

M&A Strategic effects of Asia-Pacific Banks

Yoko Shirasu¹

Abstract

This paper empirically examines the effects of the Asian bank's M&A focusing on management strategies for banks' acquisition actions, from long-term aspects.

Investors value high capitalized sound acquire banks with high liquidity that promote the purchase of new loan business from target banks with large non-performing loans. It looks like as the target bank bailout. For acquirer banks, strategy changes after acquisitions, whereas acquire banks obtain more loans and enhance adequacy capital. However as the years go by, acquirer banks suffer from non-performing loans. Even more, these banks also end up incurring more costs and losing their profitability in the long run.

Additionally, we consider the country's characteristics, the legal system, and financial regulation. Among the different countries system, especially target banks countries have stronger/ more stringent legal and regulation rules, such that acquire banks can enjoy higher equity adequacy at a less cost. In Asia, the legal system with strong investor protection and more stringent financial regulations play an important role in resolving the problems facing target banks in Asia.

It is no doubt that Asian banks M&A are meaningful in growing new loans and enhancing capital adequacy. However, banks don't become profitable. And the most important point is that the strong legal system and stringent regulations can enable Asian banks to operate effectively by using M&A between different economic system countries.

¹ Professor, Department of Economics, Aoyama Gakuin University. E-mail: shirasu@cc.aoyama.ac.jp. The author is grateful to Katsushi Suzuki, Masaharu Hanazaki, Kotaro Inoue, Vadym Volosovych, He Fan, Barbara Casu, Hubert de La Bruslerie, Sascha Kolaric, Serif Aziz Simsir, and Jeffrey Callen, as well as the seminar participants of the 2016 Paris Financial Management Conference, the Finance Seminar of Hitotsubashi University, 2016 Nippon Finance Association, 2016 Japan Finance Association, 2016 Southernwest Finance Association, 2015 Midwest Finance Association, 2015 European Financial Management Association, and 2014 European Financial Management Association. This work was supported by the Public Interest Foundation KAMPO 2016. And the JSPS KAKEN Grant Number is [15K03547]. All remaining errors are mine.

1. INTRODUCTION

Since the 1990s, large Asian and European financial institutions have aggressively promoted alliances and M&A within the Asian financial markets. Asian financial organizations followed their global client firms where client firms expand their business operation. These firms do not promote strategic businesses for clients but for themselves in association to mergers and acquisition as well as financial alliances.

This paper empirically examines the effects of the Asian stock market's performance and management strategies for banks' acquisition, from long-term aspects based on research done from the year 2000. We examine the strategic management factor as performed in Altunbas and Marques (2008) and explain the country's characteristics that relate to bank financial outcomes.

Investors value efficient and effective banks with low loans that promote the purchase of new loan business through mutual complementary. For acquirer banks, strategy changes after acquisitions whereas acquire banks obtain more loans and enhance equity. However as the years go by, acquirer banks suffer from non-performing loans. Even more, these banks also end up incurring more costs and losing their profitability in the long run.

Additionally, considering the country's characteristics, the English legal system, the regulation scope, and the Regulation entry are the one of the important issues regarding creating effective Asian banks. The legal and regulatory system can facilitate the Asian banks effectiveness and efficiency through M&A, however, Asian banks will lose their profitability. The most fundamental fact is that the strong legal system and stringent regulations can enforce the Asian banks to operate according to the regulations through M&A between different economic system countries.

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 the Asian banks' data description. Section 6 provides the study's empirical results, and Section 7 concludes the paper.

2. LITERATURE

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

Many research studies have been done on financial conglomerates. Laeven and Levine (2007) find the diversification discount in the financial conglomerate. Baele et al. (2007) postulate that the connection between diversification and bank returns is the contrary of that in Europe compared to other developed financial markets, such as the U.S. They recognize a significant relationship between the degree of functional diversification and franchise value. According to Artikis et al. (2008), there is a sound explanation of the market dynamics and incentives for bank-insurance collaboration. The authors argue that the market dynamics and incentives give banking firms the opportunity to utilize their network of branches. According to recent studies, it is evident that the focus of research is not only on diversifications but also concentrates on the cross-border bank M&A activities. As Caiazza et al (2012) expounds comprehensive empirical literature research of cross-border bank M&A.. The authors are for "acquire to restructure" hypothesis which posits that targets banks are typically less powerful banks that are acquired for the purpose of restructuring with the intention of boosting sales.

A wide variety of empirical studies has scrutinized the organization value of financial companies. These can be categorized into three main groups: Research on creating firm value, (Field et al., 2007), and (Staikouras, 2009); Second, research on destroying company value by (Laeven & Levine, 2007), (Schmid & Walter, 2009), (Lelyveld & Knot, 2009); Third, studies on neutral firm value (Allen & Jagtiani, 2000).

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) show greater cultural distance has a positive 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) show that greater culture distance has a positive influence on 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 (De Haas and Van leyeveldt 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) defines

the difference between M&A and alliances. 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 and 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 strategic management change of acquired banks and Asian stock market's response from long term aspects. 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: What the strategic management factors have impacts acquisitions? Do the similarities or differences of strategic management factors between acquirer and target affect the market evaluation? We examine the five strategic management factors: earning diversification strategy, risk strategy, cost controlling strategy, capital adequacy level strategy, and liquidity risk strategy. And we check the relationship market response and the similarity or difference of strategic management factors between acquirer and target.

To assure the economic benefits, we test the effects of not only loan business growth, cost efficiency and holding rich liquidity but also ROA and Market-to-book.

In short, we test Asian stock market response to which type of strategic management factors of acquire and target banks when effective M&A deals are announced, and whether the markets evaluate either the similarity of strategic management factors or difference of management factors.

Discussion 2: After the acquisition, one year after and three years after, which management strategic factor's changes affect the acquired banks? We examine the five strategic management factors: earning diversification strategy, risk strategy, cost controlling strategy, capital adequacy level strategy, and liquidity risk strategy.

Discussion 3: The available evidence on the differences according to target's country characteristics could help us understand some of the factors in acquiring banks. The difference of legal system (English law origin, French law origin, and the other law origin), the degree of economic freedom, and financial regulation system (scope regulation, entry regulation and self-monitoring regulation) are considering.

As Asian countries have survived some financial crisis since late the 1990s', our research mainly, focuses on credit risk strategy and capital adequacy strategy.

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 (see Appendix 1). All sample transactions have a dollar value and announcement data. Although the number of all announced data is 1907, the effective data are 1137

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 sample comprises 1137 bank transactions. Either the acquirer or the target has a regular common stock listing on Asian-Pacific stock markets (see Appendix 1) and have accounting data based on dollar values. In this long analysis, we employ completed - transactions of bank acquisitions.

We use 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 index², obtained from Moeller et al. (2005)³. Barth et al. (2008) derive the available dataset of bank regulatory environment by the World Bank Website⁴, we use it. The level of economic activities is included as potential determinant of individual bank acquisition. The macroeconomic environment is likely to affect bank activities and investment decisions (Pana et al. 2010). It is measures as annual growth date of gross domestic product.

4.2 Data selection

We select our sample data from Thomson ONE Investment Banking and cover the

² 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.

³ Moeller et al. (2005) has obtained EFW index from the World Bank.

⁴<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20345037%7EpagePK:64214825%7EpiPK:64214943%7EtheSitePK:469382,00.html>

period between 2000 and 2011 which are formally announced as the acquisition period, at least one of the firms has to be an Asia-Pacific countries' bank. All sample transactions have a dollar value. Although the number of announced data is 1907, the effective data are 1137, for transactions in the initial sample.

For example, first, in cases of 12month acquirer's long-term return analyses, we constructed our sample from the 1137 transactions by using the following procedures: (1) selected observations that acquires industry is the Asian banks or financial holding companies (800 observations); (2) selected observations of having 12month acquiring stock return (662 observations); (3) deleted observations with ABHR greater / lower than 99th/ 1st percentile (650 observations); (4) selected observations that target industry is banks or financial holding companies (233 observations). As the results, 233 observations are the maximum for our 12month acquirer long-term analysis. And not all observations have all kinds of financial data, there are many missing about Tier 1 ratio, non-performing loan and loan-loss provision data etc. Then the number of observations is less than 233.

Second, to determine long-term regression analyses by strategy variables, we constructed our sample by following procedures: (1) selected observations that acquire industry is banks or financial holding companies (800 observations); (2) selected observations of having total asset data (563 observations). And not all observations have all kinds of financial data, there are many missing data. Then the number of observations is less than 563.

4.3 ABHR: adjusted buy- and -hold returns

In discussion 1 for long-term analysis, our econometric study's methods are based on adjusted buy- and -hold (ABHR) returns. While the stock market reacts to new information and does so fairly quickly, there is some evidence of poor 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 are 12 months and 36 months after the announcement, effective data only, and used methodologies implied are ABHR.

We adopt buy- and –hold (BHR) returns for one year and three years after the actual acquisitions. To accurately measure the long-term stock performance, we compute the ABHR, which subtracts the matched bank’s BHR from event firm’s BHR. We pick up a matched bank for each of the event firms from the same country that do not adopt M&A during the same year of bank M&A event as below,

$$ABHR_{it} = BHR_i - BHR_m = \prod_{t=1}^{\tau} [1 + R_{it}] - \prod_{t=1}^{\tau} [1 + R_{mt}] \quad (1)$$

where R_{it} is event bank’s t month return, R_{mt} is matched bank’s month return, τ is the window terms, 12 month or 36 month.

To control the Fama and French’s (1992) three factors, we required the matching bank to have the book to market ratio, book value of equity over the market value of equity, in the year before the announcement, ranging between 50 percent and 200 percent of the event bank’s book to market ratio. And then, we choose as a matching bank the non-acquisition bank that is closest to the event firm in the market value the year before the announcement. In the following analyses, we delete observation with ABHR greater / lower than 99th/ 1st percentile to eliminate abnormal values.

For discussion 1 for long-term analysis, we carried out a regression analysis using The ABHR regression, the 12 month or 36 month cross-section of acquirers with considered heteroscedasticity. We set the dependent variables the ABHR, presented in previous paragraphs. The independent variables are five strategic factors as shown in Altunbas and Marques (2008), control variables (Market-to-book and size, in (asset) and some dummy variables (cross border dummy, effective year dummy, acquire country

dummy and target country dummy). 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 five strategic variables along with their proxy variables in the bank industry case, as seen in Appendix 2. We employ the difference between acquirers and the targets about every strategic variable as independent variable. These are both acquirer and targets being just bank cases. If the sign is positive, it means that the acquirer's ratio is bigger than target's ratio. And inversely, if the sign is negative, the acquirer's ratio is smaller than target's ratio.

