

# Cross-Border M&A and Enterprise Performance from Quantitative and Qualitative Approach

–Focusing on Product Synergy and PMI–

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## <Abstract>

Through the expansion of globalization, M&A has become one of the most important strategies for enterprises. This paper will explore the high failure rate of M&A from the view of post-integration. In this paper, we propose the best integration approach in the post-merger acquisition process. When an enterprise effectively integrates in the post-merger process, it generates new services and products by sharing and acquiring resources. Among the many objectives of M&A, this paper focuses on cross-border M&A, which prioritizes product synergy. Through previous research, this paper concluded that inter-organizational learning is crucial to the product synergy objective of M&A. Moreover, this paper identifies how different integration approaches affect the performance of the enterprise. This paper concludes that the symbiosis approach to integration reinforces enterprise performance, and that none of these enterprises take the preservation approach to integration.

## <Keywords>

Cross-border M&A, Inter-organizational learning, Product synergy, symbiosis, absorption, Post-merger integration

## **1. Introduction**

For many enterprises around the world, cross-border M&A has been an effective strategy in reinforcing competence in the global market, however, many of these enterprises still end up failing. There are quite a few reasons that M&A fails. Not enough due-diligence, over-diversifying its range of products, acquiring too many fields of operation, and differences in corporate culture are some of the reasons that lead to failure. This paper concentrates on the difficulties of post-merger integration, specifically, on the integration process, product synergy, and the organizational integration and performance using ROA.

The structure of this paper is as follows. First, we will discuss the current situation of cross-border M&A and identify related issues. Second, we will discuss and analyze issues and research articles that focus on product synergy, post-merger integration, and inter-organizational learning. Third, based on these issues and articles, we will develop two hypotheses through quantitative and qualitative methods to investigate our research. Fourth, we will investigate these hypotheses and present the results. Lastly, based on the results, we will discuss the limitations and implications of cross-border M&A and discuss some additional issues.

## **2. Current Situation**

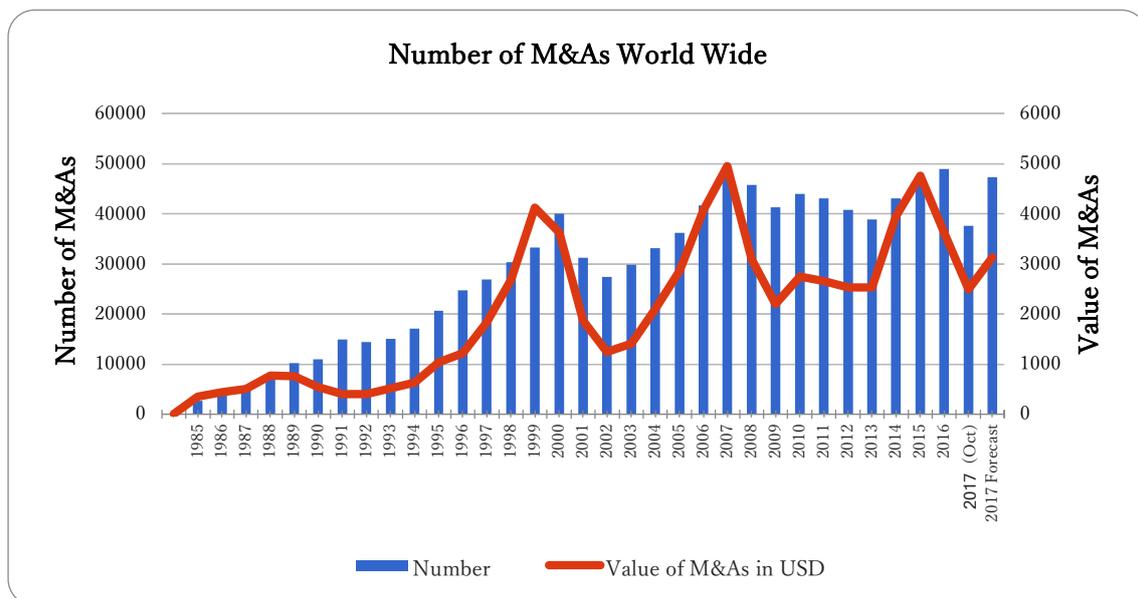
This chapter will approach the current situation of cross-border M&A and analyze issues and reasons.

