Appraising Synergy Value in M&A Practices in Vietnam

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Abstract: This study was conducted to test actual synergy values in company merge and acquisition (M&A) practices and the feasibility of synergy value valuation techniques in Vietnam. This research employed a valuation method which is the cost of capital method for appraising enterprises before and after M&A to achieve the first objective, while DCF method was used to achieve the second objective. Using data of typical M&A deals in Vietnam, this study's results show that not all M&A deals generate synergy value. Also, DCF is a feasible method for appraising synergy value in Vietnam. Finally, an empirical survey reveals that DCF is the most commonly-used and feasible method according to appraisers.

Keywords: valuation, synergy value, M&A.

JEL Classification: C58 . G32 . G34.

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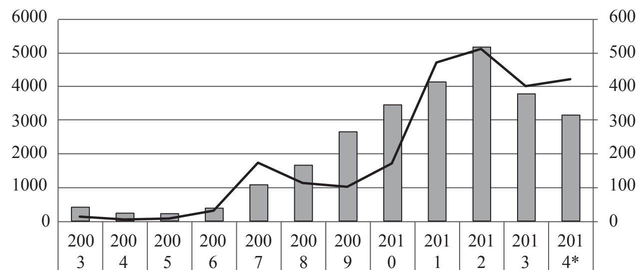
1. Introduction

In Vietnam, since 2007, M&A has become vibrant, increasing in the numbers and exchange value. Its growth rate has remained high and many significant M&A deals have been executed.



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
No. of Deals	41	23	22	38	108	166	265	345	413	517	378	315
Value (Millions of USD)	118	34	61	299	1719	1117	1008	1700	4700	5100	4000	4200

Source: MAF (2015).

Figure 1. M&A in Vietnam during the period 2003-2014

M&A activities are considered as an effective channel to increase corporate value under the synergy value support from both companies after M&A. Therefore, Graaf (2010) claims that it is necessary to quantify synergy value before the merger. Accurate and adequate valuation of synergy value provides managers with an important basis to make the right decisions (Garzella & Fiorentino, 2014).

Company executives often look at valuated synergy value before the M&A deal to make an appropriate bid and this value is always targeted by managers. However, Eccles, Lanes & Wilson (1999) maintain that many M&A deals failed due to the fact that the company had paid excessively for the acquisition. This means incorrect appraisal of synergic value represents a cause of M&A failures (Cartwright & Schoenberg, 2006). Many M&A deals in the world were implemented with the synergy value being estimated too high, however, the actual synergy value was below expectation, if not negative. An empirical study of Damodaran (2002) indicates that 65% of M&A deals all over the world create no value for shareholders. Based on this fact, the research question of this study is whether M&A deals in Vietnam generate synergy value and if so, whether the deployment of methods for appraising synergy values before the M&A provides proper and reliable results.

2. Synergy Value Theory of M&A Practices

2.1. Acquisition and Mergers

Acquisitions and mergers (often known as M&A) is an important tool used by corporations in an attempt to expand their business (Goyal & Joshi, 2011). M&A activities started in the XVIII century in the US and in the XIX century in Europe (Focarelli, Panetta & Salleo, 2002). Therefore, most empirical studies of M&A activities were conducted in these two markets while few studies were conducted in the developing countries (Malik, Anuar, Khan & Khan, 2014).

M&A are not the same terms, but they are often interchangeably used. Acquisition is an act of acquiring a part or a whole of another organisation while a merger represents an act of two or more organisations which combine to form a new organisation (Alao, 2010). Thus, mergers are a legal activity in which two or more organisations combine together and only one company will exist as a legal entity after the merger (Horne & John, 2004). Similarly, Georgios & Georgios (2011) maintain that in a merger, two or more companies approach each other and become a single company while acquisition is an act of a large company or a financial company acquire smaller companies. Rao & Kumar (2013) argue that acquisition and mergers are activities that involve taking over, restructuring, or controlling a business that leads to changes in the ownership structure of the company.

In Vietnam, M&A activities are reflected in various legal documents such as the competition law no. 27/2004/QH11, enterprise law no. 60/2005/QH11, investment law no. 59/2005/QH11, law on securities no. 70/2006/QH11, enterprise law No. 68/2014 / QH13, and other relevant legal documents.

The enterprise laws in 2005 and 2014, do not clearly state about business acquisition practice, but mention mergers and consolidation, which are two of the five forms of corporate reorganization as specified below:

- Business consolidation is an act of two or more companies of the same type (the consolidated company) combining into a new company (the consolidating company) by transferring all of their assets, legal rights, obligations and benefits, and at the same time terminating the existence of the consolidated company.

