

The Efficiency of Stock Market Based on the Inclusion-Exclusion Exercise of the Kuala Lumpur Syariah Index (KLSI)

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Much empirical work has evaluated stock price reactions of companies to a single type of event, such as public announcements on mergers, dividend payments, or security issue announcements. Less attention has been directed to the question of how news about a continuing event, like the news on the inclusion or exclusion of stocks from the Kuala Lumpur Stock Exchange Syariah Index (KLSI) that occurs twice a year, affects the security prices and trading volume of the companies involved. This study examines the price and volume effects on stocks after the announcement of their inclusion or exclusion from the KLSI during the period April 1999 to October 2007. This study finds that, in general, there are some significant differences in the average returns of stocks and the trading volume of Syariah-compliant counters for both the inclusion and exclusion of stocks from the KLSI in almost every year during the study period. This is an indication that the announcement of inclusion-exclusion of stocks from the KLSI does convey some good or bad news to investors and, as a result of that investors react either positively or negatively.

Introduction

Empirical evidence has generally confirmed the predictions of efficient market theory by showing that publicly released information is rapidly incorporated into security prices. Most of the public information is based on activities, such as merger, dividend payments or security issue announcement, which are associated only with the financial performance of firms. The emergence of new ethical investment products, such as socially responsible, green, environmental, are growing rapidly in both their size and variety (O'Rourke, 2003). Thus, an ethical company's stock reflects not only the financial soundness but also the ethical or socially responsible investment aspect of the company. It is, therefore, may have an influence on investors' perception and affect their investment decisions.

In Malaysia, an ethical stock is known as Syariah-compliant stock, which represents a company whose business activities are approved by Islamic Law (Syariah). Less attention has been directed to study the impact of inclusion-exclusion exercise of stocks from the Kuala

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Lumpur Syariah Index (KLSI) on stock price and trading volume of companies involved in the event. Thus, this study examines the impact of the inclusion-exclusion exercise of stocks from KLSI for the period April 1999 to October 2007. The selection criteria used to include or exclude stocks from the KLSE Syariah Index (KLSI) is unique since it is based on Islamic Syariah¹ law. Webley *et al.* (2001) claim that there has been a marked growth in literature recently that there is more to economics than simple optimality. In other words, economics has a moral dimension (Etzioni, 1988). Investors are not only concerned about what is profitable but also what makes their investments ethical. In the case of Malaysia, ethical investments for Muslims are investments in financial products that are approved by the Islamic law (Syariah).

Islam does not recognize the separation between spiritual and temporal affairs, and considers commerce as a matter of morality and is subject to the precepts of the Syariah (Karim, 2001). Hence, due to increasing awareness of Syariah-approved products, the Islamic Capital Market (ICM) is established. The ICM refers to the market where the activities are carried out in ways that do not conflict with the conscience of Muslims and the religion of Islam. Today, various capital market products are available for Muslims who only seek to invest and transact in the ICM. Such products include the list of the Securities Commission's Syariah-compliant securities traded on Bursa Malaysia and is supervised by the Syariah Advisory Council (SAC) of the Securities Commission.

Literature Review

Price and Volume Effects

The study on the effects of prices and trading volume when a stock is added or removed from the stock market indices have been widely examined for the US stock market (Lynch and Mendenhall, 1997; Maxam, 1998; Cooper and Woglom, 2001; Chen *et al.*, 2002; and Dahya, 2006), the UK (Brealy, 2000), Italy (Barontini and Rigamonti, 2000), Denmark (Bechmann, 2004), New Zealand (Elayan *et al.*, 2000), Germany (Deininger *et al.*, 2000; and Wilkens and Wimschulte, 2005), Turkey (Bildik and Gulay, 2001) and Malaysia (Lian *et al.*, 2005). The selection criteria used for the inclusion or exclusion of stocks from the indices in studies cited above is different from the selection criteria used in this study. This study addresses the issue of the magnitude and the duration of the effects based on specific selection criteria of the Syariah-approved stocks. It also aims to fill the gap in documented evidence, especially with regard to the behavior of the Syariah-approved stocks in the developing economy like that in Malaysia.

