Institutional Shareholders' Role Analysis on Cross-Border M&A Deals in Asia Pacific Region

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Abstract. In this competitive era, one of the key success factors for M&A deals is the role of institutional shareholders. However, each institutional shareholder has different knowledge of information. This research describes the effect of institutional shareholders on cross-border merger and acquisition deals conducted by Asia Pacific acquirers by running panel data analysis of M&A data from 2015 - 2019. The results suggest that the cross-border M&A deals are likely to increase by existence of institutional shareholders. Specifically, presence of foreign institutional shareholders, independent institutional shareholders, and long-term institutional shareholders encourages company to have cross-border M&A deals. Overall, these results are in line with the view that institutional shareholders can offer better M&A deals in Asia Pacific. Acquirer firms must be able to build good relationships with institutional shareholders and manage information from them so the company's decision-making process can be profitable for all party.

Keywords: Asia Pacific, Asymmetric Information, Cross-Border, Institutional Shareholders, Merger and Acquisition

1 Introduction

The rapid development of the global economy due to globalization has prompted several companies to implement various business strategies to survive in a competitive business environment. One of them is the merger and acquisitions (M&A) strategy, which is taking over a company by another company to expand and accelerate the business growth compared to using organic growth [1]. Currently, M&A deals have experienced a significant increase over the past decade, which during the last six years the number of global M&A deals has reached more than US$ 3 trillion each year [2].

The majority of companies are encouraged to conduct M&A deals because these will form a new company value [3]. This allows companies to enter new markets and national borders in search of new customers, expand their scope by acquiring new technology, reduce taxes by creating new subsidiaries located in foreign countries, and so on. Many companies derive this value by conducting cross-border M&A deals. According to Hsu et al. [4], announcement stock return can be increase when companies conduct cross-border M&A deals because they will not only gain new markets abroad but can adopt new technological innovations. This is one of reason why many companies have done cross-border M&A deals recently.

There are several factors driving the company in making decisions to conduct M&A deals, including the existence of institutional shareholders in the company [5]. Several previous studies have identified that institutional shareholders can influence the decision-making

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process in the company. Over the past decade the number of institutional shareholders has risen dramatically which has made their activities increasingly important in the global capital market. In M&A deals case, institutional shareholders will contribute more to influence the company on deciding deal characteristics, because shareholders wealth of acquirer and target companies can significantly affected by this important investment decision [6].

Besides, corporate control and ownership structure differ from each country, including the characteristics of institutional shareholders in influencing the decision making process of Asia Pacific firms [7]. These characteristic differences can rise asymmetric information among institutional shareholders that can impact the company's investment decisions. Previous study states that asymmetric information has a significant impact on investment decisions that lead to overinvestment or underinvestment [8]. This indicates that asymmetric information can lead companies to make decisions that tend to be biased, including the selection of cross-border M&A deals. Thus, further research is needed on the role of each institutional shareholder in accordance their characteristics to involved in M&A decision making process.

The number of M&A deals has risen rapidly in Asia Pacific region, followed by increased institutional shareholder activities. This is because the Asia Pacific region is still dominated by developing countries that are experiencing rapid economic development and industrialization. Therefore, this study will analyze the contribution of institutional shareholder characteristics in making cross-border M&A deals decision in Asia Pacific firms. In addition, there is still little research on this topic in the Asia Pacific region.

This paper presents a probit panel data regression model as a method for analyzing the characteristics of institutional shareholders in making cross-border M&A deal decisions. By using this method, Asia Pacific companies can examine institutional shareholders' behavior when influencing the company to choose cross-border M&A deals decisions. So, it is expected that the company can take advantage of the institutional shareholders existence to make the best deals related to M&A, which can improve the company's performance. Our sample is M&A deals conducted by Asia Pacific acquirers from 2015 – 2019. The difference between this study and the previous one is the additional research object, specifically group of institutional shareholders based on the horizon of investment and based on the type of institutional shareholders

The structure of this paper is as follows. First section is Introduction. Literature reviews are in Section 2. The methodology is provided in Section 3. Section 4 present the discusses and empirical data. The conclusions are in Section 5.

