The Review of Financial and Accounting Studies
ISSN 1450-2812 Issue 1 (2011)
© EuroJournals Publishing, Inc. 2011
http://www.eurojournals.com/REFAS.htm

Review of Literature Linking Corporate Performance to Mergers and Acquisitions

Tariq H. Ismail
Corresponding Author, Professor of Accounting, Faculty of Commerce, Cairo University, Egypt
E-mail: thassaneen@cu.edu.eg
Tel: +2- 010-1369557; Fax: +2-02-33568620

Abdulati A. Abdou
Associate Professor of Accounting, Faculty of Commerce, Cairo University, Egypt
E-mail: abdalatty@hotmail.com

Radwa M. Annis
Assistant Lecture of Accounting, Faculty of Commerce, Cairo University, Egypt
E-mail: radwa1mohamed@yahoo.com

Abstract

There are inconclusive results on the literature on the consequences of mergers and acquisitions (M&A) on corporate performance as well as factors that might affect such identify synergies. This paper aims at synthesizing and analyzing prior literature of mergers and acquisitions and its effects on the financial performance in an attempt to determine factors that might influence post-mergers and acquisitions performance. Previous studies are using varieties of measures to examine the impact of M&A on corporate performance, where measures might be accounting measures-based, market measures-based, mixed measures, or qualitative measures-based. This study concluded that there is a dispute regarding the factors that affect the reported performance, where eight factors might affect performance as follows: (1) method of payment (Cash or Stock), (2) book to market ratio, (3) type of merger or acquisition transaction (related or unrelated), (4) cross-border versus domestic M&A, (5) mergers versus tender offers, (6) firm size, (7) macro economic conditions, and (8) time period of transaction. Managers should be aware of such factors and their impact on post-merger/acquisition corporate performance to accurately evaluate proposed offers of mergers and acquisitions and take sound decisions.

Keywords: Mergers and Acquisitions, Corporate Performance, Business Synergies

1. Introduction

Mergers and acquisitions decisions are critical to the success of corporations and their managers. Many corporations find that the best way to get ahead is to expand ownership boundaries through mergers and acquisitions. For others, separating the public ownership of a subsidiary or business segment offers more advantages. At least in theory, M&A create synergies, gain economies of scale, expand operations and cut costs. Investors may expect mergers to deliver enhanced market power. It is no secret that plenty of mergers do not work. Those who advocate mergers will argue that the merger will

cut costs or boost revenues by more than enough to justify the price premium. In theory, M&A is great, but in practice, things can go awry. Empirical results reveal that many of mergers were disappointed, where the motivations that drive mergers can be flawed and efficiencies from economics of scale may prove elusive.

There are controversial results about the abnormal returns to the acquiring firm shareholders. Some studies suggest no significant abnormal return while others suggest negative abnormal returns. If negative abnormal returns exist, causes are not well known. For example, Tuch and O'Sullivan (2007) and Agrawal and Jafee (2000) review the literature to examine the impact of few bid characteristics on M&A performance and provide evidence on this issue. However, some questions are left unanswered on the impact of cross-border versus domestic transaction and timing of transaction on post M&A performance. Further research is needed to understand the impact of bid characteristics on M&A post performance. This study differs from prior research on reviewing the impact of mergers and acquisitions on corporate performance in a number of ways. Tuch and O'Sullivan (2007) provide evidence that stems from market measures-based and accounting measures-based studies. There is a need to review prior research that have used different measures to evaluate post M&A performance, we complement and extend the study of Tuch and O'Sullivan (2007), by looking at mix measures-based and qualitative measures-based studies that have examined the effects of M&A on performance to provide further evidence that might help to explain changes in post performance. Our study also differs from other research on the impact of bid characteristics performance. Tuch and O'Sullivan (2007) find that the acquisition of hostile targets, transactions that are paid for with cash and acquisitions of larger targets are associated with superior (or at least negative) performance, while there is mixed evidence on the benefits of related acquisitions. They do not examine a wide spectrum of attributes of bid characteristics that might affect post M&A corporate governance. However, our study extends the study of Tuch and O'Sullivan (2007) in order to investigate whether there is significant impact of book to market ratio, cross-border versus domestic transaction, mergers versus tender offers, macro economic conditions and timing of transaction on post M&A performance.

The purpose of this paper is to synthesize and analyze M&A literature on the effects of mergers and acquisitions activities on the financial performance of the involved companies in an attempt to determine factors that might impact the reported performance, where such factors should be considered by managers in making their decisions.

An extensive review of literature is carried out to pinpoint measures used to examine post M&A corporate performance in order to conclude possible factors that might affect post M&A corporate performance. The literature review is divided into four main streams of research which contribute to the study; (i) market measures-based studies, (ii) accounting measures-based studies, (iii) mixed measures-based studies, and (iv) qualitative measures-based studies. The paper investigates and discusses major studies under each category to conclude factors that might affect post M&A corporate performance.

This paper is organized as follows: the next section is reviewing of the literature on the impact of mergers and acquisitions on corporate performance followed by the discussions, summary and concluding remarks.

2. Review of Previous Studies

2.1. Market Measures-Based Studies

Gallet (1996) examined the relationship between mergers in the U.S. steel industry and the market power. The study employed New Empirical Industrial Organization (NEIO) approach which estimates the degree of market power from a system of demand and supply equations. The study analyzed yearly observations over the period between 1950 and 1988 and results have revealed that in the period of 1968 to 1971 merges did not have a significant effect on market power in the steel industry, whereas mergers in 1978 and 1983 did slightly boost market power in the steel industry.

Rau and Vermaelen (1998) investigated the controversial issue of under performance after mergers and over performance after tender offers through examining the effect of firm size and low book-to-market value on the post- acquisition performance to pinpoint reasons behind under-performance in mergers and over-performance in tender offers if any. They also investigated the effect of the payment method (Cash/Stock) on the post-acquisition performance. The study employed a sample of 3169 mergers and 348 tender offers and concluded that after adjusting for firm size and book-to-market ratio, acquirers in mergers under perform by a significant 4% over three years, while acquirers in tender offers earn a significant positive abnormal return of 9% on average. A fact that destroys the belief that under-performance is due to un-adjusting for book-to-market ratio. The study has interpreted under-performance as a result of decision makers' actions, where they over extrapolate the past performance of the bidder with low book-to-market ratios "glamour firm" and overestimate its abilities and hence approve the acquisition. On the other hand, value bidders companies with poor track record or with high book-to-market ratio tend to be more prudent and are not motivated by hubris when approving an acquisition. The study failed to interpret the effect of methods of payment in cases where the long-run abnormal return is negative in share-financed acquisition and positive in cash-financed acquisition. However, the study did not provide interpretation for the over-performance of tender offers compared to mergers.

