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Abstract

The study looks at mergers and acquisitions (M&As) in ASEAN countries and examines the post-M&A performance using data from 2001 to 2012. The industry-adjusted operating performance tends to decline in the 3 years following an M&A. Yet, the results suggest that M&As completed during the financial crisis are more profitable than those implemented before and/or after the crisis. We argue that this is mainly due to the synergies created between the firms' resources during the crisis which augur well for firms' economic performance. We find that, during the crisis, certain characteristics of the firms like the relative size of the target, cross-border nature of deals, acquirer's cash reserves and friendly nature of deals are important determinants of long-term post-M&A operating performance. However, for M&As during the crisis, there appears to be no relationship between performance and firms' characteristics linked to M&A activity such as payment method, industry relatedness and percentage of target's share acquired.

Keywords: Mergers and acquisitions, ASEAN, operating performance, financial crisis

1. Introduction

In this paper, we focus on intra-regional mergers and acquisitions (M&As) in the ASEAN (Association of Southeast Asian Nations) region. We investigate the determinants of post-M&A performance of companies in this region and examine the impact of the recent global crisis. Developed markets experienced a gloomy economic growth as a consequence of the 2007-2008 financial crisis. Though the 1997-1999 Asian crisis had a profound impact on the ASEAN region (Sufian, 2009) and intra-regional flows decreased after 1997 (Rammal & Zurbruegg, 2006), Asian countries continued to grow robustly after the 2007-2008 crisis (Economist, 2009). With a stable and high growth rate plus a dynamic business environment, ASEAN has emerged to be a promising destination for international investors (UNCTAD, 2012). Authors have suggested that, at regional level, trade agreements attempt to promote cross-border trade (Sufian & Habibullah, 2012). In the early 1990s, M&As were still relatively uncommon in Asia as these firms tend to emphasize internal development (Mitchell & Shaver, 2002) and the M&A market was at an early stage of development with a total value of $15 billion (Metwalli & Tang, 2009). The creation of ASEAN has gradually integrated the countries within this region. For example, Vietnam's joining of ASEAN has impacted positively its bilateral trade within the region (Anwar & Nguyen, 2011). Since then the ASEAN region experienced rapid growth in foreign direct investment (Kindra, Strizzi, & Mansor, 1998), and the total value of deals reached its highest level of $135 billion in 2007 (Metwalli & Tang, 2009). Also, authors have looked at growing foreign direct investment by Asian companies (Berrill & Mannella, 2013; Pananond & Zeithaml, 1998). For example, Thailand's CP group utilized internationalization strategy for its survival and growth.

For multinational companies, M&As in ASEAN market are challenging due to lack of supporting elements such as lawyers, accountants and advisers, which are fundamentally important for a successful transaction (Metwalli & Tang, 2002; Zhan & Ozawa, 2001);

companies might have to depend on relational contracting which might be hard to develop in a new country (Indro & Richards, 2007). Moreover, the cultural difference and high corruption level in ASEAN countries make M&As less tempting for firms outside the region (Rammal & Zurbruegg, 2006). Metwalli and Tang (2002) suggest that intra-regional deals will continue to dominate the M&A market in Southeast Asia in the foreseeable future, especially with the implementation of trade agreements among ASEAN countries and the possibility of a currency union (Huang & Guo, 2006). Thus, it is interesting to investigate intra-regional M&As and their performance in ASEAN.

Theoretically, there is a number of reasons why a company could increase its performance through M&A such as synergies (Larsson & Finkelstein, 1999), economies of scope and scale (Pangarkar & Lim, 2003), and greater market monopoly (Ikeda & Doi, 1983; Lubatkin, 1983; Sharma & Ho, 2002). In reality, many firms may suffer a decrease in performance from an M&A activity, as companies face several obstacles which prevent such benefits from being properly executed (Chakrabarti, 1990; Fang, Fridh, & Schultzberg, 2004; Ivancevich, Schweiger, & Power, 1987; Nahavandi & Malekzadeh, 1988; Schweiger & Denisi, 1991). Obstacles emerge at the level of people and process (Alexandridis, Mavrovitis, & Travlos, 2012; Shimizu, Hitt, Vaidyanath, & Pisano, 2004). On one hand, increased formalization of resource allocation and other management decision areas adversely affect performance, and similar challenges emerge at the level of strategic capabilities (Danbolt, 1995). On the other hand, the human aspect of M&As is equally relevant (Qiu & Wang, 2011; Shelton, 1988). As the aborted merger between Telia (Swedish) and Telenor (Norwegian) shows, nationalistic sentiments and emotions embedded in employees can cause irreversible damages to cross-border investments (Alexandridis et al., 2012). Indeed, even the managers involved in the M&A process cannot predict all the issues that are likely to emerge during the integration phase of the deal (Schoenberg, 2006; Slangen, 2006; Very &

Schweiger, 2001). A review of works on accounting performance after an M&A has been provided in the papers by Zollo and Meier (2008), Papadakis and Thanos (2010), and Thanos and Papadakis (2012a, 2012b). Thus, the question of post-M&A operating performance improvements has been addressed by many researchers over the last three decades (Amel, Barnes, Panetta, & Salleo, 2004; Healy, Palepu, & Ruback, 1992; Papadakis & Thanos, 2010; Spiegel, 2009; Zollo & Meier, 2008). Companies either experience negative or no gains from M&As and some studies indicate that acquirers can improve operating performance after M&As.

The extant literature revolves around M&As in the USA and UK and most recommendations for outcomes of M&As are based on the results using samples from these countries as either acquirers or targets. Thus, authors have suggested a need for more geographically diverse samples to overcome the UK and USA bias in the field of M&A studies (Papadakis & Thanos, 2010; Thanos & Papadakis, 2012a). Thanos and Papadakis (2012a, p. 130) specifically suggest a need to look at emerging economies to understand whether the country of origin of acquirers has an impact on M&A performance. Our study contributes to the limited literature on the long-term performance of M&As in emerging markets by investigating whether M&As within ASEAN lead to improvements or deteriorations in operating performance (OP) of involved firms. Moreover, we investigate the relationship between changes in post-M&A performance and deal characteristics. Also, another important contribution of this paper is that it links the recent global crisis with the performance of M&As in the ASEAN region.

The rest of the paper is organized as follows. Section 2 presents the summary of relevant literature and develops testable hypotheses. Section 3 describes the data selection and employed methodologies. Section 4 summarizes the main results and examines the determinants of post-M&A performance. Section 5 concludes.

