SUCCESSFUL MERGER DECISIONS IN GREECE: FACTS OR DELUSIONS?

Michail Pazarskis*, Panagiotis Pantelidis**,
Alexandros Alexandrakis***. Panagiotis Serifis****

Abstract

This study examines the success of merger decision in Greece during the last years through an extensive accounting study. The events of mergers and acquisitions (M&As) that have been performed from all merger-involved firms listed on the Athens Stock Exchange in the period from 2005 to 2007 are evaluated using accounting data (financial ratios), and from them the final sample of the study that is finally investigated consists from thirty five Greek firms, which executed one merger or acquisition in the period from 2005 to 2007 as acquirers and have not performed any other important acquiring decision in a three-year-period before or after the examined M&As transactions. For the purpose of the study, a set of sixteen ratios is employed, in order to measure firms' post-merger performance and to compare pre- and post-merger performance for three years (or two years or one year) before and after the M&As announcements (with data analysis from 2002 to 2010). Furthermore the impact of the means of payment, of international or domestic M&As and of conglomerate or non-conglomerate mergers are evaluated. The results revealed that mergers have not any impact on the post-merger performance of the acquiring firms. Thus, the final conclusion that conducted is that the M&As activities of the Greek listed firms of this research have not lead them to enhanced post-merger accounting performance. Last, from the research results, it is clear that there is no difference from the mean of payment (cash or stock exchange) on the post-merger performance at the acquiring firms, and there is a better performance for international and conglomerate M&As.

Keywords: Merger, Acquisition, Performance, Method of Payment, International Merger, Conglomerate Merger

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* Adjunct Assistant Professor, Department of Accounting, Technological Educational Institute of Serres
Email: pazarskis@gmail.com
**Assistant Professor, Department of Business Administration, Technological Educational Institute of Serres
***Associate Professor, Department of Accounting, Technological Educational Institute of Serres
****Post-graduate student, Department of Business Administration, Technological Educational Institute of Serres

1. Introduction

Presently, one of the main elements of contemporary corporate restructuring is the realisation of mergers and acquisitions (M&As). Notwithstanding, the process of internationalisation and the expansion of the European Union has fostered the whole activity in recent years: foreign direct investment by multinational companies has grown rapidly, international trade increase faster than the rate of growth of national economies, and supra-national institutions, such as the EU and the WTO, promoted ever more inter-linked economies over national governments, which evolve an international perspective of M&As and an increasingly competitive business environment (Agorastos et al., 2011).

The strategy literature commonly argues that M&As are one of the mechanisms by which firms gain access to new resources and, via resource redeployment, increase revenues and reduce cost. The main hypothesis in successful merger decisions is that potential economic benefits arising from them are changes that increase business performance that would not have been made in the absence of a change in control (Pazarskis, 2008). However, many researchers and business practitioners regard with scepticism this hypothesis, despite the fact that many others are confident and enthusiastic (Mantzaris, 2008; Pazarskis et al., 2010; 2011).

In order to examine the success of merger decision in Greece, this research proceeds to an extensive accounting comparative analysis of the post-merger operating performance of a sample of thirty five firms after M&As activities, listed at the Athens Stock Exchange (ASE) in Greece, that executed an M&As transaction in the period from

2005 to 2007, using accounting characteristics (financial ratios), and attempts to investigate the M&As' effects on their post-merger performance, by examining simultaneously several other merger characteristics, such as: the means of payment, the prospect of the merger or not, and the character of a conglomerate or non-conglomerate merger. Furthermore, in this study, the terms "merger" and "mergers and acquisitions (M&As)" are used in many cases at the text, providing similar meanings for the terms "merger" and "acquisition", while in others, wherever it is necessary, there is a clear distinction among them and always exists a provision of the exact meaning.

The structure of the paper is as follows: the next section analyses the research design of this study (related past researches with accounting data, selection of variables-financial ratios, sample and data, research hypotheses and data analysis). The following section presents and analyses the results. The next section provides further evidence from the results according to several merger characteristics and the last section concludes the paper.

