CHAPTER 2 : LITERATURE REVIEW

2.1 DEFINITION OF MERGERS AND ACQUISITIONS

In the 21st century corporate world, mergers and acquisitions has always been one of the very important strategic tool used to achieve specific business objectives (Sudarsanam, 2003). Merger and acquisitions happens when two legal entities' assets and liabilities are combined to become one legal entity (Frantlikh, 2003).

If we are to define merger and acquisition separately, acquisition generally means a larger company absorbing a smaller company, with the smaller company either becoming a subsidiary of the larger company, or with the smaller company combined into the larger company, hence losing its identity, and larger company will take control of smaller company's assets and liabilities. Merger is generally used to reflect consolidation of two companies on an equal status basis.

Mergers and acquisitions are generally being used interchangeably and abbreviated as M&A in business world. This is because mergers and acquisitions basically lead to the same outcome whereby two entities become one entity.

In reality, pure merger or mergers in equal basis do not happen very often and it is an acquisition that happened most of the time. The trick and consideration is, acquisition usually carries a negative perception and could possibly be demoralising the morale in company being acquired, hence damaging future synergies expected post M&A (Kotter and Schlesinger, 2005).

Therefore, despite all kinds of theories and definition to differentiate merger from acquisition, the acquirer companies usually prefers to call it M&A, that leads to the word merger and acquisition being used interchangeably today. Unless the deal is being generally recognised as a hostile takeover by the acquirer, where then it would be seen as a pure acquisition, in any other cases, M&A will be generally recognised as the same.

For this thesis purposes, in order to better outline the research scopes and study framework, the specific definition of M&A adopted will be as followed :

- a. Merger is the combination of two or more companies in creation of a new entity or formation of a holding company (European Central Bank, 2000, Gaughan, 2002, Jagersma, 2005, Awasi Mohamad and Vijay Baskar, 2009).
- b. Acquisition is the purchase of shares or assets on another company to achieve a managerial influence (European Central Bank, 2000, Chunlai Chen and Findlay, 2003, Awasi Mohamad and Vijay Baskar, 2009), not necessary by mutual agreement (Jagersma, 2005, Awasi Mohamad and Vijay Baskar, 2009).

2.2 TYPES OF MERGERS AND ACQUISITIONS

Mergers and acquisitions can be generally classified to congeneric M&A and conglomerate M&A. Congeneric M&A can be further breakdown to horizontal M&A and vertical M&A.

Horizontal M&A happens when the two companies that is going to be merged are from same industry, and most probably are competitors (Chunlai Chen and Findlay, 2003). The motives that is driving horizontal M&A are mainly to achieve cost saving, increase market and to tap into new market segment. Horizontal M&A is increasingly becoming more popular as the business world nowadays is becoming more globalised and liberalised. This is particularly obvious in the automotive, pharmaceutical and petroleum industry, that are involving M&A of both domestic and cross border M&A. An example of a horizontal merger, and also one of the most famous genuine mergers on an equal basis will be Glaxo Wellcome and SmithKline Beecham when they merge in year 1999 to form a new company named GlaxoSmithKline (MANDA, 2007).

Vertical M&A happens when the acquirer and company being acquired are having business relationships of upstream supplier and downstream buyer in the value chain (Chunlai Chen and Findlay, 2003). The motives behind a vertical M&A will usually be driven by intention to reduce dependencies and reduction of overhead cost and gaining the scale of economies. An example of vertical M&A would be a soft drink company buying a bottle manufacturing company.

A conglomerate M&A occurs when the two companies that were involved in the M&A are from irrelevant industry, with the purpose to diversify capital investment hence diversifying risk, and also to achieve scale of economies (Gaughan, 2002).

2.3 OBJECTIVES OF MERGERS AND ACQUISITIONS

Objectives of M&A or motive of M&A is a very important aspect in M&A related research. Various literatures have placed significant effort in elaborating M&A motives. This is because the intention that ignited the effort to start an M&A, would determine the whole process of M&A, the post M&A process, and also will determine whether that particular M&A been successful implemented.

One of the common objectives of M&A would be to achieve economy scale and economy scope. Economy scale means reducing average cost per unit in layman term, by increasing volume of production. Economy scope means saving of costs by producing more variety of offerings through sharing of common resources. By combining two companies into one entity, the new entity can then reduce redundant departments and processes hence profit margins will improve. This is due to cost being managed to lower level when redundant processes are cut but income stream remains. The economy scope is also expected to improve by performing M&A, improvement expected are such as more products offering, and increase efficiency in distribution and marketing channels (Larsson, 1990).