### **(1) Current situation of cross-border M&A**

In recent years, M&A has become the main way for enterprises to enhance their competitiveness and expand their business. As shown in Figure 1, the number of M&A transactions has remained high, especially in recent years. The rapid spread of

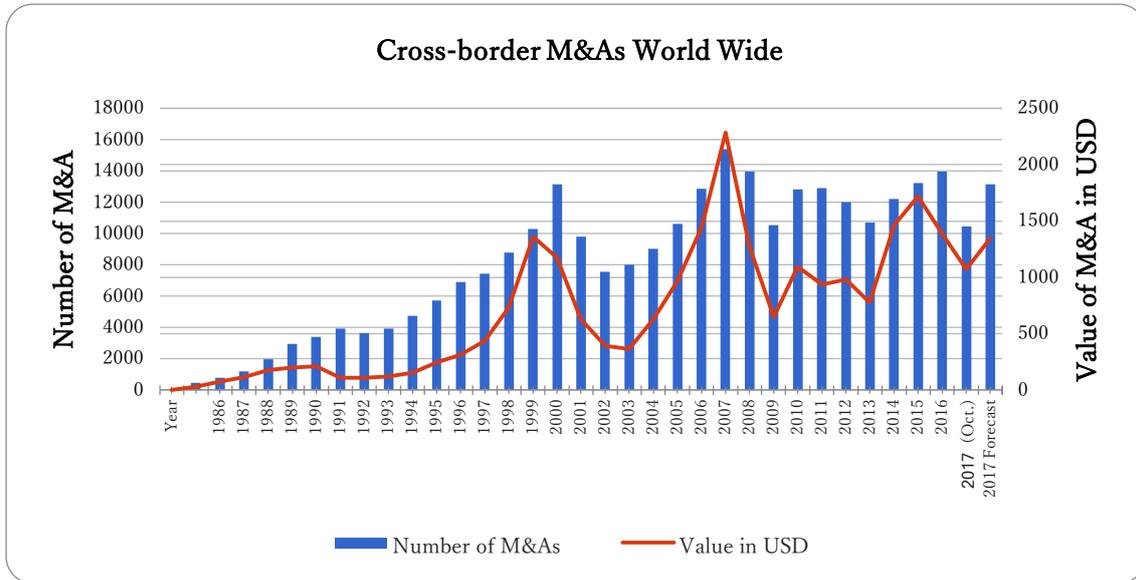
globalization has caused the market to become more competitive resulting in an increased emphasis on cross-border M&A. As shown in Figure 2(IMMA, 2017), the number of cross-border M&As has also increased greatly. There are several reasons for the dramatic increase in cross-border M&A in recent years. Typical M&A procedures, such as expanding market shares and the acquisition of knowledge and technology are two such reasons, along with maturing markets in an enterprise's home country. Another reason is that enterprises from developing countries expand into the global market. Based on these trends in the competitive environment, enterprises have to become more competent by increasing the number of transactions of cross-border M&A and taking advantage of the global market (Nomura Institute of Capital Market Research, 2009). As mentioned above, the number of cross-border M&As is very high. However, there is a negative aspect: cross-border M&A has a high failure rate. According to research by KPMG, about 70% of cross-border M&As fail.

Figure1: Number of M&As World Wide



Based on IMAA statistics

Figure2: Number of Cross-border M&As World Wide



Based on IMAA statistics

## (2) The essence of failure

There are many reasons why a cross-border M&A fails. One reason is the failure in organizational integration occurring in the post-merger integration stage. M&A process can be divided into two groups: pre-merger and post-merger integration. The [concrete] process of pre-merger includes formulating strategies, choosing targets, conducting due diligence, and signing statements of mutual agreements. The process on strategies that develop after a merger is called post-merger integration(PMI). One of the key processes in PMI is organizational integration. Organizational integration is the procedure of merging two or more enterprises into one enterprise.

The purpose of conducting organizational integration is to create a synergy effect. Synergy effects occur between multiple organizations that produce a greater effect together than the sum of their individual effects. When an enterprise fails to create enough synergy during M&A transactions, the M&A usually fails. (Lewis & McKone, 2016: McKinsey, 2013).

Ansoff's (1979) explained that there are five types of synergy effects: distribution synergy, product synergy, produce synergy, investment synergy and management synergy. This paper focuses on product synergy. Product synergy shares much in common with knowledge-based synergy shown by Bark & Kotler (2001). The main purpose of this type of synergy is to develop new products or services by sharing enterprise's experience and know-how. This product synergy is crucial to the enterprise's performance after the transaction of M&A.

Nakamura (2003) explained how acquiring enterprises create value by allowing synergy effects to improve the enterprise's performance after conducting M&A. Mintzberg (1998) also indicated that to enhance the enterprise's competitiveness, it needs to create knowledge or innovation. Therefore, an enterprise must share their knowledge to create new knowledge and value. To create knowledge and value, it is important for an enterprise to promote inter-organizational learning (Matsuyuki, 2002). It is important for the enterprise to create an organization that promotes the creation of knowledge and innovation (Botkin, 1999). Innovation happens, moreover, when people cooperate within an organization (Kitahara, 1990).

The acquiring party can cause a synergy effect and create knowledge and value by integrating the enterprise that is to be acquired and setting up organizations for inter-organizational learning. As mentioned in this section, creating value and knowledge is the most important factor in improving an enterprise's performance post-M&A. Many enterprises failed to promote synergy effect because of its failure in organizational integration. Therefore, this paper focuses on product synergy and researches the process of organizational integration after enforcing M&A.

### **3. Literature Review**

This chapter will discuss the difficulties of PMI, and the effects of the

enterprises' value creation using previous literatures.