2. Research design

2.1 Literature review

Several past studies on post-merger performance after M&As that employed accounting characteristics (financial ratios) concluded on ambiguous results (Pazarskis, 2008). Many of them supported an improvement in the business performance after the M&As action (Cosh et al., 1980; Parrino & Harris, 1992; and others), while other researchers claimed that there was a deterioration in the post-merger firm performance (Meeks, 1977; Salter & Weinhold, 1979; Mueller, 1980; Kusewitt, 1985; Neely & Rochester, 1987; Ravenscraft & Scherer, 1987; Dickerson et al., 1997; Sharma & Ho, 2002; and others), and others researchers concluded a "zero" result or ambiguous results from the M&As action (Kumar, 1984; Healy et al., 1992; Chatterjee & Meeks, 1996; Ghosh, 2001; and others).

2.2 Methodology and selection of accounting variables

The M&As action of each company from the sample is considered as an investment that is evaluated by the NPV criterion (if NPV≥0, the investment is accepted). Based on this viewpoint, the study proceeds to its analysis and regards the impact of an M&As action similar to the impact of any other positive NPV investment of the firm to its ratios over a specific period of time (Healy et al., 1992; Pazarskis, 2008).

For the purpose of the study, the selected financial ratios for each company of the sample over a three-year period before or after the M&As event are calculated, and the mean from the sum of each financial ratio for the years before is compared with the equivalent mean from the years after the M&As, respectively[12].

Similarly, the selected financial ratios of the sample over a two or one-year period before or after the M&As event are evaluated.

The study does not include in the comparisons the year of M&A event (Year 0) because this usually includes a number of events which influence post-merger firm performance in this period (as one-time M&As transaction costs, necessary for the deal, etc.) (Healy et al., 1992; Pazarskis, 2008).

Furthermore, to test the above research form of hypothesis two independent sample mean t-tests for unequal variances are applied, which are calculated as follows:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\dfrac{s_1^2}{n_1} + \dfrac{s_2^2}{n_2}}}$$

where,

n = number of examined ratios

$\overline{X}_1$ = mean of pre-merger ratios

$\overline{X}_2$ = mean of post-merger ratios

s = standard deviation

1 = group of pre-merger ratios

2 = group of post-merger ratios

Last, the post-merger performance of a firm is evaluated with its post-merger performance at some financial ratios. In this study, sixteen financial ratios are employed, which are tabulated with their code and their calculation analysis at the Table 1.

There are many other approaches for accounting evaluation performance, different from the above. Return on investment (ROI) type of measures are considered as the most popular and the most frequently used when accounting variables are utilised to determine performance. However, in considering Kaplan's (1983) arguments against excessive use of ROI types of measurements, the above referred ratio selection of this study is confirmed as better, as:

"…any single measurement will have myopic properties that will enable managers to increase their score on this measure without necessarily contributing to the long-run profits of the firm" (Kaplan, 1983, p. 699).

Thus, an adoption of additional and combined measures is believed to be necessary in order to provide a holistic view of the long-term profitability and performance of a firm, in accordance with the short-term one (Pazarskis, 2008).

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[12] In this study, the mean from the sum of each financial ratio is computed than the median, as this could lead to more accurate research results (Pazarskis, 2008). This argument is consistent with many other researchers diachronically (Philippatos et al., 1985; Neely & Rochester, 1987; Cornett & Tehnarian, 1992; Sharma & Ho, 2002; Pazarskis et al, 2006; 2008; 2009; Pramod Mantravadi & A. Vidyadhar Reddy, 2008; and others).

Table 1. Classification of financial ratios

Code	Variable Name	Description
V01	current ratio	current assets/current liabilities
V02	acid test ratio	(current assets-inventory)/current liabilities
V03	days sales in receivables	accounts receivable/(sales/360)
V04	inventory turnover	cost of goods sold/inventory
V05	days purchases in accounts payable	accounts payable / (cost of goods sold/365)
V06	total debt to total assets	total debt/total assets
V07	total debt to equity	total debt/equity
V08	short-term liabilities turnover	sales / short-term liabilities
V09	ROA before taxes	earnings before taxes/total assets
V10	ROE before taxes	earnings before taxes/equity
V11	ROA after taxes	earnings after taxes/total assets
V12	ROE after taxes	earnings after taxes/equity
V13	capital employed turnover	sales/total assets
V14	gross profit margin	gross profit/sales
V15	EBIT margin	EBIT/sales
V16	EBITDA margin	EBITDA/sales