2 Literature Review

The existence of institutional shareholders in the company considered to have important role. They can take the controlling role for company performance than individual investors because they have better access to information and can influence the management team [9][7]. The existence of a large ownership in the company makes institutional shareholders can influence management team easily. Institutional shareholders will participate in some activities and educate themselves in the hope that they will affect management decisions and promote corporate governance. In the end, the active control of institutional shareholders will provide benefits an increase in investment value. This also applies to cross boerder M&A that aim to increase the competitiveness of a company by taking over other companies abroad. The higher number of institutional shareholders in the acquirer company, the greater their encouragement for the company to keep performing wll and get higher returns. This leads to a higher possibility of the company doing cross-border M&. Based on this argument, we state our hypotesis as follows.

H1. Institutional shareholders has significant role to influence cross-borders M&A deals.

Based on origin, institutional shareholders are divided into two categories: domestic (DIO) and foreign institutional ownerships (FIO). DIO is considered to have an advantage over FIO because of the better access to information. However, when these two get the same access, FIO will have a better performance in processing the information in order to provide them with a higher return [6]. FIO also have better acces to international market than DIO. Previous research from Bena et al. [10] found that the company with a greater FIO will increase long-term investments and increase innovation output. Ferreira et al. [11] found that FIO can improve company's productivity, reduce capital expanditure, contribute to international investment and reduce asymmetric infromation and transaction costs. From this, it can be estimated that the presence of FIO will increase the possibility of companies making cross-border M&A.

Based on the type of institutions, institutional investors are divided into independent and gray investors [7]. This is motivated by the fact that not all investors have an interest in the long-term value of the company and take part in management control. Investment advisors and mutual funds are not looking for a partnership with a company, so they monitor the management team to boost their performance. This type of investor is referred to as independent investors [12]. Meanwhile, other institutional shareholders such as insurance companies, bank and others, have advantage from company business lines. They monitor management less frequently to avoid conflicts of interest and maintain existing relationships with companies. So, there is a possibility that independent institutional shareholders are involved in determining the cross-border M&A deals.

In the context of management control, long-term investors will more engage while investors who make short-term investments will only focus on trading profits. This is consistent with research from Dong and Ozkan [13] which stated that active long-term institutional shareholders involvement will result in effective corporate control. This is because long-term investors have invested and monitored the company for a long time, so they understand the company condition and have more information about the company than short-term investors. So, this study also tests whether the horizon of investment will affect the cross-border M&A deals.

3 Method

To observe institutional shareholders' roles on cross-border M&A deals, this paper uses probit panel data regression models. Probit model is used to identify the acquirer's preferences toward the target. Observation data is collected from Thomson Reuters DataStream which provides historical data of M&A deals from 01:2015 to 12:2019. The selected data are deals carried out by acquirers from Asia Pacific firms. The data required include data related to information on M&A deals, financial statement of acquirer firms, and historical ownership report of the acquirer firms.

The following conditions are used to select the final sample. (1) Financial data and ownership data for the year-end-prior must be available on Thomson Reuters DataStream. (2)

At the end of the research period (31/12/2019), the deals must have completed status. (3) The acquiring firms originate from Asia Pacific Region with Central Asia as an exception and also have public company status. (4) The deals value must exceed US$ 1 Million. (5) All companies engaged in finance will be excluded from the study. Based on these criteria, this study will use 1.964 completed M&A deals as the sample.

The variables used in this study are the dependent variables, the independent variables, and control variables. Table 1 will provide all the variable descriptions.