Tse and Soufani (2001) examined the wealth effects on both acquiring and acquired firms using a sample of 124 transactions over the period 1990 to 1996. The sample is sub-divided into two merger eras to examine the effect of the prevailing economic performance on the abnormal returns; the first era is Low Merger Activity Era (LMAE) from 1990 to 1993 which is a trough period and includes 65 transactions; and the second era is High Merger Activity Era (HMAE) from 1994 to 1996 which is a booming period, it includes 59 transactions. The basic testing tool used is "event-study" to calculate cumulative abnormal returns for both eras. The results have indicated that the returns on successful bids in HMAE are positive while returns in LMAE are negative. Marginally, returns in the HMAE are better than those in LMAE. This result has suggested a link between the wealth effect and the economic conditions. Another important result is that usually gains to target companies (acquired) are mostly positive while those to bidders (acquirer) are debatable.

Choi and Russell (2004) investigated whether mergers and acquisitions in the construction sector in U.S. make positive contributions to the performance and determined the factors that may affect post-mergers and acquisitions performance as: method of payment, acquisition timing and transaction size. The study analyzed 171 transactions that occurred between 1980 and 2002 using the cumulative abnormal returns to indicate improvement in performance. The results have revealed that (i) the number of acquisition transactions increased dramatically during the late 1990s, (ii) firms experienced insignificant improved performance, in other words, they just reached break even after mergers, and (iii) no evidence was found that either acquisition time, method of payment, or target status had an influence on the reported performance and that related diversifications perform slightly better than unrelated diversifications. The analysis covered a long time span of about 22 years which increased the reliability of the results. Unlike the majority of studies that supported the method of payment as a primary factor influencing mergers and acquisitions, Choi and Russell (2004) found no evidence to support such results.

The study of Andre et al. (2004) examined long-run performance of mergers and acquisitions in Canada and investigated the main determinants of post-acquisition abnormal performance to determine the sources of value creation or value destruction in Canadian M&A. The study's sample comprises 267 events of mergers and acquisitions between 1980 and 2000 making up 176 companies to investigate the effects of (i) method of payment, (ii) book-to-market value of the bidder, and (iii) local and cross-border deals on the long-run performance. The analysis covered three years after the transaction using mean calendar-time abnormal returns to measure the magnitude and reliability of abnormal returns. The results have shown that Canadian acquirers significantly under-perform over the three-year post-event period. After examining possible explanations for the long-run performance of M&A, the study found that the method of payment where stock-financed M&A under-perform relative

to cash-financed M&A, glamour acquirers under perform relative to value acquirers, and finally, cross-border deals perform poorly in the long- run. The study did not compare post-merger performance with a benchmark or control group of similar industries to account for industry effects, and this was the main drawback. Therefore, the negative abnormal returns could be due to industry conditions.

Yook (2004) tested the impact of acquisition on the acquiring firm's financial performance by comparing pre and post-acquisition Economic Value Added (EVA) relative to the industry average. The study based on a cross-sectional variation in EVA performance according to the following transaction characteristics: (i) types of acquisition, (ii) methods of payment, and (iii) business similarity. The sample comprises 75 of the largest acquisitions occurring during 1989 to 1994 in the United States. The results have concluded that acquiring firms experience significantly deteriorating financial performance after the acquisitions. When calculating industry-adjusted EVA, the difference is indiscernible, hence, the decline in raw EVA is grounded by industry effects. Tender offers consistently earn larger EVA than do mergers. However, there is no difference if EVA is calculated without adjusting the premium. Hence, larger premiums paid in tender offers can be justified by higher operating performance. Unfortunately, the study failed to find a relationship between industry-adjusted EVA and types of acquisition, methods of payment, and business similarity. However calculating EVA is a difficult process and still has a dispute in the accounting literature.

Megginson et al. (2004) aim at investigating the relationship between the long-term post-merger performance and the following factors: (i) the degree of corporate focus, (ii) method of payment, (iii) the impact of target management attitude, (iv) the impact of time period of the merger, and (v) the impact of (glamour/value) acquirers. The sample consists of 204 strategic mergers completed in the period 1977-1996. In examining the long-term performance, the study carried out three tests; first, comparing the long-term stock performance; abnormal returns, of merging firms with a portfolio of firms, second, comparing pre and post-merger operating cash flows to the same control group, and finally, comparing sample and control pre-merger and post-merger discounts and premiums in market-to-book values. The results have indicated that the primary determinant of long-term performance is the degree of change in corporate focus. On average, 10% decline in the focus results in (a) 9% loss in relative stockholder wealth, (b) 4% discount in firm value, and (c) 1.2% decline in operating cash flow by the third post-merger year. Cash-financed mergers outperformed stock-financed mergers in the operating performance. There is no significant relationship between managerial resistance and long-term performance. Time period has no effect on the long-term post-merger performance. No evidence was found to support that glamour outperform value acquirers.

It can be noted that although using the same measure, abnormal returns, the findings on (glamour/value) acquirers is inconsistent with those of Rau & Vermaelen (1998), where they reported that glamour acquirers outperform value acquirer in the short-run due to management's extrapolation of the firm's abilities, not due to book-to-market value and this is reversed in the long-run. Megginson et al. (2004) found no differences in abnormal returns in glamour compared to value acquirers during three years after the merger. It is difficult to relate the differences in results to the time period since they are overlapped. Data in Megginson et al. (2004) are analyzed over the period from 1977 to 1996, where in Rau & Vermaelen (1998) data were analyzed over a time period from 1980 to 1991. However, further evidence is needed to account for inconclusive results.

Yuce and Ng (2005) investigated the effect of merger announcements of Canadian firms on the abnormal returns**.** The sample consists of all Canadian mergers that occurred between 1994 and 2000 making up 1361 acquirer companies and 242 target companies representing industrial product companies, oil and gas companies, consumer product sectors and the rest of the sample is scattered over 38 industries. Abnormal returns have been used for both the acquiring and target companies in an effort to support or reject the results of American studies that report negative abnormal return for acquiring firms and positive abnormal return for target firms. The results have indicated negative results in contrast to U.S. studies (for example; Andre et al., 2004). Yuce and Ng (2005) argued that both the target and the acquiring company shareholders earn significant positive abnormal returns, but it is lower than what had reported in previous study of Megginson et al. (2004) on Canadian

companies. This means that abnormal returns appear to be decreasing through time. The results of Yuce and Ng (2005) suggest that (i) there are significant and positive cumulative abnormal returns to acquirers buying private firms with stock rather than public ones, (ii) no significant difference is found between public and private targets when paid in cash, (iii) there is higher risk for acquiring private firms than public ones, (iv) firms tend to pay less in stocks for private firms, and (v) differences in Canadian industry, capital markets, and regulations may justify the difference in the Canadian experience. It can be argued that the study did not test the effect of industry type on the acquisition price. Additionally, the study examined the performance for a period of 40 days which is a very short period to examine the performance; therefore the results have lack of generalization. Accordingly, an investigation over a long-run is needed to determine whether the positive abnormal returns in the short-run would reverse in the long-run or continue as positive.