2.3 Sample and data

From a sample of all M&As, the transactions of listed firms in the period from 2005 to 2007 in Greece are tracked. Secondly, from them for further analysis, are excluded the firms that performed M&As activities in less than a three-year period before and after the several M&As examined events. Also, in case of that some firms from this preliminary sample firms have been de-listed from the ASE for various reasons (bankruptcy, not meeting the standards of the market,

etc.), they were excluded from the sample, as well as the firms with bank activities, which present special peculiarities in their accounting evaluation. Finally, they are selected and examined only thirty five acquiring firms which is the final firm sample that executed at least one M&As action as acquirers in Greece during the period from 2005 to 2007. The percentage of the M&As events of firms by year for the research sample is illustrated at the next table (Table 2).

Table 2. Percentage of sample firm's M&As events by year

Year	Number of Mergers	Number of Acquisitions	Number of All Events	Percentage of All Events
2005	7	8	15	43%
2006	4	3	7	20%
2007	13	0	13	37%
Total	24	11	35	100%

The final sample with thirty five M&As events is satisfying as it includes all the M&As events of listed firms in the Greek market at the above referred period (according to the sample criteria of this study) and reliable in comparison to prior accounting studies conducted in significantly larger markets such as US and UK (Sharma & Ho, 2002), with similar sample firms, as: Healy et al., 1992 : $n = 50$, Cornett & Tehranian, 1992 : $n = 30$, Clark & Ofek, 1994 : $n = 38$, Manson et al., 1995 : $n = 38$, etc.

The study proceeds to an analysis only of listed firms as their financial statements are published and it is easy to find them and evaluate from them firm post-merger performance. Furthermore, it should be remarked that the M&As activities of the listed Greek firms have been tracked from their announcements on the web sites of the ASE. The data of this study (accounting ratios) are computed from the financial statements of the M&As-involved firms and the

databank of the Library of the University of Macedonia (Thessaloniki, Greece).

2.4 Research hypotheses and data analysis

In this study the following hypotheses have been formulated:

H_1: Mergers are not expected to have a relative change on the post-merger performance of the acquiring firms at a long run perspective (three years after M&As).

H_2: Mergers are not expected to have a relative change on the post-merger performance of the acquiring firms in a short-term or mid-term perspective (one year or two years after M&As).

H_3: There is no significant difference in the post-merger performance for acquiring firms using different method of payment (cash or share) of M&As.

H_4: *There is no significant difference in the post-merger performance for acquiring firms that performs domestic or international M&As.*

H_5: *There is no significant difference in the post-merger performance for acquiring firms that performs conglomerate or non-conglomerate M&As.*

3. Data analysis

The study tries to investigate the evaluation of the post-merger performance for the sample firms from many sides in a particular way. Firstly, tries to find the final post-merger performance of the sample firms in general after a three-year-period, secondly, to reveal eventual changes in performance in the short- or mid-term (after the first year or the second) from the M&As announcement, and thirdly, from the whole sample examines different particular characteristics, such as: the impact of the means of payment at the post-merger performance of the acquiring firms, the choice of domestic or international M&As or conglomerate or non-conglomerate M&As.

(i) Post-merger performance - all mergers (three years after M&As event)

The post-merger performance of the sample firms that executed M&As during the period 2005-2007 is evaluating for three years before and after the M&As event. The selected financial ratios for each company of the sample over a three-year period before (year T-3, T-2, T-1) or after (year T+1, T+2, T+3) the M&As event are calculated, and the mean from the sum of each financial ratio for the years T-3, T-2 and T-1 is compared with the equivalent mean from the years T+1, T+2 and T+3, respectively.

(ii) Post-merger performance - influences at short-term and mid-term perspective

The post-merger performance of the sample firms that executed an M&As transaction during the period 2005-2007 is evaluating for two/one year(s) before and after the M&As event in similar process than the above. The results are discussed in comparison with the received results for the three years period before and after the event for depicturing the existence of eventual special peculiarities.

