

Do Malaysian focus-increasing spin-off firms underperform?

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Abstract

This paper investigates whether increased corporate focus in the event of a spin-off is associated with the short-run and long-run share return out-performance during the period January 1980 to April 2011. By looking at the share return performance of both focus-increasing and non focus-increasing parent firms, we find evidence against the claims of the focus-increasing hypothesis. Our results show that focus-increasing parent firms significantly underperformed their counterparts in the non focus-increasing sub-sample during the few days surrounding the announcement date even after adjustment for size. We also observe that spin-offs by the focus-increasing entities fail to demonstrate abnormal performance in the long-run period (three-years).

Key words: Spin-offs, Share returns performance, Market efficiency, Focus

JEL Classification: G14; G32

1.0 Introduction

A crucial question in Malaysian corporate spin-off is whether the act of spinning-off units outside the core business creates wealth for shareholders. This paper fails to demonstrate abnormal performance both in the short-run and long-run periods.

It has been widely established in the US context (e.g. Bhagat et al., 1990; Shleifer & Vishny, 1991; Markides, 1992; Liebeskind & Opler, 1993; Comment & Jarell, 1995; Berger & Ofek, 1995; Denis et al., 1997) and in the UK (e.g. Haynes et al., 2000) that focusing on core business through corporate divestment has become a commonplace strategy since in the early 1980s. These studies plausibly argue that the disposition of assets outside the core business (or focus-increasing) of a firm is viewed by the market as value-increasing, whilst the disposition of the assets of core business (or non focus-increasing) is not. The decision to increase focus can be implemented in several forms, but managers generally take this action either by selling unrelated assets to the third parties or by spinning-off unrelated subsidiaries to the existing shareholders (Desai & Jain, 1999).

In a context of a spin-off, earlier studies in other countries suggest that focus-increasing spin-offs are associated with positive and larger announcement period abnormal returns than non focus-increasing spin-offs (e.g., Daley et al., 1997; Desai & Jain, 1999; Veld & Veld-Merkouvela, 2001; Murray, 2008). However, evidence on the long-run share returns performance of these spin-off firms is more mixed. Therefore, the present study fills the gap in the literature by exploring how Malaysian focus-increasing spin-offs and non focus-increasing spin-offs perform in both the long-run and the short-run.

It makes several contributions. First, as there is no extant evidence on the influence of corporate focus in the event of a spin-off in the Malaysia capital market the present study adds to a growing body of international evidence in corporate spin-offs decision. Second, we employ two novel market indices: Malaysia All-Shares Equal Weight Index (MAS-EWI) and Malaysia All-Shares Value Weight Index (MAS-VWI)¹. Both benchmarks are more comprehensive than any used in previous Malaysian event studies which commonly adopt two popular market indices, namely FTSE Kuala Lumpur Composite Index (KLCI) and FTSE Bursa Malaysia EMAS Index which fail to represent the broader Malaysia market². Third, we use Cumulative Abnormal Returns (CARs), Buy-and-Hold Abnormal Returns (BHARs) and Market Model as the abnormal return metrics to calculate share return performance whereas previous international studies used only one of these models in their analysis.

In the following we define a corporate spin-off as occurring when the shares of a subsidiary are distributed on a pro-rata basis to the original shareholders of the parent firms. Following the transaction, the subsidiary becomes an independent firm; therefore the parent firm has no controlling relationship with it. The former parent shareholders, however now own two different securities; the shares from the parent and the shares from the newly spun-off firm.

Spin-off activity by Malaysian listed firms began in the late 1980s in tandem with the development of the capital market. It has gathered momentum with increasing numbers of corporate spin-offs during the bull-run period of 1993 to 1994; and also in the years following the 1997 crisis. Out of 36 cases, 67% of the spin-off announcements occurred during the bear periods from 1999 to 2006. In the booming economy (prior to 1997 crisis) a number of

¹ Both benchmarks cover all sizes of all firms (based on the market capitalization).

² Each benchmark comprises of different cohorts of firms based on market capitalization. The FTSE Bursa Malaysia KLCI Index consists of 30 largest firms in the market, whilst the FTSE Bursa Malaysia EMAS Index constitutes the top 100 largest firms and 261 small capitalization firms (as at 16th February 2011).

Malaysian businesses expanded and diversified extensively (Fatimah, 2001; Ayoib et al., 2003; Zainal Abidin, 2005). Using 1995 data, Ayoib et al. (2003) find that 53% of the Malaysian firms in their sample were multi-segment firms, involved in several industries. Despite having diversification some economic and strategic value (Choo Kah Yean, 1999), over time these firms may be expanded beyond their means and capability. A number ventured into areas unrelated to their core business in which they had little or no expertise and experience at all (Choo Kah Yean, 1999; Zainal Abidin, 2005). Indeed, within our sample we witness a consumer product firm venturing into a heavy industry business; a finance firm owning a technology firm, and other businesses. Excessive leverage, lack of management expertise and ambitious involvement in unrelated businesses coupled with deteriorating market conditions (1997 crisis) led to the failure of many such businesses prompting them to engage in divestment (Zainal Abidin, 2005). The most two common methods of refocusing being asset sell-offs and corporate spin-offs. Fatimah (2001) points to diversification into unrelated areas in which firms have no expertise as one of the causes of the 1997 financial crisis.