The other main reason would be to capture bigger market shares. This is part of the M&A inorganic growth where the number of customers increases not by capturing new customer, but by inheriting customers from company being acquired (Larsson, 1990). This is very important especially when the market in that particular industry is relatively saturated. By absorbing major competitor and gaining huge leap in market shares, the new entity can then become a

major player in the market and able to set prices in market. This would also encourage cross selling, where customers previously from company A can be offered products inherited from company B, and customer from company B can be offered products inherited from company A.

Synergy is also one of the very common and important reason to engage M&A. Synergy generally means the values that will be created when two companies engage in M&A is more than the combined values of the originally two separate companies. Synergies can be seen from three perspectives which are finance, operation and management respectively (Hitt et al., 2000).

M&A also promotes knowledge and resource transfer, which is part of the synergy expected. New combined entity through M&A enables the two companies to share skills and knowledge, especially scarce resources (Haspeslagh and Jemison, 1991). Information and statistics sharing which are almost impossible to happen can now be achieved through M&A. Knowledge and talent are undoubtedly one of the most precious resource one company can owned, and through M&A one can acquire the best technical and managerial talent from competitor companies. Furthermore, the new company that is being seen as growing stronger and gaining more market shares after M&A can also attract more top talents from other competitors to join.

Last but not least, M&A can reduce double marginalisation, this is obviously seen in vertical M&A. Double marginalization happens when both the upstream supplier and downstream buyer has monopoly market power, where it leads to higher retail prices but lower total profit in vertical supply chain. By engaging vertical M&A, the new entity which includes both upstream and

downstream can optimise production cost and maximise downstream retail price and revenue, hence generating more revenue (Larsson, 1990).

Lastly, M&A also allows the new combined entity to perform asset restructuring. By engaging M&A, remaining assets of the company improved in performance after asset sales that subsequently left the company more focused (John and Ofek, 1995).

Anyway, M&A motive involved in every M&A are very different, due to the unique nature of M&A. Therefore, most M&A study has focused on studying the outcome rather than motives. Hence, there is no any one size fits all M&A motive theory that applies to all M&A. The figure 1 below illustrates the seven major M&A motive theories.

		Net gains through synergies	Efficiency Theory			
	Merger benefits bidder's shareholders	Wealth transfers from customers	Monopoly Theory			
Merger as rational choice		Wealth transfers from shareholders	Raider Theory			
		Net gains through private information	Valuation Theory			
	Merger benefits managers	Empire building theory				
Merger as process outcom	Process theory					
Merger as macroeconomic phenomenon Disturbance theory						

Figure 1 : Theories of M&A motives (F.Trautwein, 1990, Mustafa and Horan, 2010)

According to the M&A motives theories in figure 1, each of the respective theories illustrates ideas as below :

- Efficiency Theory it views mergers as being planned and executed to achieve synergies.
- Monopoly Theory it views mergers as being planned and executed to achieve market power.
- 3. Raider Theory this merger will trigger wealth transfers from the stockholders of the companies it bids for.
- Valuation Theory it argues that mergers are planned and executed by managers who have better information about the target's value than the stock market.
- Empire building theory it argues that mergers are planned and executed by managers who thereby maximise their own utility instead of their shareholders' value.
- Process theory it views mergers as strategic decisions not as comprehensive rational choices but as outcomes of processes influenced by decision process, organisational routine and political power.
- Disturbance theory it views merger waves as being caused by economic disturbances.

In the scenario of banking M&A, it has been suggested that M&A gives bank operational benefits such as economies of scale, asset restructuring, and technical and managerial skill transfer, bank mergers also supposedly improve the financial position by risk reduction, increased debt capacity and lower interest rates as well as tax savings (Pilloff,1996, Rappaport,1986).

2.4 POST M&A AND INTEGRATION

In M&A, there are three stages in general which are the pre-merger planning, the merger implementation, and the post-merger integration. The pre-merger planning is the phase where the whole merger strategy is being planned and formulated at the most comprehensive and practical manner. The merger implementation is the process where merger negotiation proceeds until the deal is concluded. And last but not least, the post-merger integration will be executed to build a robust integrated new company and realise expected synergies. Synergies creation is always one of the very important factors that leads to M&A, hence, post-merger integration is a very important process to look in detail to realise synergy expected.