(iii) Post-merger performance - impact of several merger characteristics (method of payment, international or not merger, conglomerate or not merger)

The post-merger performance of the sample firms is calculating for three years before and after the M&As event. Then, the differences between the means of post-merger and pre-merger ratios are computed, the firm's choice for the means of payment (cash or share) is provided for each firm and after their statistical analysis, there is a conceptual comparison among the received results to reveal further research details.

Similarly, as described above, the differences between the means of post-merger and pre-merger ratios are analysed with the firm's choice to perform a domestic or not M&As. After their statistical analysis, the received results are discussed in details.

Last, the differences between the means of post-merger and pre-merger ratios are analysed with the firm's choice to perform a conglomerate or non-conglomerate M&As. After their statistical analysis, the received results are also discussed in details.

The results for each hypothesis separately are presented in the following section.

4. Analysis of Results

(i) Post-merger performance - all mergers (three years after M&As event)

The hypothesis H_1 of this research is that: "Mergers are not expected to have a relative change on the post-merger performance of the acquiring firms at a long run perspective (three years after M&As)". Within this prospect in this section presented the results of the final post-merger performance of the sample firms in general after a three-year-period for M&As activities in Greece.

The results revealed that over a three-year-period before and after the M&As event all of the sixteen accounting ratios (current ratio; acid test ratio; days sales in receivables; inventory turnover; days purchases in accounts payable; total debt to total assets; total debt to equity; short-term liabilities turnover; ROA before taxes; ROE before taxes; ROA after taxes; ROE after taxes; capital employed turnover; gross profit margin; EBIT margin; EBITDA margin) did not change significantly and they did not have any particular impact (positive or negative) on post-merger accounting performance of merger-involved firms (see, Table 3). Furthermore, the results of this study revealed that as M&As have not had any impact on post-merger performance of merger-involved firms, merger decisions were finally investment actions of zero value for the sample firms, even three years after the M&A transaction, and they do not lead to enhanced business performance.

This result is consistent with the results of some studies such as Kumar, 1984; Healy et al., 1992; 1997; Chatterjee & Meeks, 1996; and Ghosh, 2001. However, it is not consistent with the results of some other studies whereby: Neely & Rochester (1987) found a decline of the profitability ratios, especially the ROA, in the post-merger period, for the US market for the year 1976. Sharma & Ho (2002) also found a decline for the ROA and the ROE ratios. Similar results, with a decline of the profitability ratios, have been found by Meeks (1977), Salter & Weinhold (1979), Mueller (1980), Kusewitt (1985), Mueller (1985), Ravenscraft & Scherer (1987); Kaplan & Weisbach (1992); Dickerson et al. (1997).

Furthermore, our results for the Greek market, since there is no significant profitability improvement, do not support the hypothesis of market power (Lubatkin, 1983; 1987). According to this approach, the market power that was gained by the acquirer after

the merger or the acquisition should increase the new firm's profit margins and therefore, its profitability.

From the above it is clear that mergers have not a relative change on the post-merger performance of

the acquiring firms, even three years after M&As, as none of the examined accounting ratios had changed significantly due to the M&As event. Thus, the above stated proposition of the hypothesis H_1 is accepted.

Table 3. Mean pre-merger and post-merger ratios before/after M&As

Table values are the mean computed for each ratio (as shown above) for the research sample of 35 M&As of Greek listed firms between 2005 and 2007. The ratio mean computed from -3 to -1 represents the mean ratio (3 years avg.) of the third (*T*-3), second (*T*-2) and first year (*T*-1) before the completion of M&As event. The rest two means (from -2 to -1, from -1 to -1) are computed in similar way for the pre-merger period. The year 0 (*T*=0) is omitted, because this

usually includes a number of events which influence firm's economic performance in this period, as one-time M&As transaction costs, necessary for the deal, etc. (Healy et al., 1992). The ratio mean computed from +1 to +3 represents the mean ratio (3 years avg.) of the third (*T*+3), second (*T*+2) and first year (*T*+1) after the M&As transaction. The rest two means (from +2 to +1, from +1 to +1) are computed in similar way for the post-merger period.