Through a case-by-case review from financial press announcements and other documents (for example firm annual report) we discovered that the spin-off event in Malaysia is claimed by most managers to be motivated by operating efficiency gains through increased corporate focus. Managers spin-off their unrelated activities to concentrate on their core businesses in order to eliminate negative synergies between the divested assets (spun-offs) and the remaining assets (parents). Evidence in other countries suggests that the action leads to better share performance (Daley et al., 1997; Desai & Jain, 1999; Veld & Veld-Merkuovela, 2001; Murray, 2008).

Out of 36 Malaysian spin-off firms completed between January 1980 and April 2008, 19 are identified as focus-increasing and 17 are classified as non focus-increasing. In a previous study, examining 85 Malaysian firms, only some of which engaged in spin-offs, Yoon and Ariff (2007) find a significant positive cumulative average abnormal return (CAAR) of +22.7% in a two-day (day -1 to day 0) event window surrounding the announcement date during the period of 1986 to 2003. It is unfortunate that they do not study long-run share return performance of spin-off firms. It is also unfortunate that the return performance of focus-increasing spin-offs is not examined. Therefore the present work represents the first comprehensive study of corporate spin-offs in Malaysia capital market in the short and long-run periods against the market benchmarks of MAS-EWI and MAS-VWI.

Our study finds that: (1) before size adjustment, focus-increasing parent firms significantly underperformed their counterparts in the non focus-increasing (as low as +6.88%) in the short-run period surrounding the spin-offs announcement day (from day -20 through day +20); (2) before size adjustment, the overall results for both focus-increasing and non focus-increasing spin-off firms (either parents, spun-offs or combined firms) are mixed and inconclusive in the long-run period; (3) after comprehensive size adjustment, our results confirm the underperformance of focus-increasing parent firms relative to their peers in the non focus-increasing over the short-run; (4) after comprehensive size adjustment in the three-year holding period, we fail to find abnormal performance for the focus-increasing parents, spun-offs and combined firms; and (5) using a full sample of spin-off firms, we find spun-offs create value in the short-run even after an adjustment for size, but we do not find evidence of long-run market abnormal performance after allowing for size.

The remainder of the paper is organized as follows. Section 2 describes a brief literature review concerning the short and long-run share returns performance of spin-off firms; and including both focus and non focus-increasing sub-samples. Section 3 explains the sample selection and data. Section 4 describes the methodologies used in the present study. Section 5 presents the results for both short and long-run share returns performance of Malaysian spin-off firms. Section 6 concludes the paper.

2.0 Literature Review

A spin-off effect has been shown in the US and European studies (e.g. Hite & Owers, 1983; Schipper & Smith, 1983; Miles & Rosenfeld, 1983; Rosenfeld, 1984; Cusatis et al., 1993; Desai & Jain, 1999; Krishnaswami & Subramaniam, 1999; Veld & Veld Mekuovela, 2004; Kirchmaier, 2003). The US studies generally show that investors who purchase and then sell shares in the spin-off announcement window (short-run period) and those who hold for three year periods following the completion of spin-offs (long-run period) gain high positive returns. In Europe the evidence is more mixed with three-year holding period studies (e.g. Veld & Veld Merkuovela, 2004; Kirchmaier, 2003) failing to find evidence that spin-offs create value.

Using 146 non-taxable³ and voluntary US spin-off firms over the 1965-1988 periods, Cusatis et al. (1993) investigate value creation through spin-offs by measuring the share return performance of parent, spun-off, and combined firms. They use the buy and hold investment strategy against the benchmark of equal-weighted matched-firms portfolios (adjusted to the size and industry). They report significantly positive abnormal returns for spun-offs, their parents and combined firms in the three-year holding periods.

³ See Cusatis et al. (1993, p. 295).

Similarly, Desai and Jain (1999) compute the buy-and-hold abnormal returns of 155 US firms using a matching firm methodology for the three-year holding periods. They show results of combined, spun-off and parent firms separately for focus-increasing and non focus-increasing sub-samples. Consistent with Cusatis et al. (1993), they find evidence of outperformance for both combined and spun-off firms relative to their equal-weighted matching firms in the three-year holding period following the completion of the spin-offs. The average buy-and-hold abnormal returns in the three-year holding period are positively significant, +19.82% and +32.31% for combined and spun-off firms, respectively. However, for parent firms, the result shows a positive but insignificant abnormal return of +15.18% in the three-year holding period. Desai and Jain also find spin-offs by focus-increasing firms produce significant larger abnormal returns than their counterparts in the non focus-increasing by a considerable margin. In the three-day announcement period (day -1 through day +1), focus-increasing parent firms statistically outperformed non focus-increasing parent firms, on average of +4.45% compared with +2.17%. Similarly, they observe the outperformance of focus-increasing parents and spun-off firms in the three-year holding period following the completion of spin-off transaction. Evidence shows that focus-increasing parent firms statistically outperformed their peers in the non focus-increasing sub-sample, on average of +25.37% compared with -10.51%. Likewise, the group of focus-increasing spun-off firms statistically outperformed the group of non focus-increasing spun-off firms, on average of +54.54% compared with -21.85%.