### **(1) Post-Merger Integration (PMI)**

In this section, we will identify what Post-Merger Integration is and what the issues on this topic are. PMI, also known as Post-Merger Integration is a term which is used as an opposite of the term Pre-Merger. Pre-Merger, on one hand, includes the phase of selecting which enterprise to acquire or the due-diligence, which is a process to assess the possible issues when acquiring the enterprise. PMI, on the other, concentrates on the phase after the acquisition, especially integration. Recently, in both practical and academic perspective, PMI has been increasing in attention, but not so many enterprises put emphasis on PMI. Therefore, scholars suggest that overlooking these issues is one reason of M&A failures (Lee, D & K. Kim, 2013) .

Bower (2001) indicates that most of the top managers do not have a clear vision of how to integrate the organization after M&A deals. Weber & Schweiger (1992, 1998) also suggest that lack of integration is a major reason for M&A failure, and too much integration can be detrimental to the outcome as the potential of cultural clash is higher. As a result, effective integration has not been conducted (Haspeslagh and Jemison, 1987). These sources conclude that PMI should be considered as primary issue of M&A (C. Adams: A. Neely, 2000).

There are several PMI issues to be discussed. Paul (1986) indicates that there are three issues when confronting PMI. Practical aspects include financial and system adjustments in the process integrating enterprises, while physical aspects include things such as distribution of resources and assets, or measurement and management of productivity. The management and culture aspect, which is the third aspect of the three, includes merger of organizational structure, compensation system, corporate culture etc. Especially, he suggests that when management and cultural aspects stand in the way of PMI, the integration would become much more difficult. He also suggests that these

management and cultural aspects are the most difficult part of the PMI, although not so much research has been conducted.

## **(2) Synergy effect**

This section will identify what the synergy is and how this synergy is produced. Value earned from M&A is divided into two types. Haspeslagh & Jemison (1991) explain that value capture and value creation exist in M&A synergy. According to their definition, value capture in the M&A is a value which you can obtain from the M&A. This paper will use the definition by Nakamura's (2003). He defined that "value capture is a value shift which is a shift from pre-acquired enterprise stakeholders to acquiring enterprise stakeholders". The value creation, on the other hand, indicates the creation of new value from inter-organizational learning. This value creation is important in the PMI, especially in the strategic M&A. This paper uses Deiser's (1994) definition of value creation. He explained that "value creation is a creation of new outcome which cannot be produced by only one enterprise, and this creation comes from transformation and inter-organizational learning of important strategic capability and management resources". Moreover, Porter (1985) and Schweiger et al (2002) explain this value creation is explained as a synergy effect which creates competitive advantage.

## **(3) Inter-organizational learning**

Enterprises frequently share their resources to create value, and by sharing their resources, each organization learns from each other to do so. Michael Porter (1985, 1987) explains that essence of organizational integration is building interrelationship between enterprises or business units. This interrelationship, causes inter-organizational learning. Porter, particularly, divides interrelation into skill transferring and sharing value activities. Skill transferring is to transfer one enterprise's management know-how and knowledge to the other, and sharing value activities

includes sharing access to resource, R&D, manufacturing, marketing strategy, etc.

Haspeslagh & Jemison (1991) also mentioned this sharing activity. They said that when strategic capabilities are transferred, in other words, when enterprise share business resources, functional skill, and transfer general management skill, value is created. Particularly, sharing of business resource include sharing essential skills such as employees, factory, brand, distribution channel, office etc. Sharing of functional skill is about sharing complex skills or know-how which is essential to produce core-competency for the enterprise. General management skill transfer includes sharing top management strategies, leadership, vision, financial planning management, human resources, and management styles (Haspeslagh & Jemison, 1991)

As we found in the literatures review, organizations share all sorts of resources, and utilizing these shared resources becomes more important in the post-merger processes. In other words, using these shared resources effectively is essential, and inter-organizational learning plays a profound role. Several researches indicate that, whether an M&A implements an effective strategy to create value and earn sustainable competency depends on inter-organizational learning (Child & Faulkner, 1998: Doz, 1996: Inkpen, 1997: Nonaka, 1991). It has also been proved by Deiser (1994) and Hakanson (1995) that inter-organizational learning is important for knowledge creation. We also found in the previous research that although it has been shown that inter-organizational learning is important, it is often overlooked by the enterprises conducting the merger, preferring instead to put emphasis on the value capture (Baden-Fuller & Stopford, 1994: Nakamura 2003). Therefore, we conclude that inter-organizational learning is essential to gain synergy or ~~core~~ future core competency which boosts post-merger performance.

#### **(4) Integration approaches**

There were several integration approaches found in the previously mentioned

sources. The most famous one is Haspeslagh & Jemison's (1991). They explained that there are four types of approaches: symbiosis, absorption, preservation, and holding. Nahavandi & Malekzadeh divided integration approach into a cultural and diversification dimension. They measured cultural dimension by degree of multiculturalism, and diversification by degree of relatedness of the firms. Ellis (2004), Marks & Mirvis (1994) introduced the mixture of the two integration approaches, and added the so-called "transformation approach", the fifth approach.