Code	Variable Name	Mean Pre-merger				Mean Post-merger		
		From -3 to -1	From -2 to -1	From -1 to -1		From +1 to +1	From +1 to +2	From +1 to +3
V01	current ratio	2,58	2,50	2,61		3,96	1,87	2,59
V02	acid test ratio	1,96	1,91	1,97		3,08	1,54	2,07
V03	days sales in receivables	224	241	249		247	228	235
V04	inventory turnover	22,0	20,1	17,0		18,5	13,0	15,0
V05	days purchases in accounts payable	2,76	2,88	3,04		3,03	2,52	2,70
V06	total debt to total assets	2,2	1,83	6,30		2,60	1,49	1,31
V07	total debt to equity	1,17	1,16	0,95		1,09	1,36	1,27
V08	short-term liabilities turnover	2,62	2,46	3,98		3,32	1,77	2,04
V09	ROA before taxes	0,133	0,162	0,159		0,113	0,120	0,118
V10	ROE before taxes	0,23	0,25	0,37		0,31	0,38	0,36
V11	ROA after taxes	0,060	0,070	0,167		0,089	0,042	0,058
V12	ROE after taxes	0,030	0,009	0,163		0,152	0,156	0,154
V13	capital employed turnover	0,567	0,592	0,634		0,581	0,603	0,595
V14	gross profit margin	1,25	1,25	1,36		1,28	1,39	1,35
V15	EBIT margin	0,31	0,30	0,44		0,34	0,30	0,32
V16	EBITDA margin	0,44	0,44	0,54		0,42	0,39	0,40

Note:
[a, b, c] *indicate that the mean change is significantly different from zero at the 0.01, 0.05, and 0.10 probability level, respectively, as measured by two independent sample mean t-tests.*
More analytically, the P-value interpretation levels for the above referred three cases are described below:
p<0.01   strong evidence against Ho (see, [a]*)*
0.01□p<0.05 moderate evidence against Ho (see, [b]*)*
0.05□p<0.10 little evidence against Ho (see, [c]*)*
0.10□p   no real evidence against Ho

(ii) Post-merger performance - influences at short-term and mid-term perspective

The hypothesis H_2 of this research is that: "Mergers are not expected to have a relative change on the post-merger performance of the acquiring firms in a short-term or mid-term perspective (one year or two years after M&As)". Within this prospect in this section aims to reveal eventual changes in performance in the short- or mid-term (after a one or two-year-period) from the M&As announcement.

For the sub-case of two-year-period before and after the M&As event, there is not any significant change at any accounting ratio (current ratio; acid test ratio; days sales in receivables; inventory turnover; days purchases in accounts payable; total debt to total assets; total debt to equity; short-term liabilities

turnover; ROA before taxes; ROE before taxes; ROA after taxes; ROE after taxes; capital employed turnover; gross profit margin; EBIT margin; EBITDA margin) (see, Table 3).

Similarly, concerning the sub-case of one-year period before and after the M&As event, there is not any significant change at any accounting ratio in the post-merger accounting performance of merger-involved firms (see, Table 3). That means that there is no significant change for the first or second year and the management shortcomings have not any positive impact on the firm performance after the first and the second year of their business unity due to M&As.

From the above it is clear that mergers have not a relative change on the post-merger performance of the acquiring firms, in a sort-term or mid-term

perspective (one or two years after M&As), as none of the examined accounting ratios had changed significantly due to the M&As event. Thus, the above stated proposition of the hypothesis H_2 is accepted.

5. Interpretation of results and further evidence

The hypothesis H_3 of this research is that: "*There is no significant difference in the post-merger performance for acquiring firms using different method of payment (cash or share) of M&As*".

According to Jensen's (1986) free cash flow theory, the financing method matters, for the post-merger performance of the acquirers. Specifically, debt or cash financed acquisitions would have lower profits than those financed with equity, because the former would raised the costs of debt, hence decreasing profitability (Pazarskis et al., 2008).