- Business mergers are an act of one or more companies of the same type (the merged company) that can be merged into another company (the merging company) by transferring all of their legal assets, rights, obligations and benefits to the merging company, and at the same terminate the existence of the merged company.

The enterprise law 2014 (effective from 01/7/2015) does not modify the nature of merger and acquisition which were defined in the 2005 enterprise law although the law made a new improvement which is allowing companies to acquire, merge other companies of different type.

2.2. Comparison of M&A Concepts between Vietnam and International Practice

M&A concepts in Vietnam are similar to and different from international practices. However, the comparison of this correlation between studies was not consistent. The correlation between the two terms is discussed in Table 1.

Table 1. Comparison of M&A terms between Vietnam and international practice

		International practice	Vietnam
Similarity	Acquisition	Acquiring a part or a whole of the merged company's capital The merged company is not necessarily terminated	
	Merger	There is at least one of the participating companies that must be terminated.	
Difference	Merger	After the merger, only one company exists. The after-merger company can be one of the participants (A + B ⇨ A′ with A′ > A or A + B ⇨ B′ with B′ > B) or it can be a brand-new company (A + B ⇨ C).	The merged company is merged into the merging company so that only the merged company is terminated (A + B ⇨ A′ with A′ > A or A + B ⇨ B′ with B′ > B).

Source: An analysis of the authors.

Therefore, the concept of "merger" in international practices only concerns the sole existence of the after-merger company. It does not concern if the company: (i) keeps the name of one of the participating companies; (ii) uses a brand-new name. In Vietnam, however, there is a clear distinction on this issue and "merger" and "consolidation" are two separate terms. Thus, "merger" according to international practice can be both "consolidation", when all of the participating companies are terminated and "merger" according to legal documents of Vietnam. At the same time, "acquisition" theory is similar in both Vietnam and in the world.

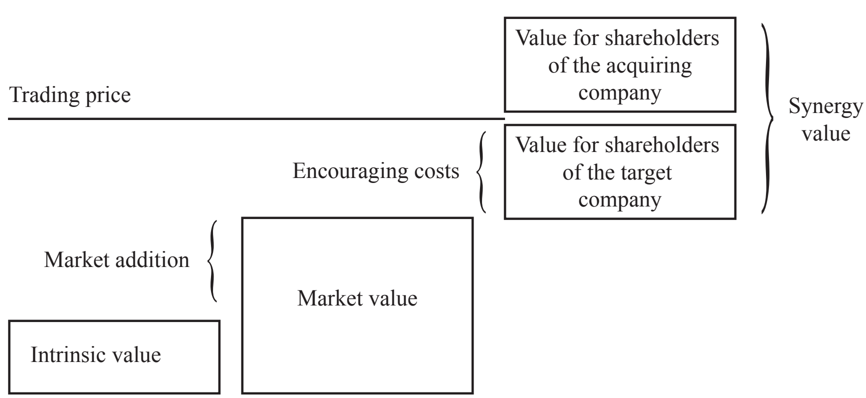
However, "merger" and "acquisition" are often mentioned together with the common abbreviation "M&A" being used to refer to activities of purchasing, trading, acquiring, merging and consolidating businesses. Within the scope of this study, the authors do not focus deeply on analysing the differences between the two terms, but will use "M&A" as a term that includes these activities.

2.3. Synergy Value in M&A Activities

The idea of synergy was introduced in management theories to explain the creation of added values of companies participating in M&A (Ansoff, 1965). According to Bradley, Desai & Kim (1988), synergy is defined as the total added benefit that shareholders gain. Based on this idea, Sirower (1997) gave a broader definition of synergy as "the increased competitiveness, leading to cash flow that exceed what are created by the two businesses when they operate independently". In the following years, the term of synergy became an interesting topic in studies about management, finance and accounting (Gruca, Nath & Mehra, 1997).

When deciding M&A execution, the acquiring company will estimate the intrinsic value of the targeted company. Rational investors only purchase a company if its intrinsic value is greater than the purchasing price that is being considered. On the other hand, the targeted company will not accept the deal unless the offer price is greater than its intrinsic value. If the acquiring company believes that implementing M&A with the targeted company will create an added benefit, an increase in the corporate value of the two companies after the M&A, the purchasing company will offer a price higher than the intrinsic value of the targeted company, but lower than the sum of the intrinsic and synergy values.