Veld and Veld-Merkuovela (2004) investigate the short and long-run wealth effect of 156 spin-off announcements by European firms over the period from January 1987 to September 2000. During these years, most spin-offs occurred in the United Kingdom (70), followed by Sweden (24), Germany (14) and Italy (11). The study indicates that for all countries, the

cumulative average abnormal return, CAAR is +2.62% over the event window from day -1 to day +1, significant at the 1% level. Using the equal-weighted matching-firm approach, the authors declare, after examining the share returns performance in the three-year holding period following the completion of spin-offs that parent, spun-off and combined firms insignificantly underperform their corresponding matching firms. Consistent with the finding in the US by Desai and Jain (2004), in the three-day surrounding the announcement date (day -1 through day +1), the group of focus-increasing parent firms significantly outperformed the group of non focus-increasing parent firms, on average of +3.57% compared with +0.76%. In contrast, they fail to show evidence that focus-increasing spin-off firms outperformed their counterparts in the non focus-increasing over the long-run period.

3.0 Sample Selection and Data

To ensure a comprehensive study all parent and spun-off firms traded on Bursa Malaysia from 1st January 1980 to 30th April 2008 are identified. This enables the present study to analyze one to three years' post spin-off performances up to April 2011. We identify 36 Malaysian parent firms conducting spin-offs.

Two event dates are specified for this analysis, the spin-off announcement date and the completion month of the spin-off. The announcement date is designated as the one in which the event first receives a mention in the financial press. On the other hand, the event month is defined as the month on which the new spun-off firm is listed, and trading its shares begins on Bursa Malaysia. The identities of both parent and spun-off firms are obtained from the Investors Digest and Bursa Malaysia's website. These sources of announcements are then cross-checked with the relevant press and financial announcements, for instance Nexis Business and News database, local English newspaper, individual firm's website and its

annual report. Combined firms are created by weighting the return of the parent and that of the spun-off firms by the market value of equity of the completion month of spin-offs. As a spin-off involves a pro rata distribution of shares of a subsidiary, creating combined firms provides information about the return that an investor would have realized if he had held on the shares of both parent and spun-off firms following the completion month of spin-offs (Desai and Jain, 1997). Using the Malaysia Standard Industrial Classification (MSIC) three-digit group, a spin-off is considered to be focus-increasing when both parent and its spun-off are in the same industry classification; whilst a spin-off is said to be non focus-increasing if both parent and its spun-off are in different industry classification. Six sub-samples are thus created; dividing spin-off firms into focus and non focus-increasing parents, spun-offs and combined firms, respectively. From the total sample of 36 spin-off firms, 19 are categorized as focus-increasing spin-offs and the remaining 17 are classified as non focus-increasing spin-offs.

In the case of daily data, defining $t=0$ as the announcement date, $t=-20$ days to $t=+20$ days represents the event period or observation period, and $t=-220$ days to $t=-21$ constitutes the estimation period (to apply in the Market Model for obtaining the value of alpha, α and beta, β). Share price data are collected from the Datastream database. Specifically, the data comprised of individual parent and spun-off firms' adjusted closing price (adjusted for dividends).

4.0 Methodology

To analyze short-run share return performance, we employ the Market Model (henceforth MM) and Cumulative Abnormal Returns (henceforth CARs). Buy-and-Hold Abnormal Returns (henceforth BHARs) are used to measure the share returns performance over the

long-run period. Fama (1998) in his study notes that the choice of weighting scheme depends on the hypothesis of interest to the researcher. Loughran and Ritter (2000) state that:

If one is trying to measure the abnormal returns on the firms undergoing some event, then each firm should be weighted equally.... [this] will produce point estimates that are relevant from the point of view of a manager, investor, or researcher attempting to predict the abnormal returns associated with a random event (p. 363 note 2).

Veld and Veld-Merkuovela (2004) claim that they prefer equal weighted portfolio returns to test whether the random event of spin-offs is associated with long-run superior performance. Therefore, we adopt equal weighted portfolio returns because spin-offs are random events that occur intermittently from January 1980 to April 2008.

4.1 Market Model and Cumulative Abnormal Returns (CARs) Model

Following the Market Model, the daily abnormal returns for security j of spin-off firms in event period t is computed as:

$$\hat{A}R_{jt} = R_{jt} - (\hat{\alpha}_j + \hat{\beta}_j R_{mt})$$

Where, $\hat{A}R_{jt}$ and R_{jt} are the daily abnormal return and the daily actual return of security j in event period t, respectively. R_{mt} is the daily market return of MAS-EWI and MAS-VWI in event period t. The parameters of alpha, $\hat{\alpha}_j$ and beta, $\hat{\beta}_j$ are the regression intercept and the slope of characteristic line, respectively; estimated for security j over the estimation period (e.g. 200 trading days) by running the ordinary least squares (OLS) regression.