Kling (2006) carried out a study to judge the successfulness of the mergers wave in Germany and to analyze the effect of mergers on the macro level taking into consideration variables that might drive mergers such as: economics of scale, macro economic conditions, success of former mergers and market structure. The study choose a sample of 35 leading German companies that experienced mergers over the period from the early 1870s to the beginning of the First World War in 1914 covering a period of 44 years. The results reveal that the first German wave of merger started around 1898 accompanied by the introduction of the new exchange law in 1896. The vector regression model used was unable to find out that mergers were not successful through the whole period albeit periods of successful mergers, hence, this issue has been identified using rolling regressions. From 1898 to 1904, mergers affected total stock returns positively in all industries except for banks. Despite this fact, managers imitated the merger wave in the industrial companies without assessing the successfulness of this activity on the banking sector. The study has cons and pros; where the period covered in the study was long enough to conclude considerable results. Moreover, categorizing the sample according to industry type provides insights on the effects of mergers across sectors rather than generalizing results with no evidence. On the other hand, the study is based on the macro level which in turn might affect results of analyzing mergers on a micro level of corporate performance.

To conclude, table 1 summarizes the main characteristics of the leading market measures-based studies which examine the effect of mergers and acquisitions on financial performance.

2.2. Accounting Measures-Based Studies

Heron and Lie (2002) investigated the relation between the method of payment, earnings management and operating performance. The study depends on a sample of 959 acquisitions (mergers & tender offers) announced and completed between January 1985 and December 1997, where current and long-term accruals have been separately used to detect any earnings management. The operating income over sales ratio has been used to examine the operating performance. This ratio considers the effects of the accounting method and the method of payment on the operating performance. The operating performance of the sample was compared with two benchmarks to isolate the factors beyond the merger transaction that may affect the performance. First, the study compared the pre-merger performance of the merged firms with similar industry counterparts. Second, it compared the post-merger performance with industry-adjusted performance. The results suggest that acquiring firms exhibit superior operating performance relative to their industry counterparts prior to acquisition and continue to exhibit performance levels in excess of their respective industries. No evidence was found on earnings management effects. No difference was found in the operating performance across different methods of payment. In contrast to previous studies that reported increased operating performance for firms using cash as the method of payment compared to firms paying is stocks, this study found no evidence for such relation.

Yeh and Hoshino (2002) examined the effects of mergers on the firms' operating performance using a sample of 86 Japanese corporate mergers between 1970 and 1994. The successfulness of mergers was tested based on their effects on efficiency, profitability, and growth. The study uses total productivity as an indicator of the firm's efficiency or productivity, return on assets and return on equity as indicators of the firm's profitability, and sales and growth in employment to indicate the firm's growth rate. The results reveal insignificant negative change in productivity, significant downward trend in profitability, significant negative effect on the sales growth rate, and downsize in the workforce after mergers. In general, the results concluded that mergers have a negative impact on firm performance in Japan. However, further research is required to determine factors that are behind M&A failure in the Japanese context.

Table 1: Summary of Market Measures-Based Studies

Study	Objective(s)	Measures used	Results
Gallet (1996)	Examine the relationship between mergers in the U.S. steel industry and the market power.	Market Power	Results have suggested that mergers slightly boost market power in steel industry.
Rau & Vermaelen (1998)	Identify the reason(s) behind under- performance in mergers and over-performance in tender offers as well as examining the effect of the payment method on post- acquisition performance.	Book-to-Market Values	Results have indicated that firms in mergers and tender offers under-perform their benchmarks by statistically significant 4% in the three years following the acquisitions.
Tse & Soufani (2001)	Test the effect of M&A on the abnormal returns for both the acquired and the acquiring firms.	Cumulative Abnormal Returns	Results have indicated that the returns on successful bids in high merger activity era are positive while returns in low merger activity era are negative. This result has suggested a link between the wealth effect and the economic conditions.
Choi & Russell (2004)	Examine the effect of M&A in the construction sector in the U.S. on firms' performance and investigating factors that may affect post M&A performance.	Cumulative Abnormal Returns	Results have reported that firms experience insignificant improved performance. No evidence was found that either acquisition time, method of payment, or target status has an impact on the reported performance. Related diversifications performed slightly better than unrelated diversifications.
Andre et al. (2004)	Explore the effect of Canadian mergers on long-term performance and identifying the factor(s) behind value creation or value destruction.	Mean Calendar-Time Abnormal Return	Results have shown that Canadian acquirers significantly under-perform over the three-year post-event period.
Yook (2004)	Test the effect of acquisition on the acquiring firms' financial performance.	Economic Value Added (EVA)	Results have reported that firms experience significantly deteriorating operating performance after the acquisitions.
Megginson et al. (2004)	Examine the impact/relationship of the followings and long term performance: (i) degree of corporate focus, (ii) method of payment, (iii) target management attitude, (v) time period of the merger, and (iv) (glamour/value) acquirers.	Abnormal Return, Market-to-Book Values	Results have indicated the following: (i) the primary determinant of long-term performance is the degree of change in corporate focus, (ii) on average, 10% decline in the focus results in 9% loss in relative stockholder wealth, 4% discount in firm value, and 1.2% decline in operating cash flow by the third post-merger year, (iii) cash-financed mergers outperform stock-financed mergers in the operating performance, (iv) there is no significant relationship between the long-term post-merger performance and both managerial resistance and time period, and (v) no evidence was found to support that glamour outperform value acquirers.
Yuce & Ng (2005)	Investigate the effect of mergers announcements of Canadian firms on the abnormal returns.	Abnormal Return	Results have indicated that both the target and the acquiring company shareholders earn significant positive abnormal returns.
Kling (2006)	Investigate the successfulness of the mergers wave in Germany.	Total Stock Return	From 1898 to 1904 mergers affected stock returns positively in all industries except for banks.