4.4 Difference in Different Methods

For discussion 2 and 3 for long term analysis, we regression analyze using difference estimation (DID) methods, dependent variables in strategic variables. In DID methods, it is better to employ group data similar to treatment group's outcome distributions⁵. We set all M&A transactions as the treatment group, and all non-M&A Asian listed bank's data as the control group. We adapt strategic variables to this research. The econometric model is below.

$$StrategicVariable[SV]_{it} = \alpha_0 + \alpha_1(Time)_{it} + \alpha_2(Trend)_{it} + \alpha_3(Trend \times Time)_{it} + \varepsilon_{it} \quad (2)$$

Where Strategic Variable_{it} is the strategic variables used in Altunbas and Marques (2008). 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 × Time)_{it} is cross term. The dependent variables are strategic variables and independent variables are intercept term, trend dummy variables and cross term variables. It is general to assess the significance of coefficient of cross term variables. In general, we hope to assess whether good effects of acquisitions or not,

⁵ See Meyer(1995)

then we test the sign and significant of coefficients of cross terms.

In this paper, in practice, as following to Inui et al. (2013) econometric methods, we set another model of DID methods, as below.,

$$SV_{it+1} - SV_{it-1} = \beta_0 + \beta_1 (Trend)_{it} + \beta_2 Z_{it} + \varepsilon_{it} \quad (3)$$

$$SV_{it+3} - SV_{it-1} = \beta_0 + \beta_1 (Trend)_{it} + \beta_2 Z_{it} + \varepsilon_{it} \quad (4)$$

where, Z_{it} is the vector of control variables. We employ control variables, ln (asset), GDP growth rate of target and acquirer countries, cross border dummy, diversification dummy, effective year dummy, acquire country dummy and target country dummy. Equation (6) estimates the change M&A effects of the SV from t-1 to 1+1, Equation (7) estimate the change M&A effects from t-1 to 1+3. Trend is dummy variable if acquisitions data are one, non-acquisitions data are zero. We assess the significance of coefficient of Trend variables.

Now, we explain the country characteristics. In order to investigate the acquisitions affects strategic variables across affects target's country characteristics differently, the affected acquirer's countries are divided into (1) the difference of legal law system, English law origin, French law origin and the other law origin, (2) the difference of EFW, (3) the difference of the strength of financial regulation, (3-1) bank activities scope regulation, (3-2) foreign bank entry regulation, (3-3) bank self-monitoring regulation (so called disclosure regulation) .

To investigate the difference of the country's characteristics, between acquirers and targets country, following Nguyen and Wilson's (2015) methods, we set another econometric model of DID methods, as below, for example legal system case.

$$\begin{aligned} SV_{it+1} - SV_{it-1} = & \beta_0 + \beta_1 (SameLawTrend)_i \\ & + \beta_2 (Different[English]LawTrend)_i + \beta_3 (Different[French]LawTrend)_i \\ & + \beta_4 (Different[Other]LawTrend)_i + \beta_4 Z_{it} + \varepsilon_{it} \end{aligned} \quad (5)$$

$$\begin{aligned}
SV_{it+3} - SV_{it-1} &= \beta_0 + \beta_1 (SameLawTrend)_i \\
&+ \beta_2 (Different[English]LawTrend)_i + \beta_3 (Different[French]LawTrend)_i \quad (6) \\
&+ \beta_4 (Different[Other]LawTrend)_i + \beta_4 Z_{it} + \varepsilon_{it}
\end{aligned}$$

Where, the dependent variable is the change of the strategic variables. And we split “Law Trend” variable into four law trend dummy variables. If acquirers and targets are same the legal system, “Same Law Tread” is one, non-acquisitions data including non-acquisitions data are zero. If acquirers are different legal system and the target is English legal system, “Different [English] Law Tread” is one, the others data are zero. If acquirers are different legal system and the target is French legal system, “Different [French] Law Tread” is one, the others data are zero. If acquirers are different legal system and the target is the other legal system, “Different [Other] Law Tread” is one, the others data are zero. We assess the significance of coefficient of some kinds of Trend variables.

For sample of EFW and financial regulation, we split “Trend” variable into three trend dummy variable. For example EFW for one year case are as following.

$$\begin{aligned}
SV_{it+1} - SV_{it-1} &= \beta_0 + \beta_1 (SameTrend)_i \\
&+ \beta_2 (Different[UnderMean]Trend)_i + \beta_3 (Different[UpperMean]Trend)_i \quad (7) \\
&+ \beta_4 Z_{it} + \varepsilon_{it}
\end{aligned}$$

$$\begin{aligned}
SV_{it+3} - SV_{it-1} &= \beta_0 + \beta_1 (SameTrend)_i \\
&+ \beta_2 (Different[UnderMean]Trend)_i + \beta_3 (Different[UpperMean]Trend)_i \quad (8) \\
&+ \beta_4 Z_{it} + \varepsilon_{it}
\end{aligned}$$

If acquirers and targets are the same system, “Same Tread” is one, the others data including non-acquisitions data are zero. If acquirers are different system and the target score is under than the mean, “Under median” is one, the others data are zero. If acquirers are different system and the target score is upper than the mean, “Upper median” is one,

the others data are zero.

4.5 Average Treatment Effect from Propensity Score Matching

For discussion 2 and 3 for long term analysis, we compute the averaged treatment effects (ATE) using Propensity Score Matching (PSM) method. In our knowledge, propensity score matching is relatively new to the econometric papers and one paper has been used in M&A studies (Behr and Heid, 2011).

In this paper, we focus on the acquirer bank's outcomes (Y) as some strategic variables. Let Z denote the indication variable, that it is 1 if it is acquisitions data, and 0 if otherwise. We observe $Y_1|z=1$ but not $Y_0|z=0$, which is a counterfactual outcome. The *prima facie* acquisition effects to observable variables by comparing the outcomes of authentically acquired data and factually non-acquisition data are

$$\Delta_i(ATE_i) = E(Y_{1i} | z = 1, x) - E(Y_{0i} | z = 0, x). \quad (9)$$

However, Δ_i is generally a biased estimator of Δ unless the assignment to the actuation group ($z=1$) or the non-actuation group ($z=0$) is independent of the outcome variable. A possible solution is to derive an unbiased estimator through conditioning on covariates. Rosenbaum and Rubin (1983) have shown that it is sufficient to condition on the Propensity Score. The propensity score is given by the probability to acquire by logit regression with set of covariates x . The basic matching approach is that, for each factual treatment acquirer data, a pair of non-acquisitions control data are selected from the pool of factually non-acquisitions data. For all Asian banks in the sample, we estimate the propensity with year dummy variables, acquirer country dummy and target country dummy. Our employed matching algorithm method is Greedy Matching⁶.

⁶ “Perhaps the most common matching algorithm is the so-called greedy matching. It includes Mahalanobis metric matching, Mahalanobis metric matching with propensity scores, nearest neighbor matching, caliper matching, nearest neighbor matching within a caliper, and nearest available Mahalanobis metric matching within a caliper defined by the propensity score. All methods are called greedy matching.” (Guo 2015)

After PSM, we checked the balanced box charts between treatment group and control group and tested balance test comparing with raw data and matched data using standardized difference and variance ratio.

5. SAMPLE DESCRIPTION

Graph 1 shows the number of acquisitions for Asian banks. Although the number of all announce data from 2000 to end of 2011 is 1907, and the effective level data are 1137. The reason for not including downloads in years 2012 and 2013 is because of the announcement that was made towards the end of 2011, which is explained in the previous sections. This graph shows the historical acquisition numbers. In 2001, the number reached around 100 and the level of every year is same. After 2009 the number is decreased; there have been fewer than ten recent acquisitions.

(Insert Graph 1 about here.)

Graph 2 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 2 about here.)

Table 1 presents the basic statistics using our regression about ABHR, DID and PSM. Panel A of Tables1 shows the one year financial and economic change after effectiveness, for both acquisition data called “treatment” data and non-acquisition data, called “control” data. Although the number of all effective level data is 1137, because there are many unlisted banks data and other industrial data, we can use only 500-600 deal data for our empirical analysis. All Asian banks data without acquisition are control data. Panel B of Tables1 shows the three-year change after effectiveness. The number of treatment data is a little smaller than panel A.

(Insert Table 1 about here.)

Table 2 presents the number of max deals using analysis. It means that the number of data having total asset data. Panel A of Tables2 shows about the treatment banks, and Panel B shows the control banks, all Asian banks without acquisitions. From 2001 to 2009, the number of acquisition is high level. And in our available sample, many acquisition deals occurred in Japan (118/563), Australia (95/563) and Thailand (94/563). And we can see the target country in Panel B, singed “target” part. The highest share target country is Japan, 108/563 banks. Second highest target country is Thailand (95/563) and third highest is Australia (73/563). Panel C of Tables2 shows about the control banks, all Asian banks without acquisitions. The number of control banks grow about twice with each passing year, 207 banks in 2000 to 395 banks in 2013. The largest country is Japan, second largest is India. In contrast, the smallest country is New Zealand and second smallest is Vietnam. And we don’t have Vietnam data before 2005.

(Insert Table 2 about here.)

6. EMPIRICAL RESULTS

6.1 Discussion 1: Long-term Stock performances

We empirically extract the difference of strategic management factors between acquirer and target from the ABHR. The matched-adjusted return for the ABHR from 12month and 36month surrounding the effective day is the dependent variable in each cross-sectional regression model. As presented in the previous section 4.2, when we compute the ABHR, we pick up a matched bank for each of event firms from the same country and same year of bank M&A event. And we check the relationship between ABHR and the similarity or the difference between the strategic factors of acquirer and target banks.

Consistent with Altunbas and Marques (2008), the independent variables are the difference of strategic management factors between the acquirers and the targets that include strategies such as earning diversification, risk, cost control, capital adequacy-level strategies and liquidity, including some control variables, Market-to-book size, adding the cross-border dummy, year dummy, the country dummy of acquirer, and the country dummy of target.