Table 1. Description of Variables

Variable Name	Description
Dependent Variables	
Cross-border (CB)	If the acquiring company conduct a cross-border deals, it will be marked with a value of 1 and a value of 0 if otherwise.
Independent Variables (Firm-level Institutional Shareholders Variables)	
Total Institutional Ownership (TIO)	Summative percentage on year end before deals announcement of all institutional investors' share in the acquirer.
Domestic Institutional Ownership (DIO)	Summative percentage on year end before deals announcement of native institutional investors' share in the acquirer.
Foreign Institutional Ownership (FIO)	Summative percentage on year end before deals announcement of foreign institutional investors' share in the acquirer.
Independent Institutional Ownership (IIO)	Summative percentage on year end before deals announcement of independent institutional investors' share in the acquirer.
Gray Institutional Ownership (GIO)	Summative percentage on year end before deals announcement of gray institutional investors' share in the acquirer.
Active Institutional Ownership (AIO)	Summative percentage on year end before deals announcement of low turnover institutional investors' share in the acquirer.
Passive Institutional Ownership (PIO)	Summative percentage on year end before deals announcement of moderate and high turnover institutional investors' share in the acquirer.
Control Variables (Firm-specific Variables)	
Firm Size (FS)	Acquirer's total assets at year-end before deal announcement.
Return on Assets (ROA)	Acquirer's net income to total assets at year-end before deal announcement.
Financial Leverage (FL)	Acquirer total debt to total assets at year-end before deal announcement.
Cash and Cash Equivalent (CASH)	Acquirer's cash and cash equivalent to total assets at year-end before deal announcement.
Capital Expenditure (CAPEX)	Acquirer's capital expenditure to total assets at year-end before deal announcement.
Dividend Yield (DY)	Acquirer's common cash dividends to the share price at year-end before deal announcement.

After data collection, it was continued to analyze descriptive statistics of the data to see the distribution and characteristics of the data and variables used. We also conducted a correlation test to see how the cross-border M&A deals correlated with other M&A deals characteristics. Before testing the hypothesis, the independent variables will be tested using the correlation test to see the correlation between variables. If the correlation value between two variables is above 40%, then one of them must be excluded to avoid biased results. As for this research model will provided on Eq. 1. After that, the testing using probit panel data regression will be conducted. We grouped the data by country, which there will be 15 country groups.

$$CrossBorder = \alpha + \beta Institutional\ Ownership + \delta X + \varepsilon \quad (1)$$

4 Result and Discussion

4.1 Data Distribution and Statistic Descriptive

Table 2. Data Distribution

Panel A: Annual distribution of Asia Pacific M&A		
Year	Number of M&A	Percentage of Sample
2015	292	14,87%
2016	441	22,45%
2017	444	22,61%
2018	451	22,96%
2019	336	17,11%
Total	1964	100,00%

Panel B: Markets distribution of Asia Pacific M&A		
Markets	Number of M&A	Percentage of Sample
Australia	460	23,42%
China (Mainland)	863	43,94%
Hong Kong	47	2,39%
India	133	6,77%
Indonesia	15	0,76%
Malaysia	49	2,49%
New Zealand	28	1,43%
Pakistan	1	0,05%
Philippines	18	0,92%
Singapore	75	3,82%
South Korea	203	10,34%
Sri Lanka	1	0,05%
Taiwan	37	1,88%
Thailand	21	1,07%
Vietnam	13	0,66%
Total	1964	100,00%

Panel C: Type of deals distribution of Asia Pacific M&A		
Type of M&A Deals	Number of M&A	Percentage of Sample
Domestic	1557	79,28%

Cross-Border	407	20,72%
Total	1964	100,00%

Table 2 provides the data distribution for our research sample. Panel A Table 1 report annual distribution of Asia Pacific merger and acquisition. M&A deals increase from 292 deals in 2015 to 451 deals in 2018 and decrease in 2019 to 336 deals. This indicates that M&A deals require a fairly lengthy process so the number of deals in the last year of research is relatively small because there are still many deals that have not been completed. Panel B report markets distributions of Asia Pacific merger and acquisition. As shown, China has a large contribution to M&A data in Asia Pacific with a total of 863 deals or equivalent to 43,94% of our sample. Australia has the second highest with 460 deals (23,42% of our sample) and South Korea follows with 203 deals (10,34% of our sample). Panel C report type of deals distributions of Asia Pacific merger and acquisition. It can be seen that M&A deals in Asia Pacific are still dominated by domestic deals with 1557 deals (78,28%), while cross-border deals are only 407 deals (20,72%). This probably happened because countries in Asia Pacific are still dominated by developing countries where they still need economic development in their own countries.

