

## **International M&As of Greek Listed Firms at South-East Europe: Effects on their Accounting Performance**

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### **Abstract**

*This study examines the international mergers and acquisitions (M&As) of Greek firms in South-Eastern European countries. The main objective of this paper is to evaluate the post-merger performance of Greek listed firms in the Athens Stock Exchange that executed as acquirers one merger or acquisition in a five-year-period (from 1998 to 2002). For the purpose of the study, a set of twenty ratios is employed, in order to measure firms' post-merger performance and to compare pre- and post-merger accounting data for three years before and after the M&As events. The selected countries of South-Eastern Europe for the research sample are the three countries with the larger Greek investments in that period: Romania, Bulgaria and Albania. The results revealed that the international M&As activities of the Greek listed sample firms in the selected countries of this research have not lead them to enhanced post-merger performance, but, in general, to an accounting performance deterioration that also have a negative impact on three profitability examined ratios. Also, the most interesting that is revealed is that the worsening of the two years after the M&As is greater in the next period (three years after the examined event) and there is no negative or positive ratio significant change in the first year after the international M&As. Last, the study further analyses these ratio results with the method of payment of the acquiring firms: cash and stock exchange (with minor cash amounts); the conclusion for this is that the method of payment has no impact on the post-merger accounting performance of the examined firms.*

Keywords: merger, acquisition, international business strategies

JEL Classifications: G34, F23, M40

## Introductory Comments

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 M&As activities 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 (Athianos et., 2003; Mantzaris, 2008; Pazarskis, 2008).

M&As represent a major force in the modern financial and economic environment, an area with potential for both good and harm. Thus, many researchers and business practitioners are confident and enthusiastic, despite the fact that many others regard with scepticism merger activity.

Related to the above statement is a characteristic declaration for this contradiction from Warren Buffet (1981) that, even three decades ago, it is still holds:

“Many managements apparently were overexposed in impressionable childhood years to the story in which the imprisoned handsome prince is released from a toad’s body by a kiss from a beautiful princess. Consequently, they are certain their managerial kiss will do wonders for the profitability of Company T[target]...We’ve observed many kisses but very few miracles. Nevertheless, many managerial princesses remain serenely confident about the future potency of their kisses—even after their corporate backyards are knee-deep in unresponsive toads” (Buffet, 1981<sup>1</sup>)

Recently in Greece, M&As have grown rapidly as part of this widespread corporate restructuring on the worldwide landscape. In order to provide further theoretical evidence on this issue at Greek business and especially from an international investment and a financial accounting perspective, this study examines the international merger activity of Greek firms in South-Eastern European Countries through the citation of several Greek M&As events diachronically in several Balkan countries (Bulgaria, Romania, and Albania) with the larger Greek investments and attempts to depicture special M&As characteristics of Greek acquiring firms. The motivation of this study is to provide an investment analysis framework of Greek international M&As useful for managers, shareholders, academics, etc.

The structure of the paper is as follows: the next section presents the differences of domestic and international M&As. The following section presents the research design of this study (literature review; sample and data; selected accounting ratios; methodology and hypothesis). The next one analysed the results. The following section proposes concerning the research results further interpretations and evidence. Last, the next section concludes the paper.

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<sup>1</sup> Warren Buffet, Berkshire Hathaway Inc. Annual Report, 1981: Quote taken from Weston, Chung, and Siu (1998).

## Differences of Domestic and International M&As

As the strategy literature commonly argues, mergers and acquisitions are one of the mechanisms by which, firms gain access to new resources, reducing costs and increasing revenues via resource redeployment. International business researchers have extended the concept of resource opportunities to include a geographic component (Agorastos et al., 2006).

Thus, international M&As are considered a special category of merger activities and present special peculiarities than the domestic ones (Errunza & Senbet, 1981, 1984; Caves, 1986; Michel & Shaked, 1986; Doukas & Travlos, 1988, 2001; Conn, & Connell, 1990; Morck & Yeung, 1991; Harris & Ravenscraft, 1991; Cebenoyan et al., 1992; Healy & Palepu, 1993; Markides & Ittner, 1994; Doukas, 1995; Eun et al., 1996; Cakici et al., 1991, 1996; Markides & Oyon, 1998; Lyroudi et al., 1999; Seth et al., 2000; Rossi & Volpin, 2004; Danbolt, 2004; etc.).