Schweiger (2002) specified Haspeslagh & Jemison's (1991) four integration approaches. He divided integration degree into three stages, and showed that there are five different integration approaches according to the objectives of the enterprises. Angwin (2007) divided integration from three different dimensions: acquisition's configuration, capability interaction, and speed of change.

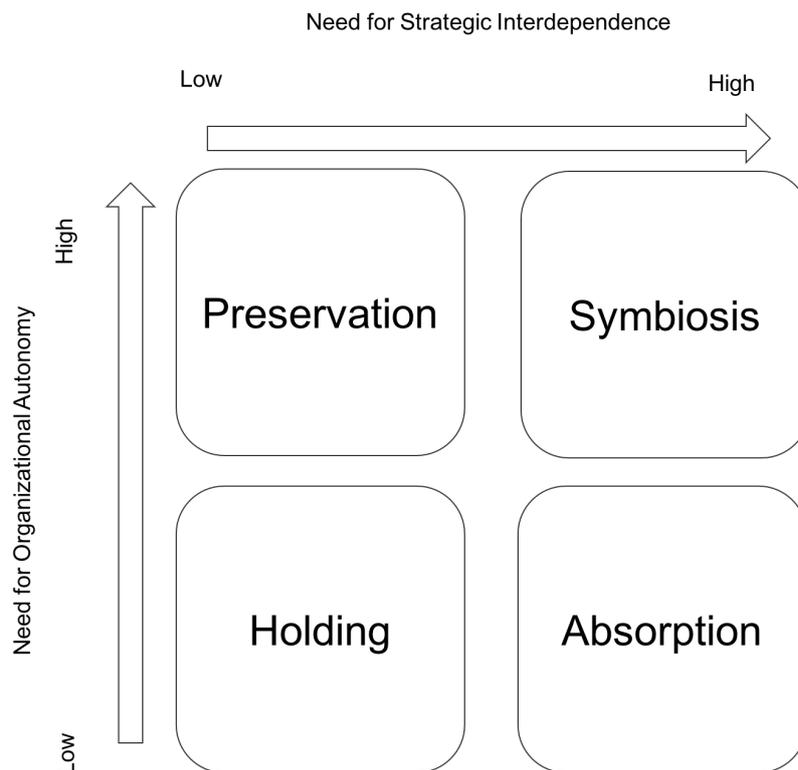
Bouchikhi & Kimberly (2008) divided by unique dimension. They divided integration approach from organizational identity. This is because the acquiring enterprise must decide whether to merge with the acquired enterprise's organizational identity or not. The choice is to keep each organizational identity separately or to merge with each other to create a hybrid organizational identity.

From the literature introduced in this chapter, we will continue this paper with Haspeslagh & Jemison's (1991) integration approaches. This is because most of these literatures about integration approaches are built upon Haspeslagh & Jemison's (1991) methods. Their integration approaches, moreover, suit this research best. This paper concentrates on M&A aiming to gain product synergy which assumes value creation, and this value creation is, as mentioned earlier, created by inter-organizational learning. There, this research concluded that Haspeslagh & Jemison's (1991) need for strategic interdependence dimension is suitable for our research. Detail of Haspeslagh & Jemison's (1991) integration approach is as follows.

Haspeslagh & Jemison (1991) explained post-merger integration from two

dimensions, and indicated that there were four types of integration approach referred to in the figure 3. The two dimensions include the need for strategic interdependence and the need for organizational authority. The four integration approach types are Symbiosis, absorption, preservation, and holding. Symbiosis type has both a strong need for strategic interdependence as well as organizational authority. absorption type has a strong need for strategic interdependence, but ~~has~~ a weak need for organizational authority. preservation type has a weak need for strategic interdependence, and a strong need for organizational authority. holding type has weak needs for both strategic interdependence and organizational authority.

Figure3: Haspeslagh & Jemison's (1991) Integration Approach



Based on Haspeslagh & Jemison (1991)

## **(5) Organizational issues**

This section looked deep into the organizational issues which are obstructive factors of inter-organizational learning. These issues are, in other words, obstructive factors of value creation and product synergies. Porter (1985) explained that formation of interrelationship affects organizational structure, organizational culture, and psychological aspects of managers and employees, and this formation of interrelationship creates organizational factors. He said organizational issues disturb inter-organizational learning because they disturb Barnard's (1948) organizational functions: explicit goal, cooperation, and communication.