In order to examine the impact of the payment method at the post-merger accounting performance with the research examined sixteen ratios, regarding to the above referred argument, the study analyses this data of the sample firms and categorize them in two groups from this respect:

77% (27 firms) has done their deal with a stock exchange and minor cash amounts and

23% (8 firms) of the sample firms have preferred cash payment for their M&As transaction.

Next, the differences between the means of post-merger and pre-merger ratios (ratios V1 to V16) are computed as below:

$$\Delta VX_i = \overline{X}_{2i} - \overline{X}_{1i}$$

where,

ΔVX = difference between the means of post- and pre-merger ratios

i = examined ratios {V1, V2, ..., V16}

$\overline{X}_1$ = mean of pre-merger examined ratios

$\overline{X}_2$ = mean of post-merger examined ratios

Then, for these data (see, ΔVX_i), after the rejection of the null hypothesis that the data sample has the normal distribution, a non-parametric test is applied, as non-parametric tests imply that there is no assumption of a specific distribution for the data population: the Kruskall-Wallis test.

The Kruskall-Wallis test is a nonparametric test alternative to a one-way ANOVA. The test does not require the data to be normal, but instead uses the rank of the data values rather than the actual data values for the analysis. The general calculation form of the Kruskall-Wallis test statistic is for H:

$$H = \frac{12 \sum n_j [\overline{R}_j - \overline{R}]^2}{N(N+1)}$$

where,

n_j = the number of observations in group j

N = the total sample size

$\overline{R}_j$ = the average of the ranks in group j,

$\overline{R}$ = the average of all the ranks.

The received results are presented in the Table 4 (see, below).

From the above received results, it is clear that there is no difference from the mean of payment (cash or stock exchange) for the acquiring firms of the research sample at any accounting ratio.

Thus, the result of this study is not consistent with Jensen's (1986) free cash flow theory, that the financing method matters, for the post-merger performance and profitability of the present examined acquirers.

Table 4. Kruskal-Wallis test for cash and stock exchange M&As payment

Code	Variable name of examined ratio	Median		P-Value
		Cash Payment	Stock Exchange	
ΔV01	current ratio	-0,0467	0,02167	0,678
ΔV02	acid test ratio	0,00667	0,0100	0,624
ΔV03	days sales in receivables	18,33	-20,17	0,234
ΔV04	inventory turnover	0,1267	0,6567	0,450
ΔV05	days purchases in accounts payable	0,000	0,000	0,473
ΔV06	total debt to total assets	0,03747	0,11440	0,308
ΔV07	total debt to equity	0,05667	0,29833	0,180
ΔV08	short-term liabilities turnover	-0,1267	0,1100	0,227
ΔV09	ROA before taxes	-0,0532	-0,0324	0,597
ΔV10	ROE before taxes	-0,0694	-0,0651	0,821
ΔV11	ROA after taxes	-0,0408	-0,0298	0,624
ΔV12	ROE after taxes	-0,0021	-0,0505	0,571
ΔV13	capital employed turnover	-0,0733	0,01833	0,180
ΔV14	gross profit margin	0,02850	-0,0287	0,473
ΔV15	EBIT margin	-0,0310	-0,0293	0,970
ΔV16	EBITDA margin	-0,0234	-0,0461	0,597

Notes:[a, b, c] indicate that the median change is significantly different from zero at the 0.01, 0.05, and 0.10 probability level, respectively. At the choice of stock exchange as a means of M&As payment, the sample firms may have completed their value transaction with minor cash amounts.

Table values are the median computed for each ratio (as shown above) for the research sample of 35 M&As of Greek listed firms between 2005 and 2007. The median of each ratio that computed for cash payment represents the median of each ratio from the mean differences of the average of 3 years before the M&As event (the third, *T*-3; the second, *T*-2; and the first year, *T*-1) and after the completion of M&As event (the third, *T*+3; the second, *T*+2; and the first year, *T*+1). The other (stock exchange) is computed in similar way for the sample firms that financed their transaction with stock exchange (and maybe with minor cash amount). From all the calculations the year 0 (*T*=0) is omitted, because this usually includes a number of events which influence firm's economic performance in this period, as one-time M&As transaction costs, necessary for the deal, etc.