Therefore, synergy value is considered a central target of M&A deals (Burner, 2004). Ficery, Herd & Persche (2007) maintain that synergy value is the current value added to the net cash flow obtained from the combination of two companies that might not have been obtained when the two companies operate separately. Similarly, Damodaran (2005) claims that synergy value is the added value that is



Source: Eccles et al. (1999).

Figure 2. Basic principles of value formation of the targeted company

created by combining two companies, from which there are more opportunities that might not have been available when the two companies operates separately. Until now, there are many definitions about synergy value regarding M&A. In general, these concepts refer to synergy as bringing an increase in corporate value after the combination. This combination brings the new company (after M&A company) a value, known as "synergy value" (Bruner, 2004).

3. Empirical Studies

Existing studies on synergy values from M&A activities focus mostly on the impact of M&A events in developed markets. In addition, most surveys concentrate on assessing the impact of M&A on the operation of the active company (the acquiring company, the takeover company, or the merging company). Also, results of these surveys are inconsistent.

A study of Aybar & Ficici (2009) focuses on cross-border M&A activities of 58 multinational companies in developing markets over the period 1991-2004. The result of this study shows that M&A does not generate any positive synergy for the active company including stock returns and financial results. Unlike Aybar & et al. (2009), a survey of Bhagat, Malhotra & Zhu (2011) on 698 M&A deals in eight emerging markets in East Asia and Southeast Asia reveals that active companies received positive stock profit after each M&A deal.

Meanwhile, impacts of M&A activities on targeted companies (acquired companies, purchased companies or merged companies) in developing and emerging markets are obvious. Song, Chu & Cheok (2010) point out that there was a marked improvement in the performance of the target enterprises after the M & A implementation by examining the impact of cross-border M&A on business performance of the targeted enterprises in five countries (Malaysia, Philippines, South Korea, Indonesia, and Thailand) over the period 1995-2007. In addition, Chari, Ouimet & Tesar (2004); Chernykh, Liebenberg & Macias (2010) note that profits of the targeted companies in developing markets increase significantly after the M&A either domestic or cross-border. Following this study, Zhu, Jog & Otchere (2011) conducted a comparison between impacts of domestic M&A and cross-border M&A on the performance of targeted companies in 20 developing markets over the period 1990-2007. The result of their study shows that while the impact of cross-board M&A is not obvious, that of domestic M&A has positive impacts on the stock profit and financial performance of the targeted companies.

Most of the previous studies only analysed impacts of M&A events on changes in stock profit and financial performance of active and targeted companies. These changes are mainly short-lived, while the target of M&A deals is synergy value (long-term added value).

One of a few studies providing empirical evidence of synergy value of M&A deal is an empirical survey of Damodaran (2002) in which the author suggests that 65% M&A deals in the world do not create value for the shareholders. Moreover, based on an investigation on enterprises in the US and Europe, which were conducted by Accenture and the Economist Intelligence Unit, there were only 45% and 51% respondents answering that they had achieved synergy values from cost-cutting and actual sale after M&A. In addition, other studies approached the synergy value through appraising the value in each M&A such as P&G deal and Gillette deal (Damodaran, 2005), and the merger of two major car groups, Volvo and Geely (Zhou & Zhang, 2011). Cornett, McNutt & Hassan (2006) estimate that the M&A deal between Manhattan bank and Chemical bank in 1996 saved 1.5 billion USD by reducing 12.000 duplicate jobs in 75.000 branches across 51 countries.

In Vietnam, studies on M&A activities are many, however, those focusing on synergy value are still limited. Nguyen Thi Ngoc Dung (2014) used an event impact analysis method for 193 M&A deals of banks in ASEAN countries over different periods to examine abnormal income of the merger. However, this approach only shows market reactions over a certain period, meaning that it only considers short-term benefits of M&A activities. Tran Hoang Ngan & Duong Tan Khoa (2014) employed t-statistic model to compare variables measuring market power and performance effectiveness of acquired banks one year before M&A, with three years after the M&A. With research data being M&A deals between commercial banks in Japan over the period 1999-2006, the result shows that three years after the M&A, the banks were able to increase their market power, capital raising ability and to improve their operational performance. This measuring method has an advantage that it considered long-term profit (three years after the M&A), but the measurement only examined whether there was an increase after the M&A implementation but did not show where the increase came from. Sometimes, the increased profit was a result of general context rather than the synergy value obtained from the M&A deal.

4. Research Method and Data

4.1. Valuation Method

To achieve the first objective, which is an empirical test of synergy value, this test is based on the basis of normative financial theory. Accordingly, managers' decisions are aimed at maximizing business value. Therefore, synergy value (if any) is the difference in enterprise value before and after M&A implementation. The authors of this paper used a capital costing method to appraise the firm value. This value was calculated at the time when M&A was implemented (appraisal time was in the past).