2. Literature review and hypotheses

Several authors have examined whether M&As can generate positive gains for merging firms. In order to answer this question, authors have developed several hypotheses to understand the underlying motivations for M&As (Caves, 1989; Gomes, Angwin, Weber, & Tarba, 2013; Gugler, Mueller, & Weichselbaumer, 2012; Gugler, Mueller, Yurtoglu, & Zulehner, 2003). These hypotheses assume that the managers of the acquirer and target firms anticipate an improvement in profitability, market power, and firm growth. The extant research suggests that there are a number of reasons why an M&A could improve firm performance through synergies (Larsson & Finkelstein, 1999), economies of scope and scale (Pangarkar & Lim, 2003), and market monopoly (Ikeda & Doi, 1983; Sharma & Ho, 2002). Yet, firms involved in an M&A may suffer a decrease in performance due to difficulties at the people and process levels (Fang et al., 2004; Schweiger & Denisi, 1991). The past and extant literature on post-merger OP improvements indicates positive gains in some studies and negative or no gains in some other studies. Overall, extant evidence offers limited consensus on post-M&A performance improvements (Amel et al., 2004; Healy et al., 1992; Meglio & Risberg, 2010; Papadakis & Thanos, 2010; Schoenberg, 2006). For a comprehensive review of the literature on M&A performance around the world, see for instance Haleblian, Devers, McNamara, Carpenter, and Davison (2009), Thanos and Papadakis (2012a, 2012b) and Zollo and Meier (2008). A summary of findings from previous empirical studies and their relevant features is displayed in Table 1. Panel A reviews the literature on post-M&A OP in developed countries, which yields different results depending on the sample and methodology used. Sharma and Ho (2002) assert that the inconsistency in prior studies might be attributable to different measures used to capture changes in OP.

Table 1: Summary of post-M&A operating performance studies

Panel A: Developed markets

Market	Sample period	Author, year	Sample size	Performance measure	Deflator	Benchmark	Object of study: Bidder (B) or Target (T)	Change (C) or Intercept (I) model	Changes in post-M&A profitability
US	1952-1963	Lev and Mandelker, 1972	69	Net income, Operating income	(1) BV Assets, (2) BV Equity, (3) Sales, (4) Number of shares	Industry, size	B	C	No significant change
US	1953-1964	Hogarty, 1970	43	(1) EPS (2) Capital gains	Number of shares	Industry	B	Other	Deterioration
US	1967-1987	Switzer, 1996	324	Pre-tax Cash flow	MV Assets	Industry	B+T	C+I	Improvement
US	1967-1987	Linn and Switzer, 2001	413	Pre-tax Cash flow	MV Assets	Industry	B+T	C	Improvement
US	1975-1979	Franks et al., 1988	42	(1) Return on common equity (ROCE); (2) Total return to shareholders (RSH)	None	Industry, size and pre-performance	B	C+I	Deterioration
US	1979-1984	Healy et al., 1992	50	Pre-tax Cash flow	MV Assets	Industry	B+T	C+I	Improvement
US	1981-1988	Clark and Ofek, 1994	38	Pre-tax Cash flow	Sales	Industry	B+ distressed T	C+I	Deterioration
US	1981-1995	Ghosh, 2001	135	Pre-tax Cash flow	Adjusted MV Assets	Industry, size and pre-performance	B+T	C+I	No significant change
US	1982-1987	Parrino and Harris, 1999	197	Pre-tax Cash flow	MV Assets	Industry	B+T	C+I	Improvement only when target management is replaced following the M&A

Market	Sample period	Author, year	Sample size	Performance measure	Deflator	Benchmark	Object of study: Bidder (B) or Target (T)	Change (C) or Intercept (I) model	Changes in post-M&A profitability
UK	1948-1977	Dickerson et al., 1997	1443	Pre-tax Cash flow	Average of opening and closing net assets	Industry	B	Other	Deterioration
UK	1985-1993	Powell and Stark, 2005	191	Pre-tax Cash flow adjusted for changes in working capital	(1) MV Assets; (2) Adjusted MV Assets; (3) BV Assets; (4) Sales	Industry, size and pre-performance	B+T	C+I	Improvement
Japan	1964-1975	Ikeda and Doi, 1983	49	Pre-tax Cash flow	(1) BV Equity (2) BV Assets	Industry	B+T	C	Improvement
Japan	1970-1974	Yeh and Hoshino, 2002	86	ROA, ROE, Sales growth, Employment growth	None	Industry	B+T	Other	Deterioration
Japan	1969-1999	Kruse et al., 2007	69	Pre-tax Cash flow	(1) MV Assets (2) Sales	Industry, size	B+T	C+I	Improvement
Greece	1998-2000	Pazarskis et al., 2006	50	Profitability, Liquidity and Solvency ratios	None	None	B	C	Deterioration
Greece	1997-2003	Papadakis and Thanos, 2010	50	ROA	BV Assets	Industry	B+T	C	No significant change
Europe	1997-2001	Martynova et al., 2007	155	Pre-tax Cash flow adjusted for changes in working capital	(1) BV Assets (2) Sales	Industry, size and pre-performance	B+T	C+I	No significant change
Australia	1986-1991	Sharma and Ho, 2002	36	Pre-tax Cash flow adjusted for changes in working capital	(1) BV Assets, (2) BV Equity, (3) Sales, (4) Number of shares	Industry, size	B+T	C+I	No significant change
Canada	1993-2002	Dutta and Jog, 2009	1300	Pre-tax Cash flow	BV Assets	Industry, size and pre-performance	B	C+I	No significant change

Panel B: Emerging markets

Market	Sample period	Author, year	Sample size	Performance measure	Deflator	Benchmark	Object of study: Bidder (B) or Target (T)	Change (C) or Intercept model (I)	Changes in post-M&A profitability
Malaysia	1988-1992	Rahman and Limmack, 2004	113	Pre-tax Cash flow adjusted for changes in working capital	BV Assets	Industry, size	B+T	C+I	Improvement
India	2003	Kumar and Bansal, 2008	74	Working capital, operating profit, profit before tax, ROE, EPS, debt to equity ratios	None	None	B	C	Improvement
India	1992-1995	Pawaskar, 2001	36	Pre-tax Cash flow	Net Assets	Industry, size	B	Other	Deterioration
India	1991-2003	Mantravadi and Reddy, 2008	118	6 different financial and operating ratios	None	None	B	C	Deterioration
Russia	1999-2008	Bertrand and Betschinger, 2012	609	Pre-tax Cash flow	BV Assets	Non-acquiring firm	B	Other	Deterioration

Literature on emerging markets (Panel B) is scarce despite the fast growth of M&A activity in these countries. In line with developed-market studies, this literature does not yield a homogeneous answer. Two Indian studies (Mantravadi & Reddy, 2008; Pawaskar, 2001) document a profitability deterioration of bidding firms following a takeover, whereas Kumar and Bansal (2008) show significant improvement in post-M&A profitability of acquirers. Evidence from Malaysian firms reveals that takeovers are usually associated with a positive change in long-term OP (Rahman & Limmack, 2004). Since our sample of ASEAN countries include Malaysia, we should expect to find a significant improvement in OP after the M&A (Rahman & Limmack, 2004).