Nakamura (1999) divided the factor of this organizational issues into two dimensions: organizational structure dimension and human behavior dimension. He explained, on one side, that organizational structure dimension come from internal competition under the enterprise's division system. He examined that when internal competition goes too far, the formation of interrelationship would be disturbed and cause organizational issues. On the other hand, he explains that human behavior dimension occurs when the working environment changes. According to Schweiger (1992), he explains that employees generally act to preserve their working environment. Employees, therefore, act negatively to the newly merged enterprise environment. As you can see from the characteristics of these two dimensions, human behavior issues are relatively difficult to cope with, and it can be concluded that these issues become more difficult in the cross-border M&A. Many researches mention that particularly in the case of international M&A, cultural differences and integration efforts during the post-acquisition integration period are critical to performance (Cording et al., 2008; Ellis et al., 2009; Graebner, 2004; Graebner & Eisenhardt, 2004; Puranam et al., 2009; Puranam et al., 2006; Puranam & Srikanth, 2007; Reus & Lamont, 2009; Sarala & Vaara, 2009; Stahl & Voight, 2008; Teerikangas & Very, 2006; Weber et al., 1996; Weber et al., 2012; Weber, Tarba & Reichel, 2009; Weber, Tarba, & Reichel, 2011; Weber & Tarba,

2012). According to these previous researches, this paper puts emphasis on cross-border M&A.

### **(6) Relationship between integration approach and organizational issues**

Nakamura (2003) concluded that the degree of organizational issues is different according to the integration approaches. According to Nakamura, when Haspeslagh & Jemison's (1991) integration approach's strategic interdependence grows stronger, the organizational issues also grow stronger. This is because when strategic interdependence is stronger, both organizations would have to cooperate with each other. If both organizations must cooperate, there would be deeper communication and bigger conflict. His indication shows that symbiosis and absorption approach in the Haspeslagh & Jemison's (1991) integration approach are, on one hand, suitable for generating value creation with deep inter-organizational learning, but, on the other hand, cause conflict which gives negative influence on value creation. According to these sources, we can understand that integrating with less organizational issues, and the most inter-organizational learning is important to the post M&A performance. In other words, whether the acquiring enterprise can create satisfying value creation lies in the post-merger stage, especially, in the approach of integration.

### **(7) Recent research on integration approach**

This section will discuss that inter-organizational learning creates synergy and value creation, and these value creation processes are obstructed by organizational issues. The section also discussed that these organizational issues are closely related to integration approach, and how it is important to choose which integration approach to take. This section looks at new opinions towards integration. Ohno (2013) asserts that there is a non-integrating style of acquisition by showing that this non-integration style is close to symbiosis or preservation style of Haspeslagh & Jemison's integration

approach, and like Kale & Sign's (2009) partnering style of acquisition and Christensen's (2011) RMB (Reinvest my Business Model) acquisition. These sources assert that enterprise performance improves by not integrating and avoiding organizational issues. This non-integrating style, however, discourages integration after the acquisition. Therefore, although there are similarities, this paper concludes that this non-integrating style is different from the integration this paper discussed in this literature review.

#### **4. Hypothesis**

Based on the current situation of the M&A and researches review, this chapter will discuss the hypothesis the authors formed.

##### **(1) Awareness from the literatures review**

Through the literature reviews from the last chapter, this research discovered a gap between synergy and integration. The current situations show that most enterprises are not capable of coping with the organizational issues such as human behavior dimensions and organizational structure dimensions. This paper, however, cannot overlook the fact that integration strengthens the inter-organizational learning and creates synergy and value creation.

##### **(2) Forming the Hypothesis**

This paper concentrates on inter-organizational learning which creates product synergy and value creation. To create more inter-organizational learning, moreover, this research concluded from the literatures that enterprises merge with enterprises which enables more Haspeslagh & Jemison's (1991) strategic interdependency. This is because when M&A is conducted to achieve an objective of product synergy, more knowledge and know-how must be shared and learned from each

other to create new products or services. In other words, acquiring enterprise and acquired enterprise would have to have adequate level of inter-organizational learning to create such value. Therefore, this paper can predict that in the product synergy objective M&A, strategic interdependency should be always high in the integration stage which indicates that there would be no Haspeslagh & Jemison's (1991) preservation approach taken.

H1: In the product synergy objective acquisition, no enterprise takes preservation approach as its post-merger integration approach.

Some researchers proved that when strategic interdependency is stronger it causes not only good amount of organizational learning, but also causes quite a lot of human behavior dimension of organizational issues. Therefore, the best solution to this issue is to have less organizational issues and great inter-organizational learning. As predicted in H1, the product synergy objective acquisition would not take the preservation approach. Which would mean that the integration approach would be chosen from symbiosis approach or absorption approach.

The difference between the two approaches is the need for organizational autonomy. Nakamura (2003) explains that symbiosis is more focused on transferring the functional skills to each other, while absorption is more the mixture of the three dimensions. Therefore, this paper predicted that symbiosis approach would cause less organizational approach which would lead to smoother inter-organizational learning and better enterprise performance.

H2: In the product synergy objective acquisition, symbiosis approach would enable better inter-organizational learning, and would create better enterprise performance.

## 5. Methodology

This section presents the research methodology used to test our two hypotheses. The sample of this study is obtained from the ranking called “cross border M&A deals worth over \$3 billion” found in the UNCTAD World Investment Report 2008, 2009 and 2011. These rankings have 212 M&A deals in total. This study is divided into a qualitative analysis, which uses the sample’s annual report, a press release, and a quantitative analysis, which uses financial statements.