To address the second objective, which is examining the feasibility of methods in appraising synergy value, which can be applied to Vietnam, the authors employed a valuation method of synergy value to determine synergy value (before M&A implementation), and then compared predicted synergy value with actual synergy value (obtained from the first objective).

The valuation of enterprise value and synergy value in M&A activities consists of various approaches and methods. Inheriting international practice and surveys on synergy value appraisal practices in Vietnam, this study employed a capital costing method to achieve the first objective and the DCF method to achieve the second objective. The cost of capital method is the method of discounting accumulated cash flows of all of the beneficiaries in the company at the weighted average cost of capital (Damodaran, 2002).

To investigate the situation, we conducted the following steps:

- First, to create the questionnaire, we discussed with survey subjects by the two-way discussion technique with a data collection tool being the discussion outline (Krueger, 1998). The selected survey subjects were specialists in M&A and the sample size was selected by the theoretical sampling technique (Coyne, 1997; Strauss & Corbin, 1998);
- Based on the proposed questionnaire, we conducted a preliminary study to modify the questionnaire. At the end of this process, we created the official questionnaire;
- The official questionnaire was posted and emailed to the survey subjects who are working in areas related to synergy value appraisal by a convenience sampling method. These areas were proposed by experts including those working in valuation, auditing, security, investment fund, fund management companies and investment banks.

According to the announcement no.38/TB-BTC of the Ministry of Finance on 20/01/2015, there are currently 105 valuation companies in Vietnam. We surveyed 32 experts of 28 companies involved in valuation (currently operating in Ho Chi Minh City). After eliminating invalid respondents, there were 11 valid experts from seven companies including four foreign companies (Deloitte, EY, Grant Thornton, UHY ACA) and three domestic companies (Southwest Information and

Valuation Joint Stock Company, Southern Valuation Limited Company, and Dat Viet Valuation Limited Company).

4.2. Selected M&A Deals

In Vietnam, many M&A deals have been implemented currently. However, to obtain sufficient data for conducting actual synergy value tests in each M&A deal (the first research objective), information of the M&A participating companies must meet the following requirements:

First, the M&A deals must be either acquisition deals of 100% of share capital or mergers.

Second, M&A deals must not those that have a takeover purpose (aiming for controlling rights) and those that were intervened by the government for state management purpose.

Third, M&A must be implemented from 2012 backwards.

Fourth, companies participating in M&A must be listed companies or those that had published financial statements (yearly financial statements at least).

Fifth, at the time of writing, information, data, financial statements of targeted companies (which had cancelled listing to be merged, consolidated into the parent company) must still be available.

As a result, there were four M&A deals fulfilling these requirements. Details of these M&A are presented in Table 2.

Table 2. Selected M&A deals

No.	Year	Acquirer	Seller	Percentage	Sector	Purpose
1	2009	Ha Tien 1 Cement Joint Stock Company (HT1)	Ha Tien 2 Cement Joint Stock Company (HT2)	100%	Industry	Merger
2	2012	Tien Len Steel Joint Stock Company	Phuc Tien Manufacturing and Trading Joint Stock Company (PTL)	100%	Industry	Merger
3	2009	Mirae Joint Stock Company (KMR)	Mirae Fiber Joint Stock Company (KMF)	100%	Industry	Merger
4	2011	Vincom Joint Stock Company (VIC)	Vinpearl Joint Stock Company (VPL)	100%	Real estate	Consolidated

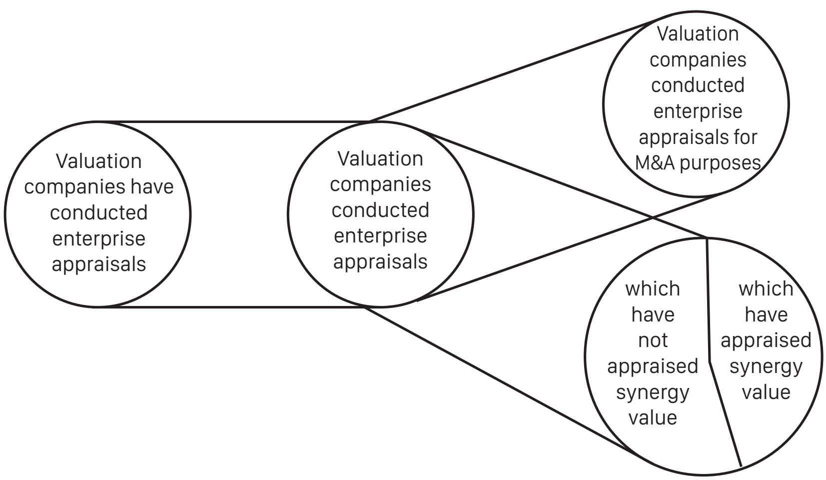
Source: A survey of the authors.