Integration process is the real source of value creation in acquisitions (Haspeslagh and Jemison, 1991). Value is not created until capabilities are transferred, and people from both organisations collaborate in order to create the expected benefits and the unpredicted opportunities. This collaboration relies on the will and ability of managers from both organisations to work together towards a new future. The key to integration is to obtain the participation of the people involved without compromising strategic task (Salama et al, 2003).

During integration stage, the aspects that are being integrated will be accounting and finance, legal platform, assets and products, systems and technologies, and most importantly cultures and mindsets.

Most common integration stages are mainly divided in to three stages. The first one will be to run both business units under same roof, which used to two

different business entities to run parallel. In this stage, values are preserved. The next stage will be to consolidate operations and business processes. This second stage of integration is the phase where synergy values are starting to be realised. And the last stage will be to transform into a brand new organisation, where synergies of value is created (Bohlin et al., 2009). According to Sherman and Rupert (2006) on banking post merger integration, some efficiency benefits following bank mergers are not realised until four years after the merger, and execution of a proper post-merger integration is utmost important in creating synergies expected. Challenges will come during integration and it has got to be managed from integrating different operation processes to cultural disharmony in order to harvest the benefits of M&A.

One of the famous M&A failed due to integration process, the AOL and Time Warner merger in year 2000. When the AOL and Time Warner merger was announced, it was positioned as the greatest merger of the century. That so-called greatest merger has turned into the worst merger of the century. AOL/Time Warner reported a loss of 54 billion dollars in the first quarter of 2002. This is the highest one-quarter loss reported by any company in history (Harvard Business Review).

Traditionally, acquirer integrates by making company being acquired to be a copy cat and mirror the acquirer, but that has been proven not working very well. But, each M&A case is unique, hence, there isn't a one size fits all integration approach that is perfect for every organisation.

Haspeslagh and Jemison (1990) have developed a matrix to assist in selecting a better approach for implementing integration post-merger (Figure 2). The matrix evaluates two factors :

- 1. Strategic Interdependence which is defined by the interweaving between the two merged units and how corresponding strategic abilities can be transferred to one another at various working level
- 2. Organisational autonomy which is defined by the level of need for independent cultural identity

Depending on the evaluation on the two criteria, the preferred integration approach will be defined as followed :

- Absorption management needs courage to ensure that its vision for the acquisition is carried out.
- Preservation management focus is to keep the source of the acquired benefits intact and nurturing.
- 3. Symbiosis management must ensure simultaneous boundary preservation and boundary permeability, gradual process.
- 4. Holding non intention of integrating and value is only created only by financial transfers, risk-sharing or general management capability.

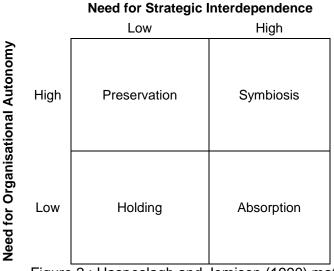


Figure 2 : Haspeslagh and Jemison (1990) matrix

2.5 SYNERGY

The term synergy is probably one of the most use arguments to justify M&A (Jansen, 2008). But yet an accurate definition for the term remains unclear. The synergy effect was probably first described by Ansoff in 1965, as "2+2=5" effect. Arising from that, Gaughan (2002) and Oberg (2004) describe synergy as the effect combined from the sum of two substances that is greater than the sum effect from two independent individual. Hitt et al. (2001) describes synergy as the ability of two or more units or companies to generate greater value working together than it could have achieved when they are working apart or alone. Gaughan (2002) explains that synergies can be contributed by financial synergy, managerial synergy, and operational synergy. Pilloff (1996) also states the primary reason for M&A synergy is performance improvement after the merger, which may be obtained in several ways.

As per mentioned in post-merger integration, and M&A integration process will go through value capture or realisation and value creation process. Singh & Montgomery (1987) and Haspeslagh & Jemison (1991) stresses that there is a distinction to be made between value creation and value capture when discussing the potential benefit of acquisitions.