Gugler et al. (2003) examined and analyzed the effects of mergers around the world over the past 15 years. The study was carried out to determine the effects of mergers on corporate performance across national, international, and sector levels. The study tested a sample of 45,000 completed merger transactions across the world over the period from 1981 to 1998, where 50% of the sample is located in the United States. The effects of mergers were analyzed using profitability and sales, then, the results are compared with the performance of control groups of non-merging firms. The statistical analysis of the total sample revealed that profitability is positive in all five years after mergers and is significant in every year at 10% level. Unlike profitability, the mean difference in sales was negative in every year and increased in absolute value through the fifth year, where most mergers led to higher actual profits than projected and lower sales. On country level, the results suggest that the U.S., the United Kingdom, Continental Europe, Australia, New Zealand and Canada have the same pattern regarding the increase in profits and decrease in sales. In Japan, the results were somewhat different as three of the five profit comparisons were negative, while sales were greater than projected in two of the five post- merger years. Conducting the analysis to account for sector impact and category of merger; horizontal, conglomerate, and vertical mergers, reveal that (i) mergers in the manufacturing sector tend to be less profitable than in the service sector, (ii) horizontal mergers in manufacturing are the most significantly profitable type of mergers, (iii) in the service sector, all the three categories of mergers seem to be equally profitable. The mean difference in service sector is more significant than that of the manufacturing sector, (iv) actual sales are below of projected sales in all of three categories in the manufacturing sector, but the short fall is considerably smaller in the horizontal merger, and (v) within the service sector, vertical mergers exhibit the best performance in terms of sales. The results of comparing mergers on both the domestic and cross-border levels have suggested that no significant difference can be observed on cross-border mergers than those domestic ones. Successful mergers resulting from efficiency power (increases in both profits and sales) were greater than those resulting from market power (increases in profit and decreases in sales). The study is considered as a world wide comprehensive one, but did not provide justifications for cases, where mergers increase sales and reduce profit. Furthermore, the study ignores the effects of industry changes before merger, where it focuses on comparing the post-merger profitability and sales with the industry median and does not consider pre-merger performance.

Ramaswamy and Waegelein (2003) tested the long-term post-merger financial performance of merged companies in Hong Kong to determine relationships between post-merger performance and firm size, the compensation plan, method of payment, and industry type. The study sample consists of 162 merging firms from 1975 to 1990 and the analysis covers the five years pre and post-mergers (using operating cash flow returns on market value of assets as the measure of performance). The results have concluded that there is a positive significant improvement in the post-merger performance. There is a significant association between post-merger performance and differences in the relative sizes of the combining firms. Firms acquiring relatively larger firms have a more difficult time digesting those firms and in effectively assimilating them into the company's operation. Firms with long-term compensation plans have more positive post-merger financial performance. Firms in dissimilar industries "conglomerate mergers" experienced better post-merger financial performance than firms in similar industries. Mergers during the years 1983 to 1990 experienced poor post-merger performance in comparison to those before 1983. It can be noted that the study is an extensive one that not only determines the effect of mergers on long-term performance but pinpoints factors behind such performance. It employed a financial performance measure that is considered as an effective measure in evaluating the long-term financial performance.

King et al. (2004) investigated the findings of published research on post- acquisition performance and employ a meta-analysis technique to assess the impact of the addressed variables in the literature on the performance of the merged firms. The study concluded that M&A do not lead to superior financial performance. It can be argued that M&A has a modest negative effect on long-term financial performance of acquiring firms. The results reveal no evidence to support and explain changes in post-mergers and acquisitions performance using the factors that were supported by the

literature to have an effect on post-merger performance such as: method of payment, relatedness of industry, prior acquisition experience, and conglomerate acquisition. It should be noted that King et al. (2004) do not consider the impact of other factors as firm size and compensation plan on corporate performance which have been discussed in the literature.

Feroz et al. (2005) assessed the effect of mergers activity on the performance of U.S. companies. A sample of 45 pairs of merged firms over a period of five years pre and post-mergers were tested. Data Envelopment Analysis (DEA) was used to determine the managerial efficiency impact of mergers by comparing the combined efficiency of the acquired and the acquiring firm prior to merger with the efficiency of the merged firm during post-merger period. Results indicated that the managerial efficiency of majority of sample firms (82%) have improved in post-merger period.

Cabanda and Pajara-Pascual (2007) examined the financial and operating performance of Philippines shipping companies resulting from the merger event based on the economic-finance perspective. The test covers three periods of analysis: (i) three years prior to merger, (ii) three years immediately after merger for the short-run analysis, and (iii) seven years after the merger for the long-run analysis. The study covers the period from 1994 to 2003. The study applies the conventional accounting and financial approaches in analyzing the effects of merger on firm performance. Empirical results showed that pre and post-merger values obtained mixed results. Some measures of firm performance such as acid test ratio, total asset turnover, and net revenues suggest statistically significant gains in the long-run. Other performance variables such as net income, return on asset, return on sales, return on equity, net profit margin, capital expenditure, capital expenditure/sales, and capital expenditure/total asset did not show significant gains after mergers in the short run. The study concluded that mergers in the Philippine shipping industry do not lead to improved performance in both the short-run and the long- run.

Mantravadi and Reddy (2008) tested whether the relative size of target and acquiring firms has an impact on the post-merger operating performance in India. The sample consists of all the acquiring transactions occurred in the period from 1991 to 2003. The financial ratios employed cover a period of three years pre-merges and five years post-mergers are: operating profit margin ratio, gross profit margin ratio, net worth, return on capital employed, and debt equity ratio. The analysis of pre and post-merger operating performance ratios for the acquiring small size firms has indicated that relative size does make difference to post-merger performance. For firms with relative medium size, there were a decline in net profit margin ratio and return on capital employed along with an increase in financial leverage after merger. For firms with relative large size, there was no difference in pre and post-merger performance. For firms where relative size of the target firms was greater than that of the acquiring firm, there was a significant decline in returns on net worth and capital employed and marginal increase in financial leverage.

Lau et al. (2008) examined the operating performance of merged firms, compared to the performance of the pre-merger targets and acquirers, for a sample of 72 Australian mergers between 1999 and 2004. Performance measures used in the study were profitability, cash flow, efficiency, leverage and growth. Such measures were used to proxy for the success of the merger, which is defined in terms of an improvement in each merged firm’s industry-adjusted operating performance between the pre and post-merger period. The results provide some evidence that mergers improve the post-merger operating performance.

Kumar (2009) examined the post-merger operating performance of a sample of 30 acquiring companies involved in merger activities during the period 1999-2002 in India. The study attempts to identify synergies, if any, resulting from mergers. The study uses accounting data to examine merger related gains to the acquiring firms. It was found that the post-merger profitability, assets turnover and solvency of the acquiring companies, on average, show no improvement when compared with pre-merger values.

Ismail et al. (2010) examined operating performance of a sample of Egyptian companies involved in merger and acquisition (M&A) transactions in the period from 1996 to 2003 in the construction and technology sectors. Empirical results reveal that some measures of corporate

performance, such as profitability, suggest statistical significant gains in the years following M&A especially in the construction sector. Other performance measures as efficiency, liquidity, solvency, and cash flow position do not show significant improvements after mergers in the short run in both sectors. Ismail et al. (2010) concluded that the analysis reveals different results than those of sector level, where total sample analysis indicated that M&A did not affect the operating performance of the Egyptian merged companies. With respect to sector level, the findings suggest that M&A in the construction sector has contributed in improving firms' profitability but failed to improve efficiency, liquidity, solvency and cash flow position. In the technology sector, no improvements were evidenced.