Table 3 shows the results of the difference between the acquirers and the targets on every strategic variable after 12 months and 36 months from effectiveness. These results are both from the acquire and the target banks' cases hence, the number of observation is small. If the sign is positive, it means that the acquirer's ratio is higher than the target's ratio. And inversely, if the sign is negative, the acquirer's ratio is smaller than target's ratio.

(Insert Table 3 about here.)

Panel A of Table 3 shows the results after 12 month cases. The Graph 3 present the distribution of ABHR for acquirer and target⁷. For both of them, there is a right side distortion in the shape of the ABHR distribution.

(Insert Graph 3 about here.)

From the empirical results of Panel A of Table 3, the two significant variables are negative non-performing loan ratio and deposit-loan ratio, and positive liquidity ratio. The results of Panel B of Table 3, the results after 36 months cases, and the two significant variables are negative non-performing loan ratio and deposit-loan ratio, and three positive total capital ratio, Tier1 capital ratio and liquidity ratio.

At the time one A year after effectiveness, market value acquire-banks with rich liquidity. And Market value when acquire-banks with small-sized loan business, the target- banks with big-sized loan in spite of being much non-performing loan business, and passing three years, market evaluate becoming more adequate capitated acquire-banks. Investors value high capitalized sound acquire banks with high liquidity that promotes the purchase of new loan business from target banks with large non-performing loans. It seems that investors evaluate the acquirer's loan purchase business from targets, however note that it looks like as the target bank bailout.

6.2 Discussion 2: Change of strategies

We empirically extract the change of strategies of acquirer after acquisitions. We

⁷ Bank acquirers and targets have negative median and mean ABHRs significantly. The target bank's ABHR is substantially higher than the acquirer's ABHR. And we examine the alpha effects using CTPR econometric methods, KENNETH FRENCH index results for 36month shows positively significant. Players price Asian M&A banks stock as overpriced.

check the relationship between the acquirer's change of outcomes (treatment data) and the change of strategic factors compared to non-acquisitions deals (control data). Consistent with Altunbas and Marques (2008), the outcome variables are the change of strategic management factors, such as earning diversification, risk, cost control, capital adequacy-level strategies and liquidity, and economic profitability measures of acquirers after one year and three years. For instance, a change of ROA, Market-to-book ratio, including some control variables, the DGP growth of acquirer country, the DGP growth of target country, year dummy, the country dummy of acquirer and the country dummy of target, and adding the cross border dummy, the alliance dummy. We report just treatment effect coefficients, omitting the coefficients of the DGP growth, year dummy, the country dummy, the cross-border dummy and the alliance dummy.

(Insert Table 4 about here.)

The equation from (1) to (11) in Panel A of Table 4 shows the results of the DID regression on the change of strategies for one year of acquirers by each variable regressed. There are a few significant results on strategy change. It suggests that one-year duration significantly makes notable impact on the bank acquisition deals, becoming large size, growing more total loans and spending more total costs, in spite of no significant results of ROA and Market-to-book. And the equation from (1) to (11) in Panel B of Table 4 shows the results of the change of strategies for three years. It suggests that a three-year duration makes clear impacts on deals, growing more and more total loans (the coefficients are bigger than the results for one year), becoming large total capital, keeping richer liquidity, whereas having non-performing loans, in spite of no significant results of ROA Market-to-book.

In summary for the change of acquirer's strategy change analysis, there are no

economic favorable results. In the initial stage after the acquisition, acquire banks become larger sized and grow more loans. However, after three years, may have been renewing many loan agreements and acquiring many deposits, acquire banks become being higher loan ratio, richer liquidity and finally qualifying as an adequate capital banks with a high capital ratio, whereas the growth of non- performing loans. We suggest the volume of the growth of non- performing loans is so much, because the non- performing loans ratio is significant, too. Even more, these banks also end up incurring more costs and losing their profitability in the long run. We can get significant strategic results about loan risk strategy.

6.3 Discussion 3: Characteristics of Asian countries

The goal of this section is to examine the acquirer's effects, adding the difference of a country's characteristics between the acquirers and the targets country. We empirically examine the country's characteristics effects using DID econometric methods and ATE from PSM as robustness.

Discussion3-1: DID

First, we check the relationship between the acquirer bank's outcomes, and the difference of the acquirer' and targets' legal systems. The English origin legal system, with its common law origin and providing investors with strongest legal protection, adversely, French origin legal system, civilian law origin and providing the least protection. 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. Second, we check the difference between the countries' degree of economic freedom based on the EFW index⁸ of targets. Third, we check the impacts of regulatory barriers on targets. Barth et al. (2001, 2004, and 2008) empirically show the difference between broad array of bank regulations and supervisory practice (see Appendix2) and bank development, performance and stability. We focus on three regulation systems; restrictions on bank scope restrictions on bank regulation, entry into banking requirements regulations for foreign banks and private monitoring regulation, generally called information disclosure.

The outcome variables are the change of strategic management factors, diversification, risk, cost control, capital adequacy-level strategies and liquidity, and economic profitability measures of acquirers after one year and three years, such as change of ROA, Market-to-book, including some control variables, the DGP growth of acquirer country, the DGP growth of target country, year dummy, the country dummy of acquirer and the country dummy of target, and adding the cross border dummy, the alliance dummy as same as 6.2.

In this paper, *Trend* is the dummy variable if acquisitions data are one, non-acquisitions data are zero, and we focus on the difference of systems between acquirer and target for treatment deals not the target system itself. As mentioned before, for example, we sprite "Trend" variable into four law trend dummy variables, "Same Law Tread", "Different [English] Law Tread", "Different [French] Law Tread" and "Different [Other] Law Tread" and set them to be one, the others data including control data are zero. For example EFW and regulations, we sprite "Trend" variable into three trend dummy variables, "Same Tread", "Under median" and "Upper median". We assess the significance of coefficient of some kinds of Trend variables,

The equation from (12) to (41) in Panel A of Table 4 shows the results of the DID

⁸ At first, we plane to investigate the effects of country's credit rating, and the correlation between EFW and rating is so high (0.93), and then omitting the rating from results parts. The empirical results are similar the EFWs'.

regression on the change of strategies with country characteristics one year of acquirers by each variable regressed.

First, we consider that after one year of changing outcomes results of the difference of some systems from equations from (12) to (16) in Panel A Table 4. Surprisingly, all Market-to-book, categorized in “same” are positively significant. The same system between acquisition deals and target deals promote banks quality higher before acquisitions. However, all the total costs, categorized in “different” are positively significant. In the different social system between acquisition deals and target deals, acquire banks incur much more costs related to acquisitions comparing with pre-acquisitions.

Second, in contrast, we consider that after three years of changing outcome’s results (Panel B Table 4). Regrettably, Market-to-book is not significant, but rather all non-performing loans categorized in “same” are positively significant.

Here, on the other hand, we argue the effects among the “different” system countries. Comparing with the results of legal systems, in the English legal system, the strong investor protection, acquirer-banks are positively highest coefficient of total capital. The strong investor protections (English Common Law) promote banks to be more adequate capitalized before acquisitions.

Next, we compare the results between restrictions on bank scope activities regulation (Regulation scope), and entry into banking requirements regulations (Regulation entry), and private monitoring regulation (Regulation monitoring). In “different; Upper Mean” category, the strong scope activities banking requirements regulations are useful to be costless and to become more adequate capitalized banks, whereas weak regulations are to be high cost and unsound banks. And more surprisingly, in “different; Upper Mean” category, the strong entry into banking requirements regulations are useful, too to eliminate of non-performing loans and to become the adequate capitalized banks, whereas

weak regulation is to be high cost and unsound banks. Adversely, the strong power of private monitoring regulations is not significant results. We suggest self-disclosure regulations are not effective in Asian financial market.

In short, English legal system with strong investor protection, strong regulation scope, and regulation entry are one of the important issues regarding having less non-performing loans, minimized costs, and creating more adequate capital Asian banks.

Discussion3-2: ATE from PSM

In this paper, we compute the ATE using PSM method focusing on the acquirer bank's outcomes as some strategic variables for robustness. The outcome variables are the changes of strategic management factors and the economic profitable measure of acquirers after one year and three years, such as change of ROA. And treatment propensity score is given by the probability to acquire by logit regression with set of covariates; acquiring bank size, credit risk of acquire banks, loan-deposit ratio of acquire banks, cost ratio of acquirer banks, the DGP growth, the legal index, the EFW index, the regulatory index of acquirer / target country, and the year dummy (see detailed covariates in Tables6).

The Table 5 shows the results of the ATE from PSM about changes of strategies with a country's characteristics one or three years of acquirers by each variable computed. The some ATE for one year change from acquisition, are increasing about total loans, total capital and total cost significantly. After time passing, the ATE for three changes is increasing about total loans, total capital, total cost and additionally non-performing loans, liquidity, significantly. And surprisingly, the ATE for three changes is significant decreasing about ROA adversely (even though the significant level is 10%). The increasing of change of acquirer's strategic factors for the total loans, total capital, total liquidity and non-performing loans are consistent with previous DID results. Whereas, in

the DID regression, we cannot acquire the significant results about economic profitability; ROA and Market-to-book, in the ATE from PSM, we can revile the non-profitability, negative ROA, of acquirer banks in Asian bank M&A.

After PSM, we checked the balanced box charts between the treatment group and the control group. We can see the overlap conditions after matching (Graph 4). And tested balance test comparing with raw data and matched data using standardized difference and the variance ratio (Table 6). If the variance ratios are near to one, it is good matchings.

We now summarize the empirical results. Investors value adequate capital banks with small loans and much liquidity that promote the purchase of new loan business through mutually complementary. And in the initial stage after an acquisition, acquire banks become large sized with high total loans. However, as the years go by, acquire banks have more, richer liquidity and finally being adequate capital banks, whereas the growth of non-performing loans. And finally acquire banks spend much cost and finally lost the profitability, become being lower ROA. Additionally, considering the country characteristics, English legal system, regulation scope and Regulation entry are one of the important issues regarding creating sound Asian banks. Among the difference system countries, especially target banks countries have stronger/ more stringent legal and regulation rules, acquire banks are able to enjoy higher equity adequacy and less cost. In Asia, the legal system with strong investor protection and more stringent financial regulations play an important role in resolving the problems facing.

7. CONCLUSION

This paper, representing research that began in 2000, empirically examines the effects of the Asian bank's M&A focusing on management strategies for banks' acquisition

actions from long-term aspects.