Table 3. Descriptive statistics

Variables	N	Mean	Median	Min	Max	Std. Dev.
Cross-Border	1964	0,21	0,00	0,00	1,00	0,4
Firm Size (US$)	1964	2082,6	297,55	0,00	223389	9650,78
Financial Leverage	1964	1,12	0,68	-87,33	76,95	4,35
ROA	1964	0,01	0,05	-36,08	57,89	1,67
Cash & Equivalent	1964	0,21	0,15	0,00	1,03	0,19
Capital Expenditure	1964	0,06	0,04	0,00	1,70	0,09
Dividend Yield	1964	0,01	0,00	0,00	0,18	0,02
TIO	1964	0,12	0,06	0,00	1,06	0,15
DIO	1964	0,07	0,04	0,00	0,67	0,10
FIO	1964	0,04	0,00	0,00	1,06	0,10
IIO	1964	0,09	0,05	0,00	1,06	0,13
GIO	1964	0,03	0,00	0,00	0,97	0,08
PIO	1964	0,08	0,01	0,00	1,06	0,13
AIO	1964	0,04	0,01	0,00	0,86	0,06

The descriptive statistic present in Table 3. There is 12% average number of total institutional shareholders in acquiring company. This show that in Asia Pacific, institutional shareholders are not the dominant shareholders group, as in US and UK [6]. Domestic institutional shareholders in Asia Pacific take control of ownership with an average of 7%, while foreign investors only have an average of 4%. Institutional shareholders in Asia Pacific are dominated by independent institutional shareholders such as hedge funds and investment managers with an average of 9%. Passive institutional shareholders also dominate the group of institutional shareholders in Asia Pacific with an average ownership of 8%, which indicates that the company has many institutional shareholders who invest in the long-term.

Tabel 4 show the correlation between cross-border M&A with other M&A characteristics. The correlation value between cross-border deals and full control deals is 85,31%. This value is quite large, compared to the correlation value between cross-border deals and partial control deals, which only 51,38%. This indicates that companies that carry out cross-border deals will have a preference for full control over the target company. By fully taking over the target company outside the company's domicile area, it is hoped that it will make it easier for the company to understand market conditions outside and expand to overseas markets. In addition, companies that carry out cross-border deals will have a preference to choose private company as target. This is supported by the correlation value between cross-border deals with private status targets which is quite large, 75,48%. Target company that have private status will be easier to manage, because there is not too many parties involved, so acquirer companies will prefer to target private company.

Table 4. Correlation between cross-border M&A with other M&A characteristics

	Cross-Border Deals
Full Control Deals	85,31%
Partial Control Deals	51,38%
Target Status - Private	75,48%

4.2 Correlation Test Result

The 6 variables in the acquirer firm characteristic category do not have a correlation level above 40% or it can be said that they do not have a strong enough correlation with other variables, so these 6 variables can be included in hypothesis testing. Meanwhile, 7 variables in the category of institutional shareholders' characteristics have a fairly strong correlation with each other or have a correlation level above 40%, so these variables cannot be tested simultaneously.

4.3 Hypotesis Test Result

Table 5 shows the probit analysis of cross-border M&A in Asia Pacific. Panel A Table 5 report the result of total institutional shareholders' roles on cross-border M&A. It shows that total institutional shareholders have a coefficient value of 1,2412 with a p-value of 0,00. This indicates that total institutional shareholders have a significant influence on cross-border M&A deals. Based on the research model, if the TIO concentration increases by 1% in the acquirer company, it will increase the likelihood of the company to conduct cross-border M&A by 1,2412%.