As stated by Bechmann (2004), there is great interest in this area of study due to the fact that such effects provide important insights into the functioning of stock markets and the behavior of stock market participants, including fund managers. In addition, some of the findings indicate inefficiencies in the stock market. The analysis done on Syariah Index (SI) is even more interesting and insightful for two reasons. Firstly, there is the specific selection criterion used for KLSI in which Syariah guidelines precede any environmental and/or social analysis of corporate performance. For many other stock market indices, the selection criterion

¹ The Islamic jurisprudence extracted from the *Holy Quran* and *Sunnah*.

used is vague and not based on specified publicly available information. Furthermore, deletions from many stock market indices are primarily due to corporate events such as mergers, acquisitions, and spin-offs, or other forms of major restructuring. In comparison, for KLSI, the deletions are based on Syariah guidelines and not on company's financial soundness. The composition of the SI is based on a publicly announced selection criterion using information accessible for all market participants. Thus, it is presumed that the addition to and deletion from the SI may not provide any new fundamental information about that particular stock to the stock market because the addition and deletion process may not convey some information to the market about the future prospects of the company and will not affect the company's average returns before and after the news event. Therefore, this study analyzes this presumption and compares it with other probable explanations.

Secondly, the changes in the composition of SI take place at a specific time period, i.e., in April and October of every year. The market participants, more or less, have some expectations about the changes in the composition of SI which do not provide any new information. Furthermore, because of the strictly enforced selection criteria, some stocks are added to and deleted from the SI several times. It is also observed that there are quite a number of cases where companies that were previously excluded from the index tried to get into the index composition again in the next round of selection (see Appendix). Hence, the study on SI provides quite a unique opportunity to examine whether it matters or not for the companies if their companies are added to or deleted from the index.

If a change in price levels, upon the arrival of public information release, is used to infer the efficiency of a market, what does a change in the level of trading volume indicate? Trading volume reflects traders' idiosyncratic reactions, while stock prices represent the average change in investors' belief due to the announcement (Beaver, 1968). Therefore, analyzing the level of trading volume surrounding the announcement provides useful information about the reactions of the traders upon information arrival. This suggests that trading volume is a good proxy for information arrival from the capital market. Blume *et al.* (1994) argue that trading volume is also an increasing function of the precision of the announced information. If low-quality information is received by the market, traders would place little confidence on it and would be reluctant to trade, which will have an impact on the trading volume. Given the importance of Syariah-approved securities announcements, this study also purports to examine the trading volume behavior of the KLSI around the release of the Syariah-approved securities information.

Study on Syariah Index Performance

Studies on the Islamic or Syariah-approved stocks are not abundant, and most of them look at the comparative performance of such stocks with conventional stocks (see, for instance, Mazilan, 2001). Most studies carried out on KLSI are based on performance and, in general, the results show no significant difference in the performances of KLSI and KL Composite Index, except the study of Noor Azuddin and Hasimi (2002). Zamri and Haslindar (2002) also compare the performance of the SI and the Composite Index (CI) of the Kuala Lumpur Stock Exchange (KLSE) during the period April 1999-January 2002. Both the raw and risk-adjusted returns were calculated for the indices for the whole and two sub-periods

(growing and declining markets). Results, based on the raw returns, revealed that, in general, the KLSE SI and CI record the same level of returns.

Two studies on the index effects are done by Mimi Hafizah and Obiyathulla (2001) and Zamri *et al.* (2003) on Syariah-approved stocks, which cover a very short period of time when the investor awareness is still in its infancy. According to Elliot *et al.* (2005), increased investor awareness is the primary factor behind the abnormal announcement returns. The study by Zamri *et al.* (2003) only focuses on deletion of stocks, which does not explain the overall index effect scenario.