Table 2 summarizes the major accounting measures-based studies.

Table 2: Summary of Accounting Measures-Based Studies

Study	Objective(s)	Measures Used	Results
Heron & Lie (2002)	Investigate the relationship between the methods of payment, earnings management and operating performance.	Operating Income Over Sales	Acquiring firms outperform their industry counterparts. No evidence was found of earning management effects, and no evidence was found in the operating performance across different methods of payment.
Yeh & Hoshino (2002)	Test the effect of mergers on the firms' operating performance.	Total Productivity, Return on Assets, Return on Equity, Growth in Employment	Insignificant negative change in productivity, significant downward trend in profitability, significant negative effect on the sales growth rate and downsize in the workforce after mergers.
Gugler et al. (2003)	Examine and analyze the effects of mergers around the world over the past 15 years.	Profitability and Sales Ratios	Profitability is positive in all five years after the mergers and is significant in every year. Unlike profitability, the mean difference in sales is negative in every year and increases in absolute value through year five, where most mergers led to higher actual profits than projected and lower sales.
Ramaswamy & Waegelein (2003)	Examine the long-term post-merger financial performance and identify the relationship between post- merger performance and method of payment, firm size, and industry relatedness.	Cash Flow Returns	There is a positive significant improvement in the post-merger performance of the full sample. There is a negative relationship between firm size and post- merger financial performance. Firms with long- term compensation plans have more positive post-merger financial performance. Firms in dissimilar industries "conglomerate mergers" experienced better post-merger financial performance than firms in similar industries.
King et al. (2004)	Assess the impact of variables addressed in the literature on the performance of merged firms.	Meta-Analysis Technique	Mergers and acquisitions do not improve financial performance.
Feroz et al. (2005)	Test the effect of mergers on the financial performance of the involved firms.	Data Envelopment Analysis	Results have shown that managerial efficiency of 82% of firms included in the sample improved across post-merger periods.
Cabanda & Pajara-Pascual (2007)	Examine financial and operating performance of shipping companies resulting from mergers	Acid Ratio, Assets Turnover, Return on Assets, Return on Sales, Net Profit Margin, Capital Exp./Sales, Capital Exp. /Total Asset	Acid ratio, total asset turnover, and net revenues suggest statistically significant gains in the long-run. Other performance variables did not show significant gains after merger in the short run.
Mantravadi & Reddy (2008)	Study the impact of mergers on the financial performance and investigate the effect of firm size on performance.	Operating Profit Margin, Gross Profit Margin, Net Worth, Return on Capital Employed, Debt Equity Ratio.	Results have suggested that there is a positive relationship between firm size and post-merger performance.
Kumar (2009)	Identify synergies, if any, resulting from mergers	Return on Capital Employed, Debt-Equity Ratio	Post-merger profitability, assets turnover and solvency of the acquiring companies, on average, show no improvement when compared with pre-merger values.
Ismail et al. (2010)	Examine post-merger operating performance of a sample of Egyptian companies involved in merger and acquisition	Profitability, Efficiency, Liquidity, Solvency, and Cash Flow Position	Mergers and acquisitions have contributed in improving firms' profitability in the construction sector whereas in the technology sector have not. In both sectors, M&A failed to improve efficiency, liquidity, solvency and cash flow position.

2.3. Mixed Measures-Based Studies

The major feature of these studies is using a mix of market and accounting measures to examine the effect of mergers and acquisitions on the financial performance. Sun and Tang (2000) aim at identifying the source of gains in merger and acquisition transactions in the railroad industry; market power or efficiency power. The study used stock price reactions to judge market power and operating performance for efficiency power. On calculating the operating performance, many indicators are examined such as: operating margin ratio (operating income to operating revenues) and net margin ratio (net income to operating revenues). Results have shown that stockholders of acquiring firms do not gain from mergers, while stockholders of acquired firms and industry counterparts earn positive market-adjusted returns. The merged railroad's post-merger operating performance is worse in comparison to pre-merger performance. The results are vague, where sample size and period of analysis are undefined as well as it depends only on limited measures to provide evidence on changes in operating performance. However, results are consistent with other studies that reported gains for the target companies rather than the acquiring companies using the stock price reactions.

Choi and Harmatuck (2006) aim at investigating the improvements in the operating performance over the long-run, define management motives behind mergers and acquisitions, and testing consistency between stock market returns and operating performance. The analysis has been conducted on a sample of 44 mergers and acquisitions transactions occurring in the construction industry in the U.S between 1980 and 2002. The study uses the following measures: operating cash flows; as an indicator of operating performance, sales growth rate and level of employment; as indicators of firm size, and cumulative abnormal returns to measure stock market returns. Results have indicated that the operating performance reported slight improvement but at an insignificant level. Additionally, the level of synergistic gains, measured as operating cash flow returns, was not improved significantly after firm integration. Regarding the management wealth maximization, the size of firms dramatically increased after the integration of the firms, and the operating performance was slightly improved compared with that before the event. There is support for the hypothesized argument that managers tend to increase their own wealth rather than shareholders' wealth. The results of testing the efficiency of equity market have suggested that market returns are positive at an insignificant level and operating performance slightly increased at an insignificant level. In conclusion, the equity market could be regarded as very efficient at least regarding M&A. The study provides new insights on stock price reactions and operating performance and it covers a long time horizon of M&A activities from 1980 to 2002. The results are inconsistent with those of Sun and Tang (2000) who have reported contradictory relationship between stock price reactions and operating performance in the railroad industry and concluded that the railroad market is inefficient.

Malhotra and Zhu (2006) carried out a study to (i) investigate short-term announcement impact on the acquiring firms' shareholders' wealth, (ii) analyze post-acquisition long-term impact on the acquiring firms' shareholders' wealth, and (iii) test the impact of acquisition on the acquiring firms' financial performance. The study examined Indian bidding firms engaged in acquisition of U.S. firms over the period beginning January 1999 and ending December 2005. Standard event analysis with cumulative abnormal returns has been used to examine the market reaction to international acquisition announcements on the acquiring firms' stock price and also to examine long-term stock performance. In addition, the study used the following financial ratios to examine the effect of M&A on the financial performance of the involved firms: sales to growth, profit margin ratio, return on equity, earnings per share, and foreign export sales. Results have revealed that Indian domestic market has significant positive response to the announcement of Indian firms acquiring of U.S. firms. Malhotra and Zhu (2006) have argued that Indian international acquisition underperforms their benchmarking. With respect to the effect of acquisition on the financial performance, results have proved that net sales to growth increased after the acquisition while other financial ratios decreased. Foreign export sales increased but no statistical test was conducted to support this observation.