This paper used secondary data, including information of companies such as financial statements, annual reports, industry reports, and information about the financial situation, business situation of companies.

5. Results

5.1. An Analysis of Synergy Value Appraisal Practices in Vietnam

The survey shows that 100% valuation companies have conducted enterprise appraisals, 100% have conducted enterprise appraisals for general purposes and for M&A purposes. However, only 43% of the valuation companies have appraised synergy value of M&A deals. The survey also reveals that the valuation companies, that have appraised synergy value, are foreign companies.

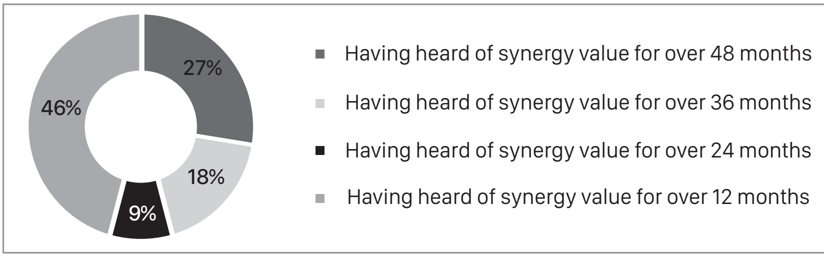


Source: A survey of the authors.

Figure 3. Synergy value appraisal activities in Vietnam

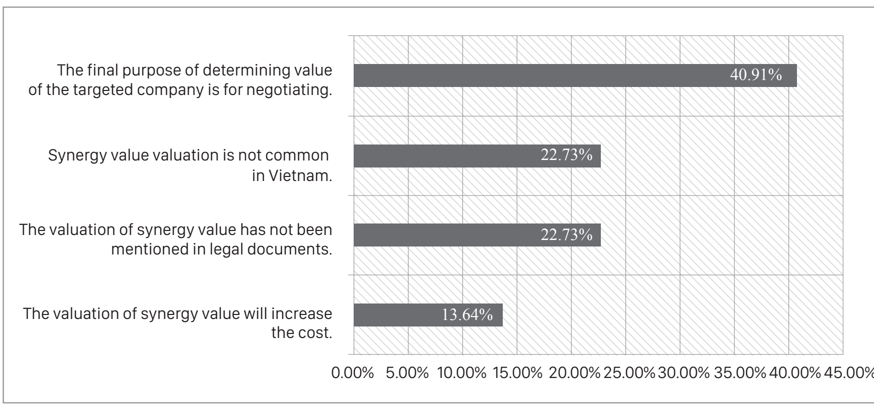
Although there were only 43% of the companies which have appraised synergy value, 100% appraisers know synergy value, of those 54% have heard of synergy value for more than two years (Figure 4). The survey shows that although synergy value is a well-known concept, however it has not yet received much attention in Vietnam.

To have a clear understanding of the reason why only 43% companies have appraised synergy value, we investigated their customers' needs (acquiring companies, targeted companies). The survey results indicate that, when conducting M&A, most customers (acquiring companies and targeted companies, only required



Source: A survey of the authors.

Figure 4. Recognition of synergy value in Vietnam



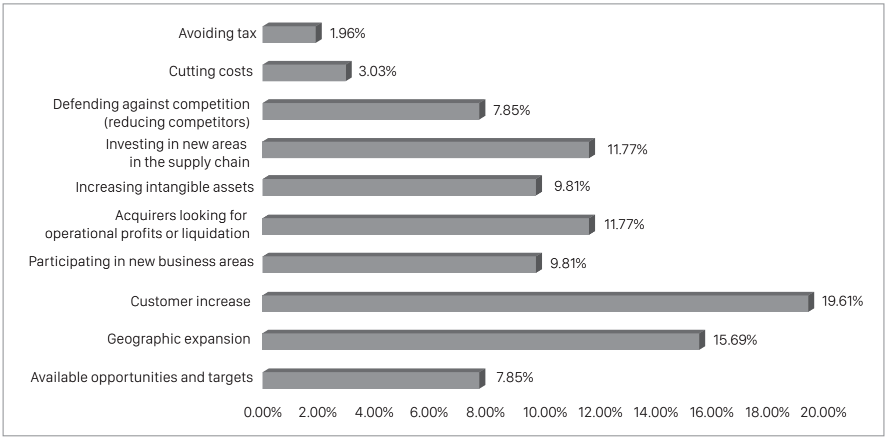
Source: A survey of the authors.