Based on the Cumulative Abnormal Returns (CARs) Model, the performance of an individual security is adjusted to the performance of market index. Therefore, the daily abnormal returns of any security j is given as the difference between daily actual return and the corresponding daily return on the market index during period t , and are computed as follows:

$$AR_j = R_j - R_{mt}$$

The abnormal return for each security j (derived from the above two models) is observed for each day in the event period and averaged across N firms or securities using the following equation:

$$AAR_t = \frac{1}{N} \sum_{j=1}^N AR_j$$

Where, AAR_t is the daily average abnormal return in event period t and N denotes the number of securities in the sample.

Finally, the $CAAR_{(t_1, t_2)}$ is computed by summing the daily average abnormal returns, AAR_t , over days from period t_1 to period t_2 as follows:

$$CAAR_{(t_1, t_2)} = \sum_{t=t_1}^{t_2} AAR_t$$

4.2 Buy-and-Hold Abnormal Returns (BHARs)

The main justification for including BHARs for long-run abnormal returns is that this approach is able to accurately simulate the effect of a spin-off event on the investor's portfolio due to its more accurate compounding approach compared with CARs.

The three-year holding period return is examined by computing the compounded monthly Buy-and Hold Return, BHR_{jT} for both parent and spun-off firms in time t as follows:

$$BHR_{jT} = \left[\prod_{t=1}^T (1 + r_{jt}) \right] - 1$$

Where, r_{jt} is the monthly actual return on security j in event period t. T is designated as number of months in event period t.

The Buy-and-Hold Returns, BHR_{mT} for the market benchmarks, proxied by the MAS-EWI and MAS-VWI are:

$$BHR_{mT} = \left[\prod_{t=1}^T (1 + r_{mt}) \right] - 1$$

r_{mt} is the corresponding monthly index level of MAS-EWI and MAS-VWI in event period t.

The Buy-and-Hold Abnormal Returns for each security or firm in event period t are computed as:

$$BHAR_{jt} = \left[\prod_{t=1}^T (1 + r_{jt}) - 1 \right] - \left[\prod_{t=1}^T (1 + r_{mt}) - 1 \right]$$

Where, $BHAR_{jt}$ is the Buy-and-Hold Abnormal Return of security j in event period t.

4.3 The statistical tests

The statistical significance of the cumulative average abnormal returns is calculated following Brown and Warner (1980, 1985) and the t-value for the daily cumulative average abnormal returns, $CAAR_{(t_1, t_2)}$ from period t_1 to period t_2 as follows:

$$t = CAAR_{(t_1, t_2)} / \sigma(AAR_t) * T^{\frac{1}{2}}$$

Where, $CAAR_{(t_1, t_2)}$ is the daily cumulative average abnormal return from period t_1 to period t_2 , $\sigma(AAR_t)$ is the standard deviation of daily average abnormal return and T denotes the total number of days in event period t.

The test-statistic for the monthly buy and hold abnormal returns, $BHAR_{(t_1, t_2)}$ during the clustering period from t_1 to period t_2 is calculated as:

$$t = \overline{BHAR}_{(t_1, t_2)} / \sigma(BHAR_t) / T^{\frac{1}{2}}$$

Where, $BHAR_{(t_1, t_2)}$ is the monthly average buy and hold abnormal return from period t_1 to period t_2 , $\sigma(BHAR_t)$ is the standard deviation of monthly average buy and hold abnormal return in event period t and T is the total number of firms in the sample.

To measure the significant difference in abnormal returns between the sub-sample of focus-increasing and the sub-sample of non focus-increasing, we employ non parametric test Mann-Whitney Rank Test.

5.0 Results

5.1 Short-run performance of parent firms following the spin-offs announcement

Table 1 reports the percentage daily abnormal returns (adjusted to the market) on parent firms from day -20 through day +20 against the MAS-EWI and MAS-VWI benchmarks⁴.

[Table 1 about here]

Though the CARs Model and the MM exhibit insignificant results over the periods prior to the spin-off announcement; the cumulative average abnormal returns (henceforth CAARs) are persistently positive for both market benchmarks around the date of announcement.

Notably, all the abnormal return metrics (CARs Model and MM), on average demonstrate positively significant abnormal returns in the three-day event window, from day -1 through day +1. Using the MAS-EWI as a benchmark, spin-offs generate positively significant CAARs of +4.99% and +5.06% for the CARs Model and MM, respectively. When the

⁴ As a robustness check, we compute the statistical significance level using the standard deviation (employed in the t-statistics' calculation) based on the pre-event estimation period. The pre-event estimation period is estimated from day -220 to day -21. The results show significant improvements in the significance level for all event windows. However, we do not report them in the present paper.

abnormal return metrics are measured against the MAS-VWI, the CAARs for the CARs Model and MM are +5.40% and +5.04%, respectively. Both abnormal returns are positively significant at 5% level.

The presence of strongly significant positive abnormal returns for parent firms in the three-day event window (day -1 through day +1) is of considerable interest, indicating that the market anticipates considerable shareholder wealth enhancement. Although our findings are slightly greater than those documented in the US (e.g. Desai & Jain, 1999), they are comparable to several European studies (Kirchmaier, 2003; and Veld & Veld-Merkuovela, 2004).