Data and Methodology

The information on the changes to the index composition of KLSI for the period 1999-2007 is obtained from the KLSE library. The initial sample consists of 359 stocks included and 144 stocks excluded from the KLSI. Some of the counters were included in and excluded from the KLSI a few times during the months of April and October of each year. The Syariah-approved securities are revised by the Syariah Advisory Council (SAC), a special body formed by the Securities Commission (SC). After revision, some of the stocks are added and some removed from the list. The methodology chosen for this study examines whether the market interprets the firms involved in the inclusion-exclusion exercise as favorable-unfavorable stocks and thus influence investors' expectations and consequently the share price and trading volume of the firms' stocks. The selected counters are screened based on their status. Consistent with previous studies, the present study considered only those securities that are continuously listed over the entire sample period with no missing data. All PN4 companies, newly listed companies, finance counters, companies delisted from exchange or dead companies are excluded from the study. As a result, only 123 companies were chosen for the final analysis.

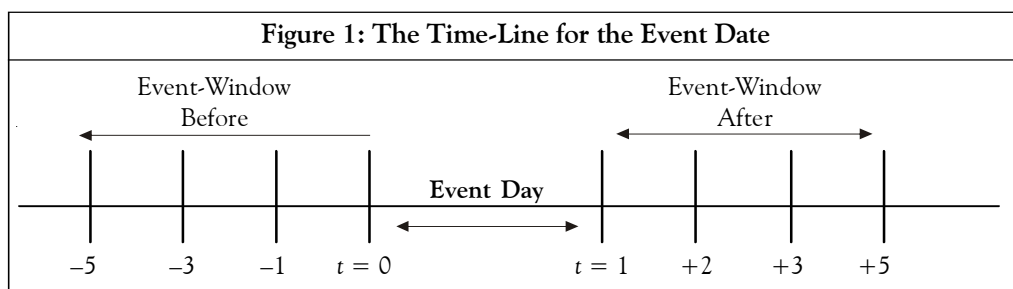
The daily closing prices and volumes of these included and excluded stocks of KLSI are obtained from the data stream. The study covers the period from April 1999 to April 2007. The KLSE SI is replaced by FTSE Bursa Malaysia EMAS Syariah Index (FBM EMAS Syariah) in October 2007 (see Appendix for more details on this event).

To analyze the relationship between the event and index effect, an event study methodology is employed. This method allows us to observe the impact that an event has on the stock price and trading volume returns of a company. The purpose is to be able to distinguish the returns derived exclusively from the new information from what should be considered normal returns. In other words, we must compare the variation in share price and trading volume on the date of the relevant news, with the variation in the price and trading volume of the stock that could be considered normal.

The market-adjusted abnormal return of a stock price and trading volume for a particular day is the stock return for that day minus the corresponding market return for the market-adjusted daily returns. The event study methodology is used here to assess the price reaction of changes to the composition of the KLSI. The event in this study is the public announcements on the inclusion in and the exclusion from the KLSI. Therefore, this study uses the Masulis's (1980) Comparison Period Return Approach (CPRA) to evaluate the variation in stocks returns and stocks trading volumes before and after an event date.

The event period is defined as day $t = 0$ and day $t = 1$ as to incorporate the late announcement release during the event day to be fully absorbed into the stock price one day following the event day. Day 0 or $t = 0$ is the date on which the event day is officially recorded in the KLSE website. A market is efficient with respect to a particular information set if it is impossible to make an economic profit by trading on the basis of the information set (Jensen, 1978). Therefore, a market is considered more efficient if its speed of adjustment is faster in response to information arrival (Tan and Gannon, 2002).