Salvato et al. (2007) says that value capture or value realisation is a onetime phenomenon or event. This phenomenon is a result from features inherent in the transaction itself, for example tax benefits and asset stripping. Value creation is a long term phenomenon that results from interactions between firms involved and entrepreneurial or managerial actions.

Noren and Jonsson (2005) said that value creation is a possible when the strategic actions have a clear focus on an efficient use of the specialised resources a firm possesses, while considering at the same time environmental constraints and opportunities.

Despite all the different definitions provided by the various researchers on the term synergy, there are also many literatures and studies looking at how are synergies being created. These literatures finds out about how synergy can be systemised at various levels of integration, functions, processes and intentions. Koppen (2008) has done an overview summary on systemisation of synergy potentials as shown in figure 3 below.

Synergy Systemisation	Classification Criteria	Author		
Root Cause	Know how transfer	Porter (1985)		
Rool Cause	Centralisation of tasks	Good & Campbell (2000)		
	Sales synergy	Bisani (1960)		
	Operating synergy	Ansoff (1985)		
Functional Area	Investment synergy	Trautwein (1990)		
	Investment synergy			
	Management synergy			
	Centralisation	Reissner (1992)		
Activity for	Integration/Restructuring			
Leveraging Synergy	Enhancement/Access			
Potential	Transfer			
	Exchange			
Value Contributing	Productional Synergy Potentials	Coenenberg & Sautter (1988)		
Areas of Company	Financial Synergy Potentials	Petri (1990)		
	Cost related synergies	Eccles, Lanes & Wilson (2000)		
lun vo o d	Revenue related synergies			
Impact	Process improvement related synergies			
	Tax related synergies			
	Growth related synergies	Viscio et. Al. (1993)		
Pursued Goal	Efficiency related synergies			
	Input synergies	Ebert (1998)		
Stage in Value chain	Process synergies			
	Output synergies			

Figure 3 : Overview for Systemisation of Synergy Potentials, Koppen (2008)

Last but not least, a generic formula to measure synergy does not exist yet. Although the popular definition of synergy is commonly understood as "1+1>2", but how synergy should be defined, what should be measured and how it should be measured remains very much opened to discussions and for researchers to explore further.

2.5.1 MEASUREMENT OF SYNERGIES

When synergies are being discussed in M&A context, the definition of synergy itself is very company and industry specific, M&A motive specific, strategic theory specific, research method specific and so on, which varies between different researchers. This echoes the arguments raised by Weber(2006), where he mentioned that synergies do not just exist or get created by itself. Synergy only happens when it is being identified and actively developed and controlled in a professional lead process. This means that synergy could exist in multiple area of the M&A entity, and it also same time means that there will also be area where synergy does not happens, depending on the M&A motive and results achieved. Given the fact that researchers are only measuring certain areas that are measurable according to their theory, hence the definition of synergy could be narrowed down to department or work stream specific within the new merged entity.

All these different arguments or parameters that are still opened for debate and discussion, leads to very distinct ways of measuring and proving process of value creation or value destruction.

A summarised table is shown in table 3(a) and 3(b) with 19 samples of literatures reviewed where synergies are being measured. As per mentioned earlier, the M&A motive plays a very important role in determining what to measure to identify synergies and how to measure them, hence, we can see from the tables that different approaches are being utilised to identify and measure synergies from these case studies or sample data.

4 out of 19 research papers have identified and measured synergies from a more qualitative point of view and they are all company specific case study research. These case study's M&A motive maybe different but synergies measured against motive are mainly from operation efficiency, management ability leveraging and financial gain point of view. They use interviews, questionnaires, articles and news as main source of data input to identify M&A motive and outcome from the M&A, financial data is also collected if available. These inputs are then being compared against motive to identify synergies achieved.

15 out of 19 research papers have utilised a more quantitative way to measure synergies, where 9 of them are measuring share returns and the remaining 6 are measuring operation efficiencies, cashflows, shareholders value and financial result comparison. The 2 most common input used are historical share prices and annual report financial data. Measurement of synergies with quantitative statistical method usually requires certain size of sample data involved, collecting many companies data with different motive initiating M&A, hence the motive of M&A are more loosely linked to the measurement of synergies in statistical computation approach. The researchers will collect required numbers input then measure the synergy gain from their proposed hypothesis of the study.

2.5.2 NEGATIVE SYNERGY OR DYS-SYNERGY

When synergies are measured, it means that the result could be positive with value creation proved, or it could be the other way round where value destruction is found with negative value, which is dys-synergy.

