonesia and Korea show a positive significant sign. Investors expect significantly more value creation in Indonesia and Korea, counties that have gotten IMF emergency assistance, than they do in Hong Kong.

In the results of the M&A targets shown in Table 11, there are only two significant variables, positive deposit-loans ratio and negative equipment cost ratio, both above the 5% level, indicating that markets value target banks with large loans but poorer IT literacy.

We now summarize the short term cross-sectional M&A results for both acquirers and targets. Domestic strategies are expected to produce more value creation, and investors value domestic banks with many loans to promote the purchase of more loan businesses through M&A, but simultaneously efficiently management acquisition banks, with high liquidity take over banks with poor IT literacy. Investors expect significantly more value creation in Indonesia and Korea, counties that have received IMF emergency assistance, than Australian investors do. One may say that M&A tools in Asia seem to represent a relief policy for unsound national banks.

6.2.3 Long term Investment Results

From Table 12 to table 14 presents the results of the long term before and after comparison results, the post one year or three year term. In Table 12, Shown the results of results for after one year acquirers, and Table13 results for after one year targets, there are mostly no significant variables (treatment variables) comparing with before and after affects. Only in targets case in Table 13 present positively significant for Q ratio. However, in Table 14, shows the results of post three years effects of acquirers, there are some significant results for some treat variables. All size factors show positive and almost credit risk1 (provisions ratio) and credit risk2 (non-performing loan ratio) show negative. Acquires in Asian banks reduce their credit risk however increase their size, in alliance and diversification case the effects are bigger. In short, after three years affects Acquires in Asian banks grow their assets and restore the soundness of their bank lending.

(Insert Table 12 about here)

(Insert Table 13 about here)

Although, in M&A and cross border case, the sign of Q ratio present show negative significantly. Especially the coefficient value of M&A is big, and it may be said that acquires Asian banks constitute

a burden for M&A of cross border acquisitions. In short, in long time aspects, acquires in Asian banks not only grow their size but also proceed risk strategy to them to restore the soundness of their bank lending.

(Insert Table 14 about here)

6.3 Discussion 3: Characteristics of Asian countries

6.3.1 Short Term Investment Results

The goal of this section is to examine whether adding country characteristics dummies helps to further explain the short term cross-border effect by testing whether cross-border country characteristics are related to bank returns.

First, we check the relationship between the cross-sectional coefficient values of the country dummy and the GDP growth rates. We calculate (an unreported) 5-year average PPP based on GDP growth rates taken from the Penn World Table and compare the cross-sectional coefficient values of the country dummies. Regrettably, the highest GDP growth country, China, has no significant cross-sectional coefficient value for the country dummy. There is no obvious relationship between bank returns and GDP growth.

Second, we check the relationship between bank returns and countries' credit ratings, obtained from S&P long term foreign currency sovereign rating for four cases: alliance acquirer (see equation(8), Table 8), alliance target (rating variables are omitted by step wise regression), M&A acquirer (see equation(5), Table 10), and M&A target (see equation(7), Table 11). We can find the significant results only alliance acquirer cases. Our empirical results in Tables8, equation (8) show a positive coefficient rating value. The cross- border effect is strongly related to a country's credit rating for alliance acquirer case.

Third, we check the difference of legal systems. Rossi and Volpin (2004), Moeller et al. (2005) and Fauver et al. (2003) empirically show that M&A returns differ according to differences in nationality and legal systems. Although Fauver et al. (2003) empirically show that French origin legal system (civilian law system) has the greater magnitude than England origin legal system (common law system), Suzuki (2012) proposes that M&A premiums in common law countries such as Australia, India, Malaysia, and Singapore are higher than in countries that do not use the common law. We check the relationship between bank returns and legal systems for four cases: alliance acquirer (see equation (9) and (10), Table 8), alliance target (see equation (7) and (8), Table 9), M&A acquirer (see equation (6) and (7), Table 10), and M&A target (see equation (8) and (9), Table 11). We can find the significant results in the former three cases. The English origin legal system, with its common law origin and

providing investors with strongest legal protection, is positively associated with the bank performance in alliance acquirer cases. Adversely, French origin legal system, civilian law origin and providing the least protection, is negatively associated with the bank performance in both alliance acquirer cases and alliance target cases. Shortly, in both Asian banks' alliance cases, market players seem to value bank transactions in common law countries and less value in civilian law countries. However, surprisingly, in M&A acquirer case, the coefficient of English origin legal system shows significantly negative (see equation (6), Table 10). In spite of completeness of investor protection legal world, the meaning of negative sign may show the huge risk or discount of M&A transactions themselves.

Fourth, the result from Table 15, almost county's dummy variable shows negative. We set county's dummy variable based on Australia, the negative county's dummy variable shows that Asian investors expect significantly less value creation than Australian investors do. Then it means that almost country's benefits below Australian benefits. While, only empirical results of M&A acquirer case, equation (5) and (6) in Tables 15, show a significantly positive coefficient country dummy value for Indonesia and Korea, countries that have received emergency IMF assistance. Investors welcome the IMF's relief programs and expect weak economies to strengthen in case of M&A acquirer. Next, we get another perspective on economic system. We calculate the correlation between the coefficient value of the country dummy and the country's EFW index for checking the relationship between bank returns and a country's EFW index, obtained from Moeller et al. (2005). The alliance acquirer case produces a positive correlation coefficient (+0.28), alliance target case, a positive correlation coefficient (+0.58) and M&A target case, a positive correlation coefficient (+0.54). There is the atmosphere that bank activities effect positively related to the degree of a country's economic freedom.

(Insert Table 15 about here)

Finally, we check the relationship between the cross-sectional coefficient value and the regulation and supervision systems. Barth et al.(2001,2004,2008) empirically show the difference between broad array of bank regulations and supervisory practice and bank development, performance and stability. We calculate three regulatory dummy variables shown in Barth et al. (2004) as restrictions on bank activities index, entry into banking requirements index and private monitoring index (detailed explained in Table16). Next we estimate the coefficient value of three regulatory dummy variables, for four cases: alliance acquirer (see Table 17), alliance target (not reported), M&A acquirer (not reported), and M&A target (not reported). We can find the significant results only alliance acquirer cases. For the other cases, we can get little significant regulatory dummy variables at all. In Table 17, Each regression contain explain variable as table11 equation (5), for the space we omit the similar results.

We find that regulatory restrictions and entry into banking requirements are strongly negatively associated with the bank performance (regression (a), (b), (d) and (e)). While the Private monitoring index is positively associated with bank AR. It is said that the loosen regulatory bank action restrictions raise the bank returns, loosen more stringent barriers to foreign-bank entry rise the bank return and larger private monitoring of banks have better performing banks. In case of alliance acquirers, in the sting circumstance of barriers to foreign-bank entry, loosen bank action restrictions and large private monitoring promote better banking sector outcomes though cross-border transactions. But unfortunately, here we notice the important reminder that for China, Malaysia and Philippines, there are much missing data in Barth's et al. (2004) database, and then we can NOT include these countries for regulatory comparing analysis.

(Insert Table 16 about here)

(Insert Table 17 about here)

6.3.2 Long term Investment Results

From Table 18 to table 21 presents the short excerpt results of cross- terms' coefficients by strategic factors from the long term difference in difference analysis results. Table 18 Shown the results of results for after one year acquirers, and Table19 results for after three acquirers, there are mostly no significant variables (cross- term variables), however three year case, in Table 19, present only two significant sing for size and Q ratio. Q ratio show negative significantly in M&A case. After three years affects Acquires in Asian banks grow their assets and it may be said especially in M&A cases, acquisition banks may weighted through M&A and that push Q ratio downward. However long term DID results suggest that cross-border diversification strategies usually don't value creation at all.

(Insert Table 18 about here)

(Insert Table 19 about here)

Table 20 shows the results of after one year acquirer including country characters and Table21 shows results for after three acquirers including country characters. First we consider the results of Table21 after three year acquirer. Comparing with the results of English origin legal system and French origin legal system, in English legal system country's acquirer banks promote risk strategy/ capital adequacy strategy and demote earing diversification strategy/ liquidity risk strategy, while in

French legal system country's acquirer banks adversely promote liquidity risk strategy and demote risk strategy. The difference of legal system causes the adverse results. Next, we compare with the results of restrictions on bank activities regulation and entry into banking requirements regulations. In restrictions on bank activities regulation, country's acquirer banks demote risk strategy and demote capital adequacy strategy. While in entry into banking requirements regulations country's acquirer banks promote risk strategy and grow Q ratio positive adversely. And surpassingly ROA shows positively both cases. Combined with conversing legal system and regulation system, English origin legal system and private monitoring regulation shows adverse results. In spite of in English legal system country's acquirer banks demote earing diversification strategy, however adversely private monitoring regulation country's acquirer banks promote it. And similar adverse results are shown by risk strategy (deposit loan ratio)/ capital adequacy strategy (Tier 1 capital ratio). The results of Table21 are similar to Table20. The courtiers whom adapted English origin legal system and high rating and private monitoring refutation systems tented to solute credit risk problems, tend to become being sound banks, with or without diversification. However, in restrictions on bank activities regulation and entry into banking requirements regulations, in spite of banks enjoy high ROA (or partly high Q ratio) by regulative protection, banks cannot reduce their non-performing loans significantly and they cannot become being sound banks.

(Insert Table 20 about here)

(Insert Table 21 about here)

In short, from long term aspects, the promotion or demotion of every strategy is widely difference among legal systems and regulation system and each combination. Say it another way, if we know the legal and regulation system for acquisition banks countries, we would understand which strategies are advantage and which strategy are disadvantage.

7. CONCLUSION

This paper, representing research that began in 2000, empirically examines the effects of the Asian stock market's response to and management strategies for banks' alliance and M&A announcements, from long-term and short term aspects. We examine the strategic management factor as performed in Altunbas and Marques (2008). And for the short term investments, we explain the cross-border effect by testing whether cross-border country characteristics are related to bank returns.

We get difference results between short term analysis and long term analysis. The long term results,

first, suggest that banks wealth effects from acquisitions need long terms from announcements at least three years and long term DID results suggest that cross-border diversification strategies don't value creation at all. Second, the promotion or demotion of every bank's acquisitions strategy is widely difference among legal systems and regulation systems. If we know the legal and regulation system for acquisition banks countries, we would understand which strategies are advantages and which strategy are disadvantage. The courtiers whom adapted English origin legal system and high rating and private monitoring refutation systems tented to solute credit risk problems(non-performing loan problems), tend to become being sound banks, in short, they can proceed to be sound banks by M&A or alliance in Asia area.

Through short-term empirical results, we make three discoveries about Asian banks. First, the target's SCAR is larger than the acquirer's in both alliances and M&A. Second, the cross-border targets' SCAR in both alliances and M&A dominate diversification, unlike for domestic SCAR.