Interestingly, we also observe that parent firms outperform both market benchmarks in the five-day event window (day +1 through day +5) following the spin-off announcement date. However, using the MAS-VWI as a benchmark, only the MM is found to show a significant CAAR of +3.88% (at the 10% level). Unfortunately neither the CARs Model nor the MM posits significant results (though both methods record positive abnormal returns) when the MAS-EWI is used as a market benchmark. So we find it difficult to conclude on this evidence alone that we have found a strongly expressed exploitable market pricing inefficiency, especially considering that transaction costs have not been deducted (see later).

Table 2 presents the share return performance of focus-increasing parent firms and non focus-increasing parent firms in the 41-trading days (day -20 through day +20) against the market benchmarks of MAS-EWI and MAS-VWI.

[Table 2 about here]

We observe that focus-increasing parent firms significantly underperformed their counterparts in the non focus-increasing sub-sample from day -20 through day +20 surrounding the spin-off announcement in both benchmarks.

Of the two models, the MM reports the worst performance of focus-increasing parent firms relative to their peers in the non focus-increasing sub-sample. Our results postulate that focus-increasing parent firms significantly underperformed non focus-increasing parent firms, showing on average of +7.10% compared to +13.23% (MAS-EWI) and +6.88% compared with +13.58% (MAS-VWI). The difference in abnormal returns between the two sub-samples is statistically significant at 5% (MAS-EWI) and 1% (MAS-VWI).

Likewise, both abnormal return metrics demonstrate similar results over the 20-trading days (day +1 through day +20) after the spin-off announcement date when they are measured against the MAS-EWI and MAS-VWI. The MM demonstrates that focus-increasing parent firms significantly underperformed their counterparts in the non-focus increasing sub-sample, on average of +2.55% compared with +5.68% (MAS-EWI) and +2.58% compared with +6.19% (MAS-VWI), respectively. The difference in abnormal returns between the two sub-samples is statistically significant at 1% level.

5.2 Long-run performance of parent firms following the listing of spun-off firms

Although Lyon et al. (1999) remind us that “analysis of long-run abnormal return is treacherous” (p.198), a number of methods are proposed⁵. Extensive literature favours the use of the BHAR method as it copes better with the effect of compounding compared with CAR (e.g. Ritter, 1991; Barber & Lyon, 1997). In modern event studies, the most commonly

⁵ See for example Barber and Lyon (1997), Fama (1998) and Lyon et al. (1999).

accepted methodology is the BHAR approach. Therefore, we engage this method to capture the effect of a spin-off event on the investor's portfolio over the long-run period⁶.

Table 3 presents the percentage monthly buy-and-hold abnormal returns of parent firms in the three year holding periods following the listing of spun-off firms against the MAS-EWI and MAS-VWI benchmarks.

[Table 3 about here]

In Panel A, we find parent firms significantly outperformed (at the 10% level) the MAS-EWI, on average by +19.61% in the three-year holding period following the listing of spun-off firms. Our result supports the earlier finding reported by Cusatis et al. (1993). When the buy-and-hold returns of parent firms are measured against the market benchmark of MAS-VWI, the parent firms show a contrary result. The parent firms demonstrate negative and significant ABHAR of -18.74% over three years, indicating that in the Malaysia market as a whole large firms outperformed small firms during the study period.

When sample firms are split into focus-increasing parent firms and non focus-increasing parent firms, the overall results are mixed (as shown in Panel B and C). Nevertheless, there is evidence that focus-increasing parent firms significantly underperformed their counterparts in the non focus-increasing in the third-year period (EX+25 TO EX+36) following the listing of spun-off firms, on average of +3.23% compared with +36.10% (MAS-EWI) and -11.91% compared with +20.33% (MAS-VWI), respectively. The difference in abnormal returns between the two sub-samples is however very weak, statistically significant at 10% level.

⁶ To double check the results presented by the BHAR Model, we analyze the long-run share returns performance using the CAR Model. By adjusting the share returns of spin-off firms to the market benchmarks of MAS-EWI and MAS-VWI, we find that the CAR Model produces results consistent with the BHAR, therefore we do not report them in this paper.

5.3 Long-run performance of spun-off firms pursuant their listing month

Table 4 demonstrates the percentage monthly buy-and-hold abnormal returns (adjusted to the market) of spun-off firms in the three-year holding period pursuant their listing month against the market benchmarks of MAS-EWI and MAS-VWI.

[Table 4 about here]

In Panel A, the results suggest that spun-off firms significantly outperformed the MAS-EWI, on average by +29.19% over the thirty-six months holding periods pursuant their listing month. We find that the long-run share returns performance of the spun-off firms is better than the parent firms (perhaps they are more focused on their core business than their corresponding parent firms, as claimed by most Malaysian spin-offs managers). Our result thus supports the extant findings documented in both European (e.g. Kirchmaier, 2003) and US (e.g. Cusatis et al., 1993; Desai & Jain, 1999) markets. In contrast, using the MAS-VWI as a benchmark, the result shows that spun-off firms insignificantly underperformed the market, on average by -12.90% over the three-year holding period following the completion month of spin-off.