According to Wegener et al.(2006), dys-synergy in M&A could be due to the following reason :

- 1. No systematic and quantification of synergy potentials
- 2. Negative synergies were not taken into account for enough consideration
- 3. Potential problems in synergy realisation were not anticipated or measures to cope not sufficiently prepared
- 4. Chosen integration approach did not allow synergy realisation in the expected scope
- 5. Barriers of integration not recognised or realised
- 6. Assymetry of information and diverging interests if the involved parties
- 7. Irrational motives of involved leaders
- 8. Lack of management resources or problems in integration of management
- 9. Underlying IT does not effectively support business processes
- 10. Target was dressed up for sale
- 11. Eagerness pushed aside doubts and rational behavior

As per mentioned by Lessiak (2010), the total synergy effect are a sum of individual positive and negative effects achieved from the M&A. He defined

dyssynergy as synchronous collaboration of separate entities, which leads to a decrease of the total value and can be summarised as :

- 1. All expenses necessary for realisation of collaboration of the separate entities, which is called cost dyssynergies
- 2. All negative impact as a result of the collaboration of all related entities
- 3. All not realised positive synergies, which is called revenue dyssynergies

Study of Kelly and Cook(1999) discover that 83% of companies that were involved in M&A thought they have concluded a successful deal, but in fact, only 17% of them managed to create shareholders value. The main reason causing the high failure rate according to Fleet Capital(2001), were due to limited compelling strategic rationale, high valuation that were unjustifiable and unrealistic expectation of synergies.

No	Author	Year	Title	Sample Data Size	Quantitative /Qualitative	Data Period and Frequency (if applicable)	Method	Measuring of Results	Company Type	Country
1	Justin Paul, Pragya Bhawsar	2011	Japanese acquisitionin India's Ranbaxy	Case Study : Daiichi Sankyo and Ranbaxy	Qualitative	Annual financial report, 2007 2009 (supporting data)	Interviews, articles and annual reports	Synergy measured from multiple business processes and department improvement	Pharmace	Japan, India
	Varini Sharma		Do Bank Mergers Create Shareholder Value?	20 bank, 2000- 2008	Quantitative	Daily historical share price of at least 1 year	Event study methodology	Measuring synergy as shareholders value	Bank	United States
3	Ahsan Mustafa, Alexander Horan	2010	Acquisition as growth Strategy	Case study : SYSteam AB and Sigma AB	Qualitative	Annual financial report, 1996 2009 (supporting data)	Interviews, articles and annual reports	Synergy measured against acquisition objectives	п	Sweden
4	Borge Hess	2010	Evaluating the efficiency effects of industry consolidation	47 companies	Quantitative	Production process annual data from 1996-2005	Stochastic frontier analysis	Results measured from operation efficiencies perspective	Oil and Gas	United States
5	K. Ramakrishnan	2010	Mergers in Indian industry: performance and impacting factors		Quantitative	Annual reports 3 years pre- and post- merger	Regression analysis with AIACF model	Results measured from cashflow management perspective	Various industries	India
6	Ugwu Kelechi Enyinna	2010	Organisational change : evidence of mergers & acquisitions (an empirical study of pan nordic logistics ab)	Case Study : Pan Nordic Logistics	Qualitative	N/A	Interviews, questionnaires and articles	Synergy measured from operational and management perspectives	Logistics	Sweden
7	Moshfique Uddin, Agyenim Boateng		An analysis of short- run performance of cross-border mergers and acquisitions	373 companies	Quantitative	Daily share price from bid announcement date to 10 days after merger	Event study methodology	Results measured by return of shares		United Kingdom
8	Linda Dastory	2009	and Rio-Tinto	Case Study : BHP-Biliton and Rio-Tinto	Quantitative	Daily share price from April 2007-October 2007	Cumulative Abnormal Return (CAR) Event study methodology	Results measured by return of shares	Mining	Sweden
9	Frida Ekenberg	2008	Are mergers and acquisitions a successful way of growth?	Case study : Astra AB and Zeneca Group	Qualitative	Annual financial report, 1999 2001 (supporting data)	Interviews, questionnaires, articles and annual reports	Synergy measured from operational and financial perspectives	Pharmace utical	Sweden
10	Charles A. Barragato, Ariel Markelevich	2008	acquisitions	907 merger cases	Quantitative	Daily share price of 5 days pre-announcement and 5 days post-announcement	Cumulative Abnormal Return (CAR) Event study methodology	Results measured by return of shares and cashflow efficiency perspective	Various industries	United States