The short term cross-sectional alliance results suggest that cross-border diversification strategies usually target value creation. Investors value banks with low loan ratios as ways to purchase larger loans for business through mutually complementary alliances between acquirers and targets. But simultaneously efficient management acquisition banks, with lower total costs but high IT literacy, acquire inefficient targets with high costs. Finally, investors are not interested in industrial diversification strategies, a significant difference from Europe and the U.S., with their conglomerates. The M&A results suggest that domestic strategies usually target value creation. Compared to their Australian counterparts, Asian investors expect significantly more value creation, especially in counties that have received IMF emergency assistance. Asian banks' M&A tools appear to be relief methods for unsound banks.

We can explain the short term cross-border effect through national characteristics: it is related to national credit ratings. Investors welcome IMF relief programs and expect weak target economies to strengthen. The effect is also strongly positively related to the degree of a country's economic freedom and has relationships with cross-sectional coefficient values and Asia's legal and market systems. In case of alliance acquirers, loosen sting circumstance of barriers to foreign-bank entry, loosen bank action restrictions and large private monitoring promote better banking sector outcomes though cross-border transactions.

This study has considered some issues that have remained unexamined. We comprehensively investigate the differences among Asia's financial and economic systems, using Barth's et al.(2004) database for more detailed analysis. Furthermore, we have to consider the effects of Asian stock market's liquidity and global financial crisis.

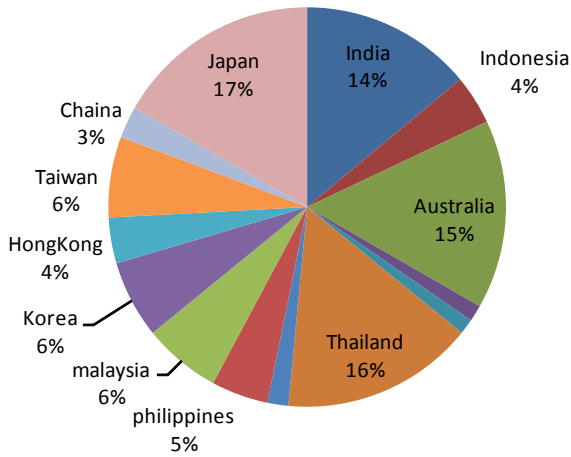
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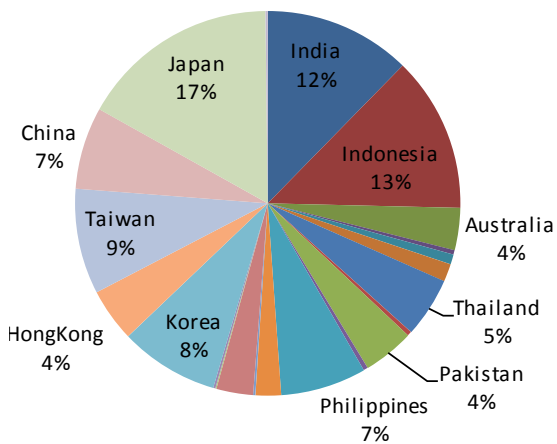
(Graph 1) The share of acquirer and target countries

Panel A) Acquirers



TOP5 industries of counterparty	%
Bank	35.35
Consumer credit business	9.33
Securities	7.28
Investment advisory service	6.93
Life insurances	6.04

Panel B) Targets



TOP5 industries of counterparty	%
Bank	54.29%
Other investment	21.36%
Investment advisory service	4.29%
Securities	3.45%
Life insurances	2.89%

(Table 1) The strategy variable for Asian banks

Strategy	Variables in bank cases in Altunbas and Marques (2008)	Proxy variables in this paper
1. Earning diversification strategy	(1) Diversity of earnings : other operational revenue / total assets (2) Off-balance sheet activity : off-balance sheet items / total assets	the other operational income ratio = other operational revenue / total assets Other industry Dummy Cross border Dummy
2. Risk strategy	(1) Credit risk : loan loss provisions / net interest revenue (2) Loan ratio : loans / total assets (3) Deposit activity : customer loans / customer deposits	(1) Credit risk : provisions ratio (credit risk1) = loan loss provisions / net interest revenue non-performing loan ratio (credit risk2) = non-performing loans / total loans (2) Loan ratio Loan ratio = total loans / total assets (3) deposit activity deposit-loans ratio = total loans / total deposits
3. Cost controlling strategy	Total costs / income	total cost ratio = total costs / operating income
4. Capital adequacy level strategy	Total capital / total asset	total capital ratio = total capital / Total Asset capital ratio2 = Tier1 capital / risk asset BIS standard
5. Liquidity risk strategy	Liquidity asset / total assets	Liquidity ratio = Liquidity asset / total assets
6. Technology and innovation strategy	R&D : other expense / total asset	standard deviation of cash flows (sdcf) = ln(The standard deviation of [bank cash flow + investment cash flow + financial cash flow]) (*1) equipment cost ratio = Equipment Expense / operating income
Controls	ROA Size	ROA = net income / total asset size = ln(Asset)

*1. According to Minton and Scharand (1999), companies with highly volatile cash flows tend to invest less and engage in fewer R&D and advertising activities. We employ the standard error of total cash flows (insurance cash flow + investment cash flow + financial cash flow) as a proxy for R&D.

(Table 2) Univariate statistics

		alliance		M&A	
		acquirer	target	acquirer	target
1,earning diversification strategy	Abnormal Return	0.399	1.783	0.467	2.684
	the other operational income ratio	0.005	0.012	0.004	0.012
	Other industry Dummy	0.829	0.828	0.701	0.566
	Cross border Dummy	0.192	0.297	0.174	0.197
2,risk strategy	bad loan ratio	0.068	0.071	0.049	0.074
	deposit-loans ratio	1.029	1.307	1.019	1.632
	total cost ratio	4.906	4.323	2.802	4.976
3,cost controlling strategy	total capital ratio	0.147	0.226	0.142	0.191
4,capital adequacy level strategy	liquidity ratio	0.230	0.228	0.237	0.278
5,liquidity risk strategy	R&D(The standard deviation of cash flows)	8.610	6.319	8.516	6.769
6,tecnology and innovation strategy	equipment cost ratio	0.303	0.006	0.067	0.080

(Table 3) The results of the banks' simple event study

Panel A) Acquirers

all asia bk	day	SCAR		p-value	
asia bk:acquirer	[-5,1]	mean	0.444 %	(0.000) ***	
		median	0.231 %	(0.020) **	
	[-5,2]	mean	0.505 %	(0.000) ***	
		median	0.269 %	(0.041) **	
	[-5,3]	mean	0.453 %	(0.000) ***	
		median	0.282 %	(0.029) **	
	[-2,1]	mean	0.277 %	(0.001) ***	
		median	0.136 %	(0.134)	
	[-2,2]	mean	0.338 %	(0.000) ***	
		median	0.184 %	(0.004) ***	
	[-2,3]	mean	0.286 %	(0.004) ***	
		median	0.081 %	(0.453)	
	n		861		

Panel B) Targets

all asia bk	day	SCAR		p-value	
asia bk:target	[-5,1]	mean	1.838 %	(0.000) ***	
		median	0.918 %	(0.000) ***	
	[-5,2]	mean	1.858 %	(0.000) ***	
		median	1.080 %	(0.000) ***	
	[-5,3]	mean	1.707 %	(0.000) ***	
		median	1.093 %	(0.000) ***	
	[-2,1]	mean	1.541 %	(0.000) ***	
		median	0.651 %	(0.000) ***	
	[-2,2]	mean	1.561 %	(0.000) ***	
		median	0.628 %	(0.000) ***	
	[-2,3]	mean	1.411 %	(0.000) ***	
		median	0.541 %	(0.000) ***	
	n		515		

*1, H0: average of SCAR=0, H1: average of SCAR≠0

*2, H0: median of SCAR=0, H1: median of SCAR≠0

*3, P value in parenthesis

*4, ***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 4) The results of bank alliance transactions

Panel A) Acquirers

alliance	day	SCAR %	alliance	cross border	domestic	other industries	
asia bk:acquirer	[-5,1]	mean	0.482 **	0.982	0.364 *	0.449 **	
		median	0.099	0.244	0.033	0.064	
	[-5,2]	mean	0.474 **	0.892	0.375 *	0.423 **	
		median	0.189	0.608	-0.066	0.174	
	[-5,3]	mean	0.399 *	0.700	0.328	0.384 *	
		median	0.228	0.133	0.288	0.304	
	[-2,1]	mean	0.373 **	0.732	0.287 *	0.303 **	
		median	-0.007	-0.007	-0.021	-0.080	
	[-2,2]	mean	0.364 **	0.642	0.298 *	0.277 *	
		median	0.177	-0.202	0.217	0.154	
	[-2,3]	mean	0.289	0.450	0.251	0.238	
		median	-0.132	-0.576	0.023	-0.124	
		n		240	46	194	193

Panel B) Targets

alliance	day	SCAR %	alliance	cross border	domestic	other industries	
asia bk:target	[-5,1]	mean	1.736 ***	3.976 **	0.872 **	1.894 ***	
		median	0.559 ***	1.140 **	0.486 *	0.528 **	
	[-5,2]	mean	1.790 ***	4.382 **	0.785 **	1.884 ***	
		median	0.605 ***	1.290 ***	0.303	0.429 ***	
	[-5,3]	mean	1.783 ***	4.573 **	0.699 *	1.860 ***	
		median	0.792 ***	1.766 **	0.495 *	0.642 **	
	[-2,1]	mean	1.363 **	3.179 *	0.667 *	1.475 **	
		median	0.302 **	0.608 **	0.232	0.232	
	[-2,2]	mean	1.417 **	3.585 **	0.580 *	1.465 **	
		median	0.401 **	1.087 ***	0.108	0.210	
	[-2,3]	mean	1.410 **	3.777 **	0.495	1.441 **	
		median	0.297 ***	1.396 ***	0.136	0.228 *	
		n		194	57	135	158

*1, H0: average of SCAR=0, H1: average of SCAR≠0

*2, H0: median of SCAR=0, H1: median of SCAR≠0

*3, P value in parenthesis

*4, ***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 5) The results of bank M&A transactions

Panel A) Acquirers

M&A	day	SCAR %	M&A	cross border	domestic	other industries	
asia bk:acquirer	[-5,1]	mean	0.395 **	-0.247	0.531 ***	0.477 ***	
		median	0.290 **	-0.111	0.402 **	0.422 **	
	[-5,2]	mean	0.540 ***	-0.077	0.670 ***	0.667 ***	
		median	0.492 **	-0.059	0.691 ***	0.706 ***	
	[-5,3]	mean	0.467 **	0.217	0.520 **	0.635 ***	
		median	0.403 **	0.236	0.421 *	0.627 ***	
	[-2,1]	mean	0.153	-0.467	0.284 *	0.070	
		median	0.154	-0.027	0.298	0.002	
	[-2,2]	mean	0.298 **	-0.297	0.424 **	0.260 *	
		median	0.184 *	-0.274	0.301 **	0.184	
	[-2,3]	mean	0.225	-0.003	0.273	0.229 ***	
		median	0.110	0.110	0.109	0.187	
		n		351	61	290	235