H1: The ASEAN firms' M&A in this region significantly improved its OP.

The extant literature has suggested that deal characteristics like method of payment (Boisot & Child, 1988; Bradley, Desai, & Kim, 1988; Haleblian et al., 2009; Jarrell & Poulsen, 1989; Lindgren, Garcia, & Saal, 1996; Metwalli & Tang, 2009), industry relatedness (Boisot & Child, 1988; Bryson, Crosby, & Stone, 2006; Healy et al., 1992; Jarrell & Poulsen, 1989; Metwalli & Tang, 2009; Sheng, 1996), geographic diversification (Aguiar & Gopinath, 2007; Chen, 2011; Wang & Boateng, 2007), acquirer's cash reserves (Jarrell & Poulsen, 1989; Lindgren et al., 1996; OECD, 2010), target's size (Alexandridis et al., 2012; Boisot & Child, 1988; Jarrell & Poulsen, 1989; Lubatkin, 1983; Mantravadi & Reddy, 2008; Qiu & Wang, 2011), and percentage of target acquired (Mantravadi & Reddy, 2008) all impact the performance of M&As. Also, recent studies have shown that the turbulences in the business environment can have a significant impact on bidder's returns (Beltratti & Paladino, 2013; Rao-Nicholson & Salaber, 2014a, 2014b, 2015; Wan & Yiu, 2009). Thus, it is interesting to look at the impact of the 2007-2008 financial crisis on the OP of M&As in ASEAN. Though, typically, a financial crisis can have a negative effect on the company's profits, authors have also recognized good M&A opportunities that present themselves in such an environment

which can lead to improvement in profitability (Krugman, 2000; Mody & Negishi, 2000; Wan & Yiu, 2009). For example, during an economic slump, firms are able to acquire targets at a lower price due to adverse economic conditions. Wan and Yiu (2009) suggest that a crisis provides acquirers with an altered – more abundant – set of opportunities, and companies that spot these opportunities and aggressively pursue them will perform better. From the perspectives of the resource-based view and dynamic capabilities, M&A during a crisis can be viewed as a way to alter firms' resources and capabilities in order to better adapt to the fast changing environment (Wan & Yiu, 2009). In the context of the 1997-1999 Asian crisis, the authors find that M&As are positively related to firm performance during the crisis, and negatively related to performance before and after the crisis. Hence, we formulate several testable hypotheses looking at the combined impact of deal characteristics and crisis period on post-M&A performance.

2.1. Method of payment

Irrespective of the firm's motivations behind cash or stock method for a deal, studies have shown that cash-financed deals are relatively more beneficial to bidding firms (Haleblian et al., 2009). Cash offers can lead to a higher profitability improvement than transactions financed with equity or a mixture of securities (Ghosh, 2001; Linn & Switzer, 2001). Cash deals give managers incentives to use resources of combined firms more efficiently than stock-swap transactions (Jensen, 1988). In competing bids, a cash offer could help acquirers accomplish the deal faster without any costly delay, making sure they are able to capture the high synergistic value (Berkovitch & Narayanan, 1990). In the ASEAN context, cash is likely to be used in M&As as acquiring companies are likely to have superior information about the targets. Yet, during the crisis we might observe valuation mismatch between the acquirer and the target leading to stock-financed M&As. For Thai firms, authors have observed that firms with the highest debt-equity ratios suffered the most devaluation during the crisis due to their

capital structure and financial leverage effect (Dekle & Hoontrakul, 2004). M&As driven by low value assets might not be motivated by superior information or synergies (Myers & Majluf, 1984); thus, impacting post-M&A performance.

H2: Cash-financed M&As are likely to generate higher post-M&A OP than stock-financed M&As.

H2a: During the crisis period, stock-financed deals are likely to negatively impact the OP of firms involved in M&As.

2.2. Industry relatedness

M&As within the same industry can be linked to firms' need for absorbing resources essential for competitive advantage and firm profitability. The occurrence of M&As between firms in the same industry can considerably change the business environment for surviving firms in that industry (Haleblian et al., 2009). For example, it can increase consolidation and generate excess rents from limited competition in the industry. Also, customers of the target firm, due to reduced commitment to the newly created firm, might examine the market for new suppliers, thus creating growth opportunity for survivor firms. These actions of customers might impact the profitability of the firms after M&A activity (Berger, Saunders, Scalise, & Udell, 1998). The findings on industry commonality and takeover effect on OP tend to suggest that M&As of firms operating in different industries are normally associated with poorer performance compared to industry-related peers (Healy et al., 1992; Jensen, 1986). However, Ghosh (2001) and Kruse, Park, Park, and Suzuki (2007) find opposite results. Furthermore, some studies document no relationship between an M&A and the combined firms' OP (Fowler & Schmidt, 1989; Martynova, Oosting, & Renneboog, 2007; Powell & Stark, 2005). Within ASEAN countries, there is a high likelihood that acquirers who engage in M&A activity with industry-related targets could swiftly utilize their established understanding of these markets and leverage their combined capabilities for mutual benefit, and thus, improve post-M&A performance. On the contrary, during the crisis

period, diversification could help overcome industry-level contagion. Thus, M&As within a sector could have a negative impact on post-M&A OP.

H3: Same-industry M&As are likely to positively and significantly impact the OP of M&As.

H3a: During the crisis, same-industry M&As could have a negative impact on OP.

2.3. Geographic diversification

The probability of cross-border M&As depend on several factors including bilateral trade between the two countries and currency exchange rates (Erel, Liao, & Weisbach, 2012). Authors have argued that geographical diversification can greatly benefit the firms' economic performance (Erel et al., 2012; Indro & Richards, 2007). Wang and Boateng (2007) conjecture that cross-border M&As make firms less vulnerable to international dynamics. Beside new resources and customers, foreign targets are also good opportunities for acquiring firms to learn new knowledge and improve their competence (Shimizu et al., 2004). With such advantages, it can be expected that cross-border M&As will increase the likelihood of synergy realization and improve profitability as observed by Wang and Boateng (2007). However, empirical studies also suggest that when going abroad, firms might face a number of challenges, which could potentially impede the accomplishment of expected synergistic value and even deteriorate the performance of acquiring firms (Kling & Weitzel, 2011; Moeller & Schlingemann, 2004). The lack of organizational capabilities has been shown to negatively affect international M&As of Russian companies (Bertrand & Betschinger, 2012). Gomes et al. (2013) highlight the importance of cross-cultural sensitivity and communication in cross-border M&A; and lacking these skills, the firms involved in M&A activity could experience integration issues. In our study, we consider only intra-regional deals; hence, we argue that the benefits of cross-border deals will overshadow any negative influences emerging from institutional differences between target and bidder countries. Yet, during the crisis, regional contagion might impede value accrual for cross-border M&As.

H4: Cross-border deals are likely to increase OP of firms engaged in M&As as compared to domestic deals.