Moreover, according to Elliot *et al.* (2005), increased investor awareness is the primary factor behind the abnormal announcement returns. Since the reaction of stock price and trading volume returns to the public news on the updated list of Syariah-approved stocks is based on investor awareness, this study uses a short event-window to test the impact of the news item on stock price and trading volume returns of the stocks involved. Another reason is to reduce the impact of overlapping events within the range of the event-windows. The short-term event-windows are $(-1, +1)$, $(-3, +3)$ and $(-5, +5)$ days around the event dates. The time-line for the event date is as illustrated in (Figure 1).



Instead of testing the null hypothesis that the excess return is zero, as are usually done in past studies, this study simply tests the null hypothesis when the mean daily return is zero. The average returns for all stocks involved in each event are used.

H_0 : The average mean-adjusted daily return is zero.

Assuming that there are no other relevant and significant information surrounding the event period, one would expect that the mean daily return is not significantly different from zero on each of the event days and also before and after the event period $(-1, +1)$, $(-3, +3)$ and $(-5, +5)$. Furthermore, if the market reflects this new information efficiently in the stock price and trading volume returns, one would also expect the mean daily return is not significantly different from zero for each one of the event-window periods.

To test for statistically significant stock price movement around Syariah-approved inclusion-exclusion exercise, this study employs the Comparison Period Return Approach (CPRA) as suggested by Masulis (1980).

The CPRA assumes that, given the return generating process is stochastic in nature, a stock's return over time can be expressed as:

$$r_{it} = u_{it} + \varepsilon_{it}$$

where,

r_{it} = Stock i 's return for time period t

μ_{it} = The expected return for stock i ; and

ε_{it} = Stochastic error term

The expected return (μ_{it}) of a stock is a function of a market-determined pricing process and of a stock's return characteristics. The stochastic error term, ε_{it} , has an expected value of zero and is serially uncorrelated. If returns are stationary over time, the impact of new information on stock prices can be discovered through an examination of ε_{it} . To determine if the ε_{it} are nonzero around an event date, this study tests the null hypothesis where the mean daily return during the observation period (event period) equals the mean daily return of some other representative time period (comparison period or non-event period). The mean daily return for the comparison period is actually an estimate of μ_{it} , the expected return. The average returns for all stocks chosen for each event are used.

H_0 : Average Mean-adjusted daily return during event period = Average mean-adjusted daily return of non-event period.

For comparison, this study uses a nonparametric rank test for abnormal security-price performance that is preferable to the parametric t -test. This rank test offers improved specification under the null hypothesis and more power under the alternative hypothesis of abnormal security-price performance. Corrado (1989) argues that the rank test is correctly specified, no matter how skewed the cross-sectional distribution of excess return. Also, the specification of the rank test is less affected by an event-date excess-returns variance increase than are the parametric tests. Corrado (1989) demonstrates that the rank test that he used shares the power and specification of the Wilcoxon two-sample rank test. Therefore, this study uses Wilcoxon two-sample rank test as provided by the e-views program.

Findings

The findings of the event study analyses of the impact of the KLSI inclusion-exclusion exercise are shown in Tables 1, 2 and 3. Table 1 presents the Mean Daily Returns (MDRs) for stock price and trading volume of the stocks involved in the inclusion-exclusion exercise and Tables 2 and 3 present Comparison Period Returns Approach (CPRA) for both the stock price and trading volume reactions in the inclusion-exclusion exercise from April 1999 to April 2007. To ease the discussion on CPRA, the period of analysis is divided into three different sub-periods. The first sub-period covers the period from April 1999 to October 2001, the second sub-period is from April 2002 to October 2004, and the last sub-period is from April 2005 to April 2007.