Panel B) Targets

M&A	day	SCAR %	M&A	cross border	domestic	other industries	
asia bk:target	[-5,1]	mean	3.060 ***	3.500 **	2.871 ***	3.285 **	
		median	1.995 ***	1.023 *	2.373 ***	2.486 ***	
	[-5,2]	mean	2.998 ***	3.356 **	2.818 ***	3.292 **	
		median	2.143 ***	1.230	2.204 ***	2.694 ***	
	[-5,3]	mean	2.684 ***	3.175 **	2.436 **	2.973 *	
		median	2.056 ***	0.623	2.069 ***	2.484 ***	
	[-2,1]	mean	2.715 ***	2.863 **	2.633 ***	2.904 **	
		median	1.375 ***	0.946 **	1.380 ***	2.772 ***	
	[-2,2]	mean	2.653 ***	2.719 **	2.581 **	2.911 *	
		median	1.235 ***	1.221 *	1.235 ***	2.283 ***	
	[-2,3]	mean	2.339 **	2.538 **	2.199 *	2.591	
		median	1.219 ***	0.603	1.284 ***	2.518 ***	
		n		123	24	98	68

*1, H0: average of SCAR=0, H1: average of SCAR≠0

*2, H0: median of SCAR=0, H1: median of SCAR≠0

*3, P value in parenthesis

*4, ***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 6) The CTPR results in acquirers

PanelA: 12month,

	(1)all	(2)cross border	(3)domestic	(4)diversificator	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.2275 *** (0.001)	0.2900 *** (0.001)	0.1953 *** (0.008)	0.1838 ** (0.017)	0.2920 *** (0.000)	0.1543 * (0.054)	0.2178 *** (0.010)
SMB	0.2367 (0.104)	0.3689 * (0.062)	0.2239 (0.167)	0.2599 (0.130)	0.2252 (0.196)	0.3326 * (0.063)	0.3509 * (0.063)
HML	-0.2708 * (0.057)	-0.1939 (0.337)	-0.2564 (0.106)	-0.1383 (0.408)	-0.3875 ** (0.031)	-0.3950 ** (0.025)	-0.2182 (0.235)
Intercept	0.5095 (0.108)	-0.3988 (0.353)	0.6714 * (0.058)	0.5498 (0.142)	0.3984 (0.292)	0.0533 (0.891)	0.4892 (0.233)
n	152	148	152	152	149	151	152
adjusted r2	0.1111	0.0971	0.0674	0.0491	0.1203	0.0684	0.0692

12month, adjusted market index

	(1)all	(2)cross border	(3)domestic	(4)diversificator	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.1560 *** (0.000)	0.2148 *** (0.000)	0.1323 *** (0.006)	0.1229 ** (0.017)	0.1975 *** (0.000)	0.1128 ** (0.024)	0.1614 *** (0.007)
SMB	0.2501 * (0.083)	0.3681 * (0.060)	0.2395 (0.136)	0.2762 (0.105)	0.2334 (0.175)	0.3389 * (0.055)	0.3459 * (0.067)
HML	-0.2405 * (0.090)	-0.1557 (0.438)	-0.2291 (0.149)	-0.1199 (0.474)	-0.3360 * (0.060)	-0.3688 ** (0.035)	-0.2206 (0.229)
Intercept	0.5403 * (0.088)	-0.3171 (0.459)	0.6861 * (0.053)	0.5576 (0.136)	0.4695 (0.214)	0.0860 (0.825)	0.5098 (0.214)
n	152	148	152	152	149	151	152
adjusted r2	0.1191	0.1101	0.0709	0.0491	0.1328	0.0771	0.0731

PanelB: 36month,

	(1)all	(2)cross border	(3)domestic	(4)diversificator	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.2868 *** (0.000)	0.5080 *** (0.010)	0.2510 *** (0.000)	0.2501 *** (0.001)	0.3165 *** (0.000)	0.2321 *** (0.000)	0.2860 *** (0.000)
SMB	0.1956 (0.125)	0.0911 (0.836)	0.1925 (0.149)	0.1640 (0.305)	0.2479 * (0.062)	0.2543 * (0.056)	0.2668 (0.108)
HML	-0.1270 (0.308)	0.2267 (0.615)	-0.1389 (0.287)	0.0550 (0.725)	-0.2509 * (0.066)	-0.2796 ** (0.032)	-0.0061 (0.970)
Intercept	0.6145 ** (0.025)	0.9199 (0.329)	0.6324 ** (0.028)	0.6162 * (0.074)	0.5757 ** (0.043)	0.2000 (0.482)	0.4950 (0.165)
n	159	156	159	158	157	159	158
adjusted r2	0.1642	0.0296	0.1218	0.0757	0.1985	0.1362	0.1048

PanelB:36month, adjusted market index

	(1)all	(2)cross border	(3)domestic	(4)diversificator	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.1917 *** (0.000)	0.3939 ** (0.014)	0.1626 *** (0.000)	0.1563 *** (0.002)	0.2256 *** (0.000)	0.1678 *** (0.000)	0.2252 *** (0.000)
SMB	0.2310 * (0.070)	0.1592 (0.715)	0.2226 * (0.094)	0.1990 (0.214)	0.2841 ** (0.030)	0.2835 ** (0.031)	0.2719 (0.101)
HML	-0.0910 (0.469)	0.2682 (0.553)	-0.1056 (0.421)	0.0797 (0.614)	-0.2021 (0.136)	-0.2340 * (0.072)	-0.0155 (0.924)
Intercept	0.6143 ** (0.026)	0.9337 (0.324)	0.6318 ** (0.029)	0.6062 * (0.082)	0.5870 ** (0.038)	0.2094 (0.459)	0.4830 (0.176)
n	159	156	159	158	157		
adjusted r2	0.1527	0.0257	0.1138	0.0597		3.3991	4.2688

PanelC: intercept of every country (using adjusted market index)

	AUS	CHN	HKG	IDN	IND	JPN	KOR
12M	0.4410 (0.248)	-0.1039 (0.926)	-0.2856 (0.733)	2.2824 (0.127)	2.2269 ** (0.015)	-1.1271 * (0.059)	0.3053 (0.815)
36M	0.4563 (0.105)	0.6856 (0.442)	0.1169 (0.850)	1.4771 * (0.057)	1.8650 *** (0.000)	-0.3265 (0.613)	0.7954 (0.383)
	LKA	MYS	PHL	SGP	THA	TWN	VNM
12M	2.9698 (0.432)	0.6741 (0.197)	2.3027 ** (0.033)	-0.0448 (0.950)	0.5099 (0.383)	0.3399 (0.632)	7.6436 ** (0.028)
36M	1.4163 (0.409)	0.8065 ** (0.033)	1.5440 ** (0.016)	0.2178 (0.629)	0.4003 (0.369)	0.1375 (0.847)	0.2451 (0.845)

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 7) The CTPR results in targets

PanelA: 12month,

	(1)all	(2)cross border	(3)domestic	(4)diversificatio	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.2281 *** (0.004)	0.2651 *** (0.002)	0.2293 ** (0.013)	0.2387 ** (0.020)	0.2157 *** (0.001)	0.2508 (0.104)	0.2934 ** (0.022)
SMB	0.0123 (0.944)	0.2569 (0.167)	-0.0616 (0.763)	0.0043 (0.985)	0.0579 (0.693)	-0.7104 ** (0.040)	0.5170 * (0.071)
HML	0.0540 (0.753)	0.0865 (0.649)	0.1129 (0.572)	0.2306 (0.299)	-0.2884 * (0.057)	0.6524 * (0.053)	-0.1089 (0.695)
Intercept	0.4290 (0.264)	0.6094 (0.133)	0.4290 (0.337)	0.5623 (0.257)	0.1367 (0.668)	0.5172 (0.491)	0.1787 (0.773)
n	152	148	152	152	149	151	152
adjusted r2	0.0386	0.0778	0.0235	0.0251	0.0794	0.0379	0.0509

12month, adjusted market index

	(1)all	(2)cross border	(3)domestic	(4)diversificatio	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.1467 *** (0.006)	0.2302 *** (0.000)	0.1329 ** (0.027)	0.1395 ** (0.032)	0.1498 *** (0.001)	0.1474 (0.124)	0.1939 ** (0.044)
SMB	0.0370 (0.832)	0.2557 (0.163)	-0.0298 (0.884)	0.1478 (0.487)	0.0741 (0.610)	-0.6780 ** (0.048)	0.5376 * (0.061)
HML	0.0795 (0.645)	0.1245 (0.510)	0.1376 (0.495)	0.2814 (0.202)	-0.2505 * (0.097)	0.6825 ** (0.044)	-0.1148 (0.681)
Intercept	0.4377 (0.256)	0.6514 (0.106)	0.4262 (0.343)	0.7437 (0.112)	0.1674 (0.600)	0.5341 (0.478)	0.1597 (0.798)
n	152	148	152	149	149	151	152
adjusted r2	0.0342	0.0929	0.015	0.03	0.0854	0.0361	0.0434

PanelB: 36month,

	(1)all	(2)cross border	(3)domestic	(4)diversificatio	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.2111 *** (0.001)	0.2174 *** (0.001)	0.2078 *** (0.005)	0.2100 *** (0.008)	0.2135 *** (0.000)	0.1180 (0.406)	0.2616 *** (0.003)
SMB	-0.0693 (0.631)	0.2981 ** (0.042)	-0.1592 (0.332)	0.0019 (0.991)	0.0059 (0.964)	-0.6648 ** (0.038)	0.3262 (0.101)
HML	0.0099 (0.944)	0.0782 (0.600)	0.0355 (0.825)	0.1935 (0.283)	-0.2508 * (0.053)	0.6459 ** (0.039)	-0.3242 * (0.096)
Intercept	0.4415 (0.155)	0.7780 ** (0.013)	0.4305 (0.221)	0.5636 (0.135)	0.3710 (0.191)	0.2337 (0.733)	0.4494 (0.291)
n	159	156	159	156	159	158	159
adjusted r2	0.0477	0.0988	0.0325	0.0367	0.0864	0.0325	0.0807

36month, adjusted market index

	(1)all	(2)cross border	(3)domestic	(4)diversificatio	(5)monopoly	(6)M&A	(7)alliance
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Market	0.1430 *** (0.001)	0.1760 *** (0.000)	0.1321 *** (0.007)	0.1375 ** (0.012)	0.1490 *** (0.000)	0.0768 (0.414)	0.2019 *** (0.004)
SMB	-0.0485 (0.735)	0.3141 ** (0.030)	-0.1356 (0.405)	0.0243 (0.889)	0.0254 (0.845)	-0.6500 ** (0.040)	0.3305 * (0.097)
HML	0.0357 (0.801)	0.0946 (0.525)	0.0618 (0.701)	0.2154 (0.234)	-0.2204 * (0.089)	0.6655 ** (0.035)	-0.3335 * (0.087)
Intercept	0.4489 (0.149)	0.8037 *** (0.010)	0.4323 (0.221)	0.5650 (0.135)	0.3853 (0.173)	0.2389 (0.727)	0.4389 (0.303)
n	159	156	159	156	159	158	159
adjusted r2	0.0468	0.1061	0.0282	0.0322	0.0923	0.0323	0.0789