Majumdar et al. (2007) examined the effect of mergers of local exchange firms in the U.S., which took place between 1988 and 2001, on the financial performance and efficiency level. The study

used cash flows and sales growth to evaluate financial performance. In evaluating synergy and operating efficiency, the following measures were employed: operator system expense ratio, ratio of total cable and wire facilities expense to total operating revenues, and information transfer ratio. Results have revealed that relative cash flows decreased after mergers, and for sales growth, the pattern was ambiguous and driven by increased market presence. The impact of mergers on the measures of efficiency and synergy was negative.

Table 3 summarizes studies that used mix measures to evaluate post M&A corporate performance.

Table 3: Summary of Mixed Measures-Based Studies

Study	Objective(s)	Measures Used	Results
Sun &Tang (2000)	Identify the source of gains in merger and acquisition transactions in the railroad industry; market power or efficiency power.	Operating Margin Ratio, Net Margin Ratio, Stock Price Reaction	Stockholders of acquiring firms do not gain from mergers, while stockholders of acquired firms and industry counterparts earn positive market-adjusted returns.
Choi & Harmatuck (2006)	Investigate the improvements in the operating performance over the long-run as well as examining management motives behind mergers and acquisitions.	Operating Cash Flow	Operating performance reported slight improvement but at insignificant level. Managers tend to increase their own wealth rather than a wealth of shareholders.
Malhotra & Zhu (2006)	Study post-acquisition short-term impact and long-term impact on the acquiring firms' shareholders' wealth as well as the impact of acquisition on the acquiring firms' financial performance.	Cumulative Abnormal Returns, Sales to Growth, Profit Margin Ratio, Return on Equity, Earnings per Share, Foreign Export Sales	Domestic market has significant positive response to the short-term announcement. With respect to long-term announcement impact, Indian international acquisitions under-perform their benchmarket. Net sales to growth and foreign export sales increased after the acquisition while other financial ratios decreased post acquisition.
Majumdar et al. (2007)	Examine the effects of mergers of local exchange firms in the U.S. on the financial performance and efficiency level.	Cash Flow, Sales Growth, Efficiency and Synergy Measures	Cash flows decreased after mergers. For sales growth, the pattern was ambiguous and driven by increased market presence. The impact of mergers on the measures of efficiency and synergy was negative.

2.4. Qualitative Measures-Based Studies

Hviid and Prendergast (1993) examined the effect of merger proposals on the expected profitability of the bidder and the target. The study described a theoretical model to show how unsuccessful bids may increase the profitability of the target but decrease the profitability of the bidding firm relative to the profitability of the firm before the merger. The model is based on several assumptions; first, the stock market holds no better information on the target firm than the bidder; second, the analysis is applicable on mergers rather than on tender offers which are directly aimed at stockholders rather than the board of directors; and finally, the rejection of mergers is rare. The suggested model provides the forthcoming explanations for the decreased profitability of the bidding firms and the increased profitability of the target firms when a merger is rejected. The decision made by the bidder is not whether to merger or not merge, but rather, which offer is preferable; a merger or tender offer? The target firm has information about its profitability not available for the bidder. Hence, the target firm would accept a merger proposal only if it increases its profitability, therefore, the target firm usually exhibits increases in profitability after mergers. A rejection of a merger proposal conveys information on the competitiveness and profitability of the target since it is viewed as low cost firm. This fact may cause the stock market to react after considering the previous fact and the stock price of the target firm increases while the stock price of the bidder decreases and thereafter its profitability. However, the study results lack generalization, where they are limited to horizontal mergers where the competition is

possible and do not provide interpretations for other forms of mergers. In addition, the results of the study are limited to mergers rather than other forms of combination such as tender offer or acquisitions. On one hand, the study model is a theoretical in nature and further tests are required based on empirical data. On the other hand, the model reliability is questionable, where it did not provide interpretations for the increased profitability of target firms and the decreased profitability of the acquiring firms after merger which is controversial in the literature.

Rappaport and Sirower (1999) provided a framework that rationalized acquiring and target companies' decisions on the method of payment in mergers and acquisitions. The framework employed three-stage approach; first, it distinguishes between stock-financed and cash-financed transactions; second, it provides bases for choosing among methods of payment; and finally, it shows the risk encountered in each method either for the acquirer or the seller. In assessing the risk, the framework depends mainly on setting the main difference, where in cash transactions, acquiring shareholder takes on the entire risk that the expected synergy value embedded in the acquisition premium will not materialize, while in stock transaction, the risk is shared in proportion to the percentage of the combined company, the acquiring and selling shareholders. Rappaport and Sirower (1999) have argued that there are two alternative ways in exchanging stocks which have different impact on risk. The first alternative is fixed shares, where the number of shares is certain but the value of the deal may fluctuate depending on the acquirer's stock price. The interest of the two companies is fixed even though, the actual shareholder value added may be different from the expected value. The second alternative is fixed value of shares, where the value of shares is certain but the number of shares isn't settled until the closing date and depends on the closing share price.

Sinay and Campbell (2002) investigated whether mergers represent a remedy of the financial distress facing local hospitals in the U.S in 1990s. The sample includes all domestic mergers occurring in the U.S in hospitals that are members of the annual survey of U.S American Hospital Association (AHA) between 1986 and 1992. The analysis compared the performance of a group of hospitals that did merge with a matched control group of "synthetically" merged hospitals and total sample includes 84 cases. The study calculated the operating performance for each group, merging hospitals and synthetically merged hospitals, using the following indicators: efficiency, changes in labor, changes in supply inputs, services rendered, beds, costs, and the use of full-time employees. Comparing the operating performance of merged and non merged hospitals revealed increases of efficiency across the two groups with differences related to the following dimensions: merged hospitals offered nearly 40% fewer services, used nearly 9% fewer full-time employees per bed, and had occupancy rate of 8% higher than non-merged counterparts. On the other hand, merged hospitals had eliminated total expenses, labor compensation, and supply costs in post-merger years rather than pre-merger years, while synthetically hospitals experienced 31% increase in total expenses, 19.5% increase in wages and benefits, and 25% increase in supply costs. The final result is that hospitals should overcome their financial distress otherwise they have to merge with each other before having to go out of business. The study does not provide an interpretation for the contradictory results of hospitals expenses although the two groups are in the same local market and had initial operating characteristics very similar to each other.

Groff et al. (2007) used Data Envelopment Analysis to test whether there were changes in efficiency associated with hospital mergers in the U.S. The sample included hospitals that had merger activity in the years 1994 and 1995 as well as a matched control group. The selected sample includes 166 hospitals (77 in 1994 and 89 in 1995) that were involved in mergers. Hospital mergers led to an efficiency gain if the coefficient of the merger status variable showed a positive association between efficiency scores and mergers. The results revealed that there were no detectible improvements in efficiency in the first year after the merger but that efficiency improved significantly in the second year after the merger.