This view is fully analyzed by Weston Fr., Chung K. and Hoag S. (1990) as they described that many of the motives for international mergers and acquisitions are similar to those for purely domestic transactions<sup>2</sup>, while others are unique to the international arena. On the whole, these "international" motives include the following:

A. Growth: (i) to achieve long-run strategic goals, (ii) for growth beyond the capacity of saturated domestic market, (iii) market extension abroad and protection of market share at home, (iv) size and economies of scale required for effective global competition.

B. Technology: (i) to exploit technological knowledge advantage, (ii) to acquire technology where it is lacking.

C. Extend advantages in differentiated products: strong correlation between multinationalization and product differentiation (Caves, 1986); this may indicate an application of the parent's (acquirer's) good reputation.

D. Government policy: (i) to circumvent protective tariffs, quotas, etc., (ii) to reduce dependence on exports.

E. Exchange rates: (i) impact on relative costs of foreign versus domestic acquisitions, (ii) impact on value of repatriated profits.

F. Political and economic stability: to invest in a safe, predictable environment.

G. Differential labor costs, productivity of labor.

H. To follow clients (especially for banks).

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<sup>2</sup> For an extensive literature review about the motives for M&As, in general, see: Jensen, 1986; Ravenscraft & Scherer, 1987; Ravenscraft, 1988; Pazarskis, 2008.

I. Diversification: (i) by product line, (ii) geographically, (iii) to reduce systematic risk.

J. Resource-poor domestic economy: to obtain assured sources of supply.

## **Research Design**

### **Literature review**

Several studies on post-merger performance after M&As that employed accounting variables (financial ratios) concluded on ambiguous results (Pazarskis, 2008). Many of them supported an improvement in the post-merger performance after the M&As action (Cosh et al., 1980; Parrino et al., 1998; 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 from the M&As action (Kumar, 1984; Healy et al., 1992; Chatterjee & Meeks, 1996; Ghosh, 2001; and others).

### **Sample and data**

In the period from 1998 to 2002, firstly, all the international M&As activities from firms of Greek interests, listed in the Main market of the Athens Exchange, that have invested in the three selected research sample countries with the larger Greek investments in the South-East Europe (Bulgaria, Romania, and Albania), are tracked, excluding from them the actions of their subsidiaries, as only a parent's M&As action is examined. This sample consists of twenty-one firms.

Secondly, from them for further analysis, are excluded the firms that performed bank activities, which present special peculiarities in their accounting evaluation of the international M&As transactions, and these are two firms. Thus, the final research sample for examination consists from nineteen firms, listed in Greece at the Athens Exchange.

The study considers that the sample firms performed one merger or acquisition in a five-year-period (from 1998 to 2002) and have not had done any other important M&As action from 1995 to 2005, during the period of three years before and after their examined M&As transaction, and their merger activity have consisted of an important investment that assure the acquiring firm management.

The final sample with nineteen 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 the firm post-merger accounting performance. 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).

#### **Selected accounting ratios**

The post-merger accounting performance of a firm is evaluated with its performance at some accounting ratios. For the purpose of this study, twenty ratios are employed, which are the following ratios (see, Table 1):

**Table 1: Classification of financial ratios**

<i>Code</i>	<i>Variable Name</i>	<i>Description</i>
V01	Return on equity (ROE) before taxes	Earnings before Taxes / Equity
V02	ROA before interest and taxes	EBIT / Total Assets
V03	Return on assets (ROA) before taxes	Earnings before Taxes / Total Assets
V04	Gross profit margin	Gross Profit / Sales
V05	Operating profit margin	Operating Profit / Sales
V06	EBIT margin	EBIT / Sales
V07	Net profit margin (before taxes)	EBT / Sales
V08	Capital employed turnover	Sales / Capital Employed
V09	Invested capital turnover	Sales / Invested Capital
V10	Capital employed to fixed assets	Equity + Long Term Debt / Fixed Assets
V11	Total Debt to equity	Total Debt / Equity
V12	Times interest earned (earnings based)	EBIT / Interest Expense
V13	Equity to total assets	Equity / Total assets
V14	Current ratio	Current Assets / Current Liabilities
V15	Acid test ratio	(Current assets-Inventory)/Current liabilities
V16	Working capital	Current Assets - Current Liabilities
V17	Capital employed	Long-term Debt + Equity
V18	Days sales in receivables	Accounts receivable / (Sales/365)
V19	Days purchases in accounts payable	Accounts payable / (Cost of Goods Sold/365)
V20	Days to sell inventory	Inventory / (Cost of Goods Sold/365)

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 et al., 2008; Pazarskis, 2008).