PanelC: intercept of every country (using adjusted market index)

	AUS	BMU	CHN	HKG	IDN	IND	JPN
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
12M	-0.6882 (0.184)	-0.5357 (0.749)	1.0174 (0.369)	-0.2948 (0.668)	0.4428 (0.646)	2.5587 ** (0.041)	0.5095 (0.550)
36M	-0.3463 (0.412)	0.8475 (0.355)	0.0745 (0.893)	-0.1196 (0.896)	1.1328 ** (0.029)	0.1304 (0.887)	0.2563 (0.670)
	KOR	LKA	MYS	PAK	PHL	SGP	TWN
	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
12M	0.3161 (0.826)	3.3015 (0.207)	0.1770 (0.824)	-1.2988 (0.330)	0.7408 (0.484)	1.5078 (0.221)	0.1858 (0.779)
36M	0.7791 (0.129)	1.1711 (0.353)	0.6066 (0.314)	0.2765 (0.682)	0.0764 (0.870)	-0.7929 (0.553)	-0.1645 (0.743)

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 8) The cross-sectional results in alliance acquirers

alliance. acquiror	AR calculation term	(1) [-5_+1]	(2) [-5_+2]	(3) [-5_+3]	(4) [-2_+1]	(5) [-2_+2]	(6) [-2_+3]	(7) [-2_+2]BISadjusted	(8) [-2_+2]	(9) [-2_+2]	(10) [-2_+2]
variables		coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
1.earning diversification strategy	the other operational income							-128.027 (0.163)	-130.1299 (0.141)	-152.557 * (0.059)	-195.564 * (0.059)
	Other industry Dummy	0.841 (0.295)	1.180 (0.175)	1.439 * (0.090)		0.562 (0.340)	0.826 (0.180)				
	Cross border Dummy	1.495 * (0.083)	1.714 * (0.065)	1.601 (0.101)	0.797 (0.264)	1.180 * (0.096)	1.072 (0.171)	0.884 (0.193)	0.729 (0.243)	0.698 (0.271)	0.474 (0.381)
2.risk strategy	Credit risk	-0.188 (0.218)	-0.204 (0.185)	-0.210 (0.296)	-0.219 * (0.099)	-0.256 * (0.052)	-0.268 (0.129)	-0.387 * (0.090)	-0.155 (0.390)	-0.445 (0.143)	-0.501 ** (0.048)
	loans ratio	-5.516 * (0.097)	-6.022 * (0.098)	-8.690 ** (0.038)			-3.394 (0.372)	2.261 (0.491)	3.724 (0.292)		
	deposit-loans ratio	-5.511 * (0.056)	-5.719 ** (0.047)	-7.096 ** (0.025)	-5.369 ** (0.042)	-4.557 ** (0.046)	-6.727 ** (0.034)	-9.176 * (0.060)	-10.655 * (0.051)	-11.025 ** (0.048)	-11.103 ** (0.034)
3.cost controlling strategy	total cost ratio	-0.028 (0.144)	-0.046 ** (0.012)	-0.029 (0.159)	-0.041 *** (0.004)	-0.058 *** (0.000)	-0.041 *** (0.005)	-0.049 *** (0.003)	-0.062 *** (0.001)	-0.055 *** (0.005)	-0.051 *** (0.003)
4.capital adequacy level strategy	total capital ratio	14.879 (0.138)	16.385 (0.102)	20.062 * (0.073)	16.047 * (0.080)	15.386 * (0.069)	20.770 * (0.061)	29.513 * (0.076)	30.128 * (0.063)	31.987 * (0.070)	36.924 ** (0.043)
	Tier1 capital ratio							-8.828 (0.199)		-8.159 (0.290)	-19.637 (0.229)
	BIS standard										20.126 (0.282)
5.liquidity risk strategy	liquidity ratio	-5.173 (0.190)	-5.591 (0.162)	-10.595 ** (0.021)	-2.354 (0.404)		-7.464 * (0.064)				
6.tecnology and innovation strategy	R&D(The standard deviation of cash equipment cost ratio	0.282 (0.331)	0.508 * (0.053)	0.346 (0.226)	0.377 * (0.051)	0.605 *** (0.005)	0.449 ** (0.016)	0.510 (0.115)	0.732 ** (0.032)	0.564 * (0.096)	0.387 (0.248)
control variables	InAsset	-0.338 (0.174)	-0.300 (0.244)	-0.320 (0.269)	-0.243 (0.204)	-0.214 (0.290)	-0.229 (0.360)			***	
	ROA					-20.785 (0.297)	-17.364 (0.431)	-32.373 (0.120)	-35.442 * (0.095)	-44.454 ** (0.036)	-24.931 (0.266)
country rating									0.198 * (0.092)		
English law origin										1.735 (0.133)	
English law origin											-4.328 * (0.051)
intercept		11.931 *** (0.009)	11.689 ** (0.012)	15.436 *** (0.005)	6.853 ** (0.033)	4.932 (0.110)	10.224 * (0.053)	5.547 * (0.092)	2.032 (0.358)	5.683 (0.221)	7.125 ** (0.029)
n		175	175	175	175	175	175	175	138	138	138
R2		0.106	0.107	0.105	0.105	0.111	0.095	0.161	0.185	0.182	0.218

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 9) The cross-sectional results in alliance targets

alliance, target	AR calculation term	(1) [-5_+1]	(2) [-5_+2]	(3) [-5_+3]	(4) [-2_+1]	(5) [-2_+2]	(6) [-2_+3]	(7) [-2_+1]	(8) [-2_+1]
variables		coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
1,earning diversification strategy	Other industry Dummy	3.654 (0.271)	3.964 (0.247)	3.566 (0.280)	2.640 (0.370)	2.873 (0.354)	2.484 (0.398)	5.677 * (0.065)	3.057 (0.372)
	Cross border Dummy	5.651 ** (0.038)	5.977 ** (0.033)	6.488 ** (0.018)	5.748 ** (0.024)	6.069 ** (0.022)	6.581 *** (0.010)	5.290 ** (0.044)	5.798 ** (0.033)
2,risk strategy	Credit risk							-20.822 * (0.062)	-14.184 (0.134)
	loans ratio	54.108 ** (0.040)	57.113 ** (0.035)	52.676 * (0.056)	50.431 ** (0.031)	60.155 ** (0.031)	55.069 ** (0.019)	34.147 ** (0.023)	29.237 * (0.055)
	deposit-loans ratio	-10.317 (0.155)	-11.143 (0.108)	-6.199 (0.396)		-5.385 (0.437)		-13.260 (0.142)	-10.516 (0.216)
3, cost controlling strategy	total cost ratio	0.842 *** (0.001)	0.839 *** (0.001)	0.811 *** (0.001)	0.842 *** (0.000)	0.839 *** (0.000)	0.811 *** (0.001)	0.716 *** (0.001)	0.811 *** (0.001)
4, capital adequacy level strategy	total capital ratio	29.731 (0.141)	32.756 * (0.088)	24.868 (0.230)	12.783 (0.250)	24.159 (0.188)	15.465 (0.170)	24.371 (0.193)	27.072 (0.184)
5, liquidity risk strategy	liquidity ratio	19.609 (0.323)	20.891 (0.309)	21.883 (0.294)	24.975 (0.231)	27.523 (0.203)	28.390 (0.182)		
6, technology and innovation strategy	R&D(The standard deviation of cash	6.283 ** (0.023)	5.998 ** (0.035)	5.849 ** (0.035)	5.155 ** (0.038)	5.108 * (0.060)	4.936 ** (0.050)	7.874 *** (0.006)	7.146 ** (0.013)
	equipment cost ratio	0.297 (0.399)	0.367 (0.312)	0.359 (0.335)				0.719 * (0.073)	0.273 (0.414)
controll variables	lnAsset	-5.281 ** (0.034)	-5.046 ** (0.048)	-5.180 ** (0.038)	-4.720 ** (0.038)	-4.657 * (0.058)	-4.775 ** (0.037)	-6.465 ** (0.012)	-7.763 *** (0.005)
	ROA	-86.744 (0.155)	-77.183 (0.191)	-68.573 (0.229)	-66.091 (0.226)	-61.414 (0.270)	-52.335 (0.317)	-113.545 * (0.094)	-73.650 (0.149)
English law origin							7.553 *** (0.009)		
English law origin									-9.953 ** (0.018)
intercept		-41.854 ** (0.037)	-44.072 ** (0.031)	-42.221 ** (0.044)	-44.790 ** (0.033)	-48.824 ** (0.024)	-46.799 ** (0.026)	-22.426 ** (0.013)	0.984 (0.936)
n		63	63	63	63	63	63	63	63
R2		0.710	0.706	0.694	0.692	0.694	0.686	0.7315	0.7233

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 10) The cross-sectional results in M&A acquirers

M&A, acquiror	AR calculation term	(1)		(2)		(3)		(4)		(5)	(6)	(7)	
		[-5_+1]BISadjusted	[-5_+1]	[-5_+2]BISadjusted	[-5_+2]	[-5_+3]BISadjusted	[-5_+3]	[-2_+2]BISadjusted	[-2_+2]	[-5_+1]	[-5_+1]	[-5_+1]	
variables		coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	
1.earning diversification strategy	the other operational income	-66.891 (0.334)	-53.483 (0.252)	-63.458 (0.357)	-36.774 (0.446)					-69.419 (0.317)	-92.488 (0.212)	-99.906 (0.150)	
	Other industry Dummy	0.631 (0.412)	0.472 (0.419)	0.783 (0.364)	0.623 (0.341)	1.181 (0.170)	0.777 (0.247)			0.641 (0.401)	1.004 (0.178)	0.938 (0.195)	
	Cross border Dummy	-0.933 (0.116)	-0.894 * (0.075)	-0.829 (0.188)	-0.811 (0.129)					-0.869 * (0.074)	-0.955 ** (0.018)	-0.932 (0.122)	-0.873 (0.233)
	Credit risk									-0.214 (0.327)	-0.159 (0.428)	-0.195 (0.469)	
2.risk strategy	loans ratio				2.292 (0.489)	3.850 (0.395)	3.608 (0.291)	6.729 ** (0.037)	4.111 * (0.084)				-2.709 (0.486)
	deposit-loans ratio	3.005 (0.116)	2.014 (0.193)	3.701 (0.116)	2.620 (0.164)	3.060 (0.219)	1.438 (0.489)	2.930 (0.147)	3.339 ** (0.031)	3.576 * (0.064)	4.612 ** (0.022)	4.048 ** (0.028)	
	total cost ratio	-0.008 *** (0.005)	-0.007 *** (0.001)	-0.009 *** (0.002)	-0.009 *** (0.000)	-0.011 *** (0.000)	-0.011 *** (0.000)	-0.007 *** (0.000)	-0.008 *** (0.000)	-0.009 *** (0.002)	-0.009 *** (0.005)	-0.009 *** (0.001)	-0.009 *** (0.001)
4.capital adequacy level strategy	total capital ratio	-14.156 *** (0.006)	-11.730 *** (0.004)	-16.523 *** (0.006)	-12.993 *** (0.005)	-14.646 ** (0.025)	-9.002 * (0.084)	-7.198 (0.205)	-8.792 ** (0.036)	-14.100 *** (0.008)	-12.413 ** (0.020)	-16.475 *** (0.001)	
	Tier1 capital ratio					-16.574 (0.411)		-14.860 (0.290)			-19.455 (0.237)		
	BIS standard					12.969 (0.385)		14.795 (0.189)			18.989 (0.160)		
5.liquidity risk strategy	liquidity ratio	6.862 ** (0.018)	4.046 (0.150)	7.638 ** (0.025)	6.558 (0.160)	8.882 (0.128)	5.420 (0.273)	13.826 *** (0.001)	10.556 *** (0.003)	7.083 ** (0.014)	4.497 (0.172)	4.745 (0.310)	
6.tecnology and innovation strategy	R&D(The standard deviation of cash equipment cost ratio												-0.188 (0.442)
	controll variables												
	InAsset												-0.152 (0.308)
	ROA	71.943 ** (0.033)	45.092 (0.266)	73.498 ** (0.047)	41.437 (0.368)	71.601 * (0.074)	35.109 (0.453)	18.375 (0.250)		62.174 (0.107)	71.050 ** (0.045)	59.342 (0.121)	
country rating													-0.095 (0.358)
English law origin													-2.512 ** (0.022)
English law origin													2.543 (0.205)
intercept		-2.643 (0.280)	-1.037 (0.607)	-3.185 (0.268)	-3.655 (0.384)	-6.788 (0.191)	-4.118 (0.334)	-9.731 *** (0.006)	-5.055 (0.154)	-1.590 (0.584)	-1.442 (0.657)	-1.185 (0.788)	
n		191	240	191	240	191	240	191	240	191	191	191	
R2		0.100	0.067	0.094	0.063	0.082	0.041	0.083	0.070	0.106	0.137	0.120	