Table 3(a) :Summary of Synergy Measurement Method from Other Research

				Sample Data	Quantitative	Data Period and			Company	
No	Author	Year	Title	Size	/Qualitative	Frequency (if applicable)	Method	Measuring of Results	Туре	Country
			Measuring							
			comparative							
			efficiencies and							
	He-Boong Kwon,		merger impacts of							
	Philipp A.		wireless					Results measured from		
	Stoeberl, Seong-		communication				Data envelopment	operation efficiencies		United
11	Jong Joo	2008	companies	4 companies	Quantitative	Annual data 2002-2005	analysis (DEA)	perspective	п	States
			The impact of							
			mergers and							
	Catiah Kuman		acquisitions on	74				Measuring synergy by	Variaus	
40	Satish Kumar,	2000	corporate	74 companies,	O	Annual financial reports,	Comparison of annual		Various	ha ali a
12	Lalit K. Bansal	2008	performance in India Do Stock Mergers	2003 2128 Merger bid	Quantitative	2000-2006 Daily historical share price	report result	pre- and post- merger	industries	India
	Pavel g. Savor,		Create Value for	companies, 1978-		at least 1 year pre-merger	Pograssian Event study	Results measured by return	Public	United
12	Qi Lu	2007	Acquirers?	2003	Quantitative	and 3 years post-merger	methodology	of shares	listed	States
13		2007	Bidder Returns A	2003	Quantilative	and 5 years post-merger	methodology	or shares	listeu	Sidles
			Study on Share Price							
			Reactions Following				Cumulative Abnormal			
	Susanna Grill,		Takeover			Daily share price from 2000-		Results measured by return	Various	
14	Philip Jaskow	2007	Announcements	113 companies	Quantitative	2006	study methodology	of shares		Sweden
		200.		110 companie	Quantitativo	2000	citaly methodology	Measuring synergy by	inductified	0.100.011
								comparing financial result		
ł			The Effect of Mergers	19 banks, 1997-			Data envelopment	and productivity efficiency		
15	Viverita	2007		2000	Quantitative	Financial data 1997-2006	analysis (DEA)	pre- and post- merger	Bank	Indonesia
			Merging activity in the							
			greek banking			Daily historical share price				
	Nikolaos		system: a financial			of at least 1 year and	Event study and pre- vs			
	Mylonidis, loanna		accounting	13 banks, 1999-		financial reports from 1997-	post merger comparison	Results measured by return		
16	Kelnikola	2005	perspective	2000	Quantitative	2002	on accounting data	of shares	Bank	Greek
			Bank Merger and				Generalized			
			Bank Stock Volatility:				Autoregressive			
			A Post –				Conditional			
	Hui Boon Tan,		Announcement			Weekly share price from	Heteroskedasticity	Results measured by return		
17	Chee Wooi Hooy	2003	Analysis	4 banks	Quantitative	1997-2001	(GARCH)	of shares	Bank	Malaysia
			Management Motive,							
			Shareholder Returns, and the Choice of			Doily abore price of 60 days	Cumulativa Abnormal	Beaulto monourod by return		
	Mahandra Dai			070		Daily share price of 60 days	Cumulative Abnormal Return (CAR) Event	Results measured by return of shares according to	Variaus	United
10	Mahendra Raj, Michael Forsyth	2002	Payment: Evidence from the UK	376 merger cases, 1990-1998	Quantitativo	pre-announcement and 10	study methodology	5	Various industries	Kingdom
10	wichael r'Uisyti'i	2003	Focusing versus	Cases, 1990-1998	Quantitative	days post-announcement	study methodology		nuustnes	Ringdom
			diversifying bank							
			mergers: analysis of							
			market reaction and			Daily historical share price				
			long-term	56 merger cases,		at least 1 year pre-merger	Regression Event study	Results measured by return		United
10	Gayle L. DeLong	2001	•	1991-1995	Quantitative	and 3 years post-merger	methodology		Bank	States
13	Cayle L. DELUNG	2001				And S years post-merger			Dank	Ulaies

 Table 3(b) : Summary of Synergy Measurement Method from Other Research