Panel B Table 5 report the result of domestic and foreign institutional shareholders' roles on cross-border M&A. As show, domestic institutional ownership (DIO) has a coefficient value of 0,5610 with a p-value of 0,32 and the foreign institutional ownerships (FIO) variable has a coefficient value of 1,4518 with a p-value of 0,00. This suggests that cross-border M&A deals can be significantly affected by foreign institutional shareholders. Meanwhile, the concentration of DIO has no significant effect on cross-border M&A deals because it has a p-value above 0,05. Based on the research model, if the FIO concentration increases by 1% in the acquiring company, it will increase the likelihood of that company to conduct cross-border M&A by 1,4518%.

Next, Panel C Table 5 report the result of independent and gray institutional shareholders' roles on cross-border M&A. As show, independent institutional ownerships (IIO) has a coefficient value of 1,4768 with a p-value of 0,00 and the gray institutional ownerships (GIO) has a coefficient value of 0,5897 with a p-value of 0,17. This indicates that independent institutional ownerships have a significant influence on cross-border M&A and GIO has no significant effect on cross-border M&A deals. Based on the research model, if the IIO concentration increases by 1% in the acquiring company, it will increase the likelihood of the company to conduct cross-border M&A by 1,4768%.

Last, Panel D report the result of passive and active institutional shareholders's roles on cross-border M&A. It can be seen that passive institutional ownerships (PIO) has a coefficient value of 0,9899 with a p-value of 0,00, meanwhile the active institutional ownerships (AIO) has a coefficient value of 1,6647 with a p-value of 0,08. This indicates that passive institutional ownerships have a significant influence on cross-border M&A and AIO concentration has no significant effect these deals. Based on the research model, if the concentration of PIO increases by 1% in the acquiring company, it will increase the likelihood of the company to conduct cross-border M&A by 0,9899%.

Table 5. Probit analysis of cross-border M&A in Asia Pasific

Panel A: Output Probit Panel Data Regression of Total Institutional Ownerships Variable			Panel B: Output Probit Panel Data Regression of Institutional Ownerships Variable Based on Origin		
Variables	Coefficient	z	Variables	Coefficient	z
Constant	-0,7992 ***	-3,22	*Constant*	-0,7669***	-3,15
TIO	1,2412***	3,02	DIO	0,5610	0,99
			FIO	1,4518***	7,04
FS	0,0000***	2,62	FS	0,0000***	3,00
LEVER	-0,0112	-1,66	LEVER	-0,0107	-1,63
ROA	-0,0129	-0,55	ROA	-0,0094	-0,45
CASH	0,5964***	2,43	CASH	0,5604***	2,22
CAPEX	-0,8179***	-2,33	CAPEX	-0,8369***	-2,30
DY	-0,9908	-0,44	DY	-0,3938	-0,18
σ_u	0,5793		σ_u	0,5738	
ρ	0,2512		ρ	0,2477	
Panel C: Output Probit Panel Data Regression of Institutional Ownerships Variable Based on Type			Panel D: Output Probit Panel Data Regression of Institutional Ownerships Variable Based on Investment Horizon		
Variables	Coefficient	z	Variables	Coefficient	z
Constant	-0,7974***	-3,15	*Constant*	-0,7885***	-3,22
IIO	1,4768***	0,99	PIO	0,9899***	3,11
GIO	0,5897	7,04	AIO	1,6647	1,78
FS	0,0000***	2,62	FS	0,0000***	2,55
LEVER	-0,0115	-1,66	LEVER	-0,0111	-1,64
ROA	-0,0199	-0,55	ROA	-0,0152	-0,72
CASH	0,5890***	2,43	CASH	0,5670***	2,37
CAPEX	-0,7926***	-2,33	CAPEX	-0,8187***	-2,38
DY	-1,0617	-0,44	DY	-0,6693	-0,28
σ_u	0,5775		σ_u	0,5731	
ρ	0,2501		ρ	0,2472	