First, investors value high capitalized sound acquires banks with high liquidity that promote the purchase of new loan business from target banks with large non-performing loans. It seems that investors evaluate the acquirer's loan purchase business from the targets, however, note that it resembles the target bank bailout.

Next, focusing on acquirer banks' strategy changes after acquisitions, in the initial stage; acquire banks become larger in size, growing more gross loans. And as the years go by, acquirer banks establish more and more loans, and obtain higher liquidity and enhance adequate equity. That is like as the success business story. But simultaneously the shocking fact is that acquisitions accrue to acquire banks more non-performing loans. Even more, these banks also end up incurring more costs and losing their profitability in the long run.

Additionally, we consider the country characteristics, legal system, and financial regulation. Whereas acquirer's profitability among the same system countries are increasing in the initial stage, however after three years go by, acquirer banks are not being profitable but rather they are suffering from non-performing loan problems. On the other hand, among the difference system countries, especially target banks countries have stronger/ more stringent legal and regulation rules, acquire banks can enjoy higher capital adequacy and less cost. In Asia, the legal system with strong investor protection and more stringent financial regulations play an important role in resolving the problems.

The Asian banks M&A are meaningful to the issue of growing new loans and enhancing capital adequacy. Regrettably, Asian banks don't become profitable by M&A because of non-performing loans. And the most important issue is that the legal system with investor protection and more stringent regulatory systems are able to enforce the Asian banks being efficient through M&A between different economic system countries.

This study has considered some issues that have remained unexamined. We compute

the ATE from regression adjustment methods not only PSM. Although, the propensity score is given by the probability to acquire by logit regression and compute the ATE with the *prima facie* acquisition effects by factually acquired data and factually non-acquisition data, there are no considerations about the change of effecting terms to the outcome, directly. We plan to compute ATE from regression adjustment methods. And we have to consider the effects of a global financial crisis, comparing before the crisis and after the crisis.

From long term aspects, the promotion or demotion of every strategy widely differs from legal systems and regulation system and each combination. To say it another way, if we know the legal and regulation system for acquisition banks countries, we would understand which strategies are advantageous and which strategies are disadvantageous.

References

- Allen, L. and J. Jagtiani (2000), The Risk Effects of Combining Banking, Securities, and Insurance Activities, *Journal of Economics and Business*, 52, 485-497.
- Altunbas, Y. and D. Marques (2008), Mergers and Acquisitions and Bank Performance in Europe: The Role of Strategic Similarities, *Journal of Economics and Business*, 60, 204-422.
- Artikis, P.G., S. Stanley and S. Staikouras (2008), A Practical Approach to Blend Insurance in the Banking Network, *Journal of Risk Finance*, 9(2), 106-124.
- Baele, L., D.J. Oliver and V.V. Rudi (2007), Does the Stock Market Value Bank Diversification? *Journal of Banking & Finance*, 31, 1999-2023.
- Barth, J.R., G. Caprio and R. Levine (2001), The Regulation and Supervision of banks around the world: A New Database, *The World Bank Working Paper*, 2588.
- Barth, J.R., G. Caprio and R. Levine (2004), Bank Regulation and Supervision: What works best?, *Journal of Financial Intermediation*, 13, 205-248.

- Barth, J.R., G. Caprio and R. Levine (2008), Bank Regulation are Changing?: For Better or Worse?, *The World Bank Working Paper*, 4646.
- Behr, A. and F. Heid (2011), The Success of Bank Merger Revisited. An Assessment Based on a Matching Strategy, *Journal of Empirical Finance*, 18, 117-135
- Caiazza, S., C. Andrew and F.P. Alberto (2012), what do bank acquirers want? Evidence from Worldwide bank M&A targets, *Journal of Banking and Finance*, 36, 2641-2659
- Calzolari, G., Loranth G (2011) Regulation of multinational banks: A theoretical inquiry. *Journal of Financial Intermediation* 20, 178-198
- Campbell, C.J., Crown, A.R. and Salotti, V. (2010), Multi-country event study methods, *Journal of Banking & Finance*, 34, pp3078-3090 .
- Chiou, I. and L. J. White (2005), Measuring the Value of Strategic Alliances in the Wake of a Financial Implosion: Evidence from Japan's Financial Services Sector, *Journal of Banking & Finance*, 29, 2455-2476.
- De Haas, R., Lelyveld, I (2010) Internal capital markets and lending by multinational bank subsidiaries. *Journal of Financial Intermediation* 19, 1-25.
- Fauver, L., J. Houston and A. Naranjo (2003), Capital market development, international integration, legal systems, and the value of corporate diversification: A cross-country analysis, *Journal of Financial and Quantitative Analysis*, 38-1, 135–157
- Field, L.P., D.R. Fraser and J.W. Kolari (2007), Bidder Return in Bancassurance Mergers: Is There Evidence of Synergy? *Journal of Banking & Finance*, 31, 3466-3662.
- Guo,S and N.Frase (2015), *Propensity Score Analysis -Statistical Methods and Applications*, SAGE Publications
- Kitamura, Y.(2011), Methods of policy valuation analyses, *Introduction to*

Microeconometrics, Nihon Hyoron Sha

Inui, T., Xial, Tan, et al. (2013) Do Chinese firms success the cross border M&A?,

RIETI Policy Discussion Paper, 12-P-005.

Laeven, K, L. and R. Levine (2007), Is There a Diversification Discount in Financial

Conglomerates? *Journal of Financial Economics*, 85, 331-367.

Lelyveld, I. and K. Knot (2009), Do Financial Conglomerates Create or Destroy Value?

Evidence for the EU, *Journal of Banking and Finance*, 33, 2312-2321.

Makimoto, N. (2007), The Study of Purpose and Causality of M&A and Alliance by

Covariance Structure Analysis, *Mathematics of Finance and Accounting Business*,

Asakura Press (in Japanese)

Meyer, B.D. (1995), Natural and Quasi-Experiments in Economics, *The Journal of*

Business and Economics Statistics, 13, 151-161

Minton, B.A., and C. Schrand (1999), The Impact of Cash Flow Volatility on

Discretionary Investment and the Costs of Debt and Equity Financing, *Journal of*

Financial Economics, 54, 423-460.

Moller, S.B., and F. P. Schlingmann (2005), Global Diversification and Bidder Gains:

A Comparison between Cross-Border and Domestic Acquisitions, *Journal of*

Banking and Finance, 29, 533-564

Nguyen, L., Wilson, J., 2016. How Does Bank Lending React to a Catastrophic

Weather Event? Proceeding of World Finance Conference 2016.

La Porta, R., F. Lopez-de-Silanes; A. Shleifer and R. Vishny (1997), Legal Determinants

of External Finance." *Journal of Finance*, 52, 1131-1150.

Ongena, S., Popov, A., Udell, G (2013) When the cat's away the mice will play': does

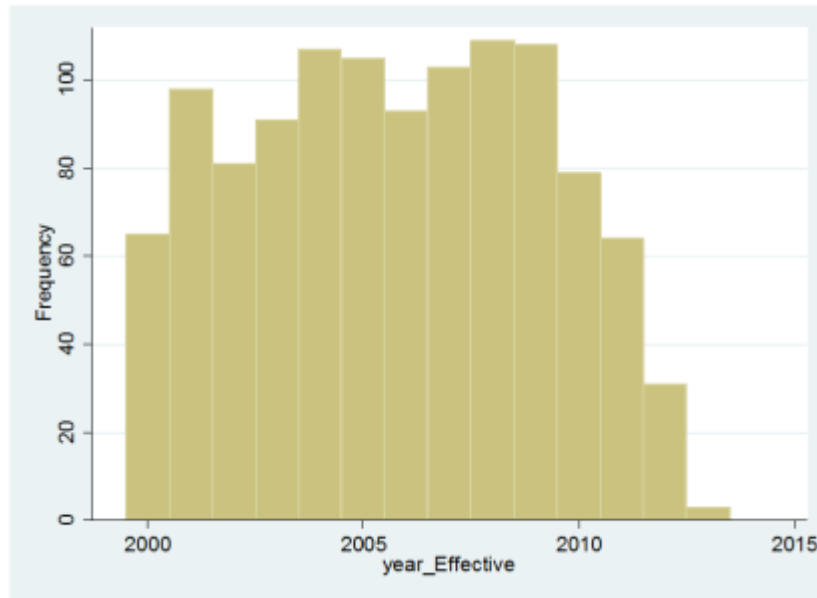
regulation at home affect bank risk taking abroad?, *Journal of Financial*

Economics, 108, 707-750.

Pana, E., Park, J., Query, T. (2010), The impact of bank mergers on liquidity creation,

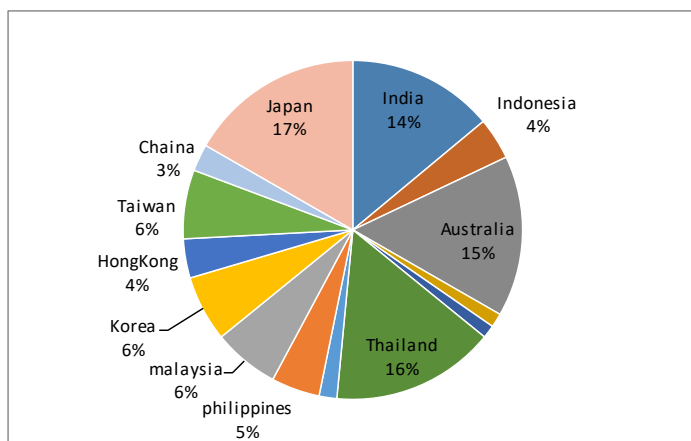
- Journal of Risk Management and Financial Institutions*, 4, 74–96
- Pratt, S.P., and R.J. Grabowski (2010), *Cost of Capital :Applications and Examples*, John, Wiley & Son, Hoboken
- Rossi, S. and Volpin, P. (2004), Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*, 74, 277-304.
- Saikouras, S.K. (2009), An Event Study of International Ventures Between Banks and Insurance Firms, *Journal of International Financial Markets Institutions and Money*, 19, 675-691.
- Sakai, K., K. Tsuru and K. Hosono (2009), Merger of Credit Unions, *Kinyu-keizai kenkyu*, 28, 47-63 (in Japanese).
- Schmid, M. and I. Walter (2009), Do Financial Conglomerates Create or Destroy Economic Value?, *Journal of Financial Intermediation*, 18(2), 193-216.
- Steigner T. and N.K. Sutton (2011), How Does National Culture Impact Internalization Benefits in Cross –Border Mergers and Acquisitions?, *The Financial Review*, 46, 103-125.
- White, H. (1980), A heteroscedasticity-consistent covariance matrix estimator and a direct test for heteroscedasticity. *Econometrica* 48, 817–838.
- Yamazaki, N., and H. Yamaguchi (2011), “Assessment of measuring ways about Japanese stock long Performance - The test between BHAR and CRP”, Discussion Kobe University 2011-9.
- Yamori, N., K. Harimaya and K. Kondo (2003), Are Banks Affiliated with Bank Holding Companies More Efficient Than Independent Banks? The Recent Experience Regarding Japanese Regional BHCs, *Asia-Pacific Financial Markets*, 10(4), 359-376.