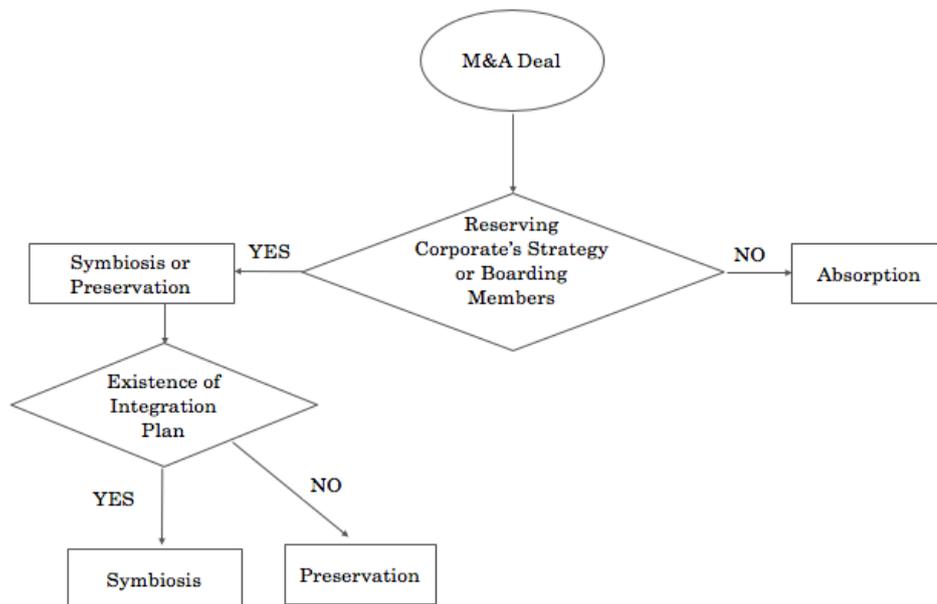
First, this study uses qualitative analysis to distinguish the purposes of the M&A for each enterprise, determining whether the purpose is focused on product synergy or not. After that, each enterprises' integration approach is discerned, specifically, whether the model taken is symbiosis, absorption, or preservation. ☒

It is necessary to measure each sample’s organizational performance after M&A to use quantitative analysis. In general, researchers use quantitative analysis via financial statements to measure an enterprise's organizational performance. This study in particular uses Return on Assets (ROA) (Galbraith & Schendel, 1983; Gimenez, 2000; Parnell & Wrigh, 1993; Thomas & Ramaswamy, 1996). ROA is a financial indicator used to observe how much return an enterprise generates on an invested asset. It can prove whether an enterprise has invested its assets effectively. ROA is the most appropriate financial indicator to validate which one of the two integration models can reduce organizational issues and allow an enterprise to make the most of its assets. According to Nakamura (2003), enterprises that attempt to integrate acquired enterprises using the symbiosis and absorption models face organizational issues: a result that was also proposed by Porter (1985). By analyzing ROA, it is possible to determine which integration model, symbiosis integration or absorption integration, minimizes organizational issues, enhances inter-organizational learning, and makes profit from investment after M&A.

This research uses industry adjusted ROA to eliminate macroeconomic factors, making it possible to accurately measure a sample's performance after M&A. Industry adjusted ROA is calculated by evaluating each sample's ROA and subtracting an industries average ROA (Yeh, 2002). In this study, industry adjusted ROA is calculated from the 212 corporate averages found in the UNCTAD World Investment Report 2008, 2009, 2011 and taking the average by industry. The observation period in this study spans over 5 years after the beginning of M&A, as with Yeh (2002). Some researches argue that it is necessary to use both qualitative analysis and quantitative analysis to evaluate corporate performance (Baden-Fuller & Boschetti, 1996; Gulati, 1998; Nakamura,2003; Vicari, 1994). However, this study only uses financial statements and measures enterprises' performance after M&A.

In addition, this paper uses Ellis (2004)'s classification methods. This research classifies the integration approach model by capturing the features of each integration model and analyzing annual reports, press releases, and newspaper articles. Figure 4 shows its methods.

Figure4: Ellis' (2004) Classifying Method for Integration Approach



Based on Ellis (2004)

After qualitative analysis, this research makes comparisons between each sample's industry adjusted ROA growth rate for each 5-year period after M&A closing.

$$\text{Excess ROA for each 5-year period} = \text{Industry adjusted ROA growth rate for each 5-year period} - \text{ROA growth rate one year before M\&A}$$

After calculating excess ROA for each 5-year period by using this formula, this paper examines each symbiosis integration model and absorption integration model average excess ROA for each 5-year period.

Symbiosis integration model excess ROA each 5-year period with respect to absorption integration model = symbiosis integration model average excess ROA each 5-year period – absorption integration model excess ROA each 5-year period

This study measure whether symbiosis model enterprises' excess ROA each 5-year period gets more positive impacts than absorption integration model enterprises' one or not by using the formula.