If the market reflects this new information efficiently in the stock price and trading volume returns, one would expect the MDR is not significantly different from zero. As we can see, in general, the t -statistics for price for all the days surrounding the event dates (inclusion-exclusion) indicate the significance of MDRs at the 5% and 1% level. The MDR is significantly different from zero in at least one event-window for price and trading volume except in April 1999 (price), April 2001 (volume) and October 2001 (price). Thus, the null

Table 1: Mean-Daily Returns for Price and Volume [@]						
Year	Price			Volume		
	Event Day	t-statistics		Event Day	t-statistics	
		Included	Excluded		Included	Excluded
April 1999				0,1	N/A	2.454**
				2	N/A	-3.663***
				5	N/A	-2.321**
October 1999				-5		1.987**
	-3		-2.093**			
				-1	-7.433***	
	0,1	2.440**				
	2	-1.979**				
			5		2.000**	
April 2000				-1		-5.135***
	0,1		-5.071***			
	2		2.490**	2		4.222***
	3		2.444**	3		4.081***
	5		2.386**	5		1.991**
October 2000				-5		1.987**
	-3		-2.093**	-3		
	-1	2.440**		-1	-7.433***	
	0,1		2.418**			
	2	-1.979**				
			5		2.000**	
April 2001	-3	-3.143***	Nil			Nil
	-1	3.011***	Nil			Nil
	0,1	5.138***	Nil			Nil
	2	3.011***	Nil			Nil
	3	-3.143***	Nil			Nil
October 2001				-5	2.154**	
				-3	8.659***	2.209**
				-1	2.104**	
				0,1		-2.063**

(Contd...)

Table 1: Mean-Daily Returns for Price and Volume@ (...contd)						
Year	Price			Volume		
	Event Day	t-statistics		Event Day	t-statistics	
		Included	Excluded		Included	Excluded
April 2002				-5	2.551***	
	-1		-2.645***	-1	1.971**	
	2		2.372**	2	-2.711**	
				5	2.200**	
October 2002	-5	-3.007***	2.081**			
	2	-4.409***	0.590	2	1.057	2.660***
	3	-0.025	5.812***	3	1.866	2.660***
	5	1.492	-0.306	5	2.286**	2.248**
April 2003	-5	4.247***	Nil	-5		Nil
			Nil	0,1	4.300***	Nil
			Nil	2	3.402***	Nil
October 2003			Nil	5	8.115***	Nil
				-5		2.312**
	0,1	-3.566***		0,1	-2.220**	
				2		-3.256***
April 2004				3	-4.169***	2.747***
				5	-1.252	2.817***
	-5		-2.100**	-5		2.633***
	-3		-2.100**	-3		2.633***
October 2004	-1		-2.285**			
	2	-3.336***		2		2.489**
				-5	2.054**	
				-3	2.054**	
	0,1	3.946***	1.419			
April 2005	3		-1.962**			
	5	2.608***	-1.981**	5	2.285**	
				-5	2.216**	
April 2005				-3	2.216**	
				0,1		2.023**

(Contd...)

Year	Price			Volume		
	Event Day	t-statistics		Event Day	t-statistics	
		Included	Excluded		Included	Excluded
	2		1.990**			
	3	-2.892***	-2.536**			
	5	-3.657***	-3.772***			
October 2005				-5		-5.860***
	-3		-5.860***			
	-1		-5.860***			
April 2006	-3		2.351**	-3	2.191**	
				-1	2.068**	
				0,1		2.070**
				5		3.218***
October 2006	-5	-2.533**				
	0,1	2.149**				
April 2007	-5	-3.280***				
	-3	-4.762***	-7.557***			
	-1	6.858***		-1		-2.806***

Note: ** Significant at 5% level; *** Significant at 1% level;
[@] Refers to the null hypothesis that the mean daily return is zero.

hypothesis that the average mean-adjusted daily return is zero is rejected. Thus, in general the stock market is not efficient.

In the first sub-period (Table 2a), the *t*-statistics show that there are no significant differences in average returns of stock price in 1999 in the inclusion and exclusion of the stocks, even though there is some reaction in excluded stocks average return. Beginning October 1999, the *t*-statistics for both the included and excluded stocks' price and trading volume (Table 3a) show that there are some significant differences in average returns, except in October 2000, for price.