H4a: During the crisis, companies' performance will be hurt by cross-border M&As as opposed to domestic deals.

2.4. Acquirer's cash reserves

According to the free cash flow theory (Jensen, 1986), a high level of free cash holding could increase the agency costs of firms since the managers tend to get involved in value-destroying investments. The author suggests that M&As by cash-rich firms are likely to result in operating underperformance relative to those implemented by firms with limited cash holdings. The empirical evidence seems to confirm this conjecture (Harford, 1999; Martynova et al., 2007). This effect is likely to be more acute during the crisis as prudent companies seek to maximize their cash reserves.

H5: Cash-rich firms are likely to engage in M&As that can negatively impact their OP as compared to cash-poor firms.

H5a: During the crisis, deals executed by cash-rich firms are more likely to cause a decrease in post-M&A OP.

2.5. Relative size of target

Corporate theories suggest that deals of relatively large targets are likely to bring operating and financial advantages, therefore leading to stronger profitability improvement compared to smaller targets (Martynova et al., 2007). Moreover, M&As that involve relatively large targets enable bidders to quickly take advantage of valuable assets such as strong market position, well-recognized branch, and established distribution network (Alexandridis et al., 2012). However, managers of bidding firms may find it more difficult to assimilate large targets into a combined entity and much of the issues related to large deals has been attributed to managerial hubris which may influence the decision to target larger

rather than smaller firms for M&A (Haleblian et al., 2009). Also, the growing size of a company engaged in M&A could potentially impact the cost of bureaucracy within a company (Bertrand & Betschinger, 2012; Indro & Richards, 2007). Most prior empirical research found no significant relation between relative size of target and post-M&A OP (Chatterjee, 2000; Fowler & Schmidt, 1989; Powell & Stark, 2005; Sharma & Ho, 2002). In the ASEAN region, acquirers invest largely in their own region and engage with known targets; hence enabling them to mitigate any negative impact of size of target in deriving synergies from M&As. During the crisis, it might be even more beneficial for acquirers to focus on large targets with which they share synergies.

H6: The relative size of the target is likely to have a positive impact on post-M&A OP.

H6a: During the crisis, the relative size of the target will have an even stronger impact on post-M&A OP.

2.6. Target share acquired

The percentage of target share acquired in a M&A directly determines the extent to which bidding firms could exercise their control over the target (Agrawal, Jaffe, & Gershon, 1992; Jensen & Ruback, 1983; Travlos, 1987). A deal that leads to a majority shareholding in the target enhances the likelihood of the realization of efficiency combination that could consequently lead to profitability improvement (Mantravadi & Reddy, 2008). Consistent with previous hypothesis on the size of the target, this effect is likely to be more acute during the crisis when bidders want to derive potential synergies from their M&As.

H7: The percentage of target share acquired has a positive impact on post-M&A OP.

H7a: During the crisis, the percentage of target acquired will have an even stronger impact on post-M&A OP.

2.7. Friendly versus neutral M&As

Friendly M&As, i.e., agreed between acquirer and target managements, are likely to create synergies as compared to other types of deals (Morck, Shleifer, & Vishny, 1988; Sheng, 1996). Typically M&As invoke a higher degree of friendly managerial reactions (Huang & Walkling, 1987). In their study, authors find that 38% of the target management took neutral position as compared to 49% of target management who expressed favorable attitude. Authors have also argued that companies from emerging economies like India and China prefer friendly deals over other types of deals (Sun, Peng, Ren, & Yan, 2012). We argue that this can be equally true for ASEAN countries. This is especially true during the crisis, where friendly deals can help quick assimilation of synergies between the merging companies.

H8: Friendly M&As will experience performance improvements as opposed to non-friendly deals.

H8a: During the crisis, friendly deals will experience stronger performance improvements.

3. Data and methodology

3.1. Sample selection

Our study focuses on M&A activity within ASEAN countries over the period 2001-2012. We include domestic as well as cross-border transactions, and both target and bidding firms are publicly listed companies. The details of each transaction were extracted from the SDC Platinum of Thomson Financial Securities Data Worldwide Mergers and Acquisitions Database. The data includes transaction value, percentage of shares acquired and owned after the transaction, country and industry of each bidder and target, deal attitude and mode of payment. Financial deals are excluded. We also eliminate transactions from multiple bidders who are involved in more than one deal over the sample period.

In addition, to be included in the sample, bidding and target firms need to have accounting data available for at least one year before and after the takeover. OSIRIS database

was used to collect accounting data up to three years prior and subsequent to each transaction. Hence we selected deals that were completed between 2004 and 2009 and collected performance data for the years 2001-2012. This procedure is consistent with empirical research in this area as OP induced from corporate takeovers might not materialize for several years (Healy et al., 1992).

3.2. Sample description

Table 2 presents descriptive statistics of our final sample of 57 M&As. Panel A shows a drop in M&A activity in ASEAN in 2006-2007, although the total transaction value is highest in 2007. M&A activity is recorded in six ASEAN countries. Panel B shows that Malaysia is the most prolific acquirer country (30% of deals). For the mode of payment, a third of the takeovers are undertaken using cash only (Panel C). Regarding takeover strategies (Panel D), the sample is divided between focusing (30%) and diversifying transactions (70%). Moreover, the majority of transactions in our sample involve relatively large targets (Panel E). Table 2 Panel F shows that domestic deals dominate our ASEAN sample as only 19% of the deals involve cross-border takeovers.

We define cash reserves as cash equivalents of the bidder divided by its book value of total assets, measured in the year prior to the transaction. Table 2 Panel G shows that the level of cash reserves is fairly distributed among deals and that M&As completed by cash-rich bidders are not uncommon. Also, there is an equal distribution between majority deals where bidders end up owning more than 50% of the target and minority deals where less than 50% of the target is controlled after the M&A (Panel H). In Panel I, we split the sample into three sub-periods, Pre-crisis includes M&As completed from 2004 to 2006; Crisis includes transactions from 2007 and 2008; and Post-crisis comprises deals in 2009. Finally, Panel J shows that 75% of ASEAN deals are friendly, which is consistent with our discussion in section 2.7.