### Methodology and hypothesis

The M&As action of each acquiring company from the sample is considered as an investment that is evaluated by the NPV criterion (if  $NPV \geq 0$ , the investment is accepted). Based on this viewpoint, the study proceeds to its analysis and regards the impact of an M&A 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).

In this study the following case and sub-cases have been considered for the sample:

- $\alpha$  : the case of the acquiring firms that executed international M&As during the five-year-period, evaluating their performance three years before and after the M&As event
- $\beta$  : the sub-case of the acquiring firms that executed international M&As during the five-year-period, evaluating their performance two years before and after the M&As event
- $\gamma$  : the sub-case of the acquiring firms that executed international M&As during the five-year-period, evaluating their performance one year before and after the M&As event

In order to evaluate the relative change with ratio analysis of the sample of the Greek firms that executed M&As actions, the general form of the hypothesis that is examined for each accounting ratio separately (ratios from V1 to V20) and for the above case and sub-cases ( $\alpha$ ,  $\beta$ ,  $\gamma$ , respectively) is the following:

$H_{0ij}$ : There is expected **no** relative change of the accounting ratio **i** from the international M&As event of (sub-)case **j** for the acquiring firms.

$H_{1ij}$ : There is expected relative change of the accounting ratio **i** from the international M&As event of (sub-)case **j** for the acquiring firms.

where,

$i = \{V1, V2, \dots, V20\}$

$j = \{\alpha, \beta, \gamma\}$

The crucial research question that is investigated by examining the above mentioned ratios is the following: "Post-merger performance in the post-merger period is greater than it is in the pre-merger period for the acquiring firm with the international M&As?" (Pazarskis, 2008).

The selected accounting 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 for the case  $\alpha$  the mean from the sum of each accounting 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<sup>3</sup>. In similar process, the sub-cases  $\beta$  and  $\gamma$ , for two years and one before and after, respectively, are evaluated.

To test this hypothesis two independent sample mean t-tests for unequal variances are applied, which are calculated as follows:

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

where,

$n$  = number of examined ratios

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

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

$s$  = standard deviation

1 = group of pre-merger ratios

2 = group of post-merger ratios

Last, 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 firm's economic performance in this period (as one-time M&As transaction costs, necessary for the deal, etc.) (Healy et al., 1992; Pazarskis et al., 2008; Pazarskis, 2008).

Finally, the research results are presented in the next section.

## Analysis of Results

The results revealed that over a three-year-period before and after the M&As event six (return on equity (ROE) before taxes; return on assets (ROA) before interest and taxes; return on assets (ROA) before taxes; capital employed turnover; equity to total assets; working capital) out of the twenty accounting ratios had a statistically significant change due to the M&A event, including three examined profitability ratios; five decreased and only one of them (working capital) slightly increased. The rest fourteen accounting ratios 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 2).

Furthermore for the sub-case of two-year-period before and after the M&As event, there is a significant change at three accounting ratios (return on assets (ROA) before interest and taxes; return on assets (ROA) before taxes; equity to total assets) in the post-merger period for the merger-involved firms, which present a worsening. Also, the most interesting that is revealed is that this worsening of the two years after the M&As

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<sup>3</sup> In this study, the mean from the sum of each accounting 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., 2008, 2009; Pramod Mantravadi & A. Vidyadhar Reddy, 2008; and others).

is greater in the next period (three years after the examined event). The rest seventeen ratios did not present any significant change.

Last, 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, which means that there is no significant change for the first year and the management shortcomings have a negative impact on the firm performance after the second and the third year of their business unity due to M&As.