Figure 5. The reasons of why customers did not require the appraisal of synergy value

valuation companies to appraise their enterprise value. The most frequently-picked reason is that "to serve the ultimate purpose of determining enterprise value of the targeted company for the negotiation" (Figure 5).

Figure 5 shows that there are many reasons why the demand for synergy value appraisal in Vietnam was not high. However, there were 90,91% appraisers saying that what motivates business executives of acquiring companies and targeted companies to make M&A deals is synergy value. According to the experts, synergy value is represented under different forms, depending on each deal.

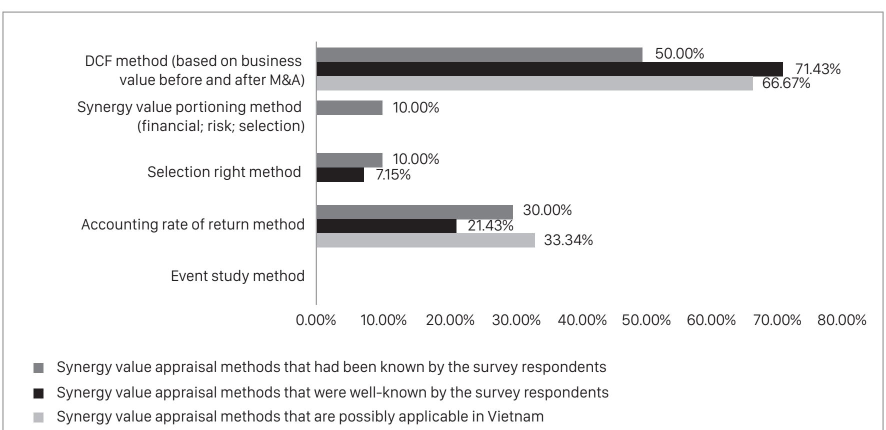
In the next step, we conducted a survey on the methods for valuating synergy value that had been known by the survey subjects. The results indicate that the DCF method (which is based on enterprise value before and after M&A) is the most well-known among the respondents (50%), followed by a method of accounting rate



Source: A survey of the authors.

Figure 6. Specific reasons of why companies often aims at synergy value

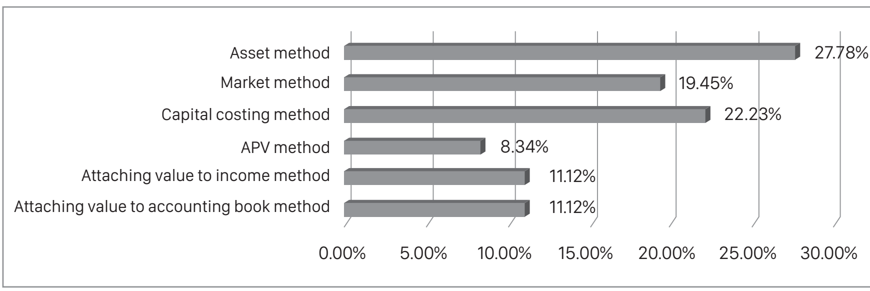
of return (30%). Concurrently, when the respondents were asked about methods of valuating synergy value that they had heard of, they continued to select these two methods (71,43% and 21,43% respectively). Finally, when evaluating the feasibility of the methods in Vietnam, no respondents selected other methods than the two above-mentioned methods. Among the two methods, DCF was selected by two thirds of the respondents while the accounting rate of return was selected by one third of the respondents.



Source: A survey of the authors.

Figure 7. Synergy value valuation methods

Based on the results presented in Figure 7, the DCF method (which is based on enterprise value before and after M&A) was the most well-known and is considered a feasible method in Vietnam. However, in order to apply this method, appraisers need to conduct a valuation of enterprise value before and after M&A. Therefore, this study continued surveying current adoption of enterprise value appraisal methods to provide appraisers with a selection basis when conducting valuation of synergy value by the DCF method. The survey results show that in Vietnam, the asset method, the capital costing method, and the market method were most commonly-used (27,78%, 22,23%, and 19,45% respectively).