In the second sub-period (Table 2b), the *t*-statistics show that there is at least one event day, like in April 2003, that experiences significant difference in average returns for price in the inclusion and exclusion exercise every year. The reactions of stock price to the news of the inclusion-exclusion of Syariah-compliant stocks from the KLSI are not fully supported by the reaction of stocks trading volume (Table 3b) as shown in October 2002, 2003 and 2004.

Table 2a: Comparison Period Returns Approach (CPRA) for Price [@] (Sub-Period 1)					
Price					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 1999					
October 1999	-1	2.839***			
	2	3.632***	2.418**		
	3	2.048**			
April 2000	-5		-3.095***		-2.023**
	-3		-5.067***		-2.023**
	-1		-5.071***		-2.023**
	2		-3.052***		-2.023**
	3		-3.551***		-2.023**
	5		-4.080***		-2.023**
October 2000					
April 2001	-5	4.373***		-2.197**	
	-3	5.215***		-2.366**	
	3	5.215***		-2.366**	
	5	4.373***		-2.197**	
October 2001					

Note: ** Significant at 5% level, *** Significant at 1% level;
 @ Refers to the null hypothesis that the event returns = nonevent returns.

Table 2b: Comparison Period Returns Approach (CPRA) for Price [@] (Sub-Period 2)					
Price					
	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 2002	-1		3.172***		-2.023**
	2		-1.977**		
October 2002	-5	2.064**			
	2	2.080**			

(Contd...)

Table 2b: Comparison Period Returns Approach (CPRA) for Price [@] (Sub-Period 2) (...contd)					
Price					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
	3		-5.789***		
April 2003	-3	-3.453***			
October 2003	-3		-2.109**		
	-1	-2.643***			
April 2004	-1		3.195***		-2.023**
	2	2.243**			
October 2004	-5	2.586***			
	-3	3.091***		-2.366**	
	-1	2.773***		-2.028**	
	5	-2.529**		-2.028**	

Note: ** Significant at 5% level, *** Significant at 1% level; and
 @ Refers to the null hypothesis that the event returns = nonevent returns.

Table 2c: Comparison Period Returns Approach (CPRA) for Price [@] (Sub-Period 3)					
Price					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 2005	-1				
	3	2.146**		-2.192**	
	5	2.323**	2.134**	-2.073**	
October 2005	3		-6.324***		
	5		-2.909***		
April 2006	3				-2.271**
October 2006	-5	2.360**		-2.666***	
	-3	2.014**		-2.073**	
	5				-2.207**
April 2007					

Note: ** Significant at 5% level, *** Significant at 1% level; and
 @ Refers to the null hypothesis that the event returns = nonevent returns.

Volume					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 1999	2		3.260***		
	5		3.136***		
October 1999	2	-9.003***			
April 2000	2		-3.255***		
	3		-2.115**		
October 2000	-1		9.426***		
April 2001	-1	2.152**		-2.366**	
	2	2.152**		-2.366**	
October 2001	-3		-2.319**		
	-1		-1.973**		

Note:** Significant at 5% level, *** Significant at 1% level.
 @ Refers to the null hypothesis that the event returns = nonevent returns

Volume					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 2002	2	6.338***			
	5	-2.271**			
October 2002					
April 2003	3	4.212***			
	5	4.212***			
October 2003					
April 2004	2		-2.383**		
October 2004					

Note:** Significant at 5% level, *** Significant at 1% level; and
 @ Refers to the null hypothesis that the event returns = nonevent returns.

Table 3c: Comparison Period Returns Approach (CPRA) for Volume@ (Sub-Period 3)					
Volume					
Year	Event Day	t-statistics		z-statistics	
		Included	Excluded	Included	Excluded
April 2005	-1		3.731***		
October 2005					
April 2006	-3		2.135**		-2.401**
	3				-2.134**
October 2006	-3	2.024**		-1.960**	
	2	2.062**			
	5	2.150**	2.605***		
April 2007					

Note:** Significant at 5% level, *** Significant at 1% level.
 @ Refers to the null hypothesis that the event returns = nonevent returns.

