

Measuring the Performance of Acquisitions: An Empirical Investigation Using Multiple Criteria

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The performance of corporate acquisitions is a popular research topic. Researchers have employed various criteria in their attempt to evaluate acquisition performance. This paper replicates and extends a previous study by investigating the comparability of the three most widely used measures of acquisition performance, namely *accounting-based measures, cumulative abnormal returns* and *managers' subjective assessments*, in a non-Anglo Saxon setting. Empirical testing is based on a sample of 50 domestic acquisitions carried out by Greek firms. Overall, results from the three measures indicate failure rates from 50% to 60%. However, the most impressive finding stems from the comparison (correlation analysis) of the alternative measures. Accounting-based measures are positively correlated to managers' subjective assessments. Contrarily, cumulative abnormal returns are not correlated to either accounting-based measures or managers' subjective assessments. This lack of statistically significant relationships between the performance criteria may provide a plausible basis for explaining some of the contradictory results often reported in the mergers and acquisitions literature. In light of these findings, we discuss their implications for both theory and practice and suggest ideas for future research.

Introduction

Research on the performance of mergers and acquisitions¹ (M&As) has grown rapidly during the past 20 years. However, as Zollo and Singh (2004) stress, there exists much heterogeneity both on the definition of the performance of M&As and on its measurement. With respect to

the measurement of the performance of M&As, finance and economic scholars have often relied on objective criteria such as accounting returns and stock-market-based measures while strategic management and organizational behaviour scholars have often employed managers' personal assessments regarding the materialization of the objectives set before the M&A. These one-dimensional approaches of measuring M&A performance may be partially responsible for some of the contradictory results often published in the M&A literature regarding the antecedents of successful acquisitions (King *et al.*, 2004; Stahl and Voigt, 2008). In one of the few studies in the field that has employed multiple performance criteria, Schoenberg (2006) found no correlation between objective and subjective measures of acquisition performance, urging future research-

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¹Following other researchers, the terms merger and acquisition are used interchangeably in the current paper.

ers to consider the use of multiple performance criteria when measuring the performance of corporate acquisitions. The work presented here is a replication and extension of Schoenberg's (2006) study. The contributions of our study over and above the previous research are as follows.

- (a) It measures the performance of acquisitions using three alternative criteria, namely accounting returns, stock-market-based measures and managers' personal assessments regarding the materialization of the objectives set before the acquisition. We bring into Schoenberg's (2006) cumulative abnormal returns (CARs) and managers' subjective assessments an accounting-based measure (return on assets, ROA) which has received a central role in previous acquisition studies. We compare in a single study the three most widely used M&A performance criteria.
- (b) It brings empirical evidence from a country outside the USA and the UK context where the majority of the published M&A research originates from (Cartwright and Schoenberg, 2006). It may be that the results of these studies have to be modified so as to be applicable in other national settings. In this way this study contributes to overcoming the 'overwhelming geographical bias' of work in the field of management (Pettigrew, Thomas and Whittington, 2002) and provides answers as to whether the results of previous research are 'culture free' or 'culture specific'.

Literature review

The significant value of worldwide M&As during the past 20 years has attracted the interest of many academics and consultants. Zollo and Meier (2008) after reviewing 97 papers published in top management and finance journals concluded that the vast majority of the published research on the performance of M&As can be classified into three research streams. In the first one, researchers have relied on accounting-based measures for evaluating the performance of M&As (e.g. Kusewitt, 1985; Lu, 2004; Ramaswamy, 1997; Zollo and Singh, 2004). The second stream of research has employed stock-market-based measures (e.g. Agrawal, Jaffe and Mandelker, 1992; Halebian and Finkelstein, 1999;

Markides and Oyon, 1998; Sudarsanam and Mahate, 2006). Finally, the third stream of research has relied on managers' personal assessments regarding the effective materialization of the original goals set before the M&A (e.g. Angwin, 2004; Capron, 1999; Homburg and Bucerius, 2006; Papadakis, 2005).

In the following paragraphs we review these streams of research, starting with those that have employed accounting-based measures (refer to Table 1 for a synopsis on the research on the performance of corporate acquisitions).

M&As and accounting-based measures

Researchers of this stream have used accounting-based measures to evaluate the success of an acquisition. The rationale behind these studies is that the strategic aim of a business is to earn a satisfactory return on capital (McGee, Thomas and Wilson, 2005). The use of accounting metrics is based on the premise that synergies obtained from an acquisition are best reflected in accounting measures such as ROA (Hitt *et al.*, 1998). The basic methodology in accounting-based studies is to compare post-acquisition returns to the weighted average of the pre-bid returns of each of the target and acquiring firm (Sudarsanam, 2003).

Generally speaking, results of this research stream provide no clear evidence of improved post-acquisition performance (Tuch and O'Sullivan, 2007, p. 152). For example, Meeks (1977) after studying 233 UK acquirers reported that profitability increased in the year of the acquisition, but decreased in each of the 5 subsequent years for almost 60% of the combined firms. Twenty years later, Dickerson, Gibson and Tsakalotos (1997), in a study of 2941 acquisitions that took place in the UK from 1948 to 1977, found that non-acquiring firms outperform acquirers by 2.4% per annum in each of the 18 years following the acquisition. Lu (2004) in a more recent study examined 592 US deals over a period of 60 months before and after the acquisition and reported a negative industry-adjusted ROA.

In contrast to the above, some studies (e.g. Healy, Palepu and Ruback, 1992, 1997; Manson, Stark and Thomas, 1994) report that an acquisition may improve a firm's performance. Healy, Palepu and Ruback (1992), for instance, studied