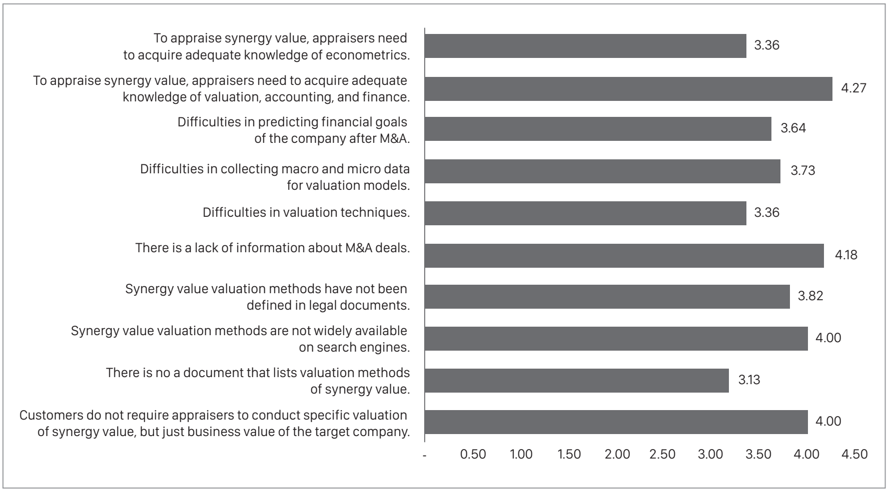
Source: A survey of the authors.

Figure 8. Enterprise value appraisal methods

Finally, this study identified challenges in appraising synergy value in Vietnam. Difficulties that were most concerned by the appraisers included: (i) synergy value appraisal requires appraisers to acquire adequate knowledge of valuation, accounting and finance; (ii) there is not enough information about M&A deals; (iii) there are scant methods for valuating synergy value available on search engines; (iv) customers do not require appraisers to specifically appraise synergy value rather than enterprise value of the targeted company (Figure 9). This is an important basis for this study to make recommendations to make synergy value valuation methods more widely-used in Vietnam in the years to come.

5.2. Actual Synergy Value of M&A Deals in Vietnam

According to the survey presented in Figure 8, the asset method was most commonly-used in appraising enterprise value (27,78%), followed by the capital costing method (22,23%) and the market method (19,45%). The asset method requires appraisers to have access to detailed data items in financial reports, and



Source: A survey of the authors.

Figure 9. Difficulties of synergy value appraisals in Vietnam

to check the actual inventory and send confirmation letters. It was not feasible to perform these tasks in this paper. Therefore, in this research, we adopted the capital costing method for enterprise value valuation before and after M&A implementation at the time each M&A deal was conducted. Based on the enterprise value before and after M&A, this study determined the actual synergy value of each M&A deal (Table 3).

Table 3 presents synergy value of each M&A deal, which is the value identified at the time when each M&A deal was implemented. This value reflects actual synergy value obtained from M&A, which was the difference between enterprise value before and after M&A.

As discussed, with four M&A deals being adopted, two of them created actual synergy value (HT1 and HT2; VIC and VPL). This result shows that not all M&A deals create synergy value. This result is also consistent with the empirical result of Damodaran (2002). In addition, when comparing with book values of the two companies before M&A, synergy value constituted around 5%. This result supports managers and appraisers in providing them with a cautious view when evaluating the performance of a M&A deal.

However, a question of each M&A deal is, do synergy value valuation methods reflect actual synergy value? The authors continued to examine the feasibility of synergy value valuation methods in Vietnam.

Table 3. Actual synergy value of M&A deals

Deal	Enterprise value before M&A		After M&A	Synergy value (Actual)	Proportion*
HT1 and HT2	1,979,698,716,112 (HT1)	1,513,812,864,369 (HT2)	4,072,823,650,094 (HT1)	579,312,069,612	5.77%
TLH and PHT	1,379,977,367,999 (TLH)	256,212,457,874 (PHT)	1,240,679,326,614 (TLH)	(395,510,499,258)	-18.93%
VIC and VPL	16,985,608,424,542 (VIC)	2,382,582,714,914 (VPL)	21,648,017,669,282 (VIC)	2,279,826,529,827	5.07%
KMR and KMF	215,857,891,649 (KMR)	62,589,190,215 (KMF)	58,319,722,536 (KMR)	(220,127,359,328)	-30.03%

** The proportion in comparison with book values of the companies before M&A.*
Source: An analysis of the authors.

5.3. Findings on the Feasibility of Synergy Value Valuation Methods in Vietnam

In the previous section, M&A deals between HT1 and HT2, VIC and VPL created synergy value. In this section, we compared actual synergy value and the synergy value determined by the synergy value valuation method.

There are five common methods for valuating synergy value: (1) the accounting rate of return method, (2) the event study method, (3) the DCF method, (4) the option right method, and (5) the decomposing synergy value component method.