Table 2: Sample description

Panel A: Completion year

	N° of deals	Percent (%)	Deal value ($ million)	Percent (%)
2004	13	23%	429	8%
2005	10	17%	414	8%
2006	5	9%	646	12%
2007	4	7%	2482	47%
2008	14	25%	1024	19%
2009	11	19%	333	6%

	N° of deals	Percent (%)		N° of deals	Percent (%)
Panel B: Acquirer country			**Panel F: Location of deals**		
Malaysia	17	30%	Domestic	46	81%
Thailand	14	24%	Cross-border	11	19%
Singapore	12	21%			
Indonesia	5	9%	**Panel G: Pre-M&A bidder cash reserves**		
Vietnam	5	9%	Cash Q1	15	26%
Philippines	4	7%	Cash Q2	17	30%
			Cash Q3	10	18%
Panel C: Mode of payment			Cash Q4	15	26%
Cash only	19	33%			
Stock only	6	11%	**Panel H: Target share acquired**		
Mixed	5	9%	Minority deals	27	47%
Other/unknown	27	47%	Majority deals	30	53%
Panel D: Industry relatedness			**Panel I: Financial crisis**		
Consolidation	17	30%	Pre-crisis	28	49%
Diversification	40	70%	Crisis	18	32%
			Post-crisis	11	19%
Panel E: Relative size of target					
Small target	14	25%	**Panel J: Deal attitude**		
Medium target	12	21%	Friendly	43	75%
Large target	31	54%	Neutral	14	25%

*Note*s: In Panel E, small, medium and large mean that the size of the target (as a proportion of the size of the acquirer) is less than 10%, between 10-20% and more than 20%, respectively. In Panel G, the four quartiles of pre-M&A cash reserves are Q1: less than 5%; Q2: 5-10%; Q3: 10-15% and Q4: more than 15%.

3.3. Performance measures

Several post-M&A accounting-based performance measures have been used in extant literature (Haleblian & Finkelstein, 1999; Hitt, Harrison, Ireland, & Best, 1998; Papadakis & Thanos, 2010; Schoenberg, 2006; Zollo & Meier, 2008). The rationale for using accounting-

based measures to evaluate the post-M&A performance relies on the assumption that most deals are geared towards deriving higher performance for merging firms and this synergy between firms is best observed by looking at long-term accounting measures such as the return on assets (Hitt et al., 1998; Papadakis & Thanos, 2010; Thanos & Papadakis, 2012b). Thanos and Papadakis (2012a) suggest that one of the prime motives of M&As is to exploit the potential synergies between the merging companies and most of these synergies take number of years to realize. Thus, the M&A performance can be visible in accounting-based measures over a period of time. Also, authors have argued that using multiple measures in a single study gives a more holistic view of the post-M&A performance (Thanos & Papadakis, 2012a). Hence, following Bertrand and Betschinger (2012), Papadakis and Thanos (2010) and Boisot and Child (1988), we calculate two measures of post-M&A performance: the combined return on assets (ROA), measuring the firms' profitability, and the combined sales margin, providing a picture of the firms' effectiveness (Thanos & Papadakis, 2012a).

We utilize the pretax cash flow as accounting-based performance measure, which is defined as sales, minus cost of goods sold and selling, general, administrative expenses, plus depreciation (Healy et al., 1992; Sudarsanam, 2003). Rather than using raw operating cash flow, the usual approach is to deflate them before and after the deal, in order to make financial ratios comparable between companies and over time. Common bases used to scale operating cash flows are the book value of assets and sales (Clark & Ofek, 1994). Hence we calculate two cash flow returns of the combined firm (i) for each year (t):

Return on assets $ROA_{i,t} = \frac{CF_{i,t}}{ASSETS_{i,t}}$

Sales margin $MARGIN_{i,t} = \frac{CF_{i,t}}{SALES_{i,t}}$

where *CF* is the pretax cash flow (EBITDA), *ASSETS* is the book value of total assets and *SALES* is the total revenues of the combined firm at the end of the year. For the years before the M&A, we aggregate accounting figures of target and bidding firms. Following test

techniques designed by Martynova et al. (2007), pre-M&A cash flow returns of the combined firm are calculated as the sum of cash flows of both firms scaled by the sum of their total assets or sales at the end of the year.

We do provide a cautionary note that our measures are not without limitations as highlighted by several authors (see Papadakis & Thanos, 2010 for a review). The main concern about using such accounting measures is the fact that they represent aggregate data for the whole organization (Chenhall & Langfield-Smith, 2007). Yet, given the context of our study which is similar to the one observed in Papadakis and Thanos (2010), i.e., similar to their study the M&A market in consideration in this study is a relatively new phenomenon, and thus, the M&A-related decision-making might be more intuitive than analytical. Also, given the low M&A intensity of our sampled firms which do not engage in multiple M&A activities during the period of our study, we believe that there are potentially few confounding events than those observed for UK and USA firms undertaking M&A activities.

3.4. Performance benchmarks

In order to isolate the impact of the M&A on OP, we need to find a relevant benchmark for each transaction. We use two benchmarks selected on the basis of industry, size and pre-M&A performance. Our first benchmark controls for industry effects (Healy et al., 1992). Hence, a separate industry portfolio is formed for each acquirer and target firm, which consists of all firms with the same two digits SIC code. To control for industry size, the pool of firms is reconstructed every year. The firm with the median value of operating cash flow return is then selected as the industry median control firm. Our second benchmark also controls for firm size as well as pre-M&A performance (Dimson & Marsh, 1986; Ghosh, 2001). To construct industry, size and pre-M&A performance benchmarks, we first group firms by industry. Then, only firms with size (book value of total assets) that falls within the same quartile as the sample firms are retained. Finally, the firms with the profitability return

closest to our sample firms are selected as control benchmarks. Our sample firms are carefully removed from the benchmark portfolios.

For each deal, the median values of OP before and after the M&A (for both sample and control firms) are selected. Then the adjusted OP is calculated by subtracting the median performance of control firms from that of sample firms.

Two performance measures and two control benchmarks give us four adjusted measures of OP: *IAROA* is the industry-adjusted return on assets, *IAMARGIN* is the industry-adjusted sales margin, *ISPAROA* is the return on assets adjusted for industry, size and pre-M&A performance, and *ISPAMARGIN* is the sales margin adjusted for industry, size and pre-M&A performance.

$$IAROA_i = median\ ROA_{i,t} - median\ ROA_{ind\_peer,t}$$

$$IAMARGIN_i = median\ MARGIN_{i,t} - median\ MARGIN_{ind\_peer,t}$$

$$ISPAROA_i = median\ ROA_{i,t} - median\ ROA_{ind\_size\_perf\_peer,t}$$

$$ISPAMARGIN_i = median\ MARGIN_{i,t} - median\ MARGIN_{ind\_size\_perf\_peer,t}$$

Each performance measure is calculated before and after the transaction, and the Wilcoxon signed rank test will be employed to test whether the change in adjusted profitability of the combined firm is statistically significant following the M&A.