In Panel B and C, we find that focus-increasing spun-off firms significantly underperformed their peers in the non focus-increasing sub-sample, on average of +10.66% compared with +22.82% in the third-year period (EX+25 TO EX+36) pursuant their listing month when MAS-EWI is used as a market benchmark. The difference in abnormal returns between the two sub-samples is statistically significant at 10% level. Nevertheless, the overall results (as shown in both market benchmarks) for both focus-increasing and non focus-increasing spun-off firms are mixed and inconclusive, hence difficult for us to make a definite conclusion.

5.4 Long-run performance of combined firms following the completion month of spin-off

Table 5 demonstrates the percentage monthly buy-and-hold abnormal returns of combined firms in the three-year holding period following the completion month of spin-off against the MAS-EWI and MAS-VWI benchmarks.

[Table 5 about here]

In Panel A, though the combined companies outperformed the MAS-EWI in the three-year holding period following the completion month of spin-offs, the ABHAR at +16.50% is statistically insignificant. Nevertheless, we find that the combined firms are associated with significant negative ABHAR when the MAS-VWI is used as a benchmark. The ABHAR for combined firms over the thirty-six months holding periods is -23.48%, statistically significant at 5% level. Not surprisingly, our finding is substantially different from those that in the US (e.g. Cusatis et al., 1993; Desai & Jain, 1999) and European (e.g. Kirchmaier, 2003; Veld & Veld-Merkuovela, 2004) studies.

In Panel B and C, we fail to find a significant difference in abnormal returns between the group of focus-increasing combined firms and the group of non focus-increasing combined firms over the three-year holding period following the completion month of spin-off.

5.3 Index Performance of the FTSE Bursa Malaysia Index Series

We have already pointed out an indication that Malaysian large firms outperformed small firms; we now examine this in more details. FTSE Asia Research (June, 2009) reports that Malaysian small capitalization firms consistently underperformed large capitalization firms over the 12-year period (1997-2008). To confirm this, we analyze the index performance of

the FTSE Bursa Malaysia Index Series over the 15-year period (1996-2011) as a preliminary to investigating whether the size effect subsumes the spin-off effect. The historical index performance of the FTSE Bursa Malaysia Index Series is shown in Table 6 and Figure 1. Since the price index data for all Index Series (excluding FTSE Bursa Malaysia Kuala Lumpur Composite Index (KLCI)) is officially available in Datastream on 1st January 1996, our analysis begins on the particular date.

[Table 6 and Figure 1 about here]

We find that the FTSE Bursa Malaysia KLCI, a large cap index, has outperformed other indices over a long-run period. Over the 15 years period, the FTSE Bursa Malaysia KLCI generates substantial positive cumulative returns, up to +44.01%. Over the same period, the FTSE Bursa Malaysia Fledgling Index records the worst share returns performance of -29.43%; followed by the FTSE Bursa Malaysia Small Cap Index with negative cumulative returns of -18.13%.

From Figure 1, we notice that both the FTSE Bursa Malaysia Fledgling and Small Cap indices outperformed the FTSE Bursa Malaysia KLCI during the bull periods of 1996 (prior to the 1997 financial crisis) and 2000. Nevertheless, we observe that the trend is reversed during the bear periods, from 2001 to 2006. The large capitalization firms continue to demonstrate superior performance in the subsequent years. It is important to note that our test period of one to three years' post spin-off performances coincides with the several periods of Malaysia bear market. Two-thirds of the spin-off events occurred during the period 1999 to 2006, following the 1997-98 massive decrease in Malaysia share prices, disproportionately affecting small capitalization firms more than large capitalization firms. Our findings thus support the

results documented by Nathrah (2006). Using all firms listed on the Bursa Malaysia during the period from 1994 to 2003, she observes that a reversed size effect is seen during the bear months; and a small firm effect tends to occur during the bull months.

To show the size composition of our sample firms, we present the percentage of spin-off firms based on the size-ranked deciles portfolios (as in Table 7) with the largest market capitalization portfolio in deciles 1 and the smallest market capitalization in deciles 10.

[Table 7 about here]

Clearly the percentage of spun-off firms is distributed fairly evenly across the deciles. On the other hand, approximately 70% of the total number of parent firms is categorized in the largest market capitalization quintile; hence we need to test if the performance of spin-off firms is a manifestation of a size effect.

5.4 Size adjustment

To ascertain whether there is a spin-off effect independent of a size effect, a full size adjustment analysis is conducted. Following Arnold and Baker (2007), we create “size-adjusted portfolios”. To generate these, we firstly take the completion month of a spin-off and on that date allocate all the shares in the Malaysia market into deciles on the basis of market capitalization. Size decile 1 consists of the largest market capitalization firms, whilst size decile 10 includes firms with the smallest market capitalization. This allows us to then observe the returns for the size decile appropriate for the sample firm. We then have data for the returns (for each of our 36 spin-off firms) over the 36 months following the spin-off completion as a result of belonging to a size decile. If these returns are subtracted from the

actual returns for the sample firm, we have the size-adjusted returns, and can then comment on whether the size effect subsumes the spin-off effect. We conducted a similar analysis for the few days around the spin-off announcement by forming size decile for each sample parent firm at the date of announcement and observing the average returns for size decile that the sample firm falls into.