Liu and Zou (2008) used a panel data analysis to investigate the impact of international technology spillovers on innovation in Chinese high-tech industries through Greenfield foreign direct investment, cross-border mergers and acquisitions and trade. The study employs the following

variables to test hypothesis: intra-foreign output, inter-foreign output, intra-foreign firms' skilled workers, inter-foreign firms' skilled workers, intra-foreign R&D, inter-foreign R&D, exports, intra M&A, inter M&A, and domestic R&D. The results report that foreign Greenfield R&D activities by multinational corporations in a host country significantly affect the innovation performance of domestic firms and there exist both intra-industry and inter-industry spillovers from foreign Greenfield R&D. There are only inter-industry M&A spillovers. The results suggest that importing foreign technology and investing in domestic R&D have positive impacts on domestic innovation.

3. Summary and Concluding Remarks

In light of reviewing leading studies in the literature that discusses the effects of M&A on the financial performance of companies, prior studies can be categorized according to measures used to test such effects into four categories as follows: (i) marked measures-based studies, (ii) accounting measures-based studies, (iii) mixed measures-based studies, and (iv) qualitative measures-based studies. Analysis of previous studies reveals:

The effect of mergers and acquisitions on the abnormal returns for both the acquiring and the acquired firms is inconclusive; where some studies reported insignificant improved abnormal returns (Jensen & Ruback, 1983; Choi & Russell, 2004; Megginson et al., 2004). Yuce & Ng (2005) reported significant positive abnormal returns in Canada. On the other hand, few studies reported positive returns in high merger activity era and negative returns in low merger activity era (for example Tse & Soufani, 2001). Furthermore, results reported that M&A leads to a decline of abnormal returns after mergers and acquisitions (Jarrell and Poulsen, 1989; Rau and Vermaelen, 1998; Andre et al., 2004; Yook, 2004; Kling, 2006).

Studies that use accounting measures-based have inconsistent results; where some studies reported slight improvements in the financial performance at insignificant level (Choi and Harmatuck, 2006), other studies reported significant positive performance (Healy et al., 1992; Ghosh, 2002; Heron and Lie, 2002; Ramaswamy and Waegelein, 2003) or negative impact on financial performance (Mueller, 1980; Sun and Tang, 2000; Yeh and Hoshino, 2002; King et al., 2004). In addition, the analysis of the effects of M&A on performance revealed positive impact on specific aspects of performance and negative impact on other aspects of performance (for example, Gugler et al. 2003, who reported significant increase in profitability but negative effect on sales; Mantravadi and Reddy 2008, who reported increase in profitability and decrease in return on net worth).

Some studies showed inconsistent results in respect to industry type. For example, banking industry has experienced deterioration after mergers or acquisition (Berger and Humphrey, 1992; Rhoades, 1993; Kling, 2006) and railroad industry that was affected negatively by mergers in acquisitions (Sun and Tang, 2000) as well as the steel industry (Gallet, 1996). The construction industry reports improvement in performance. (Choi and Russell, 2004; Choi and Harmatuck, 2006, Ismail et al., 2010).

There is a dispute regarding factors that affect the reported performance, where eight factors might affect performance: (1) the method of payment; Cash or Stock, (2) book to market ratio, (3) the type of merger or acquisition transaction; related or unrelated, (4) cross-border versus domestic M&A, (5) mergers versus tender offers, (6) firm size, (7) macro economic conditions, and (8) time period of transaction. All the above mentioned factors had collusion on their influence on performance among the previous studies as follows:

Some studies that examine the type of payment argue that cash-financed transactions outperform stock-financed ones (Rau and Vermaelen, 1998; Andre et al., 2004; Megginson et al., 2004), while, other studies found no evidence that the method of payment has influence on the reported performance (Choi and Russell, 2004; Yook, 2004; Heron and Lie, 2002; King et al., 2004).

The effect of book to market ratio has been tested, where very few studies reported that glamour acquirers -firms with low book to market ratio- under perform relative to value acquirers firms

with high book to market ratio (Andre et al., 2004), while, other studies found no evidence for this belief (Rau and Vermaelen, 1998; Choi and Russell, 2004; Megginson et al., 2004).

The impact of the type of merger; related or unrelated, on post-merger performance has been supported by some studies (Gugler et al., 2003; Ramaswamy and Waegelein, 2003; Choi and Russell, 2004), whereas other studies failed to prove the relation between industry relatedness and the reported post-merger performance (King et al., 2004).

The impact of cross- border versus domestic M&A on post- mergers and acquisitions performance reveals inconclusive results. Few studies argue that cross-border leads to poor performance (Andre et al., 2004) but, some others found no significant difference in cross-border deals than domestic ones (Gugler et al., 2003).

Concerning the effects of the transaction type; merger or tender offer, on post-merger performance, prior studies results reveal that no dispute among previous studies was found on the over performance of tender offers than mergers but the reasons are not yet identified.

Regarding the effects of firm size on post mergers and acquisitions performance, the results suggest that there is no consensus in the literature on its impact. Very few studies argue that there is a negative relationship between firm size and post- merger financial performance (Ramaswamy and Waegelein, 2003). Whereas other studies defend a positive relationship between firm size and post M&A performance (Mantravadi and Reddy, 2007).

Very few studies argue that macro economic conditions affect the post- merger performance (for example, Tse and Soufani, 2001). Previous studies argue that timing of the transaction do not affect post-merger performance (Choi and Russell, 2004; Megginson et al., 2004).

This paper sheds light on the importance of mergers and acquisitions decisions, where they impact the future consequences that may lead to success/failure of businesses. Managers should consider relevant information that helps in rationalizing their decisions. A sound investment decision on M&A should be relied on a wide spectrum of relevant data and analysis tools that reflect the expected post mergers and acquisitions corporate performance. The results of the paper contribute to understanding of M&A and ultimately help in understanding how mergers and acquisitions can be more successful.

References

[1] Agrwal, A. and J. Jafee, 2000. “The Post-Merger Performance Puzzle. In Cooper, C. and Geregory, A., eds. Advances in Mergers and Acquisitions, CT: JAI press, Stamford.

[2] Andre, P., M. Kooli and J. L’Her, 2004. “The Long-Run Performance of Mergers and Acquisitions: Evidence from the Canadian Stock Market”, *Financial Management* 33 (4), pp. 27-43.

[3] Berger, A. and D. Humphrey, 1992. "Mergers in Banking and the Use of Cost Efficiency as a Defense", *Antitrust Bulletin* 37, pp. 541-600.

[4] Cabanda, E. and M. Pajara-Pascual, 2007. "Merger in the Philippines: Evidence in the Corporate Performance of William, Gothong, and Aboitiz (WG&A) Shipping Companies", *Journal of Business Case Studies* 3(4), pp. 87-100.