3.5. Cross-sectional analysis

We then perform a multivariate analysis to look at the effect of each variable on our adjusted performance measures. Hence we regress our four measures of post-M&A OP on various deal characteristics and control variables, based on the following cross-sectional OLS model:

$$ADJ\_PERF_i(post) = \alpha_0 + \alpha_1 ADJ\_PERF_i(pre) + \alpha_2 STOCK_i + \alpha_3 SAMEIND_i + \alpha_4 CB_i + \alpha_5 CASH\_RESERVE_i + \alpha_6 RELATIVESIZE_i + \alpha_7 PERC\_OWNED_i + \alpha_8 FRIENDLY_i + \alpha_9 CRISIS_i + \varepsilon_i$$

where $ADJ\_PERF_i(post)$ is the post-M&A adjusted performance of the combined firm (measured by $IAROA_i$, $IAMARGIN_i$, $ISPAROA_i$, and $ISPAMARGIN_i$) and $ADJ\_PERF_i(pre)$ is the pre-M&A adjusted performance of the combined firm. $STOCK_i$ is a dummy variable equal to one when the deal is all stock financed, zero otherwise (we alternatively use $CASH_i$ as a dummy capturing all cash-financed deals). $SAMEIND_i$ is a dummy variable taking the value one when both bidder and target firms have same first two SIC digits. CB_i is a dummy equal to one for cross-border deals, zero otherwise. $CASH\_RESERVE_i$ is the level of pre-M&A cash reserves of the acquirer as defined in section 3.2. $RELATIVESIZE_i$ measures the size of the target relative to the size of the bidder. $PERC\_OWNED_i$ represents the percentage of target share owned after the transaction. $FRIENDLY_i$ is a dummy variable which equals one for friendly deals, zero otherwise. Finally, $CRISIS_i$ is a dummy capturing the effect of the global crisis, i.e., it is equal to one for deals completed in 2007 and 2008.

We also investigate the combined impact of the crisis and deal characteristics by interacting the dummy *CRISIS* with all other variables in the model.

4. Results and Discussion

4.1. Change in operating performance

Table 3 shows the post-M&A changes in OP for our different performance measures. Specifically, findings indicate that M&As in ASEAN countries have a detrimental impact on both raw performance and adjusted performance of merging firms. This decrease in OP is significant for *IAROA* (equal to -2.25%), which is consistent with previous empirical studies (Clark & Ofek, 1994; Dickerson, Gibson, & Tsakalotos, 1997). However, the fact that other measures do not yield any significant difference between pre- and post-M&A performance supports the conjecture of Sharma and Ho (2002).

Table 3: Changes in operating performance

	Pre-M&A	Post-M&A	Difference
Raw performance			
ROA	10.58	9.53	-0.55
MARGIN	13.86	14.11	-0.07
Industry-adjusted performance			
IAROA	1.60 [(a)]	-0.33	-2.25**
	(38)	(25)	(17)
IAMARGIN	1.75 [(b)]	0.96 [(c)]	-0.69
	(31)	(31)	(26)
Performance adjusted for industry, size and pre-M&A performance			
ISPAROA	-0.26	-0.53	-1.04
	(28)	(27)	(27)
ISPAMARGIN	-0.78	-0.95	2.24
	(26)	(25)	(32)

Notes: Percentage of positive values is reported in brackets.
[(a)]/[(b)]/[(c)] significance at 1%, 5%, 10% using Wilcoxon ranked test which shows that combined firm's performance is significantly different from benchmark's performance.
***/**/* significance at 1%, 5%, 10% using Wilcoxon ranked test which shows that the median post-M&A performance is significant different from the median pre-M&A performance.

Another important finding presented in Table 3 is that merging firms significantly outperform their respective industry benchmark before the M&A (+1.6% for *IAROA* and +1.75% for *IAMARGIN*). This implies that, on average, firms in ASEAN countries are likely to engage in M&As during a period when they experience a superior level of OP relative to the industry. For the years subsequent to the transaction, merging firms continue to retain a higher level of performance (measured by *IAMARGIN*) but to a smaller extent. This finding is in line with empirical evidence from other studies (Heron & Lie, 2002; Kruse et al., 2007; Martynova et al., 2007; Rahman & Limmack, 2004) and reinforces the suggestions of Ghosh (2001) that empirical studies should take into account the pre-event performance of merging firms when selecting control benchmarks.

Table 4: Deal characteristics and changes in operating performance

	IAROA	IAMARGIN	ISPAROA	ISPAMARGIN
Cash only	-3.2**	-2.9	-2.9	-3
Mixed	-1.7	-1.2	4.2	3.3**
Stock only	-3.5	0.8	-1.8	2.6
Diff (Cash - Stock)	0.3	-3.7	-1.1	-5.6
Consolidation	-1.9	-1.4	1.7	2.6
Diversification	-2.5**	1.1	-1.4	2.1
Diff (Cons - Div)	0.6	-2.5	3.1	0.5
Large target	-2.2**	-1.4	-0.5	1.9
Medium target	-1.4	3.2***	2.3	3.6
Small target	-2.9	-2	-2.8	2.1
Diff (Large - Small)	0.7	0.6	2.3	-0.2
Cross-border	-1.9	-1.7	-1	2.8
Domestic	-2.3**	-0.4	-1.2	2.1
Diff (CB - Domestic)	0.4	-1.3	0.2	0.7
Cash Q1	-3.0**	-2	-2.5	-3.2
Cash Q2	-1.1	-1.7	3.0**	1.9
Cash Q3	-2.2	-0.4	-1.9	2.7
Cash Q4	-1.1	3.3	-1.6	7.8
Diff (Q4 - Q1)	1.9	5.3	0.9	11
Minority deals	-1.9**	2.9	-2.5	2.8
Majority deals	-2.3	-1.2	0.4	1.9
Diff (Minority - Majority)	0.4	4.1*	-2.9	0.9
Friendly deals	-2.3**	-0.4	-1.1	2.7*
Neutral deals	-2	-2.1	0	-1.6
Diff (Friendly - Neutral)	-0.2	1.7	-1.1	4.4*
Pre-crisis	-2.8**	-2.2	-1.5	-0.5
Crisis	-0.6	3.2**	5.4	6.0**
Post-crisis	-3.2	1.1	4.6	0.6
Diff (Post - Pre)	-0.4	3.3	6.1**	1.1

Notes: Small, medium and large target mean that the size of the target (as a proportion of the size of the acquirer) is less than 10%, between 10-20% and more than 20%, respectively. The four quartiles of pre-M&A cash reserves are Q1: less than 5%; Q2: 5-10%; Q3: 10-15% and Q4: more than 15%.
***/**/* Significant at 1%, 5%, 10% levels. Wilcoxon ranked test was used to test for the statistical significance of the change in operating performance (median post-M&A performance minus median pre-M&A performance). Mann-Whitney test was used to test for the statistical difference in performance changes between sub-groups of deals.

4.2. Deal characteristics

This section focuses on discovering the sources of OP of merging firms. Changes in OP for different sub-groups of deals are presented in Table 4.

First, the adjusted profitability does not differ significantly between cash-financed and stock-financed M&As, which is consistent with prior empirical studies (Healy et al., 1992; Heron & Lie, 2002; Martynova et al., 2007; Powell & Stark, 2005; Sharma & Ho, 2002). Also, the combined offer of cash and stock is associated with significantly positive changes in performance (*ISPAMARGIN*). Second, focusing M&As are not able to generate more synergistic benefits for merging firms than diversifying ones, consistent with previous studies (Fowler & Schmidt, 1989; Martynova et al., 2007; Powell & Stark, 2005). Third, the change in OP is statistically the same between small and large targets. Fourth, geographic scope of business expansion does not help explain the sequent changes in post-M&A performance in ASEAN.