## **6. Results**

This chapter analyzes the results what the study got by using methods mentioned on previous chapter.

### **(1) Result for Hypothesis 1**

As the previous chapter mentioned, the study uses 212 cross border M&A deals which were on the rankings of “cross border M&A deals worth over \$3 billion” on UNCTAD World Investment Report 2008, 2009, 2011, and analyzed the enterprises' annual reports and press release qualitatively to distinguish whether their purpose of M&A was product synergy or not. In conclusion, 32 of all 212 samples' M&A purpose was product synergy. Those 32 enterprises are the sample of this study. In addition, this study analyzed those press releases and annual reports to investigate which integration model those enterprises took by using Ellis (2004)'s methods. 13 enterprises of samples took symbiosis integration model, and 19 of enterprises took absorption model. This result supports Hypothesis 1 since none of these 32 samples did not take preservation model.

### **(2) Result for Hypothesis 2**

The study calculated symbiosis integration model excess ROA each 5-year

period with respect to absorption integration model by using formula mentioned on the previous chapter. Figure 5 shows the results. Symbiosis integration model excess ROA each 5-year period with respect to absorption integration model showed symbiosis integration model has positive impact on ROA compared to absorption model although first and fifth years' symbiosis integration model average excess ROA each 5-year period are negative numbers.

The study used Willcoxon signed-rank test and verified the results. In conclusion, the results showed 5 % significance of symbiosis integration model excess ROA each 5-year period with respect to absorption integration model. In general, Willcoxon signed-rank test are used when the sample size is small, and a normal distribution cannot be assumed. This study judged Willcoxon signed-rank test is adequate the purpose of the research since Araki et al (2008) and Distler (2007) made use of this method to verify corporates performance after M&A.

Figure 5 symbiosis integration model excess ROA each 5-year with respect to absorption integration model and the results of Willcoxon signed-rank test

After M&A	Symbiosis integration model average excess ROA each 5-year (%)	Symbiosis integration model excess ROA each 5-year with respect to absorption integration model (%) **
First year	-1.1573256	0.243459255
Second Year	-0.8980458	0.757532365
Third Year	1.01958527	2.407123398
Fourth Year	1.348378298	2.782055863
Fifth Year	-0.273926759	2.09899452422038

\*\*5% significance

## 7. Implications

This research uses both quantitative and qualitative approaches to verify the hypothesis concerning cross-border M&A and the purpose of creating product synergy. This chapter shows the implication from hypothesis 1 and hypothesis 2.

### (1) Implications from Hypothesis 1

To verify the first hypothesis, this research use qualitative data to categorize acquisition integration approaches. This research uses press releases and annual reports as qualitative data. The sample of this study is obtained from the ranking called “cross

border M&A deals worth over \$3 billion” on UNCTAD World Investment Report 2008,2009 and 2011. These rankings have 212 M&A deals in total. The analysis shows that there were no enterprises using the preservation integration model, which supports the hypothesis.

This result shows that almost all the enterprises enforcing large scale cross-border M&A with the purpose of causing product synergy, have a strong need for strategic interdependence. To create product synergy and cooperation, inter-organizational learning is necessary, and so acquiring enterprises must encourage integrated enterprises to contribute and create the best synergy possible between the two partners. The strategy of both acquiring enterprises and the enterprises they acquire must be coincident. Creating product synergy is only possible when both organizations have the same purpose and goal. To accomplish this, it's better for enterprises to choose either the symbiosis model or the bsorption model after enforcing large scale’s cross-border M&A.

## **(2) Implications from Hypothesis 2**

Using the formula mentioned in the previos chapter, this paper calculated the symbiosis integration model's excess ROA after each 5-year period and compared it to that of the absorption integration model. The results show that symbiosis integration model has a more positive impact on ROA compared to the absorption models. Using the Willcoxon signed-rank test to verify our results, this paper found a 5 % significance in the symbiosis integration model's excess ROA after each 5-year period compared to the absorption integration model, supporting our second hypothesis. Consequently, an enterprise using the symbiosis integration model sees better ROA performances than an enterprise taking the absorption integration model when the cross-border M&A deals are worth over \$3 billion, and the purpose of the cross-border M&A is to create product synergy. Enterprises that have a strong need for strategic interdependence face

organizational issues in the process of integrating after enforcing cross-border M&A. Organizational issues usually occur when there's a strong need for strategic interdependence. Nakamura (1999) divided these organizational issues into two dimensions: the organizational structure dimension and the human behavior dimension. Organizational issues from the human behavior dimension have a big impact on three components that establish an organization: explicit goals, cooperating and communication. This is because organizational issues which result from human behavior are caused by the change of an employers' environment. Whenever combining new organizations making a new organization after enforcing M&A, employer's environment changes. That means organizational issues occur after enforcing M&A. As shown above, organizational issues disturb inter-organizational learning. Because of the value that Inter-organizational learning creates, whenever organizational issues occur, enterprise performance decreases.