(Graph 1) The number of acquisitions for Asian banks by effective years
(Announcement from 2000 to 2011)



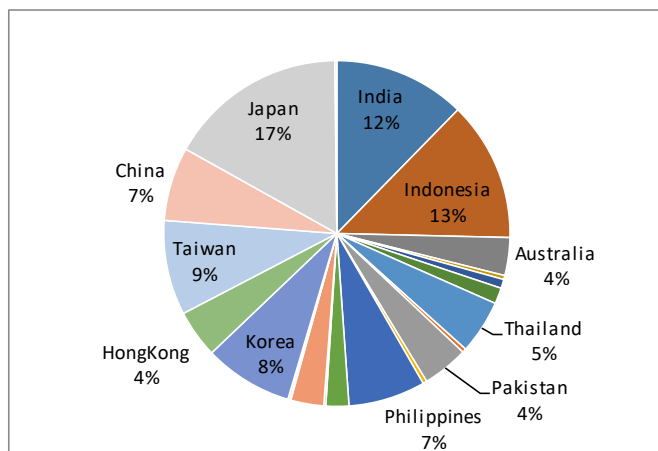
(Graph 2) The share of acquirer and target countries

Panel A) Acquirers



Top five industries of counterparty	%
Bank	35.35
Consumer credit	9.33
Securities	7.28
Investment advisory services	6.93
Life insurance	6.04

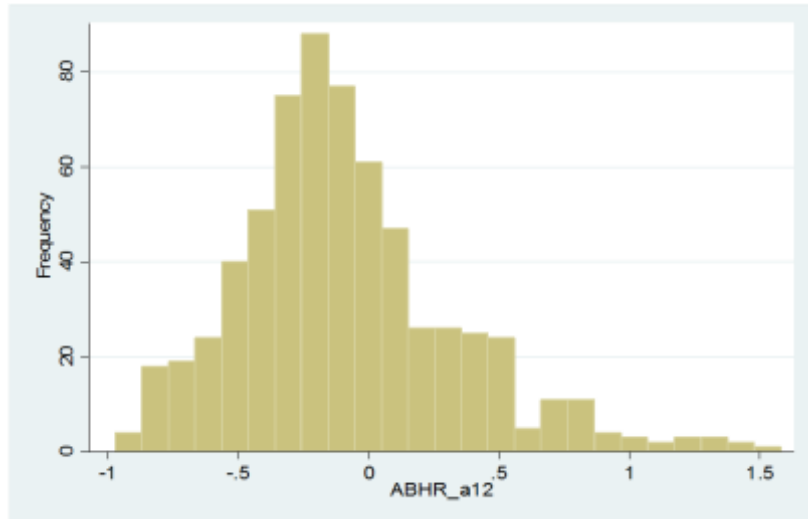
Panel B) Targets



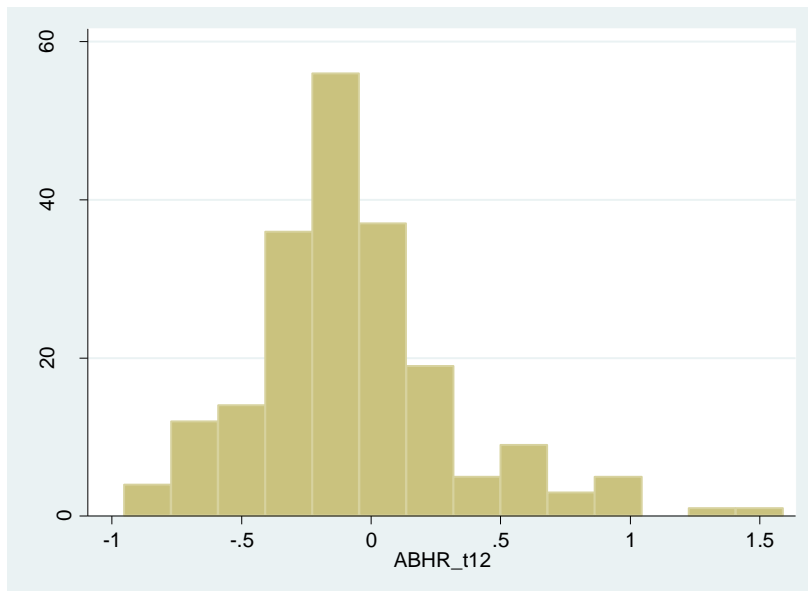
Top five industries of counterparty	%
Bank	54.29%
Other investment	21.36%
Investment advisory services	4.29%
Securities	3.45%
Life insurance	2.89%

(Graph 3) The distribution of ABHR for 12month

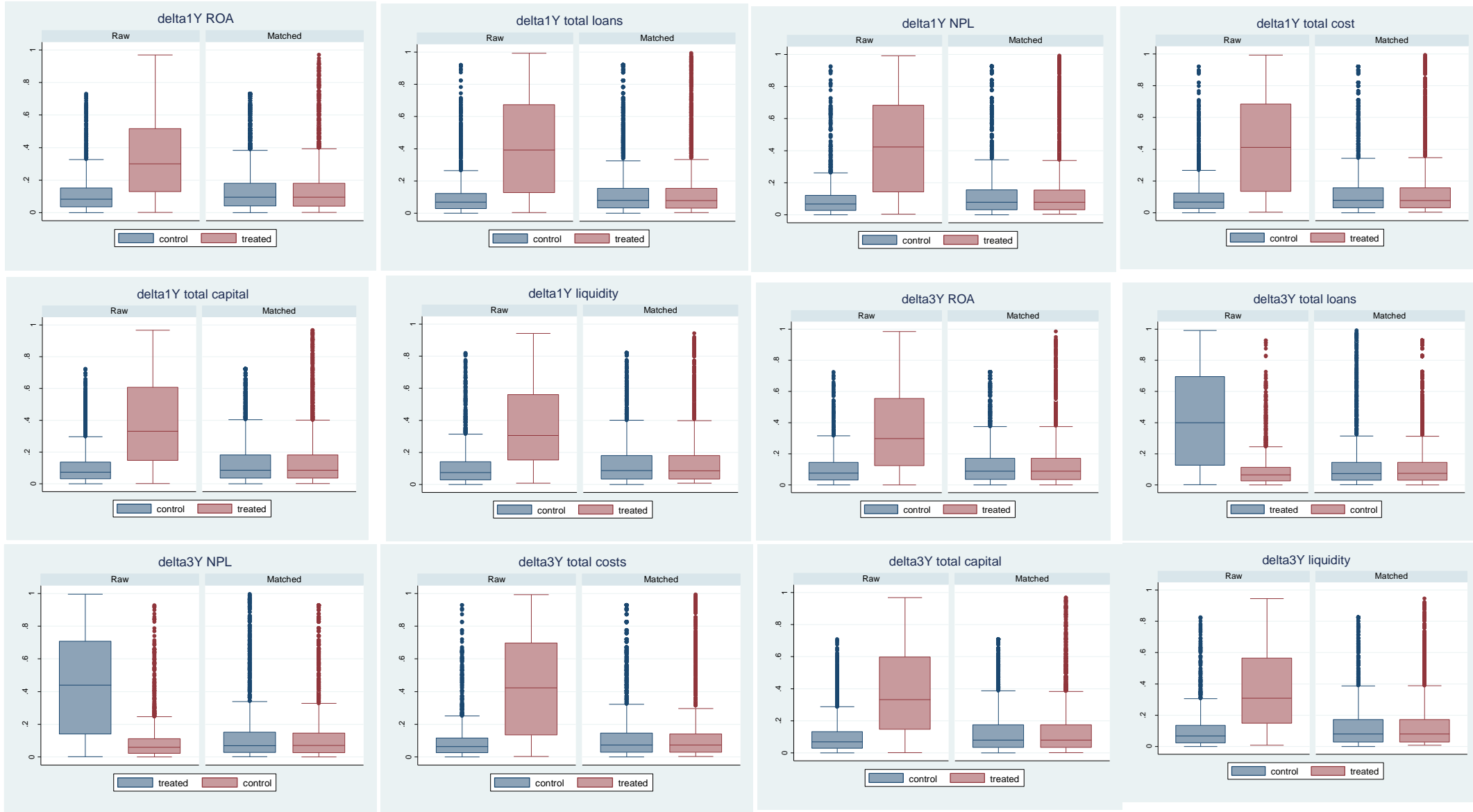
Acquire



Target



(Graph4) The balanced box chart comparing with raw data and matched data



(Table 1) basic statistics

Panel A) 1 year

Variable	Treatment Banks			Control Banks		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Δ 1Y_loanloss provision ratio	494	-0.038	1.158	2,910	-0.146	6.785
Δ 1Y_loans ratio	473	-0.010	0.077	2,846	-0.064	2.704
Δ 1Y_total capital ratio	529	-0.004	0.049	3,377	-0.001	0.126
Δ 1Y_deposit-loans ratio	522	-0.047	0.390	3,351	-0.260	11.724
Δ 1Y_total cost ratio	545	0.776	29.375	3,264	-0.612	52.741
Δ 1Y_Total capital ratio	563	-0.002	0.061	4,255	-0.001	0.074
Δ 1Y_Tier 1 capital ratio	402	-0.005	0.082	2,145	-0.001	0.103
Δ 1Y_Liquidity ratio	548	0.004	0.055	3,973	0.002	0.069
Δ 1Y_Total loans	527	0.140	0.244	3,374	0.090	0.199
Δ 1Y_Non-performing loan	472	0.075	0.543	2,839	0.012	0.625
Δ 1Y_Loan loss provisions	494	0.086	0.428	2,875	0.028	0.432
Δ 1Y_Total cost	543	0.133	0.315	3,264	0.066	0.291
Δ 1Y_Total capital	560	0.158	0.336	4,217	0.109	0.322
Δ 1Y_ROA	563	0.000	0.030	4,258	0.000	0.189
Δ 1Y_Size	563	0.146	0.234	4,262	0.103	0.228
Δ 1Y_Qratio	548	-0.017	0.260	3,781	-0.020	0.534
Δ 1Y_GDP growth(a)	806	3.781	4.171	6,632	3.790	4.239
Δ 1Y_GDP growth(t)	793	3.989	4.315	6,632	3.790	4.239
ABHR12month	650	-0.086	0.417	-	-	-
ABHR36month	594	-0.031	0.927	-	-	-