In a more analytical review of the research results over a three-year-period before and after the M&As event there are concluded the following for the influenced ratios:

- a) The variables V01 (return on equity (ROE) before taxes), V02 (return on assets (ROA) before interest and taxes) and V03 (return on assets (ROA) before taxes), which are profitability ratios, present a decrease after the M&As transactions. This high decrease of these three profitability ratios could be attributed to the inefficient unity of the merged firms. This result is not consistent with the results of some other studies that have found a profitability improvement in the post-merger period: Cosh et al. (1980), Parrino et al. (1998), and others. But, it is also consistent with the results of some other past studies 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 for the Australian market. Similar results, with a decline of the profitability ratios, have found Meeks (1977), Salter & Weinhold (1979), Mueller (1980), Kusewitt (1985), Mueller (1985), Dickerson et al. (1997), and others. Furthermore, 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.
- b) The variable V08 (capital employed turnover) present a deterioration of the firm performance in this ratio. This reveals that after the M&As events the sample firms have decreased sales to capital employed (long-term debt plus equity), due to bank loans, etc., three years later.
- c) The variable V13 (equity to total assets) present a deterioration of the firm performance in this ratio. This reveals that after the M&As events the sample firms have probably decreased equity to total assets due to an increase of their total debt amount (mainly caused by received bank loans for the completion of M&As, the extended firm activities, etc.) even three years later.
- d) The variable V16 (working capital) present an increase after the M&As transactions. Regarding this liquidity ratio after the merger, it can be concluded that its increase could be attributed to some extended liquidity level that was created from the action of unity by the merged firms, which could be also presumed as a liquidity unused surplus from current assets.

All-in-all, it is clear from the received results that the international M&As activities of the Greek listed sample firms in the selected



countries (Bulgaria, Romania, and Albania) of this research have not lead them to enhanced post-merger accounting performance, but in general to a performance deterioration that also have a negative impact on three profitability examined ratios.

**Table 2: 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 19 international M&As of Greek listed firms between 1998 and 2002. 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	ROE before taxes	16,80 <sup>c</sup>	16,80	14,30		12,30	11,60	12,00 <sup>c</sup>
V02	ROA before int.-taxes	18,20 <sup>a</sup>	18,30 <sup>b</sup>	14,90		12,20	11,20 <sup>b</sup>	10,90 <sup>a</sup>
V03	ROA before taxes	14,90 <sup>b</sup>	15,00 <sup>c</sup>	12,10		10,50	9,500 <sup>c</sup>	9,300 <sup>b</sup>
V04	Gross profit margin	28,40	28,00	28,20		34,90	31,50	32,30
V05	Operating profit margin	1,700	-1,20	4,300		8,100	9,200	10,60
V06	EBIT margin	16,00	19,10	23,10		12,80	13,50	14,20
V07	Net Profit margin (before taxes)	13,30	16,20	19,80		6,800	8,600	10,30
V08	Capital employed turnover	1,630 <sup>b</sup>	1,490	1,230		0,877	0,869	0,909 <sup>b</sup>
V09	Invested capital turnover	2,470	2,440	2,540		2,660	2,540	2,160
V10	Capital employed to fixed assets	3,060 <sup>c</sup>	3,410	3,620		6,400	6,300	5,670 <sup>c</sup>
V11	Total debt to equity	0,910	0,912	0,898		0,805	0,831	0,927
V12	Times interest earned	13,60	12,30	12,40		14,60	14,30	18,90
V13	Equity to total assets	0,885 <sup>a</sup>	0,880 <sup>b</sup>	0,855		0,832	0,818 <sup>b</sup>	0,788 <sup>a</sup>
V14	Current ratio	1,694	1,683	1,650		1,612	1,569	1,700
V15	Acid test ratio	1,181	1,226	1,186		1,126	1,072	1,161
V16	Working capital	0,039 <sup>b</sup>	0,047	0,055		0,104	0,091	0,095 <sup>b</sup>
V17	Capital employed	0,313	0,379	0,403		0,507	0,516	0,487
V18	Days sales in receivables	155,0	164,0	169,0		171,0	155,0	149,0
V19	Days purchases in accounts payable	107,0	99,00	130,0		78,70	69,10	71,90
V20	Days to sell inventory	78,30	82,80	85,70		68,60	68,30	122,0

**Notes:**

- <sup>a, b, c</sup> 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  $H_0$  (see, <sup>a</sup>)  
 $0.01 \leq p < 0.05$  moderate evidence against  $H_0$  (see, <sup>b</sup>)  
 $0.05 \leq p < 0.10$  little evidence against  $H_0$  (see, <sup>c</sup>)  
 $0.10 \leq p$  no real evidence against  $H_0$

- At the variables V16 and V17, the amounts are in millions euro.