[5] Choi, J. and D. Harmatuck, 2006. “Post- Operating Performance of Construction Mergers and Acquisitions of the United States of America", *Canadian Journal of Civil Engineering* 33 (3), pp. 266-278.

[6] Choi, J. and J. Russell, 2004. “Economic Gains around Mergers and Acquisitions in the Construction Industry of the United States of America”, *Canadian Journal of Civil Engineering* 31 (3), pp. 513- 525.

[7] Feroz, E. H., S. Kim and R. Raab, 2005. "Performance Measurement in Corporate Governance: Do Mergers Improve Managerial Performance in the Post Merger Period?", *Review of Accounting and Finance* 4, pp. 86-101.

[8] Gallet, C. A., 1996. “Mergers and Market Power in the U.S. Steel Industry”, *Applied Economics Letters* 3, pp. 221-223.

[9] Ghosh, A., 2002. "Does Operating Performance Really Improve Following Corporate Acquisition?", *Journal of Corporate Finance* 7, pp. 151-178.

[10] Groff, E., D. Lien, and J. Su, 2007. "Measuring Efficiency Gains from Hospital Mergers", *Research in Healthcare Financial Management*, pp. 1-10.

[11] Gugler, K., D. Mueller, B. Yurtoglu and C. Zulehner, 2003. "The Effects of Merger: an International Comparison", *International Journal of Industrial Organization* 21, pp. 625-653.

[12] Healy, P., K. Palepu and R. Ruback, 1992. "Does Corporate Performance Improve after Merger Success?", *Journal of Financial Economics* 31, pp. 135-175.

[13] Heron, R. and E. Lie, 2002. "Operating Performance and the Method of Payment in Takeovers", *Journal of Financial and Quantitative Analysis*, March, pp. 137-156.

[14] Hviid, M. and C. Prendergast, 1993. "Merger Failure and Merger Profitability", *Journal of Industrial Economics* 41(4), pp. 371-386.

[15] Jarrell, G. and A. Poulsen, 1989. "The Returns to Acquiring Firms in Tender Offers: Evidence from Three Decades", *Financial Management* 12, pp. 12-19.

[16] Jensen, M. and R. Ruback, 1983. "The Market for Corporate Control: the Scientific Evidence", *Journal of Financial Economics* 11 (1-4), pp. 5-50.

[17] Ismail, T. H., A. A. Abdou and R. M. Annis, 2010. “Exploring Improvements of Post-Merger Corporate Performance- the Case of Egypt”, *the Icfai University Journal of Business Strategy* (forthcoming).

[18] King, D., D. Dalton, C. Daily and J. Covin, 2004. "Meta-Analysis of Post-Acquisition Performance: Identifications of Unidentified Moderators", *Strategic Management Journal*, February, pp. 187-201.

[19] Kling, G., 2006. "The Long-Term Impact of Mergers and the Emergence of a Merger Wave in Pre-World-War I Germany", *Explorations in Economic History* 43 (4), pp.667-688.

[20] Kumar, R., 2009. "Post-Merger Corporate Performance: an Indian Perspective", *Management Research News* 32 (2), pp. 145-157.

[21] Lau, B., A. Proimos and S. Wright, 2008. "Accounting Measures of Operating Performance Outcomes for Australian Mergers", *Journal of Applied Accounting* 9 (3), pp. 168-180.

[22] Liu, X. and H. Zou, 2008. "The Impact of Greenfield FDI and Mergers and Acquisitions on Innovation in Chinese High-Tech Industries", *Journal of World Business* 43, pp. 352–364.

[23] Majumdar, S., R. Moussawi and U. Yaylacicegi, 2007. "Quest for Efficiency: Assessing the Impact of Mergers on Performance in the U.S. Telecommunications Industry", Working Paper Series, available at: www.ssrn.com (accessed March 15, 2008).

[24] Malhotra, S. and P. Zhu, 2006. "Shareholder Benefits and Firm Performance: an Empirical Analysis of International Acquisitions by Firms from a Developing Economy", Working Paper Series, available at: www.ssrn.com (accessed March 15, 2008).

[25] Mantravadi, P. and A. Reddy, 2008. "Relative Size in Mergers and Operating Performance: Indian Experience", Working Paper Series, available at: www.ssrn.com (accessed March 15, 2008).

[26] Megginson, W., A. Morgan and L. Nail, 2004. "The Determinate of Positive Long-Term Performance in Strategic Merger: Corporate Focus and Cash", *Journal of Banking and Finance*, March, pp. 523-552.

[27] Mueller, D.C. 1980. The Determinants and Effects of Mergers: an International Comparison. Oelgeschlager, Gunn & Hain, Cambridge, MA.

[28] Ramaswany, K. and J. Waegelein, 2003. "Firm Financial Performance Following Mergers", Review *of Quantitative Finance and Accounting* 20, pp. 115-126.

[29] Rappaport, A. and M. Sirower, 1999. "Stock or Cash? the Trade-Offs for Buyers and Sellers in Mergers and Acquisitions", *Harvard Business Review* 77 (6), pp. 147-158.

[30] Rau, P. and T. Vermaelen, 1998. “Glamour Value and the Post Acquisition Performance of Acquiring Firms”, *Journal of Financial Economics* 49, pp. 223-253.

[31] Rhoades, S., 1993. "Efficiency Effects of Horizontal (in-Market) Bank Mergers", *Journal of Banking and Finance* 17, pp. 411-422.

[32] Sinay, T. and C. Campbell, 2002. "Strategies for More Efficient Performance through Hospital Merger", *Health Care Management Review* 27, pp. 137-156.

[33] Sun, H. and A. Tang, 2000. "The Sources of Railroad Merger and Gains: Evidence from Stock Price Reaction and Operating Performance", *Transportation Journal* 39 (4), pp. 14-27.

[34] Tse, T. and K. Soufani, 2001. "Wealth Effect of Takeovers in Merger Activity Eras: Empirical Evidence from the UK", International *Journal of Economics of Business* 8, pp. 365-377.

[35] Tuch, C. and N. O'Sullivan, 2007. "The Impact of Acquisitions on Firm Performance: A Review of the Evidence", *International Journal of Management Reviews* 9 (2), pp. 141-170.

[36] Yeh, T. and. Y. Hoshino, 2002. "Productivity and Operating Performance of Japanese Merging Firms: Keiretsu-Related and Independent Mergers", *Japan and the World Economy* 14, pp. 347-366.

[37] Yook, K.C. 2004. "The Measurement of Post-Acquisition Performance Using EVA", Quarterly *Journal of Business & Economics*, Summer, pp. 67- 84.

[38] Yuce, A. and A. Ng., 2005. "Effects of Private and Public Canadian Mergers", *Journal of Administrative Sciences*, June, pp. 111-124.