Fifth, the change in OP does not significantly differ for cash-rich and cash-poor companies, which is in contrast with other studies (Harford, 1999; Martynova et al., 2007). Sixth, results for the percentage acquired do not provide any evidence that majority deals significantly outperform minority deals. We find the opposite result for *IAMARGIN*. Seventh, friendly M&As provide significantly better OP improvements when *ISPAMARGIN* is used.

Finally, we test whether economic downturn would have any impact on OP by comparing pre-crisis and post-crisis deals. Results for *ISPAROA* show that post-crisis M&As benefited from a higher increase in performance than pre-crisis transactions. Moreover, takeovers during the crisis were associated with a significant increase in sales margin (*IAMARGIN* and *ISPAMARGIN*).

Table 5: Correlation table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 IAROA(post)	1.00															
2 IAROA(pre)	0.67[3]	1.00														
3 IAMARGIN(post)	0.58[3]	0.39[3]	1.00													
4 IAMARGIN(pre)	0.45[3]	0.61[3]	0.56[3]	1.00												
5 ISPAROA(post)	0.70[3]	0.39[3]	0.41[3]	0.14	1.00											
6 ISPAROA(pre)	0.25[1]	0.67[3]	0.16	0.38[3]	0.34[2]	1.00										
7 ISPAMARGIN(post)	0.28[2]	0.10	0.72[3]	0.13	0.51[3]	0.17	1.00									
8 ISPAMARGIN(pre)	0.06	0.12	0.14	0.42[3]	0.08	0.26[2]	0.19	1.00								
9 CASH	-0.05	0.04	-0.08	0.09	0.05	0.28[2]	-0.03	0.21	1.00							
10 STOCK	0.06	0.23	-0.02	0.18	0.00	0.12[2]	-0.20	0.02	-0.24	1.00						
11 SAMEIND	0.01	-0.12	-0.07	0.03	-0.10	-0.14	0.00	0.01	0.03	-0.10	1.00					
12 CB	0.06	0.04	0.08	0.04	0.00	-0.23[1]	-0.09	-0.08	-0.06	0.12	-0.03	1.00				
13 CASH_RESERVE	0.16	0.17	0.21	0.10	0.24[1]	0.22[1]	0.25[1]	0.01	0.18	-0.14	-0.16	-0.19	1.00			
14 RELATIVESIZE	0.01	-0.07	0.18	-0.07	0.16	0.03	0.20	-0.04	-0.06	-0.11	0.03	0.18	0.12	1.00		
15 PERC_OWNED	0.04	-0.02	-0.10	-0.05	0.04	-0.03	-0.08	-0.06	0.00	0.48[3]	0.29[2]	0.13	-0.15	-0.15	1.00	
16 FRIENDLY	-0.01	0.03	-0.01	-0.13	0.08	0.07	-0.01	-0.36[3]	-0.12	0.20	0.02	0.07	0.11	0.09	0.25	1.00
17 CRISIS	0.07	0.00	0.20	0.05	0.13	-0.17	0.13	-0.13	-0.24[1]	0.01	-0.20	0.05	0.11	0.15	-0.17	0.04

Significance level of each correlation coefficient: [3] $p<0.01$, [2] $p<0.05$, [1] $p<0.1$

Table 6: Cross-sectional analysis of post-M&A operating performance

	IAROA(post)		IAMARGIN(post)		ISPAROA(post)		ISPAMARGIN(post)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ADJ_PERF(pre)	1.020***	1.138***	0.819***	0.761***	0.588**	0.613*	0.286	0.198
	(0.165)	(0.180)	(0.222)	(0.210)	(0.289)	(0.318)	(0.254)	(0.272)
CASH	-1.682		-3.786		-0.655		-3.425	
	(2.077)		(3.237)		(2.396)		(4.372)	
STOCK		2.043		3.744		0.069		2.011
		(2.728)		(3.862)		(2.968)		(5.391)
CRISIS*STOCK		1.815		6.116		6.120		17.67
		(4.448)		(6.394)		(5.673)		(11.22)
SAMEIND	2.004	3.668	-1.346	1.156	-0.563	-1.077	2.183	0.349
	(2.701)	(3.880)	(4.234)	(5.243)	(2.559)	(3.379)	(5.269)	(6.495)
CRISIS*SAMEIND		-4.636		-18.12**		1.414		-12.93
		(4.791)		(8.465)		(3.897)		(10.50)
CB	0.809	1.566	1.303	3.016	1.684	2.548	-3.404	3.668
	(2.083)	(2.941)	(4.915)	(4.676)	(2.757)	(3.436)	(8.035)	(6.184)
CRISIS*CB		-5.079		-12.66		-4.655		-32.94*
		(4.166)		(11.44)		(5.504)		(19.46)
CASH_RESERVE	0.0648	0.105	0.129	0.246	0.117	0.132	0.299	0.374
	(0.110)	(0.168)	(0.145)	(0.158)	(0.181)	(0.287)	(0.272)	(0.362)
CRISIS*CASH_RESERVE		-0.291		-0.999***		-0.251		-1.290**
		(0.215)		(0.304)		(0.333)		(0.574)
RELATIVESIZE	0.003	-0.013	0.024	0.006	0.009	-0.002	0.029	0.004
	(0.008)	(0.011)	(0.022)	(0.015)	(0.008)	(0.009)	(0.030)	(0.022)
CRISIS*RELATIVESIZE		0.050***		0.081*		0.037*		0.122
		(0.014)		(0.047)		(0.019)		(0.077)
PERC_OWNED	0.019	-0.027	-0.006	-0.006	0.034	0.026	-0.003	0.043
	(0.033)	(0.049)	(0.065)	(0.074)	(0.042)	(0.041)	(0.095)	(0.092)
CRISIS*PERC_OWNED		0.042		-0.161		-0.016		-0.280
		(0.069)		(0.113)		(0.084)		(0.202)

FRIENDLY	-1.651	-0.832	0.682	-6.357	-0.523	-0.501	1.262	-7.645
	(2.669)	(2.864)	(3.653)	(4.449)	(2.455)	(2.558)	(4.444)	(6.065)
CRISIS*FRIENDLY		-0.548		22.38***		0.104		20.46**
		(4.477)		(6.244)		(4.859)		(9.297)
CRISIS	1.246		3.035		3.298		4.313	
	(1.889)		(4.344)		(2.632)		(6.709)	
Constant	-2.544	-3.129	-1.094	-0.509	-4.130	-3.473	-4.806	-1.963
	(3.556)	(2.876)	(5.170)	(4.130)	(3.252)	(4.011)	(6.561)	(7.744)
Observations	57	57	56	56	57	57	56	56
R-squared	0.480	0.560	0.412	0.608	0.203	0.260	0.150	0.343
Adjusted R-squared	0.381	0.399	0.297	0.461	0.051	-0.011	-0.016	0.097

Notes: Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

4.3. Cross-sectional analysis

In this section, we explore the combined effect of the determinants of the post-M&A performance in a multivariate framework. Table 5 presents the correlation coefficients (and statistical significance) among all our variables. We do not observe any significant correlations that could bias our analysis.