## Interpretation of Results and Further Evidence

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 twenty 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: 21% (4 firms) has done their deal with a stock exchange and minor cash amounts and 79% (15 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 V20) are computed as below:

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

where,

$\Delta VX$  = difference between the means of post- and pre-merger ratios

$i$  = examined ratios {V1, V2, ..., V20}

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

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

Then, for these data (see,  $\Delta VX_i$ ), 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:

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

where,

$n_j$  = the number of observations in group j

$N$  = the total sample size

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

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

The received results are presented in the Table 3 (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 3: Kruskal-Wallis test for cash and stock exchange M&As payment**

Table values are the median computed for each ratio (as shown above) for the research sample of 19 international M&As of Greek listed firms between 1998 and 2002. The ratio median computed for cash payment represents the median 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 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.

Code	Variable Name	Median		P-Value
		Cash Payment	Stock Exchange	
V01	ROE before taxes	-7,157	-4,253	0,764
V02	ROA before int.-taxes	-9,077	-4,402	0,920
V03	ROA before taxes	-8,437	-4,562	0,841
V04	Gross profit margin	2,410	-0,476	1,000
V05	Operating profit margin	-2,737	12,92	0,162
V06	EBIT margin	-2,767	-1,817	1,000
V07	Net Profit margin (before taxes)	-3,407	-1,405	0,764
V08	Capital employed turnover	-0,146	-0,165	1,000
V09	Invested capital turnover	-0,146	0,190	0,271
V10	Capital employed to fixed assets	0,820	0,550	0,764
V11	Total debt to equity	0,130	0,200	0,617
V12	Times interest earned	-0,853	-0,196	0,920
V13	Equity to total assets	-0,033	-0,071	0,548
V14	Current ratio	-0,333	0,098	0,549
V15	Acid test ratio	-0,186	0,161	0,424
V16	Working capital	0,005	0,021	0,317
V17	Capital employed	0,069	0,342	0,230
V18	Days sales in receivables	9,333	-24,66	0,162
V19	Days purchases in accounts payable	3,333	12,33	0,484
V20	Days to sell inventory	-8,666	0,666	0,617

**Notes:**

1. <sup>a, b, c</sup> indicate that the mean change is significantly different from zero at the 0.01, 0.05, and 0.10 probability level, respectively.
2. At the choice of stock exchange as a means of M&As payment, the sample firms have completed their value transaction with minor cash amounts.
3. At the variables V16 and V17, the amounts are in millions euro.

## **Concluding Remarks**

Another path for profit maximisation and market expansion is the new business activities within an international context (Paschaloudis et al., 2006). This study analyses and evaluates this possibility for Greek listed firms through international M&As from past experience (from 1998 to 2002) in South-Eastern European countries, and more specifically, in Bulgaria, Romania and Albania, the countries with the larger Greek investments over this period.

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 international M&As using an explanatory set of twenty accounting ratios (ROE before taxes; ROA before interest and taxes; ROA before taxes; Gross profit margin; Operating profit margin; EBIT margin; Net Profit margin before taxes; Capital employed turnover; Invested capital turnover; Capital employed to fixed assets; Total debt to equity; Times interest earned-earnings based; Equity to total assets; Current ratio; Acid test ratio; Working capital; Capital employed; Days sales in receivables; Days purchases in accounts payable; Days to sell inventory) and attempted to investigate the M&As effects on the post-merger accounting performance of this sample. Also, for a more comprehensive research analysis are 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 international M&As activities of the Greek listed sample firms in the selected countries (Bulgaria, Romania, and Albania) of this research have not lead them to enhanced post-merger accounting performance, but, in general, to a performance deterioration that also have a negative impact on three profitability examined ratios. 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.

Furthermore, 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.

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 or could examine another sample, if possible, according to their industry categorization.

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