Table 8 displays the daily size-adjusted abnormal returns for the full sample of parents, focus-increasing parents and non focus-increasing parents in the 41-trading day (day -20 through day +20) surrounding the announcement date. Table 9 demonstrates the percentage monthly size-adjusted abnormal returns for the full sample of parents, spun-offs and combined firms including their focus-increasing and non focus-increasing sub-samples in the three-year holding period following the completion month of spin-offs.

[Table 7 and 8 about here]

After adjusting for size, our results confirm the presence of a spin-off effect for parent firms during the few days surrounding the announcement date. The size-adjusted abnormal returns (SAARs) in the three-day event window (day -1 through day +1) and in the five-day event window (day +1 through day +5) are recorded at +5.00% and +4.36%, respectively; indicating that the short-run outperformance of parent firms persist following the size-adjustment analysis. Interestingly, the size adjustment increases the strength of evidence in favour of a pricing inefficiency. In the five days following the announcement there is jump in returns indicating some post-announcement drift. But the results are significant only at the 10% level.

In contrast to the results obtained using market adjusted buy-and-hold abnormal returns as shown earlier, we observe there is no significant spin-off effects for parents, spun-offs and combined firms over the three-year holding period after eliminating the influence of size; thus any spin-off effect is subsumed by the size effect.

When we split the 36 spin-off firms into two groups: focus-increasing and non focus-increasing, we observe that focus-increasing parent firms continue to underperform their counterparts in the non focus-increasing group over short-run period surrounding the spin-off announcement day. After comprehensive size adjustment, focus-increasing parent firms significantly underperformed non focus-increasing parent firms, on average of +7.23% compared with +9.72% in the 41-trading days (from day -20 through day +20). The difference in abnormal returns between the two sub-samples is statistically significant at 1% level.

However, we fail to find abnormal performance for parents, spun-offs and combined firms in the focus-increasing sub-sample over the three-year holding periods after allowing for size.

6.0 Summary and Conclusion

This study provides a number of new findings about Malaysian corporate spin-offs. First, though investors react positively to the event of a spin-off, we find focus-increasing parent firms significantly underperformed their counterparts in the non focus-increasing sub-sample during the few days surrounding the announcement date. Evidence shows that focus-increasing parent firms continue to demonstrate short-run underperformance even after eliminating the influence of size. This result implies that the Malaysian stock market treats the spin-off announcement differently between the two sub-samples. Perhaps, investors in Malaysia might perceive the decision to concentrate on core businesses by parent firms

through spin-offs as unfavourable news because the spin-off announcement might not coupled with viable future strategies. Another possible reason could be focus-increasing parent firms fail to convey information that the action is motivated to improve operating efficiency gain; and not merely to signal a stand-alone value of a business entity. Whatever the cause of the negative perception our findings provide evidence against the corporate focus hypothesis.

Second, in the long-run analysis (three-year), after allowing for size we fail to find abnormal performance for focus-increasing parents, spun-offs and combined firms. We can plausibly argue that focus-increasing spin-off firms are not acting at the best interests of their shareholders over the long-run period. Overall, our findings thus support the results documented by Yoon and Ariff (2007). Using a multiple regression approach, they find that the variable of corporate focus fails to demonstrate a significant result, thus indicating that increased corporate focus is not a differentiating factor in the subsequent performance of spin-off parent firms.

Third, by looking at the performance of shares for the full sample of spin-off firms we find spin-offs create (perhaps illusory) value in the short-run period after; but we do not find evidence of long-run market outperformance after allowing for size. An interesting question arises from this work: *“What do the findings say about the efficiency of the stock market in pricing the shares?”*

We observe that there is the possibility of a reasonably consistent delay in the positive reaction by the investors in few days after the spin-off announcement, which is exploitable. Stoll and Whaley (1983), however claim that on the basis of currently available information, a market is inefficient only if it is possible for an investor to earn abnormal returns (adjusted to

market) net of all transaction costs. To avoid mistakenly concluding that the Malaysia market is inefficient; and at the same time not to underestimate the transaction costs associated with the share purchases of parent firms, we now consider the average trading costs in the order-driven Malaysia share market.

Trading of shares on Bursa Malaysia involve the following costs: brokerage fees, clearing fees and stamp duty⁷. Taken these costs into our calculation, we find an average roundtrip transaction cost in buying and selling shares on Bursa Malaysia is approximately about +0.7% of the contract value⁸. Madun (2008) reports that a typical transaction cost in Malaysia share market is on average nearly +1% of the contract value; and fairly comparable to Singapore share market (around +1%) and Hong Kong share market (around +0.6%). Taking the highest estimated cost of 1% it appears that an investor can possibly earn abnormal return net of transaction cost of +4.68% (5.68%-1.00%) by concentrating his investment on non focus-increasing parent firms during the 20-day event window (day +1 through day +20) following the spin-off announcement date.

Therefore, we can plausibly argue that there are abnormal returns opportunities that can be exploited by investors and hence provide some evidence against the efficient stock market hypothesis.