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 11) The cross-sectional results in M&A targets

M&A, target	AR calculation term	(1) [-5_+1]	(2) [-5_+2]	(3) [-5_+3]	(4) [-2_+1]	(5) [-2_+2]	(6) [-2_+3]	(7) [-2_+3]	(8) [-2_+3]	(9) [-2_+3]
variables		coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
1.earning diversification strategy	the other operational income	-698.405 (0.242)	-687.775 (0.253)	-666.717 (0.225)	-832.209 (0.168)	-896.233 (0.181)	-797.447 (0.150)	-842.596 (0.223)	-947.434 (0.165)	-1306.931 (0.155)
	Other industry Dummy	-3.566 (0.313)	-3.426 (0.331)	-2.788 (0.407)	-4.638 (0.169)	-4.654 (0.194)	-3.828 (0.227)	-6.325 (0.186)	-6.237 (0.202)	-7.941 (0.165)
	Cross border Dummy				-2.072 (0.285)	-1.835 (0.333)	-1.969 (0.289)			
	2.risk strategy	Credit risk							57.099 (0.263)	64.608 (0.223)
	loans ratio	30.721 (0.419)	29.661 (0.437)	37.113 (0.299)	34.942 (0.350)	32.372 (0.383)	41.164 (0.248)	23.718 (0.497)	27.633 (0.429)	60.173 (0.246)
	deposit-loans ratio	0.507 *** (0.000)	0.525 *** (0.000)	0.490 *** (0.000)	0.632 *** (0.000)	0.674 *** (0.000)	0.616 *** (0.000)			
3.cost controlling strategy	total cost ratio					0.091 (0.492)			0.431 (0.274)	0.315 (0.324)
4.capital adequacy level strategy	total capital ratio	17.395 (0.340)	14.708 (0.422)	14.451 (0.413)	18.008 (0.303)	14.280 (0.413)	15.053 (0.363)			
5.liquidity risk strategy	liquidity ratio	61.797 (0.393)	61.835 (0.395)	67.373 (0.323)	65.891 (0.356)	63.342 (0.370)	71.252 (0.289)	54.278 (0.430)	49.043 (0.437)	66.528 (0.352)
6.tecnology and innovation strategy	R&D(The standard deviation of cash equipment cost ratio	-0.887 (0.154)	-1.028 * (0.096)	-1.122 ** (0.049)	-0.985 (0.143)	-1.251 (0.102)	-1.208 * (0.059)	-2.004 (0.489)	12.070 (0.320)	
controll variables	lnAsset							3.526 (0.346)	2.149 (0.163)	3.847 (0.165)
	ROA							-84.788 (0.434)		
country rating								0.730 (0.222)		
English law origin									4.826 (0.213)	
English law origin										11.799 (0.190)
intercept		-32.621 (0.457)	-31.630 (0.472)	-38.807 (0.347)	-35.521 (0.407)	-33.054 (0.438)	-41.599 (0.308)	-55.899 (0.353)	-53.119 (0.326)	-94.721 (0.231)
n		53	53	53	53	53	53	42	42	42
R2		0.2223	0.2215	0.2335	0.2948	0.2959	0.3117	0.2575	0.2566	0.2811

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 12) The before and after comparison results for after one year acquirers

Panel A: All Acquirers															
	1. earing	2. risk strategy				3. cost	4. capital adequacy strategy				5. liquidity risk	6. technology	the others		
	the other	credit risk1	creditrisk2	loan ratio	deposit-loans	total cost	total capital	Tier 1 capital	BIS standard	liquidity ratio	equipment cost	size	roa	Q ratio	
treat	0.0007	-0.1199	-0.0167	0.0012	-0.0397	0.3719	0.0035	-0.0038	-0.0021	-0.0054	-0.0016	0.1108	0.0004	-0.0065	
	0.354	0.153	0.832	0.848	0.544	0.727	0.556	0.244	0.524	0.365	0.969	0.17	0.686	0.49	
cons	0.0055 ***	1.2435 ***	0.1196 **	0.6631 ***	1.05 ***	3.8948 ***	0.1604 ***	0.0992 ***	0.1349 ***	0.2696 ***	0.1454 ***	10.2387 ***	0.0076 ***	0.9851 ***	
	0	0	0.047	0	0	0	0	0	0	0	0	0	0	0	
obs.	2277	1942	1990	2253	2214	2368	2386	1506	1472	2386	1794	2386	2386	2224	
ad-r2	0.0004	0.001	0	0	0.0002	0.0001	0.0001	0.001	0.0003	0.0003	0	0.0008	0.0001	0.0002	
PanelB: M&A															
treat	0.0003	-0.0434	-0.0098 *	0.0043	-0.0657	2.0001	0.0027	-0.0127 *	-0.0095	-0.0076	0.0673	0.1781	0.0009	-0.0213	
	0.66	0.53	0.065	0.64	0.697	0.415	0.741	0.067	0.124	0.399	0.476	0.177	0.544	0.288	
cons	0.0047 ***	0.9688 ***	0.0542 ***	0.6803 ***	1.1497 ***	2.3209	0.151 ***	0.1054 ***	0.1389 ***	0.257 ***	0.0422	10.433 ***	0.0077 ***	1.004 ***	
	0	0	0	0	0	0.279	0	0	0	0	0.586	0	0	0	
obs.	838	767	765	833	826	865	875	612	596	875	660	875	875	823	
ad-r2	0.0002	0.0005	0.0045	0.0003	0.0002	0.0008	0.0001	0.0059	0.0042	0.0008	0.0008	0.0021	0.0004	0.0014	
PanelC: Alliance															
treat	0.0009	-0.0407	-0.004	0.0028	-0.0096	-1.1773	0.0004	0.0052	0.0054	-0.008	-0.0738	0.1166	0.001	0.0022	
	0.444	0.836	0.599	0.804	0.775	0.281	0.97	0.238	0.354	0.489	0.35	0.384	0.441	0.856	
cons	0.0055 ***	1.5416 ***	0.0683 ***	0.6791 ***	1.0077 ***	4.5088 ***	0.161 ***	0.0878 ***	0.1277 ***	0.2604 ***	0.2539 ***	10.3864 ***	0.0057 ***	0.9617 ***	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
obs.	622	522	536	609	602	642	645	445	443	645	488	645	645	594	
ad-r2	0.001	0.0001	0.0005	0.0001	0.0001	0.0018	0	0.003	0.0018	0.0007	0.0018	0.0012	0.0009	0.0001	
PanelD: Cross Border															
treat	0.0002	-0.0913	-0.0058	-0.0075	-0.0068	1.6175	0.0037	-0.0024	0.0035	0.0039	0.0498	0.124	0.0001	-0.0067	
	0.888	0.171	0.109	0.526	0.819	0.325	0.668	0.723	0.334	0.735	0.579	0.464	0.817	0.574	
cons	0.005 ***	0.8348 ***	0.0325 ***	0.6583 ***	1.0502 ***	2.2243	0.1546 ***	0.1036 ***	0.1372 ***	0.2527 ***	0.0539	11.4301 ***	0.0095 ***	0.9905 ***	
	0	0	0	0	0	0.168	0	0	0	0	0.546	0	0	0	
obs.	409	384	375	406	404	415	416	330	326	416	369	416	416	407	
ad-r2	0	0.0049	0.0068	0.001	0.0001	0.0023	0.0004	0.0004	0.0029	0.0003	0.0008	0.0013	0.0001	0.0008	
PanelE: Diversification															
treat	0.0012	-0.1735	-0.0208	-0.0014	-0.0364	-0.7811	0.0053	-0.0016	0.0009	-0.0054	-0.0237	0.113	0.0015	0.0018	
	0.29	0.164	0.863	0.87	0.71	0.472	0.529	0.605	0.756	0.492	0.67	0.253	0.256	0.876	
cons	0.006 ***	1.4145 ***	0.155 *	0.6704 ***	1.0975 ***	4.2393 ***	0.1732 ***	0.0955 ***	0.1313 ***	0.2634 ***	0.1502 ***	10.2704 ***	0.0077 ***	0.971 ***	
	0	0	0.091	0	0	0	0	0	0	0	0.001	0	0	0	
obs.	1507	1240	1297	1469	1432	1566	1573	1028	1008	1573	1196	1573	1573	1487	
ad-r2	0.0007	0.0016	0	0	0.0001	0.0003	0.0003	0.0003	0.0001	0.0003	0.0002	0.0008	0.0008	0	

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 13) The before and after comparison results for after one year targets