Panel B) 3 year

Variable	Treatment Banks			Control Banks		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Δ 3Y_loanloss provision ratio	455	-0.249	1.188	2,740	-0.237	5.701635
Δ 3Y_loans ratio	430	-0.015	0.082	2,592	-0.161	3.732269
Δ 3Y_total capital ratio	481	-0.006	0.068	3,100	-0.002	0.219027
Δ 3Y_deposit-loans ratio	475	-0.083	0.490	3,077	-0.514	14.61434
Δ 3Y_total cost ratio	503	0.2832	34.455	2,998	-1.841	50.02508
Δ 3Y_Total capital ratio	521	-0.002	0.078	4,046	-7E-04	0.106191
Δ 3Y_Tier 1 capital ratio	361	0.0027	0.089	1,803	-0.071	2.792076
Δ 3Y_Liquidity ratio	506	0.0135	0.081	3,777	0.0049	0.100088
Δ 3Y_Total loans	479	0.387	0.355	3,099	0.2889	0.4285
Δ 3Y_Non-performing loan	430	0.2996	0.928	2,592	0.0223	0.983636
Δ 3Y_Loan loss provisions	455	0.2404	0.636	2,717	0.102	0.713012
Δ 3Y_Total cost	501	0.3387	0.606	2,998	0.2114	0.50672
Δ 3Y_Total capital	520	0.4293	0.458	4,005	0.3458	0.509835
Δ 3Y_ROA	521	-0.002	0.027	4,050	0.0012	0.205907
Δ 3Y_Size	521	0.3906	0.338	4,054	0.3123	0.43795
Δ 3Y_Qratio	509	-0.022	0.282	3,605	-0.02	0.946645
Δ 3Y_GDP growth(a)	806	3.7806	4.171	6,632	3.79	4.239192
Δ 3Y_GDP growth(t)	793	3.9891	4.315	6,632	3.79	4.239192
ABHR12month	113	-0.014	0.411	-	-	-
ABHR36month	103	0.2294	1.135	-	-	-

(Table 2) The number of max deals using analysis (the data having financial data, total assets)

Panel A) Treatment Banks (Entities)

Acquire; banks

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Japan	4	14	8	14	7	5	15	12	15	10	7	4	3		118
India	2	5	2	4	16	11	6	6	5	5	6	3			71
Indonesia					1	3		1	4	3	1	2			15
Singapore		2			2		2	1	2						9
Sri Lanka		2								2					4
Thailand	3	9	12	8	11	13	7	5	6	8	7	3	2		94
Pakistan			1	1					2		1				5
Philippines	1		3	2	2	1	3	6	2	1		2	1		24
Malaysia	3	3	3	1	3	2	2	1	8	3			1		30
Korea; Republic (S. Korea)	1	7	1	4	6	3	2	3	4		3	2	3		39
Hong Kong		1	1		1	2	4	2	1	3					15
Taiwan	1	2	1	3	1	1	2	1		3					15
China	2				1			1	7	2	3	3	3	1	23
Vietnam									1		3		2		6
Australia	9	6	7	8	4	9	5	12	12	12	6	5			95
Total	26	51	39	45	55	50	48	51	69	52	37	24	15	1	563

Target; Entities

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Japan	4	13	8	14	7	4	15	10	14	10	5	2	2		108
India	2	5	2	4	16	10	4	5	5	5	6	3			67
Indonesia	1	1			3	4	1	4	7	4	1	1			27
Singapore		2			1		2		1						6
Sri Lanka		2		1						2					5
Thailand	3	9	12	8	11	12	7	5	7	9	8	3	1		95
Pakistan			1						2		1				4
Philippines	3		3	2	2	1	3	6	2	1		2	1		26
Malaysia	2	3	3	1	3	2	2	3	1						20
Korea; Republic (S. Korea)	1	7	1	3	5	2	2	2	3		2	2	3		33
Hong Kong	2		1		1	1	2	1	5	3	1	1			18
Taiwan		2	1	3	1	2	2	1		4					16
China				1	2	3	3	1	4	2	1	2	3	1	23
Kazakhstan									1		2				3
Vietnam								1	4	1	4	1	3		14
Macao									1	1					2
Australia	7	3	6	8	3	8	3	8	9	8	4	5	1		73
Tonga		1													1
New Zealand	1		1							2	1				5
Fiji							1								1
Samoa		1													1
Rus.						1									1
U.S.		1						4	2		1	1	1		10
kenya							1								1
The others		1							1			1			3
Total	26	50	39	45	55	50	48	51	68	52	37	23	15	1	563

Industry of target

<u>Industry Code</u>	<u>Industry of target</u>	<u>Freq.</u>
100	Agriculture etc.	1
1000	Mine, Construction	12
2000	Food, textile etc.	22
3000	Steel, Electric etc.	34
4000	Transportation etc.	10
5000	Sales etc.	8
6000	Bank	178
6100	Consumer credit	83
6200	security	91
6300	Insurance	29
6400	Insurance Agent	2
6500	Real Estate	16
6700	Holding company	33
7000	Hotel, Leasure etc.	34
8000	Service etc.	10
		<hr/>
		563

Target; Only Banks and holding companies

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Japan	2	12	5	6	4	2	7	3	2	2	5	2	1		53
India		1	1		2	1	1	2	1		2	1			12
Indonesia	1	1			2	2	1	4	5	2		1			19
Singapore		1							1						2
Sri Lanka				1						1					2
Thailand		1	2	1	1	1	1		1	1	6				15
Pakistan			1												1
Philippines	2		2	1	2	1	2	3	2	1					16
Malaysia	2	2	1		1	1	1	1							9
Korea; Republic (S. Korea)			1	1		1	1	1	1				2		8
Hong Kong	2		1		1		1		4	2	1	1			13
Taiwan					1	2	2			1					6
China				1	2	2	3	1	2	1	1		1		14
Kazakhstan									1		2				3
Vietnam									3	1	1	1	2		8
Macao									1	1					2
Australia	1		2	1		1	1	2	2	2		1			13
Tonga		1													1
New Zealand										2					2
Fiji							1								1
Samoa		1													1
Rus.						1									1
U.S.		1						2	2			1			6
kenya							1								1
Total	10	21	16	12	16	15	23	19	28	17	18	8	6	0	209

Panel B) Control Banks

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Japan	86	83	87	88	92	96	95	91	94	82	93	95	101	102	1285
India	11	26	27	31	31	33	38	37	39	38	40	42	41	43	477
Indonesia	11	24	23	24	17	19	27	24	26	24	26	33	42	43	363
Singapore	2	3	4	4	3	4	3	3	3	3	3	4	4	4	47
Sri Lanka	4	4	7	7	8	9	11	12	12	11	11	15	15	16	142
Thailand	9	10	7	9	8	6	6	6	7	4	9	9	10	12	112
Pakistan	8	9	7	10	13	15	17	20	19	23	19	20	21	21	222
Philippines	10	17	16	18	18	15	15	15	19	16	21	17	19	19	235
Malaysia	14	16	15	16	12	14	11	9	8	9	11	11	11	11	168
Korea; Republic (S. Korea)	19	18	23	25	24	25	27	28	27	28	25	21	19	20	329
Hong Kong	8	9	11	11	7	10	8	7	7	6	8	9	9	9	119
Taiwan	18	15	19	21	23	20	20	16	20	18	20	19	19	21	269
China	4	7	8	8	10	14	12	12	15	19	15	20	21	25	190
Bangladesh							5	7	9	11	25	27	27	27	138
Vietnam					1	1	3	5	5	5	5	7	5	8	45
Australia	3	8	8	10	9	8	7	7	7	7	9	8	12	14	117
New Zealand		1	1	1	1										4
Total	207	250	263	283	277	289	305	299	317	304	340	357	376	395	4262

Source: Thomson Reuter Data Base

(Table 3) Regressions of the difference between acquires and targets

Panel A) 1 year

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
the other operational income ratio	-0.6699 (0.423)	-0.0481 (0.971)								
loanloss provision ratio			-0.0479 (0.283)	-0.1339 (0.163)						
non performing loan ratio					-1.0739 (0.231)	-5.6527 *** (0.004)				
loans ratio							-0.1654 (0.319)	-0.2882 (0.132)		
deposit-loans ratio									-0.0049 *** (0.000)	-0.0187 *** (0.010)
total cost ratio										
total capital ratio										
Tier1 capital ratio										
liquidity ratio										
D cross border	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
D Year		Included		Included		Included		Included		Included
D acqvie country		Included		Included		Included		Included		Included
D target country		Included		Included		Included		Included		Included
Control variables(Market-to-book, lnAsset)	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Intercept	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
n	106	101	64	61	48	45	97	93	68	64
r2	0.1547	0.5133	0.0424	0.5549	0.0332	0.7921	0.1858	0.6005	0.0652	0.7115
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
the other operational income ratio										
loanloss provision ratio										
non performing loan ratio										
loans ratio										
deposit-loans ratio										
total cost ratio	0.0017 ** (0.015)	0.0015 * (0.099)								
total capital ratio			-0.0342 (0.602)	0.0209 (0.750)						
Tier1 capital ratio					0.4704 (0.348)	0.4866 (0.574)				
liquidity ratio							0.4352 *** (0.000)	0.3075 *** (0.008)		
D cross border	Included	Included	Included	Included	Included	Included	Included	Included		
D Year		Included		Included		Included		Included		
D acqvie country		Included		Included		Included		Included		
D target country		Included		Included		Included		Included		
Control variables(Market-to-book, lnAsset)	Included	Included	Included	Included	Included	Included	Included	Included		
Intercept	Included	Included	Included	Included	Included	Included	Included	Included		
n	199	193	200	194	43	41	200	194		
r2	0.2039	0.5598	0.1912	0.5477	0.0554	0.476	0.2515	0.5674		

The results of the 12month ABHR of acquires in each GDP weighted cross-sectional regression model. Heteroskedasticity-corrected P value are in parenthesis. The symbols ***, **, and * denote statistical significant at the 1%, 5% and 10% level, respectively. The independent variables are the difference between acquires and targets of strategic factors after one year of acquisitions. .