***Represent significance at 1% respectively.

4.4 Discussion

The existence of institutional shareholders in the acquirer affects M&A decision in Asia Pacific, as does the trend towards cross-border deals. This is in consistent with the characteristics of institutional shareholders, who have greater ownership than other shareholders, so that they can provide a long-term view of an investment and it is easier to regulate or control management in terms of decision making [14], one of which is M&A decision through voting rights at the GMS. When compared to institutional shareholders in developed countries, such as in US and UK, institutional shareholders in Asia Pacific are relatively smaller [6]. However, this does not reduce their activism in monitoring company's management, because they do not want to lose their investment value and also they have more information than other types of shareholders.

The choice of cross-border M&A can be directed by institutional shareholders because by conducting cross-border mergers and acquisitions it is possible to expand the market and technology, which will provide benefits for the company as well as institutional shareholders as reflected in the increase shareholders wealth. This is consistent with previous research which states that cross-border M&A deals can be expand the market and increase the company's technological capabilities, so that it has an impact on increasing shareholder value [15]. Hsu et al. [4] state that these cross-border M&A can generate higher returns on shares compared to local M&A deals.

In addition, it can be seen that the concentration of foreign institutional shareholders, independent institutional shareholders, and passive institutional shareholders has an influence on cross-border M&A. Foreign institutional shareholders will have better knowledge or access to information related to international capital markets than domestic institutional shareholders. This knowledge is useful for reducing transaction costs and asymmetry information between the target company and the acquirer [11]. Moreover, foreign shareholders are also able to provide external funding sources to support the company's M&A deals [9]. This causes these foreign institutional shareholders encourage companies to conduct cross-border M&A.

For independent institutional shareholders, because they are not tied to the business of the acquirer company, this type of institutional shareholder will more easily direct and make suggestion to acquirer company about decisions, such as cross-border M&A decision. They are on the neutral side and do not have a conflict of interest in the acquirer company [7]. Independent institutional shareholders will have more freedom to monitor and control the company's policies. This active monitoring is expected to increase the company's cash flow and the rate of return on investment, such as on M&A deals.

In addition, access to information related to the condition of the company and also the company's business environment will be easier and better understood by institutional shareholders who have long invested in a company. Long-term institutional shareholders will be more actively involved in making corporate decisions and will not want to reduce the value of their investment in the business, in order to them to participate in M&A deal decision [6]. This could be an indication that passive institutional shareholders will direct the company to conduct cross-border M&A if the company's conditions and environment are favorable.

From this discussion it can be concluded that institutional shareholders have a role to monitor and control company’s decisions, such M&A decision through their voting rights at the GMS. Moreover, the existence of institutional shareholders in the acquirer company can minimize the information gap between the acquirer and the target company, provide external funding, reduce transaction costs and risks that may occur in M&A deals.

5 Conclusion

Based on the results of probit panel data regression, it is known that institutional shareholders as a whole have a significant positive impact on cross-border M&A deals. Meanwhile, foreign institutional shareholders, independent institutional shareholders, and passive institutional shareholders are 3 categories of institutional shareholders that have a significant positive effect on cross-border M&A deals.

Institutional shareholders can play an important role in the external monitoring process and also have an influence on corporate decision making. This is because they do not want to lose the value of their investment in the company, so they will actively contribute to management decision making, including this M&A decision. Several types of institutional shareholders can play a special role in the company, so companies must pay attention and manage them properly. The acquiring company should hold regular meetings with institutional shareholders, outside of the GMS agenda, to gather information that can support their strategic decisions. Investors or shareholders must also be open and active in providing information or input to the company and giving voting rights, because it can affect the value of their investment in the company.

For further research, it is possible to expand the scope of research variables in order to better represent the role of shareholders in corporate decision making. Further researchers can also consider from the side of the target company in terms of the characteristics of M&A deals. Variables related to country level specific can also be added in further research to explain the differences in shareholder characteristics between countries.

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