The hypothesis H_4 of this research is that: "There is no significant difference in the post-merger performance for acquiring firms using enchorial or international M&As".

With similar process than the above a non-parametric test is applied in order to examine if domestic or international mergers provide a better performance for the acquirers.

The data of the sample firms within this respect are in two groups:

86% (30 firms) has done a domestic merger and

14% (5 firms) of the sample firms have preferred an international M&As transaction.

The results reveal that two variables (ΔV10, ΔV12) present a significant change due to the M&As events. And thus, it signalizes a better performance of acquirers firms with international M&As than these with domestics M&As.

Table 5. Kruskal-Wallis test for domestic and international M&As

Table values are the median computed for each ratio (as shown above) for the research sample of 35 M&As of Greek listed firms between 2005 and 2007. The median of each ratio that computed for domestic mergers and acquisitions represents the median of each ratio from the mean differences of the average of 3 years before the M&As event (the third, *T*-3; the second, *T*-2; and the first year, *T*-1) and after the completion of M&As event (the third, *T*+3; the second, *T*+2; and the first year, *T*+1). The other (international M&As) is computed in similar way for the sample firms. From all the calculations the year 0 (*T*=0) is omitted, because this usually includes a number of events which influence firm's economic performance in this period, as one-time M&As transaction costs, necessary for the deal, etc.

| Code | Variable name of examined ratio | Median | | P-Value |
		Domestic M&As	International M&As	
ΔV01	current ratio	-0,04333	0,34333	0,396
ΔV02	acid test ratio	-0,01667	0,1700	0,637
ΔV03	days sales in receivables	-5,167	-37,000	0,671
ΔV04	inventory turnover	0,5267	-0,1500	0,346
ΔV05	days purchases in accounts payable	0,000	-5,03333	0,480
ΔV06	total debt to total assets	0,1029	0,1305	0,925
ΔV07	total debt to equity	0,26167	-0,07667	0,370
ΔV08	short-term liabilities turnover	-0,02500	0,26667	0,409
ΔV09	ROA before taxes	-0,03671	0,00400	0,637
ΔV10	ROE before taxes	-0,06965	0,01790	0,066*
ΔV11	ROA after taxes	-0,03516	0,003300	0,637
ΔV12	ROE after taxes	-0,05308	0,01103	0,021**
ΔV13	capital employed turnover	0,0000	0,0300	0,759
ΔV14	gross profit margin	-0,02877	0,04180	0,144
ΔV15	EBIT margin	-0,03397	0,02070	0,604
ΔV16	EBITDA margin	-0,03898	-0,00466	0,671

Notes:[a, b, c] indicate that the median change is significantly different from zero at the 0.01, 0.05, and 0.10 probability level, respectively. At the choice of stock exchange as a means of M&As payment, the sample firms may have completed their value transaction with minor cash amounts.

The hypothesis H_5 of this research is that: "There is no significant difference in the post-merger performance for acquiring firms using diagonal or not diagonal M&As".

With similar process than the above also a non-parametric test is applied in order to examine if

conglomerate or non-conglomerate mergers provide a better performance for the acquirers.

The data of the sample firms within this respect are in two groups:

75% (26 firms) has done a non-conglomerate merger and

25% (9 firms) of the sample firms have preferred a conglomerate M&As transaction.

The results reveal that two variables (ΔV04, ΔV08) present a significant change due to the M&As events. And thus, it further signalizes a better performance of acquirers firms with international M&As than these with domestics M&As.

Table 6. Kruskal-Wallis test for conglomerate or not M&As

Table values are the median computed for each ratio (as shown above) for the research sample of 35 M&As of Greek listed firms between 2005 and 2007. The median of each ratio that computed for conglomerate mergers and acquisitions represents the median of each ratio from the mean differences of the average of 3 years before the M&As event (the third, *T*-3; the second, *T*-2; and the first year, *T*-1) and after the completion of M&As event (the third, *T*+3; the second, *T*+2; and the first year, *T*+1). The other (non-conglomerate M&As) is computed in similar way for the sample firms. From all the calculations the year 0 (*T*=0) is omitted, because this usually includes a number of events which influence firm's economic performance in this period, as one-time M&As transaction costs, necessary for the deal, etc.