Panel B) 3 year

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
the other operational income ratio	-0.1338 (0.876)	1.4107 (0.228)								
loanloss provision ratio			0.055 (0.519)	-0.1457 (0.412)						
non performing loan ratio					-0.4012 (0.694)	-6.768 ** (0.036)				
loans ratio							0.1484 (0.579)	-0.1054 (0.732)		
deposit-loans ratio									-0.0162 *** (0.000)	-0.141 (0.851)
total cost ratio										
total capital ratio										
Tier1 capital ratio										
liquidity ratio										
D cross border	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
D Year		Included		Included		Included		Included		Included
D acqie country		Included		Included		Included		Included		Included
D target country		Included		Included		Included		Included		Included
Control variables(Market-to-book, lnAsset)	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Intercept	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
n	96	91	59	56	45	42	89	85	63	59
r2	0.3178	0.6804	0.1151	0.7334	0.1693	0.9202	0.3011	0.7029	0.2444	0.7395
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
the other operational income ratio										
loanloss provision ratio										
non performing loan ratio										
loans ratio										
deposit-loans ratio										
total cost ratio	0.0002 (0.895)	0.0007 (0.700)								
total capital ratio			0.1586 (0.292)	0.2558 ** (0.034)						
Tier1 capital ratio					1.6809 *** (0.003)	3.0862 ** (0.026)				
liquidity ratio							0.9762 *** (0.001)	0.6055 ** (0.023)		
D cross border	Included	Included	Included	Included	Included	Included	Included	Included		
D Year		Included		Included		Included		Included		
D acqie country		Included		Included		Included		Included		
D target country		Included		Included		Included		Included		
Control variables(Market-to-book, lnAsset)	Included	Included	Included	Included	Included	Included	Included	Included		
Intercept	Included	Included	Included	Included	Included	Included	Included	Included		
n	183	178	183	178	38	36	183	178		
r2	0.1733	0.5917	0.1769	0.5987	0.2118	0.7946	0.2368	0.6064		

The results of the 12month ABHR of acquires in each GDP weighted cross-sectional regression model. Heteroskedasticity-corrected P value are in parenthesis. The symbols ***, **, and * denote statistical significant at the 1%, 5% and 10% level, respectively. The independent variables are the difference between acquires and targets of strategic factors after three year of acquisitions.

(Table 4) The DID results for acquirers

Panel A: Δ 1year

	Dependent variable (Delta for 1 years)	Δ ROA	Δ market-to-book	Δ the other operational income ratio	Δ non performing loan ratio	Δ tier 1 capital ratio	Δ liquidity ratio	Δ size	Δ total loans	Δ nonperforming loans	Δ total costs	Δ total capital
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	regression	0.0006 (0.897)	0.0219 (0.117)	-0.0004 (0.581)	0.0395 (0.407)	0.0008 (0.833)	0.0056 (0.244)	0.0297 * (0.058)	0.0346 * (0.065)	0.0706 (0.251)	0.0357 * (0.100)	0.0303 (0.147)
Simple regression	n	4815	4323	4025	3315	2545	4516	4820	3897	3307	3802	4771
	r2	0.0036 (12)	0.0166 (13)	0.01 (14)	0.0079 (15)	0.0079 (16)	0.0281 (17)	0.1425 (18)	0.2086 (19)	0.0437 (20)	0.1807 (21)	0.1047 (22)
Legal law	same	0.003 (0.539)	0.0392 ** (0.024)							0.0601 (0.330)	0.0084 (0.638)	0.0089 (0.607)
	English law origin	0.0081 (0.721)	0.1419 ** (0.038)							0.8162 (0.196)	-0.0692 (0.505)	0.0677 (0.423)
	French law origin	0.0056 (0.793)	-0.0619 (0.614)							-0.445 (0.434)	0.0672 (0.651)	0.2339 *** (0.008)
	Others law origin	-0.0216 (0.223)	0.0997 (0.507)							-0.4793 (0.444)	0.3341 *** (0.001)	-0.0713 (0.378)
EFW	same	0.003 (0.542)	0.0403 ** (0.021)						0.0025 (0.751)	0.068 (0.268)	0.0091 (0.610)	0.01 (0.560)
	Under Mean	-0.0083 (0.771)	-0.1161 (0.390)						-0.0094 (0.811)	-0.1517 (0.699)	0.4377 ** (0.014)	0.2066 * (0.058)
	Upper Mean	0.015 (0.616)	0.1898 (0.165)						-0.0053 (0.857)	-0.1742 (0.587)	-0.2158 (0.177)	-0.1796 (0.158)
Scope regulation	same	0.0029 (0.545)	0.0394 ** (0.023)	0.0002 (0.836)					0.0029 (0.710)	0.0697 (0.257)	0.009 (0.613)	0.0111 (0.519)
	Under Mean	0.0192 (0.628)	0.2407 * (0.085)	-0.0038 (0.262)					-0.0247 (0.403)	-0.4388 (0.257)	-0.1527 (0.371)	-0.2154 * (0.066)
	Upper Mean	-0.0023 (0.904)	-0.0367 (0.780)	0.0061 (0.104)					-0.03 (0.389)	-0.3 (0.451)	0.4396 *** (0.004)	0.1487 (0.247)
Entry regulation	same	0.003 (0.539)	0.0403 ** (0.021)						0.0024 (0.755)	0.0665 (0.276)	0.011 (0.535)	0.0106 (0.534)
	Under Mean	0.0184 (0.603)	0.1914 (0.116)						-0.0197 (0.525)	-0.4047 (0.306)	-0.2052 (0.240)	-0.2243 * (0.059)
	Upper Mean	-0.0026 (0.914)	-0.1106 (0.506)						-0.0251 (0.476)	-0.2549 (0.466)	0.3744 ** (0.024)	0.1254 (0.349)
Self-monitoring regulation	same	0.0031 (0.525)	0.0398 ** (0.022)						0.0025 (0.747)	0.061 (0.319)	0.0109 (0.540)	0.0103 (0.546)
	Under Mean	0.0087 (0.727)	-0.1762 (0.260)						0.0472 (0.182)	-0.0682 (0.867)	0.1583 (0.376)	0.2449 ** (0.038)
	Upper Mean	0.0183 (0.551)	0.1779 (0.173)						0.0094 (0.711)	-0.1993 (0.450)	-0.2835 * (0.080)	-0.1726 (0.155)

The results of the 1year DID of acquires with some control variables. Heteroskedasticity-corrected P value are in parenthesis. The symbols ***, **, and * denote statistical significant at the 1%, 5% and 10% level, respectively. The independent variables are the difference between after one year (t=1) acquire's values and pre-effective year (t=0) values of strategic factors. The treatment banks are determined as acquired banks and the control banks are all asian banks without acquisitions. In independent variables, there are treatment dummy variables, treatment banks are 1, the others are 0.

Panel B: Δ 3year

	Dependent variable (Delta for 3 years)	Δ ROA	Δ market-to-book	Δ the other operational income ratio	Δ non performing loan ratio	Δ tier 1 capital ratio	Δ liquidity ratio	Δ size	Δ total loans	Δ nonperforming loans	Δ total costs	Δ total capital
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Simple regression	regression	-0.0054 (0.443)	-0.007 (0.760)	0.0006 (0.645)	0.1783 ** (0.015)	0.0926 (0.313)	0.0156 * (0.083)	0.039 (0.239)	0.0755 ** (0.032)	0.2861 *** (0.003)	0.0512 (0.342)	0.0809 * (0.074)
	n	4566	4109	3703	3019	2162	4278	4570	3575	3019	3494	4520
	r2	0.0045	0.0101	0.013	0.014	0.0104	0.0834	0.1721	0.2548	0.1097	0.2862	0.1581
		(12)	(13)							(14)	(15)	(16)
Legal law	same	-0.0046 (0.439)	0.0227 (0.423)							0.2509 *** (0.008)	0.0166 (0.657)	0.0542 * (0.099)
	English law origin	0.0016 (0.919)	0.0925 (0.442)							-0.5754 (0.455)	-0.2277 (0.388)	0.2943 *** (0.001)
	French law origin	0.0137 (0.480)	-0.2815 (0.119)							0.2398 (0.792)	0.2631 (0.311)	0.1371 (0.310)
	Others law origin	-0.0184 (0.461)	-0.0343 (0.895)							0.6813 (0.452)	0.4213 (0.167)	-0.1918 (0.165)
EFW	same	-0.0046 (0.446)	0.021 (0.457)						-0.0049 (0.688)	0.2602 *** (0.006)	0.0005 (0.990)	0.055 * (0.091)
	Under Mean	0.0068 (0.532)	0.04 (0.820)						0.0974 * (0.087)	-1.0187 * (0.081)	-0.3909 (0.348)	0.2636 * (0.074)
	Upper Mean	-0.0087 (0.685)	-0.2166 ** (0.013)						-0.0781 * (0.095)	0.5241 (0.365)	0.3009 (0.238)	-0.001 (0.994)
		(17)	(18)						(19)	(20)	(21)	(22)
Scope regulation	same	-0.0046 (0.448)	0.0201 (0.474)	0.0012 (0.384)					-0.0046 (0.704)	0.256 *** (0.006)	0.0007 (0.985)	0.0561 * (0.085)
	Under Mean	-0.0066 (0.644)	-0.0833 (0.707)	-0.0092 (0.251)					0.028 (0.721)	1.4834 * (0.073)	1.0477 * (0.055)	-0.3235 ** (0.047)
	Upper Mean	0.0128 (0.347)	0.1691 (0.400)	0.0198 ** (0.041)					-0.0486 (0.602)	-1.2744 (0.143)	-1.2293 * (0.094)	0.4334 ** (0.020)
		(23)	(24)	(25)					(26)	(27)	(28)	(29)
Entry regulation	same	-0.0046 (0.450)	0.0204 (0.469)						-0.0046 (0.702)	0.2557 *** (0.007)	0.0013 (0.973)	0.0556 * (0.088)
	Under Mean	-0.0098 (0.516)	-0.1701 (0.421)						0.0292 (0.719)	0.9677 (0.239)	0.9977 * (0.066)	-0.2782 * (0.089)
	Upper Mean	0.0087 (0.548)	0.06 (0.777)						-0.045 (0.616)	-2.1032 *** (0.010)	-1.2781 * (0.082)	0.4848 *** (0.010)
		(30)	(31)						(32)	(33)	(34)	(35)
Self-monitoring regulation	same	-0.0045 (0.454)	0.0201 (0.474)						-0.0047 (0.696)	0.2542 *** (0.007)	-0.0005 (0.989)	0.0561 * (0.085)
	Under Mean	0.0002 (0.995)	0.2184 (0.277)						0.0167 (0.764)	0.7852 (0.192)	-0.0417 (0.810)	0.2541 * (0.071)
	Upper Mean	-0.0097 (0.692)	-0.1314 (0.418)						0.012 (0.829)	0.2226 (0.725)	0.2509 (0.389)	-0.1062 (0.396)
		(36)	(37)						(38)	(39)	(40)	(41)