Panel A: All Targets														
	1. earing	2. risk strategy				3. cost	4. capital adequacy strategy			5. liquidity risk	6. technology	the others		
	the other	credit risk1	creditrisk2	loan ratio	deposit-loans	total cost	total capital	Tier 1 capital	BIS standard	liquidity ratio	equipment cost	size	roa	Q ratio
treat	0.0038	0.2633	0.0241	0.011	-0.4277	1.1245	0.0087	-0.0409	-0.0509	0.0004	-0.0018	0.0872	-0.0106	0.0376
	0.218	0.318	0.51	0.462	0.211	0.529	0.616	0.124	0.197	0.968	0.985	0.425	0.52	0.258
cons	0.0103 ***	1.2797 ***	0.0817 ***	0.6532 ***	1.7248 ***	1.3613	0.1847 ***	0.1483 ***	0.1907 ***	0.277 ***	0.086 *	8.2484 ***	-0.0053	1.0015 ***
	0	0	0	0	0	0.235	0	0	0	0	0.088	0	0.172	0
obs.	1298	1058	984	1284	1215	1639	1644	649	582	1646	959	1646	1646	1476
ad-r2	0.0013	0.001	0.0004	0.0004	0.0013	0.0002	0.0002	0.004	0.0032	0	0	0.0004	0.0003	0.0009
PanelB: M&A														
treat	-0.0015	0.0101	-0.0019	0.0635	-1.8061 *	4.505	-0.0172	0.0006	-0.002	-0.003	0.3658	0.0041	-0.0244	0.0755 ***
	0.716	0.965	0.842	0.353	0.082	0.328	0.458	0.955	0.856	0.908	0.21	0.985	0.134	0.009
cons	0.0113 ***	1.1153 ***	0.0659 ***	0.6975 ***	2.7561 ***	1.1548	0.1848 ***	0.1077 ***	0.1412 ***	0.289 ***	0.1018	8.4327 ***	0.0055	0.9775 ***
	0	0	0	0	0.008	0.472	0	0	0	0	0.146	0	0.147	0
obs.	253	217	170	246	219	298	302	141	131	302	182	302	302	259
ad-r2	0.0005	0	0.0002	0.0046	0.0103	0.0041	0.0019	0	0.0003	0	0.0105	0	0.01	0.0272
PanelC: Alliance														
treat	0.012	-0.0182	-0.029 *	0.009	-0.5807	3.3786	0.0042	-0.0329	-0.0344	-0.0027	0.1557	0.1263	-0.0188	0.0412
	0.144	0.908	0.065	0.546	0.137	0.154	0.916	0.145	0.163	0.872	0.256	0.54	0.641	0.595
cons	0.0118 ***	1.0591 ***	0.0862 ***	0.6208 ***	1.5328 ***	1.2707	0.2261 ***	0.1413 ***	0.1715 ***	0.2504 ***	0.0788	7.8116 ***	-0.0079	1.0262 ***
	0	0	0	0	0	0.534	0	0	0	0	0.534	0	0.297	0
obs.	422	340	319	410	384	620	620	234	205	621	290	621	621	567
ad-r2	0.0051	0	0.0112	0.0009	0.0058	0.0033	0	0.0101	0.011	0	0.0047	0.0006	0.0004	0.0005
PanelD: Cross Border														
treat	0.0009	-0.0357	-0.0148	0.008	0.0144	5.0778	0.0036	-0.0571	-0.0851	-0.0045	0.1998	0.0885	0.0017	-0.0016
	0.501	0.853	0.118	0.522	0.591	0.145	0.758	0.366	0.354	0.723	0.24	0.546	0.761	0.906
cons	0.0058 ***	1.1213 ***	0.0704 ***	0.638 ***	0.8736 ***	2.6967	0.1443 ***	0.1685 ***	0.2339 **	0.3007 ***	0.0305	8.8135 ***	0.0011	0.9981 ***
	0	0	0	0	0	0.194	0	0.008	0.011	0	0.763	0	0.841	0
obs.	463	414	386	473	473	497	497	269	252	497	378	497	497	453
ad-r2	0.001	0.0001	0.0064	0.0009	0.0006	0.0043	0.0002	0.0037	0.0041	0.0003	0.0037	0.0007	0.0002	0
PanelE: Diversification														
treat	0.006	0.098	0.0368	0.0153	-0.6301	0.5015	0.0122	-0.0594	-0.0757	0.0003	0.0726	0.0999	-0.0123	0.0511
	0.181	0.682	0.511	0.479	0.219	0.808	0.616	0.135	0.199	0.984	0.567	0.47	0.593	0.261
cons	0.0119 ***	1.3419 ***	0.091 ***	0.6597 ***	2.0759 ***	1.5524	0.2065 ***	0.1712 ***	0.2157 ***	0.27 ***	0.0512	7.9787 ***	-0.0082	1.0071 ***
	0	0	0	0	0	0.152	0	0	0	0	0.471	0	0.137	0
obs.	871	663	642	834	766	1154	1156	429	386	1158	620	1158	1158	1066
ad-r2	0.0022	0.0003	0.0007	0.0006	0.0019	0.0001	0.0002	0.0057	0.0048	0	0.0005	0.0005	0.0003	0.0012

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 14) The before and after comparison results for after three year acquirers

Panel A: All Acquirers														
	1. earing		2. risk strategy			3. cost	4. capital adequacy strategy			5. liquidity risk	6. tecnologia	the others		
	the other	credit risk1	creditrisk2	loan ratio	deposit-loans	total cost	total capital	Tier 1 capital	BIS standard	liquidity ratio	equipment cost	size	roa	Q ratio
treat	0.001	-0.3064 ***	-0.0754	-0.0005	-0.0204	-0.5312	0.004	0.0116	0.0071	0.0013	-0.0161	0.3945 ***	0.0006	-0.0164 *
	0.189	0	0.21	0.932	0.744	0.645	0.54	0.258	0.616	0.821	0.723	0	0.436	0.097
cons	0.0055 ***	1.2435 ***	0.1196 **	0.6631 ***	1.05 ***	3.992 ***	0.1604 ***	0.0992 ***	0.1349 ***	0.2739 ***	0.1454 ***	10.2387 ***	0.0076 ***	0.9851 ***
	0	0	0.047	0	0	0	0	0	0	0	0	0	0	0
obs.	2202	1873	1963	2171	2136	2261	2294	1514	1470	2275	1762	2294	2294	2188
ad-r2	0.0008	0.0073	0.0008	0	0	0.0001	0.0002	0.0008	0.0002	0	0.0001	0.0099	0.0003	0.0013
Panel B: M&A														
treat	0.0008	-0.1936 ***	-0.0163 ***	0.0017	-0.1356	2.6373	0.0085	-0.0029	-0.01	0.0013	0.0935	0.4819 ***	0.0009	-0.0414 **
	0.248	0.002	0.002	0.849	0.354	0.287	0.317	0.728	0.221	0.884	0.306	0	0.414	0.024
cons	0.0047 ***	0.9688 ***	0.0542 ***	0.6803 ***	1.1497 ***	2.3589	0.151 ***	0.1054 ***	0.1389 ***	0.26 ***	0.0422	10.433 ***	0.0077 ***	1.004 ***
	0	0	0	0	0	0.279	0	0	0	0	0.586	0	0	0
obs.	807	740	747	801	794	830	841	613	591	836	643	841	841	806
ad-r2	0.0017	0.0127	0.0121	0	0.001	0.0013	0.0012	0.0002	0.0025	0	0.0016	0.0154	0.0008	0.0062
Panel C: Alliance														
treat	0.0004	-0.3445 *	-0.0169 ***	0.0061	0.04	-1.227	0.0062	0.0089 ***	-0.0006	-0.0065	-0.1125 *	0.4362 ***	0.0003	-0.0001
	0.727	0.055	0.01	0.583	0.513	0.239	0.557	0.002	0.866	0.575	0.096	0.001	0.828	0.996
cons	0.0055 ***	1.5416 ***	0.0683 ***	0.6791 ***	1.0077 ***	4.6949 ***	0.161 ***	0.0878 ***	0.1277 ***	0.2677 ***	0.2539 ***	10.3864 ***	0.0057 ***	0.9617 ***
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
obs.	596	502	527	584	579	605	617	444	438	608	481	617	617	583
ad-r2	0.0002	0.0068	0.0122	0.0005	0.0008	0.0022	0.0006	0.022	0.0001	0.0005	0.0057	0.0165	0.0001	0
Panel D: Cross Border														
treat	0.0003	-0.2155 ***	-0.0111 ***	-0.0114	-0.0282	0.3347	0.0065	-0.0039	-0.0109 **	0.0183	-0.0443	0.4602 ***	0.0001	-0.022 **
	0.781	0	0.001	0.334	0.321	0.901	0.428	0.558	0.011	0.116	0.732	0.007	0.86	0.047
cons	0.005 ***	0.8348 ***	0.0325 ***	0.6583 ***	1.0502 ***	2.2243	0.1546 ***	0.1036 ***	0.1372 ***	0.2539 ***	0.0539	11.4301 ***	0.0095 ***	0.9905 ***
	0	0	0	0	0	0.168	0	0	0	0	0.546	0	0	0
obs.	400	375	374	396	395	406	407	331	325	406	362	407	407	400
ad-r2	0.0002	0.033	0.0293	0.0024	0.0025	0	0.0015	0.0011	0.0194	0.0061	0.0003	0.018	0.0001	0.0098
Panel E: Diversification														
treat	0.001	-0.3626 ***	-0.1079	-0.0005	-0.0059	-1.0707	0.0045	0.0063	-0.0018	0.0011	-0.0262	0.3978 ***	0.0002	-0.0105
	0.33	0.003	0.239	0.951	0.949	0.37	0.625	0.109	0.652	0.884	0.655	0	0.814	0.399
cons	0.006 ***	1.4145 ***	0.155 *	0.6704 ***	1.0975 ***	4.4017 ***	0.1732 ***	0.0955 ***	0.1313 ***	0.2696 ***	0.1502 ***	10.2704 ***	0.0077 ***	0.971 ***
	0	0	0.091	0	0	0	0	0	0	0	0.001	0	0	0
obs.	1458	1196	1277	1417	1384	1489	1517	1021	992	1499	1167	1517	1517	1461
ad-r2	0.0007	0.0071	0.001	0	0	0.0005	0.0002	0.0025	0.0002	0	0.0002	0.0103	0	0.0005

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(Table 15) The country's dummy variables results in short term results

Modified Equation AR calculation term	alliance, acquiror		alliance, target		M&A, acquiror		M&A, target
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Eq(5),Table7 [-2,+2]	Eq(7),Table7 [-2,+2]BISadjusted	Eq(4),Table8 [-2,+1] [-2,+1]		Eq(1),Table9 [-5,+1]BISadjusted [-5,+1]		[-2,+3]
dummy variables	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient	coefficient
Japan				-7.724 *	2.045	1.430	-18.891 ***
				(0.067)	(0.056)	(0.122)	(0.011)
India							-7.074 ***
							(0.216)
Indonesia	-4.301 **	-4.173 **	-15.375 ***	-11.989 **	4.917 ***	2.746	
	(0.011)	(0.036)	(0.001)	(0.020)	(0.057)	(0.153)	
Singapore	-2.524 ***	-2.702 *					
	(0.008)	(0.079)					
Sri lanka			2.934				
			(0.250)				
Thailand	-1.965 **	-0.807	-3.367				-21.994 ***
	(0.016)	(0.349)	(0.268)				(0.004)
philippines	-5.902 **	-5.969 **	-24.215 ***	-13.603 ***			
	(0.023)	(0.040)	(0.000)	(0.005)			
Malaysia	-1.542		-4.591 **	-6.145 **			-10.125 ***
	(0.245)		(0.040)	(0.018)			(0.258)
Korea	-1.751		-16.990 ***	-12.289 ***		2.246 **	-30.282 ***
	(0.189)		(0.000)	(0.005)		(0.030)	(0.012)
HongKong		1.686	-14.283 **	-11.518 **	-0.933 ***		-8.991 ***
		(0.294)	(0.015)	(0.037)	(0.429)		(0.050)
Taiwan			-14.247 ***	-8.480 **		-0.972	
			(0.000)	(0.041)		(0.279)	
Chaina	-1.108	1.549	-15.472	-13.367			-33.997 ***
	(0.413)	(0.282)	(0.000)	(0.006)			(0.001)
n	175	138	63	94	191	240	42
R2	0.195	0.253	0.808	0.652	0.169	0.112	0.6473

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)Each regression contain explain variable as table7,8,9,10. For the space we omit the similar results and present only county dummies results.