⁷ Estimates of brokerage fees, clearing fees and stamp duty are taken from the Bursa Malaysia website (http://www.bursamalaysia.com/website/bm/tradings/equities/transaction_cost.html). It should be noted the brokerage fees could change depending on the order size. For example, the minimum brokerage fees are +0.3% of contract value (retail trades valued above RM100, 000), +0.6% of contract value (retail trades below RM100, 000) and up to a maximum of +0.7% of the contract value. For simplicity, we apply the +0.3% of contract value in our calculation. We also take account of the +0.001% stamp duty and +0.03% clearing fee.

⁸ We calculate the roundtrip transaction cost as follows:

$$\begin{aligned}\text{Roundtrip transaction cost} &= (2 * \text{brokerage fees}) + (2 * \text{stamp duty}) + (2 * \text{clearing fees}) \\ &= (2 * 0.3\%) + (2 * 0.001\%) + (2 * 0.03\%) \\ &= +0.662\%\end{aligned}$$

REFERENCES

- Arnold, G. & Baker, R. D. (2007). Return reversal in UK shares. Retrieved 28 March, 2011, from Social Science Research Network.
- Ayoib, C. et al. (2003). Corporate governance, ownership structure and corporate diversification: Evidence from the Malaysian listed companies. *Asian Academy of Management Journal*, 8(2), 67-89.
- Barber, B. M. & Lyon, J.D. (1997). Detecting long-run abnormal stock return: The empirical power and specification of test statistics. *Journal of Financial Economics*, 43 (3), 341-372.
- Brown, S. & Warner, J. (1980). Measuring security price performance. *Journal of Financial Economics*, 8, 205-258.
- Brown, S.J. & Warner, J.B. (1985). Using daily stock returns: the case of event studies. *Journal of Financial Economics*, 14, 3-31.
- Choo, K. Y. (1999, July 12). Unlocking corporate excellence. *The Edge*, p. 24.
- Cusatis et al. (1993). Restructuring through spin-offs: The stock market evidence. *Journal of Financial Economics*, 33 (3), 293-311.

- Desai, H. & Jain, P. C. (1999). Firm performance and focus: Long run stock market performance following spin-offs. *Journal of Financial Economics*, 54, 75-101.
- Fama, E.F. (1998). Market efficiency, long-term returns, and behavioural finance. *Journal of Financial Economics*, 283-306.
- Fatimah, A. B. (2001). Corporate governance in financial troubled companies. In *Seminar on Corporate Governance: Issue and Challenges* (pp. 1-35). Kedah: Universiti Utara Malaysia.
- FTSE Asia Research (2009). *Report of the enhancement of the Kuala Lumpur Composite Index (KLCI)*. Retrieved March, 3, 2011, from [http://www.ftse.com/Research and Publications/Downloads/FTSE Asia Monthly Performance Report-June2009.pdf](http://www.ftse.com/Research%20and%20Publications/Downloads/FTSE%20Asia%20Monthly%20Performance%20Report-June2009.pdf).
- Hite, G. K. & Owers, J. E. (1983). Security price reaction around corporate spin-off announcements. *Journal of Financial Economics*, 12, 409-436.
- Kirchmaier, T. (2003). The performance effects of European demergers. *Center for Economic Performance Discussion*, 1-37. Retrieved 23 December, 2010, from Social Science Research Network.
- Krishnaswami, S. & Subramaniam, V. (1999). Information asymmetry, valuation, and the corporate spin-off decision. *Journal of Financial Economics*, 73-112.
- Loughran, T. & Ritter, J. R. (2000). Uniformly least powerful tests of market efficiency. *Journal of Financial Economics*, 55, 361-389.

- Lyon, J.D. et al. (1999). Improved methods for tests of long-run abnormal stock returns. *Journal of Finance*, 54 (1), 165-201.
- Miles, J., A. & Rosenfeld, J. D. (1983). The effect of voluntary spin-off announcements on shareholder wealth. *The Journal of Finance*, 38 (5), 1597- 1606.
- Nathrah, Y. (2006). *The evidence of size effect during bull and bear markets*. Unpublished Master Dissertation, Universiti Putra Malaysia, Malaysia.
- Ritter, J. (1991). The long-run performance of initial public offerings. *Journal of Finance*, 46, 3-28.
- Rosenfeld, J. D. (1984). Additional evidence on the relation between divestiture announcement and shareholder wealth. *Journal of Finance*, 39, 1437-1447.
- Schipper, K. & Smith, A. (1983). Effects of re-contracting on shareholder wealth: The case of voluntary spin-offs. *Journal of Financial Economics*, 12 (4), 437-467.
- Veld, C. & Veld-Merkoulova, Y. V. (2004). Do divestiture create value? The case for European spin-off. *Journal of Banking and Finance*, 28 (5), 1111-1135.
- Yoon, C. S. & Ariff, M. (2007). Corporate spin-offs, their price reactions and determinants in Malaysia. *International Journal of Banking and Finance*, 5, 83-112.

Zainal Abidin, P. (2005). Malaysia's experience with corporate restructuring. In Pomerleano, M., & Shaw, W. (Eds.), *Corporate restructuring: lesson from experience* (pp. 209-221). Washington D.C.: World Bank Publication.