The symbiosis integration model only transfers functional skill and has a strong need for organizational autonomy. This means the symbiosis integration model can diminish organizational issues more effectively than absorption integration model. This paper focuses on cross-border M&A because there are many organizational issues in the different national culture. Therefore, this research proved that symbiosis integration model could diminish organizational issues and activate inter-organizational learning and create value when cross-border M&A's purpose was to create product synergy.

## **8. Conclusion**

This chapter will conclude this research.

### **(1) Research and Results of this paper**

This paper focuses on cross-border M&A because of the expansion of globalization and the resulting fiercer competition. This paper explores the high failure rate of cross-border M&A. This paper especially focuses on PMI which is not researched much and focuses on the ways how acquiring enterprises integrate enterprise to be acquired. This research used samples from the ranking called “cross border M&A deals worth over \$3 billion” on UNCTAD World Investment Report, and limit them to the deals with the purpose of causing product synergy. To create product synergy, it is necessary to integrate organization and share the know-how by inter-organizational learning. This research categorizes samples by acquisition integration approach of Haspeslagh & Jemison (1991). After categorizing them, this research verifies the relation between the acquisition integration approach and the enterprise's performance after enforcing M&A. This research proved that acquiring enterprise takes symbiosis model or absorption model after enforcing large scale's cross-border M&A with the purpose of gaining product synergy. Additionally, symbiosis model showed better performance after enforcing M&A than absorption model. This is because an enterprise which adapts the symbiosis model can create more value by diminishing organizational issues.

## **(2) Academic significance and practical significance of this paper**

This paper's academic significance is to analyze PMI. In the present day, there are only few papers researching the relation between acquisition integration approach and value creation. This paper used acquisition integration approach of Haspeslagh & Jemison (1991), and verified the relation between value creation and performance after conducting M&A. This research focused on cross-border M&A, looking at organizational issues and the cause of them. This analysis expects research about PMI to be more progressive.

This paper's practical significance is that this research can be the benchmark for large enterprise to succeed in accomplishing a cross-border M&A. As mentioned in

the beginning of this paper, these days enterprises' environment is competitive, and the importance of cross-border M&A is growing. Although the cross-border M&A is important, the failure rate of cross-border M&A is still high. It is because enterprises are not able to create value smoothly.

Enterprises must choose the best acquisition integration model to find ~~out~~ the way to activate inter-organizational learning for value creation. This paper verified the relation between the acquisition integration model and the performance after enforcing M&A.

This paper limited M&A to cross-border M&A. Although cross-border M&A is getting important, the failure rate of cross-border M&A is still high. It is because many enterprises are not able to create value with enterprises to be acquired (Nomura Institute of Capital Markets Research, 2009). Therefore, this paper focused on cross-border M&A. One more reason is that cross-border M&A matches the theme of our research: the relation between acquisition integration model and value creation. In cross-border M&A, the difference of enterprise culture and national culture appear notably, and that influences the performance after enforcing M&A (Cording et al., 2008; Ellis et al., 2009). On the other hand, the difference of culture and languages makes more creative value after integrating organization (Harding & Rovit, 2004). For these reasons, focusing on the cross-border M&A matches this paper's theme.

In conclusion, this paper has academic significance because this research used quantitative and qualitative approach to research PMI which is less researched. This paper also has practical significance because this research verified the relation between acquisition integration model and performance after enforcing M&A. It means that enterprise can choose the best acquisition integration model for their performance after enforcing M&A.

### **(3) Limitations of this paper and issues for future**

This chapter looks the limitations of this paper and issues for future. First, the number of samples are not enough. This research used samples from the ranking on UNCTAD World Investment Report 2008, 2009 and 2011. The number of the deals are 212. UNCTAD World Investment Report 2010 was not available. Therefore, this research did not use UNCTAD World Investment Report 2010. Furthermore, to analyze the performance after enforcing M&A, we must look at least 5 years. Thus, this research used UNCTAD World Investment Report 2011 for the newest. Therefore, this research does not have many samples. A research uses more samples should be appeared in the future.

Second, this research only focused on the large size cross-border M&A. This research used samples from the ranking on UNCTAD World Investment Report 2008, 2009 and 2011. This research chooses large size transaction because the deal price must be comparable level. Thus, research focusing on small size transaction is needed

Third, this paper focused on value creation only by product synergy. Authors thought that the difference of the M&A's purpose influence the selection of integration model. It is not a right way to research this theme by not categorizing the purpose of M&A. However, there are many varieties to purposes of M&A. For example, there are hostile acquisitions to acquire a hostile enterprise or acquisitions for patents. The types of integration models change by the purpose of M&A. Thus, research focusing on each of the purposes is needed in future.

Fourth, this paper did not focus on the characteristics of industry. For example, all the enterprises belonging in the industry of military demand take symbiosis integration model, and those enterprises display positive performance. Thus, researching the relation between the model of integration after enforcing M&A and industries might develop the research of PMI in the future.

For all those reasons, the research is expected to develop further.

## 9. Reference

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