(*3)Eq(4) is omitted the equipment ratio from variables

(Table 16) Barth's three comprehensive regulations

Barth et al.(2004)JFI T1

<i>1. Bank activity regulatory variables</i>			
Variable	Definition	Source and quantification	World Bank guide questions
(a) Securities activities	The extent to which banks may engage in underwriting, brokering and dealing in securities, and all aspects of the mutual fund industry.	OCC and WBG 4.1 (higher values, more restrictive) Unrestricted=1: full range of activities can be conducted directly in the bank; Permitted=2: full range of activities can be conducted, but some or all must be conducted in subsidiaries; Restricted=3: less than full range of activities can be conducted in the bank or subsidiaries; and Prohibited=4: the activity cannot be conducted in either the bank or subsidiaries.	4.1 What is the level of regulatory restrictiveness for bank participation in securities activities (the ability of banks to engage in the business of securities underwriting, brokering, dealing, and all aspects of the mutual fund industry)?
(b) Insurance activities	The extent to which banks may engage in insurance underwriting and selling.	OCC and WBG 4.2 (higher values, more restrictive) Unrestricted=1: full range of activities can be conducted directly in the bank; Permitted=2: full range of activities can be conducted, but some or all must be conducted in subsidiaries; Restricted=3: less than full range of activities can be conducted in the bank or subsidiaries; and Prohibited=4: the activity cannot be conducted in either the bank or subsidiaries.	4.2 What is the level of regulatory restrictiveness for bank participation in insurance activities (the ability of banks to engage in insurance underwriting and selling)?
(c) Real estate activities	The extent to which banks may engage in real estate investment, development and management.	OCC and WBG 4.3 (higher values, more restrictive) Unrestricted=1: full range of activities can be conducted directly in the bank; Permitted=2: full range of activities can be conducted, but some or all must be conducted in subsidiaries; Restricted=3: less than full range of activities can be conducted in the bank or subsidiaries; and Prohibited=4: the activity cannot be conducted in either the bank or subsidiaries.	4.3 What is the level of regulatory restrictiveness for bank participation in real estate activities (the ability of banks to engage in real estate investment, development, and management)?

<i>3. Competition regulatory variables</i>			
Variable	Definition	Source and quantification	World Bank guide questions
(a) Limitations on foreign bank entry/ownership	Whether foreign banks may own domestic banks and whether foreign banks may enter a country's banking industry.	OCC Yes =1; No =0	
(b) Entry into banking requirements	Whether various types of legal submissions are required to obtain a banking license.	WBG 1.8.1-1.8.8 Yes =1; No =0 Higher values indicate greater stringency.	1.8 Which of the following are legally required to be submitted before issuance of the banking license? 1.8.1 Draft by-laws? Yes/No 1.8.2 Intended organization chart? Yes/No 1.8.3 Financial projections for first three years? Yes/No 1.8.4 Financial information on main potential shareholders? Yes/No 1.8.5 Background/experience of future directors? Yes/No 1.8.6 Background/experience of future managers? Yes/No 1.8.7 Sources of funds to be disbursed in the capitalization of new banks? Yes/No 1.8.8 Market differentiation intended for the new bank? Yes/No

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(c) Fraction of entry applications denied	The degree to which applications to enter banking are denied.	WBG $(1.9.1 + 1.10.1)/(1.9 + 1.10)$ (pure number)	1.9 In the past five years, how many applications for commercial banking licenses have been received from domestic entities? 1.9.1 How many of those applications have been denied? 1.10 In the past five years, how many applications for commercial banking licenses have been received from foreign entities? 1.10.1 How many of those applications have been denied?
(1) Domestic denials	The degree to which foreign applications to enter banking are denied.	WBG 1.9.1/1.9 (pure number)	1.9 In the past five years, how many applications for commercial banking licenses have been received from domestic entities? 1.9.1 How many of those applications have been denied?
(2) Foreign denials	The degree to which domestic applications to enter banking are denied.	WBG 1.10.1/1.10 (pure number)	1.10 In the past five years, how many applications for commercial banking licenses have been received from foreign entities? 1.10.1 How many of those applications have been denied?

7. Private monitoring variables			
Variable	Definition	Source and quantification	World Bank guide questions
(a) Certified audit required	Whether there is a compulsory external audit by a licensed or certified auditor.	WBG 5.1 *5.3(Yes =1; No =0)	5.1 Is an external audit a compulsory obligation for banks? Yes/No 5.3 Are auditors licensed or certified? Yes/No
(b) Percent of 10 biggest banks rated internationally	The percentage of the top ten banks that are rated by international credit rating agencies.	WBG 10.7.1 (percent)	10.7.1 What percent of the top ten banks are rated by international credit rating agencies (e.g., Moody's, Standard and Poor)?
(c) No explicit deposit insurance scheme	Whether there is an explicit deposit insurance scheme and, if not, whether depositors were fully compensated the last time a bank failed.	WBG 1 if 8.1 = 0 and 8.4 = 0; 0 otherwise Yes =1; No =0 Higher values indicate more private supervision	8.1 Is there an explicit deposit insurance protection system? Yes/No 8.4 Were depositors wholly compensated (to the extent of legal protection) the last time a bank failed? Yes/No
(d) Bank accounting	Whether the income statement includes accrued or unpaid interest or principal on nonperforming loans and whether banks are required to produce consolidated financial statements.	WBG $(10.1.1 - 1) * (-1) + 10.3 + 10.6$ Yes =1; No =0 Sum of assigned values, with higher values indicating more informative bank accounts.	10.1.1 Does accrued, though unpaid interest/principal enter the income statement while the loan is still non-performing? 10.3 Are financial institutions required to produce consolidated accounts covering all bank and any non-bank financial subsidiaries? 10.6 Are bank directors legally liable if information disclosed is erroneous or misleading?
(e) Private monitoring index	Whether (a) occurs, (b) equals 100%, (c) occurs, (d) occurs, off-balance sheet items are disclosed to the public, banks must disclose risk management procedures to the public, and subordinated debt is allowable (required) as a part of regulatory capital.	WBG: $(a) + [1 \text{ if } (b) \text{ equals } 100\%; 0 \text{ otherwise}] + (c) + (d) + 10.4.1 + 10.5 + 3.5$ Yes =1; No =0 Higher values indicating more private supervision.	10.4.1 Are off-balance sheet items disclosed to the public? Yes/No 10.5 Must banks disclose their risk management procedures to the public? Yes/No 3.5 Is subordinated debt allowable (required) as part of capital? Yes/No

(Table 17) The cross-sectional regulatory variables results in alliance acquirers in short term

Alliance, acquirers

Modified Eq(5), Table 7; [-2,+2]

	(a)	(b)	(c)	(d)	(e)
	coefficient	coefficient	coefficient	coefficient	coefficient
Restrictions on banks activity index	-0.3287 * (0.055)			-0.3635 * (0.062)	
Entry into banking requirements index		-0.0326 ** (0.028)		-0.0191 (0.143)	-0.0393 *** (0.007)
Privatemonitoring index			0.1653 ** (0.030)		0.1846 ** (0.024)
n	175	159	172	159	159
R2	0.1368	0.1608	0.1266	0.1904	0.1818

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)Each regression contain explain variable as table 7 equation (8), for the space we omit the similar results.

(*3)Restrictions on banks activity index and Privatemonitoring index show high correlation.

(Table 18) The difference in difference analysis results for after one year acquirers

	Variable	All			M&A			Alliance			Cross border			Diversification		
		cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2
1.earing divercificatio n strategy	the other operation income	0.0005	0.583	0.0016	0.0001	0.897	0.0017	0.0007	0.59	0.0006	0.0000	0.989	0.0008	0.001	0.432	0.0006
2. risk strategy	credit risk1	-0.0791	0.625	0.0001	-0.0026	0.987	0.0002	0.0001	1	0.0003	-0.0505	0.742	0.0003	-0.1327	0.476	0.0002
	creditrisk2	-0.0207	0.847	0.0002	-0.0137	0.85	0.0003	-0.0079	0.914	0.0002	-0.0098	0.893	0.0002	-0.0248	0.861	0.0001
	loan ratio	0.0032	0.698	0.0001	0.0063	0.552	0.001	0.0048	0.7	0.0006	-0.0055	0.669	0.0001	0.0006	0.95	0.0003
	deposit-loans ratio	-0.1905	0.955	0.0001	-0.2165	0.948	0	-0.1604	0.962	0	-0.1576	0.962	0	-0.1872	0.955	0.0001
3. cost controlling strategy	total cost	0.7204	0.602	0.0005	2.4078	0.359	0.0006	-0.9177	0.515	0.0003	2.0631	0.265	0.0004	-0.4979	0.723	0.0005
4. capital adequancy strategy	total capital ratio	0.0031	0.749	0.0009	0.0023	0.836	0.0001	0	1	0.0003	0.0033	0.774	0.0001	0.0049	0.67	0.0015
	Tier 1 capital ratio	-0.004	0.981	0.0003	-0.0129	0.94	0.0001	0.005	0.977	0.0001	-0.0026	0.988	0.0001	-0.0018	0.991	0.0002
	BIS standard	-0.0018	0.982	0.0001	-0.0093	0.908	0.0001	0.0056	0.944	0.0001	0.0037	0.963	0	0.0012	0.988	0.0001
5. liquidity risk strategy	liquidty ratio	-0.0125 *	0.058	0.0105	-0.0133	0.158	0.011	-0.018	0.125	0.0068	-0.0001	0.995	0.0058	-0.0143 *	0.085	0.0107
6. tecnology and innovation strategy	eqipment cost	-0.0026	0.959	0.0001	0.0664	0.498	0.0004	-0.0747	0.368	0.0008	0.0488	0.601	0.0002	-0.0247	0.689	0.0001
the others	size	0.1083	0.247	0.0621	0.1755	0.209	0.0414	0.114	0.421	0.0295	0.1214	0.488	0.0552	0.1104	0.313	0.05
	roa	-0.0007	0.834	0	-0.0001	0.978	0	-0.0001	0.982	0	-0.0009	0.756	0	0.0004	0.891	0
	Q ratio	-0.006	0.697	0.0009	-0.0208	0.374	0.0002	0.0027	0.872	0.0007	-0.0061	0.716	0.0002	0.0024	0.887	0.0011