| Code | Variable name of examined ratio | Median | | P-Value |
		Conglomerate M&As	Non-Congl. M&As	
ΔV01	current ratio	-0,0400	0,02167	0,706
ΔV02	acid test ratio	-0,0400	0,0250	0,706
ΔV03	days sales in receivables	-22,000	-1,667	0,473
ΔV04	inventory turnover	2,6833	0,000	0,005***
ΔV05	days purchases in accounts payable	1,0700	-0,1183	0,089*
ΔV06	total debt to total assets	0,12027	0,09363	0,406
ΔV07	total debt to equity	0,2267	0,2617	0,291
ΔV08	short-term liabilities turnover	0,41333	-0,06667	0,054*
ΔV09	ROA before taxes	-0,02950	-0,04640	0,940
ΔV10	ROE before taxes	-0,05083	-0,06940	0,940
ΔV11	ROA after taxes	-0,02303	-0,03517	0,792
ΔV12	ROE after taxes	-0,04617	-0,05067	0,970
ΔV13	capital employed turnover	0,17000	-0,03167	0,168
ΔV14	gross profit margin	-0,02686	-0,00538	0,706
ΔV15	EBIT margin	0,01687	-0,03707	0,345
ΔV16	EBITDA margin	-0,04617	-0,03650	0,546

Notes:[a, b, c] indicate that the median change is significantly different from zero at the 0.01, 0.05, and 0.10 probability level, respectively. At the choice of stock exchange as a means of M&As payment, the sample firms may have completed their value transaction with minor cash amounts.

6. Summary and Conclusions

One of the main elements of contemporary corporate restructuring, with a universal acceptance, is the formation of new business entities via mergers and acquisitions (M&As). This study examines the success of merger decision in Greece during the last years through an extensive accounting study.

The events of mergers and acquisitions (M&As) that have been performed from merger-involved firms listed on the Athens Stock Exchange are evaluated using accounting data (financial ratios) from a sample of all Greek M&As transactions from 2005 to 2007. The final sample of the study that is investigated consists from thirty five Greek listed firms, which executed one merger or acquisition in the period from 2005 to 2007 as acquirers.

In order to evaluate this trend, this study tries to analyse the pre- and post-merger performance of a sample of Greek listed acquirer firms for a three-year-period before and after M&As using an explanatory set of sixteen accounting ratios (current ratio; acid test ratio; days sales in receivables; inventory turnover; days purchases in accounts payable; total debt to total assets; total debt to equity; short-term liabilities turnover; ROA before taxes; ROE before taxes; ROA after taxes; ROE after taxes; capital employed turnover; gross profit margin; EBIT margin; EBITDA margin) and attempted to investigate the M&As effects on the post-merger accounting performance of this sample. Also, for a more comprehensive research analysis is examined the sub-cases of the two years and one year, before and after, of the same M&As transactions.

The final conclusion that conducted is that the M&As activities of the Greek listed sample firms of this research have not lead them to enhanced post-merger accounting performance. Thus, these results for the Greek market, since there is no significant profitability improvement, do not support the

hypotheses of market power (Lubatkin, 1983; 1987). According to this approach, market power that gained by the acquirer after the merger or the acquisition should increase the new firm's profit margins and therefore, its profitability.

Thus in order to answer the question if the majority of merger decisions in Greece were successful or not, the answer is no. However, it cannot be ignored the event that if these mergers had never happened may sample firms that were examined could have a different or more disappointing business performance without the M&As.

Also, from the research results, it is clear that there is no difference from the mean of payment (cash or stock exchange, plus minor cash amount) for the acquiring firms of this research sample. This result is not consistent with Jensen's (1986) free cash flow theory, that the financing method matters, for the post-merger performance of the acquirers.

Furthermore, from the sample firms, these acquiring firms that performed an international or conglomerate merger present a better pros-merger performance.

Last, future extensions of this study could examine a larger sample that could include not only M&As-involved Greek firms listed in the Athens Exchange, but also non-listed firms and within other or larger time frame periods.

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