The results of the 3year DID of acquires with some control variables. Heteroskedasticity-corrected P value are in parenthesis. The symbols ***, **, and * denote statistical significant at the 1%, 5% and 10% level, respectively. The independent variables are the difference between three one year (t=3) acquire's values and pre-effective year (t=0) values of strategic factors. The treatment banks are determined as acquired banks and the control banks are all asian banks without acquisitions. In independent variables, there are treatment dummy variables, treatment banks are 1, the others are 0.

(Table 5) The ATE calculating from PSM for acquirers

Outcome variable	Δ ROA	Δ total loans	Δ nonperforming loans	Δ total costs	Δ total capital	Δ liquidity
	(1)	(2)	(3)	(4)	(5)	(6)
ATE from PSM: 1 year	-0.0085 (0.102)	0.0568 *** (0.010)	0.0673 (0.263)	0.0533 ** (0.033)	0.0910 * (0.093)	-0.0140 ** (0.013)
n	2963	2888	2519	2564	2960	2564
	(7)	(8)	(9)	(10)	(11)	(12)
ATE from PSM: 3 year	-0.0132 * (0.073)	0.0891 *** (0.009)	0.2015 ** (0.043)	0.1680 *** (0.000)	0.1497 ** (0.025)	0.0133 * (0.088)
n	2855	2758	2399	2468	2817	2474

The results of the 1year and 3 year ATE from PSM for acquires with some control variables. P value are in parenthesis. The symbols ***, **, and * denote statistical significant at the 1%, 5% and 10% level, respectively. The outcome variables are the difference between after one/three year (t=1 or t=3) acquire's values and pre-effective year (t=0) values of strategic factors. The treatment banks are determined as acquired banks and the control banks are all asian banks without acquisitions.

(Table 6) The balanced check by variance ratio

Δ 1Y ROA	Raw	Matched	Δ 1Y total loans	Raw	Matched	Δ 1Y NPL	Raw	Matched	Δ 1Y total costs	Raw	Matched	Δ 1Y total capital	Raw	Matched	Δ 1Y liquidity	Raw	Matched
size	1.328	1.308	size	1.4381	1.2441	size	1.4768	1.1004	size	1.4381	1.2441	size	1.0737	1.0870	size	1.4350	1.3951
creditrisk	0.001	0.005	creditrisk	0.0006	0.0005	costratio	0.5022	0.5370	creditrisk	0.0006	0.0005	creditrisk	0.0353	0.0564	costratio	0.4730	0.9440
loandeporatio	0.008	0.055	loandeporatio	1.0378	0.5912	capitalratio	1.1900	0.7116	capitalratio	1.0378	0.5912	loandeporatio	0.0008	0.0068	creditrisk	0.0006	0.0009
gdpgrowth_a	0.862	0.770	gdpgrowth_a	0.8538	0.7670	loandeporatio	0.0074	0.0150	gdpgrowth_a	0.8538	0.7670	gdpgrowth_a	0.9195	0.6908	capitalratio	1.0637	0.7960
gdpgrowth_t	0.872	0.804	gdpgrowth_t	0.8531	0.6385	gdpgrowth_a	0.8585	0.8578	gdpgrowth_t	0.8531	0.6385	gdpgrowth_t	0.9348	0.7311	loandeporatio	0.0075	0.0162
bkact_inx_t	0.916	0.979	bkact_inx_t	0.9050	0.8058	gdpgrowth_t	0.8544	0.7051	bkact_inx_t	0.9050	0.8058	privatemoni_it	1.0195	0.9681	gdpgrowth_a	0.8528	0.7758
privatemoni_it	0.957	0.975	compfor_inx_t	0.4736	0.3964	bkact_inx_t	0.9069	0.7083	compfor_inx_t	0.4736	0.3964	EFW_t	0.8749	0.5791	gdpgrowth_t	0.8522	0.8009
EFW_t	0.865	0.648	privatemoni_it	0.9856	0.9174	compfor_inx_t	0.4666	0.2977	privatemoni_it	0.9856	0.9174	legal_e_a	1.1929	1.0411	compfor_inx_t	0.4716	1.0396
legal_e_t	0.469	0.977	EFW_a	0.7754	0.6944	privatemoni_it	0.9915	0.9220	EFW_a	0.7754	0.6944	legal_e_t	1.1812	1.0308	privatemoni_it	0.9852	0.8938
Year Dummies			EFW_t	0.7096	0.7096	EFW_a	0.7813	0.6551	EFW_t	0.8376	0.7096	Year Dummies			EFW_t	0.8344	0.6150
			legal_e_a	1.0988	0.9049	EFW_t	0.8418	0.6728	legal_e_a	1.0988	0.9049				legal_e_t	1.0755	0.8917
			legal_e_t	1.0770	0.9094	legal_e_t	1.0836	0.8882	legal_e_t	1.0770	0.9094				Year Dummies		
			Year Dummies			Year Dummies			Year Dummies								

Δ 3Y ROA	Raw	Matched	Δ 3Y total loans	Raw	Matched	Δ 3Y NPL	Raw	Matched	Δ 3Y total costs	Raw	Matched	Δ 3Y total capital	Raw	Matched	Δ 3Y liquidity	Raw	Matched
size	1.3275	1.3083	size	1.2882	1.0596	size	1.4760	1.2755	size	1.4347	1.3054	size	1.0778	1.1971	size	1.4273	1.2182
creditrisk	0.0008	0.0046	costratio	0.5050	1.4042	costratio	0.5339	0.7041	creditrisk	0.0006	0.0006	creditrisk	0.0355	0.0547	costratio	0.5189	1.4738
loandeporatio	0.0080	0.0546	capitalratio	1.4311	0.8694	capitalratio	1.2141	0.8211	capitalratio	1.0863	0.8149	loandeporatio	0.0008	0.0053	creditrisk	0.0006	0.0006
gdpgrowth_a	0.8625	0.7703	gdpgrowth_a	0.8744	0.8461	loandeporatio	0.0074	0.0159	gdpgrowth_a	0.8536	0.9215	gdpgrowth_a	0.9260	0.7853	capitalratio	1.1014	0.6605
gdpgrowth_t	0.8718	0.8043	gdpgrowth_t	0.8752	0.8551	gdpgrowth_a	0.8609	0.8647	gdpgrowth_t	0.8490	0.6676	gdpgrowth_t	0.9401	0.8002	loandeporatio	0.0076	0.0108
bkact_inx_t	0.9156	0.9786	bkact_inx_t	0.9292	0.8157	gdpgrowth_t	0.8644	0.6436	bkact_inx_t	0.9493	0.7558	privatemoni_it	1.0287	0.9957	gdpgrowth_a	0.8570	0.9065
privatemoni_it	0.9567	0.9747	compfor_inx_t	0.4636	0.5854	bkact_inx_t	0.9077	0.7189	compfor_inx_t	0.4830	0.2731	EFW_t	0.8945	0.6520	gdpgrowth_t	0.8523	0.8061
EFW_t	0.8653	0.6478	privatemoni_it	0.9985	0.8840	compfor_inx_t	0.4888	0.3744	privatemoni_it	0.9886	0.9368	legal_e_a	1.1977	1.0289	compfor_inx_t	0.4811	0.5907
legal_e_t	1.0313	0.9770	EFW_a	0.8123	0.7228	privatemoni_it	0.9918	0.8439	EFW_a	0.7921	0.6004	legal_e_t	1.1838	1.0260	privatemoni_it	0.9887	0.9627
Year Dummies			EFW_t	0.8846	0.7643	EFW_a	0.7600	0.5904	EFW_t	0.8507	0.6876	Year Dummies			EFW_t	0.8505	0.5871
			legal_e_a	1.0695	0.8928	EFW_t	0.8293	0.6718	legal_e_a	1.0904	0.9241				legal_e_t	1.0662	0.9242
			legal_e_t	0.9085	0.9144	legal_e_t	1.0724	0.8531	legal_e_t	1.0648	0.9452				Year Dummies		
			Year Dummies			legal_o_t	0.9095	0.8423	Year Dummies								
						Year Dummies											

The variance ratio is standardized different covariate's variance of treatments over controls.

<Appendix 1>

Asia-Pacific Data

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, Japan, 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, Western Samoa
------------------------	--

<Appendix 2>

The strategy variables for Asian banks

Strategy	Variables in Altunbas and Marques (2008)	Proxy variables used in this paper
1. Earning diversification strategy	(1) Diversity of earnings Other operational revenue / total assets	The other operational income ratio = other operational revenue / total assets
	(2) Off-balance sheet activity off-balance sheet items / total assets	
2. Risk strategy	(1) Credit risk Loan loss provisions / net interest revenue	Provisions ratio (credit risk1) = loan loss provisions / net interest revenue
	(2) Loan ratio Loans / total assets	Non-performing loan ratio (credit risk2) = non-performing loans / total loans
	(3) Deposit activity Customer loans / customer deposits	Loan ratio = total loans / total assets 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 assets	Total capital ratio (Capital ratio 1) = total capital / total asset Capital ratio 2 = tier 1 capital / risk asset
5. Liquidity risk strategy	Liquidity asset / total assets	Liquidity ratio = Liquidity asset / total assets
The others	ROA Size Market-to-book	ROA = net income / total asset size = ln(asset) Market-to-book = market value of capital / book value of capital