Table 6 presents the coefficient estimates from the cross-sectional analysis for each performance measure and for different combinations of the independent variables. The dependent variable is the post-M&A adjusted OP (*IAROA*, *IAMARGIN*, *ISPAROA*, and *ISPAMARGIN*) and *ADJ_PERF(pre)* is the corresponding pre-M&A performance. In this analysis, robust standard errors (White estimator) were used. Models with odd numbers report coefficient estimates without interaction between variables, and even-numbered models report the results including crisis interaction terms. Across specifications, pre-M&A OP has a strong and positive impact on post-M&A performance, which is expected. The fact that the statistical significance of *ADJ_PERF(pre)* decreases for *ISPAROA* and disappears for *ISPAMARGIN* is also expected, as these measures of performance are already adjusted for pre-M&A performance. Over the entire sample period, we observe that none of the deal characteristics have a significant impact on post-M&A OP. Nevertheless, it is interesting to note that this changes during the crisis period. Indeed, several coefficients become statistically significant when deal characteristics are interacted with the *CRISIS* dummy.

On one side, *SAMEIND*, *CB* and *CASH_RESERVE* have a negative impact on post-M&A performance (measured by sales margin) for deals completed during the crisis. These results are consistent with our hypotheses H3a, H4a and H5a, as well as previous empirical evidence (Harford, 1999; Kruse et al., 2007; Martynova et al., 2007; Moeller & Schlingemann, 2004). Hence, during bad economic times, ASEAN firms should concentrate

on diversifying M&As within their own borders. Moreover, during crisis, a large amount of cash holding is particularly detrimental for acquirers.

On the other side, *RELATIVESIZE* and *FRIENDLY* both impact positively the post-M&A performance of transactions completed in 2007-2008. These findings support our hypotheses H6a and H8a, as well as existing studies (Martynova et al., 2007; Morck et al., 1988; Shelton, 1988; Sun et al., 2012). ASEAN firms are able to generate extra performance from friendly M&As with large targets only during the crisis period. Finally, we do not find support for H2a (stock-financed deals) and H7a (percentage of target owned).

4.4. Robustness checks

We undertook a series of tests to verify the robustness of our results. First, we used *CASH* as an explanatory variable instead of *STOCK*. The interaction between *CASH* and *CRISIS* doesn't offer any statistical significance. Similarly, we removed from the regression the explanatory variables that were not significant, namely *STOCK* (*CASH*) and *PERC_ OWNED*. Our results remain similar. Second, we removed the control variable *ADJ_PERF(pre)* from the regression to account for the fact that *ISPAROA* and *ISPAMARGIN* are already adjusted for pre-M&A performance. Results are similar to those presented in the paper. Finally, instead of regressing *ADJ_PERF(post)* on *ADJ_PERF(pre)* and other variables, we directly used the difference in adjusted performance as the dependent variable. Following other studies (Ramaswamy, 1997; Zollo & Singh, 2004), we calculated for each deal the difference between post-M&A and pre-M&A performance and tried to explain the change using our explanatory variables. Again our conclusions remain unchanged.

5. Concluding remarks

This paper contributes to the literature on mergers and acquisitions (M&As) in emerging markets by investigating post-M&A performance of ASEAN companies over 2001-2012. Using various measures of adjusted operating performance (OP) and conducting both

univariate and multivariate analyses, we find, on average, a deterioration of post-M&A performance of the combined firms as measured by the return on assets. This result is consistent with previous studies where authors find a negative impact of M&A activity (Alexandridis et al., 2012; Bertrand & Betschinger, 2012; Brouthers & Brouthers, 2000; Danbolt, 1995; Indro & Richards, 2007; Kindra et al., 1998; Kumar & Bansal, 2008; Pawaskar, 2001; Qiu & Wang, 2011; Shelton, 1988; Shimizu et al., 2004; Zhan & Ozawa, 2001). When taking into consideration the impact of the 2007-2008 financial crisis, from the multivariate analysis, we find that the decrease in performance is particularly significant for M&As that are engaged in cross-border deals and have high cash reserves and observe negative effect of diversification for deals during this period. These findings are consistent with prior works (Jarrell & Poulsen, 1989; OECD, 2010; Sheng, 1996). We find positive impact of relative size and friendly deals on post-M&A OP (Alexandridis et al., 2012; Jarrell & Poulsen, 1989; Morck et al., 1988; Sun et al., 2012). This result is particularly interesting as it shows how the crisis can affect the long-term performance of M&As in ASEAN countries. Moreover, our results help explain that inconsistent findings across previous empirical studies may be the result of differences in adjustment bases, performance measures or model specifications. For instance, our results significantly differ when using return on assets and sales margin.

Our findings have several managerial implications. In times of crisis, managers can be expected to do well if they focus on their domestic markets and access domestic firms for M&As. The argument in favor of this domestic consolidation would be the growth in market power which might help firms weather the crisis in their business environment. Also, during the crisis, managers must prudently focus on strengthening their capabilities in their core sector and avoiding unnecessary diversification through M&As. Finally, managers might want to focus on deals that are friendly and where the target's board and employees are

amicable to M&A. Indeed friendly deals help in the easier integration of the two companies and managers can work proactively to derive sooner synergistic gains from their M&A activity.

It is acknowledged that the current study has a number of limitations; therefore the results may not provide a comprehensive picture in understanding the long-term OP of M&As. In particular, companies selected in this study were restricted to publicly listed firms. Thus, future studies should try to include private acquirers as well as targets. This will help identify the differences between the M&A dynamics of private and public acquirers and targets. Moreover, this study used extant methodology of analyzing changes in OP three years following the M&A. Yet, it is not clear whether merging companies can derive all the synergistic value within this timeframe, and studies over a longer period will provide an insight into M&A performance in ASEAN. Hence, we suggest that future research should look to undertake an analysis over a longer time horizon, e.g. up to 7 years. In this study we present a holistic view of the M&A activity within ASEAN region, and do not examine the global M&A activities of firms from this region. For instance do ASEAN firms engage more actively in M&As within this region as compared to the rest of the world? Also, we do not investigate the micro-foundations of these M&A activities Are there any micro-founded reasons for this? For example are managers in this region more likely to link through ethnic communities and diaspora (e.g. Chinese ethnic communities) and engage in regional M&A activities than managers in other regions?

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