The first and second methods are often used when evaluating the success of a M&A deal (evaluating the impact of M&A on the company's performance). The results of the two methods are calculated through financial ratios rather than a specific value. Therefore, the authors did not select the two methods when comparing with actual synergy value.

The third, fourth and fifth methods were those which can determine synergy value by a specific value. According the survey results (Figure 7), the DCF method was known and heard of by experts and it is considered feasible to be applied in Vietnam. Therefore, in this research, we adopted the DCF method to appraise synergy value. The results are presented in Table 4.

Table 4 shows that synergy values determined the valuation method were closer to actual synergy values. This result partly reflects the feasibility of this method in Vietnam.

Table 4. Synergy value of the two M&A deals between HT2 and HT1, and between VPL and VIC based on the DCF method

M&A	Synergy value (valuated)	Proportion*	Synergy value (Actual)	Difference
HT1 and HT2	585,463,327,197	5.83%	579,312,069,612	1.06%
VIC and VPL	2,262,098,369,615	5.03%	2,279,826,529,827	-0.78%

** Proportion in comparison with book values of the two companies before M&A.*
Source: A calculation of the authors.

6. Conclusion and Recommendation

This research has tested synergy values of typical M&A deals in Vietnam. The results show that not all M&A deals create synergy values for shareholders. This finding provides managers, investors and appraisers with a more cautious view on estimating benefits of a M&A deal. At the same time, the survey results indicate that the cost of capital method and the DCF method are respectively the most commonly-used methods for appraising enterprise value and synergy value. Finally, the research results also show that synergy values obtained from the DCF method were closer to the actual synergy values, partly reflecting the feasibility of the synergy value valuation method in Vietnam.

Based on the obtained research results, we have the following recommendations to help the practices of valuing synergy in M&A activities to become more well-recognised and commonly-used in Vietnam.

First, there should be a legal recognition of methods of valuating enterprise value. There are many methods for valuating synergy values in which the method is based on the difference in enterprise value before and after the M&A execution is often used. In Vietnam, methods of valuating enterprise value are currently mentioned in the 59/2011/NĐ-CP Decree and the 127/2014/TT-BTC Circular, but only for the purpose of transferring 100% state-owned enterprises into Joint Stock Companies. Therefore, it is necessary to issue valuation standards for appraising enterprise value in Vietnam.

Second, there should be a legal recognition of synergy value valuation methods. In Vietnam, there is still a lack of a complete document which mentions methods for appraising synergy values in M&A activities. Concurrently, valuation is a specialised area which is subject to strict control of legal documents. Therefore, the Ministry of Finance should issue an appendix of valuation standards in appraising enterprise value (proposed in the first recommendation) to provide a guidance about the use of methods for appraising synergy values in M&A activities.

Third, methods for appraising synergy values should be discussed in the content of extra-curriculum professional programs about valuation. The currently issued 204/2014/TT-BTC Circular has regulations on professional knowledge of valuation (updating knowledge about valuation). Therefore, the national data centre, the price service of the price management department (the Ministry of Finance), and the valuation professional organisation (the Vietnam valuation association) can introduce the methods of appraising synergy values into extra-curriculum programs to increase the applicability of these methods in Vietnam.

Fourth, the expertise of appraisers should be improved. When determining synergy values, appraisers often approach financial reports, use and analyse data in these reports, and derive useful information for valuation purposes. Therefore, appraisers need to constantly improve specialised knowledge and skills about laws, accounting, financial analysis, prediction skills, and proficiency in econometric models.

Fifth, the DCF method tends to produce decent evaluation of M&A deals which do not create any synergy values. Therefore, before each M&A deal, appraisers should have professional judgements to help them choose an appropriate method.

Limitations and future directions

Apart from theoretical and practice contributions, a major limitation of this paper is that the information input was publicly available information and data only (the authors did not contact directly with companies to learn about their internal control system, plans, and business strategies, etc..). Therefore, enterprise values and synergy values in this research were only approximate values and they did not completely reflect the synergy values at the time of the valuation. In addition, there were many M&A deals, that fulfilled requirements of this paper, in 2013 and 2014, however, the periods after the M&A executions were close to the time of writing this paper. Therefore, future research can use these M&A deals to increase their sample size and test the feasibility via econometric models. Finally, this research only used the capital costing method to measure enterprise value before and after M&A, and the DCF method to measure synergy value. Thus, further studies can adopt other methods to appraise synergy value by basing on the idea of this research. This will contribute to a more complete picture of the feasibility of methods for appraising synergy value in Vietnam.

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