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)omitting other dummy variables for spaces

(Table 19) The difference in difference analysis results for after three year acquirers

	Variable	All			M&A			Alliance			Cross border			Diversification		
		cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2
1.earing divercificatio n strategy	the other operation income	0.0001	0.671	0.0019	0.0001	0.841	0.0019	-0.0001	0.846	0.001	-0.0001	0.824	0.001	0.0001	0.715	0.0009
2, risk strategy	credit risk1	-0.0727	0.188	0.0003	-0.0351	0.504	0.0003	-0.0854	0.266	0.0003	-0.0424	0.416	0.0004	-0.0915	0.145	0.0003
	creditrisk2	-0.0185	0.556	0.0004	0.0012	0.959	0.0003	0.001	0.966	0.0002	0.003	0.903	0.0002	-0.0293	0.452	0.0002
	loan ratio	0.0002	0.929	0	0.001	0.777	0.0008	0.0025	0.551	0.0007	-0.0034	0.436	0.0001	0.0003	0.937	0.0003
	deposit-loans ratio	0.8811	0.253	0.0002	0.8427	0.275	0.0002	0.9012	0.243	0.0002	0.8785	0.255	0.0002	0.8859	0.251	0.0002
3, cost controlling strategy	total cost	0.1622	0.735	0.0008	1.2184	0.163	0.0006	-0.0697	0.877	0.0004	0.4508	0.633	0.0007	-0.0176	0.971	0.0006
4, capital adequancy strategy	total capital ratio	0.0013	0.721	0.0009	0.0028	0.487	0.0002	0.002	0.657	0.0003	0.0021	0.591	0.0001	0.0014	0.73	0.0015
	Tier 1 capital ratio	-0.0039	0.948	0.0003	-0.0087	0.885	0.0001	-0.0048	0.936	0.0001	-0.0091	0.88	0.0001	-0.0057	0.925	0.0002
	BIS standard	-0.0006	0.983	0.0001	-0.0063	0.824	0.0001	-0.0032	0.911	0.0001	-0.0066	0.815	0.0000	-0.0036	0.9	0.0001
5, liquidity risk strategy	liquidty ratio	-0.0014	0.52	0.0083	-0.0014	0.658	0.0095	-0.004	0.31	0.0061	0.0042	0.289	0.0052	-0.0015	0.593	0.0084
6, tecnology and innovation strategy	equipment cost	0.001	0.953	0.0002	0.0376	0.235	0.0004	-0.0311	0.198	0.001	-0.0083	0.849	0.0006	-0.0023	0.914	0.0002
the others	size	0.1132 ***	0	0.0735	0.1423 ***	0.003	0.0489	0.1271 ***	0.008	0.0352	0.1351 **	0.021	0.063	0.1143 ***	0.002	0.0594
	roa	-0.0005	0.668	0	-0.0004	0.743	0.0001	-0.0006	0.622	0.0001	-0.0006	0.552	0.0001	-0.0006	0.6	0.0000
	Q ratio	-0.0063	0.234	0.0014	-0.0147 **	0.047	0.0006	-0.0009	0.872	0.0008	-0.0082	0.14	0.0003	-0.0044	0.458	0.0015

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)omitting other dummy variables for spaces

(Table 20) The difference in difference analysis results for after three year acquirers including country characters

	Variable	Legal_e			Legal_f			rating			Barht_bk			Barht_compor			Barht_privatemoni		
		cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2
1. earning divercification strategy	the other operation income	-0.0043 ***	0.003	0.0033	0.0055	0.265	0.0032	0.0000	0.924	0.0144	0.0001	0.907	0.0009	0.0001	0.235	0.0156	0.0006 ***	0	0.0102
2. risk strategy	credit_risk1	-0.289	0.153	0.0044	-0.2155	0.302	0.0001	0.0209	0.423	0.0115	0.0001	0.998	0.0019	-0.0156 ***	0	0.0071	-0.004	0.874	0.0069
	creditrisk2	-0.1686	0.158	0.0022	0.1053	0.128	0.0005	0.0072	0.624	0.0019	0.0179 **	0.03	0.0004	0.0008	0.644	0.0003	0.0122	0.477	0.002
	loan ratio	0.0593 ***	0	0.0027	-0.0658 ***	0.001	0.0044	0.0003	0.798	0.0193	0.0115 ***	0	0.0012	-0.0006 **	0.011	0.0713	-0.0012	0.383	0.0016
	deposit-loans ratio	-6.964 *	0.072	0.0008	2.8373	0.108	0.0002	0.2277 **	0.049	0.0002	-1.1705 *	0.055	0.0004	0.0564 *	0.088	0.0003	0.8352 *	0.065	0.0007
3. cost controlling strategy	total cost	-0.9899	0.494	0.001	-3.2976 *	0.09	0.0027	0.4362 **	0.011	0.0015	-0.7292	0.157	0.0021	-0.072 ***	0.002	0.0023	0.288	0.161	0.0006
4. capital adequancy strategy	total capital ratio	0.0282 **	0.024	0.0015	-0.0306	0.106	0.0038	0.0012	0.349	0.0039	-0.0041 *	0.092	0.0031	0.0002	0.322	0.0016	0.0006	0.686	0.004
	Tier 1 capital ratio	-0.4084 *	0.079	0.0014	-0.1593	0.486	0.0004	0.0379 ***	0.007	0.0012	-0.0914 **	0.012	0.0012	-0.0005	0.833	0.0003	0.0599 *	0.062	0.0016
	BIS standard	0.0413	0.429	0.0002	-0.3822	0.133	0.0034	0.0238 *	0.06	0.0021	-0.0502	0.106	0.0015	-0.0035	0.135	0.003	-0.0017	0.729	0.0001
5. liquidity risk strategy	liquidty ratio	-0.0717 ***	0	0.0185	0.0273 *	0.053	0.0231	-0.0021 **	0.016	0.0993	-0.0018	0.437	0.0132	0.0007 ***	0	0.0994	0.0009	0.421	0.029
6. tecnology and innovation strategy	equipment cost	-0.0137	0.811	0.0002	0.0345	0.784	0.0105	0.0029	0.699	0.0049	-0.0077	0.779	0.0011	-0.0019 ***	0	0.0015	-0.0071	0.339	0.0028
the others	size	0.235 *	0.061	0.0764	-0.0639	0.697	0.156	0.0061	0.61	0.2778	0.1698 ***	0	0.0639	0.0015	0.468	0.2201	0.055 ***	0	0.1561
	roa	0.0051 *	0.076	0.0001	-0.0072	0.454	0.0012	-0.0002	0.557	0.0004	0.0012	0.311	0.0011	0.0001	0.288	0.0002	-0.0002	0.627	0.0005
	Q ratio	-0.0147	0.403	0.001	0.0515	0.167	0.0026	-0.0037 *	0.058	0.0017	0.0006	0.886	0.0017	0.0008 ***	0.001	0.0035	-0.003	0.156	0.0012

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)omitting other dummy variables for spaces

(Table 21) The difference in difference analysis results for after three year acquirers including country characters

	Variable	Legal_e			Legal_f			rating			Barht_bk			Barht_compfor			Barht_privatemoni		
		cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2	cross term	p-value	r2
1.earing divercification strategy	the other operation income	-0.0013 ***	0.004	0.0039	0.0013	0.386	0.0027	0.0000	0.7410	0.0155	0.0000	0.824	0.0011	0	0.29	0.0157	0.0002 ***	0.001	0.0114
2. risk strategy	credit risk1	-0.1411 **	0.04	0.0052	-0.0557	0.345	0.0003	0.0154 *	0.078	0.0113	-0.0054	0.608	0.0018	-0.0061 ***	0	0.0069	0.0029	0.725	0.0079
	creditrisk2	-0.0765 ***	0.006	0.0021	0.0462 ***	0	0.0007	0.0064 ***	0.002	0.0018	0.0072 ***	0	0.0006	-0.0003 ***	0	0.0005	0.008 **	0.016	0.0019
	loan ratio	0.0217 ***	0	0.003	-0.0177 **	0.011	0.0024	-0.0007 *	0.068	0.0145	0.0044 ***	0	0.0016	0.0000	0.831	0.0599	-0.0007	0.137	0.0014
	deposit-loans ratio	-1.3137	0.177	0.0007	0.4984	0.263	0.0003	0.0445	0.131	0.0003	-0.2359	0.127	0.0004	0.011	0.181	0.0004	0.1592	0.163	0.0006
3. cost controlling strategy	total cost	0.6448	0.262	0.0011	-1.3759	0.413	0.0027	0.0058	0.943	0.0017	-0.1423	0.561	0.0026	-0.0049	0.866	0.0026	-0.0479	0.511	0.0008
4. capital adequancy strategy	total capital ratio	0.0156 ***	0.001	0.0018	-0.0198 *	0.056	0.0034	0.0004	0.383	0.0035	-0.0005	0.697	0.0029	0.0001	0.149	0.0015	0.0001	0.803	0.0036
	Tier 1 capital ratio	-0.1346 *	0.095	0.0014	-0.056	0.475	0.0004	0.0108 **	0.031	0.0012	-0.0304 **	0.014	0.0013	-0.0002	0.852	0.0004	0.0187 *	0.09	0.0016
	BIS standard	0.0245	0.212	0.0002	-0.1374	0.114	0.0034	0.0056	0.251	0.0021	-0.0167	0.117	0.0015	-0.0012	0.122	0.003	-0.0029	0.214	0.0002
5. liquidity risk strategy	liquidity ratio	-0.0262 ***	0	0.0176	0.001	0.833	0.0167	0.0004	0.228	0.0841	-0.001	0.211	0.0096	0	0.848	0.0797	0.0005	0.188	0.0277
6. tecnologia and innovation strategy	equipment cost	0.0092	0.699	0.0002	-0.017	0.771	0.0081	-0.002	0.496	0.0052	0.002	0.85	0.0021	-0.0003	0.614	0.0013	-0.0044	0.121	0.0028
the others	size	0.145 ***	0.001	0.0876	-0.0192	0.736	0.1626	-0.0021	0.599	0.2816	0.0594 ***	0	0.0754	0.0014 **	0.036	0.2272	0.0143 ***	0.004	0.1642
	roa	0.0011	0.241	0.0001	-0.0016	0.595	0.0013	-0.0001	0.514	0.0004	0.0008 **	0.043	0.0011	0.0000 ***	0	0.0006	0.0001	0.648	0.0005
	Q ratio	-0.0117 *	0.068	0.0015	0.0275 *	0.087	0.0035	-0.001	0.164	0.0022	-0.0003	0.876	0.0022	0.0002 ***	0.002	0.004	-0.0007	0.373	0.0015

(*1)***: significant at 1%, **: significant at 5%, *: significant at 10%

(*2)omitting other dummy variables for spaces