The same scenario recurs in the third sub-period (Tables 2c and 3c), except that in April 2007, both the *t*-statistics and *z*-statistics show that there is no significant difference in average returns of price and trading volume both for the included and excluded stocks.

Conclusion

This study finds that, in general, there are some significant differences in the average returns of stocks price and trading volume of Syariah-compliant counters for both the inclusion and exclusion of stocks from the KLSI in almost every year from April 1999 to October 2006. This is an indication that the announcement of inclusion-exclusion of stocks from the KLSI does convey some good or bad news to investors, and as a result of that investors react either positively or negatively. In other words, being included conveys good news, while being excluded from the KLSI conveys bad news to the investors. ▲

References

1. Barontini R and Rigamonti S (2000), "Stock Index Futures and the Effect on Cash Market in Italy: Evidence from Changes in Indexes", Working Paper Series at University Cattolica del S Cuore, Via Necchi, Milano, Italy, pp. 1-23.
2. Beaver W (1968), "The Information Content of Annual Earnings Announcement", *Journal of Accounting Research*, Vol. 6, No. 3, pp. 67-92.
3. Bechmann K L (2004), "Price and Volume Effects Associated with Changes in the Danish Blue-Chip Index—The KFX Index", *Multinational Finance Journal*, Vol. 8, No. 1-2, pp. 3- 34.
4. Bildik R and Gulay G (2008), "The Effects of Changes in Index Composition on Stock Prices and Volume", *International Review of Financial Analysis*, Vol. 17, No. 1, pp. 178-197.

5. Blume E, Easley D and O'hara M (1994), "Market Statistics and Technical Analysis: The Role of Volume", *Journal of Finance*, Vol. 49, No. 1, pp. 153-181.
6. Brealy RA (2000), "Stock Prices, Stock Indexes & Index Funds", *Bank of England Quarterly Bulletin*, Vol. 40, No. 1, pp. 61-68.
7. Chen H, Noronha G and Singal V (2002), "Investor Awareness and Market Segmentation: Evidence from S&P 500 Index Changes", paper presented at seminar held at Virginia Tech, Arizona State University West, Loyola College, Maryland.
8. Cooper D and Woglom G (2001), "The S&P 500 Effect: Not Such Good News in the Long Run", FEDS Working Paper No. 2002-48, Federal Reserve Board, Research and Statistics, Washington DC.
9. Corrado C J (1989), "A Nonparametric Test for Abnormal Security-Price Performance in Event Studies", *Journal of Financial Economics*, Vol. 23, No. 2, pp. 385-395.
10. Dahya J (2006), "Playing Footsy with the FTSE 100 Index", working paper series at Department of Finance, pp. 1-34, Baruch College, City University of New York (CUNY), New York.
11. Deininger C, Kaserer C and Roos S (2000), "Stock Price Effects Associated with Index Replacement in Germany", pp. 1-27, working paper series presented at the European Financial Management Association (EFMA) Lugano, Switzerland Meetings.
12. Elayan F, Li W and Pinfold J (2000), "Price Effects of Changes to the Composition of New Zealand Share Indices", working paper series at department of commerce, Massey University at Albany, Auckland, New Zealand.
13. Elliot W B Van Ness, Bonnie F Walker M D and Richard S (2005), "What Drives the S&P 500 Inclusion Effect? An Analytical Survey", *Financial Management Surveys*, Vol. 35, No. 4, pp. 31-48.
14. Etzioni A (1988), *The Moral Dimension: Toward a New Economic*, The Free Press, New York.
15. Jensen M C (1978), "Some Anomalous Evidence Regarding Market Efficiency", *Journal of Financial Economics*, Vol. 6, No. 2-3, pp. 95-101
16. Karim R A (2001), "International Accounting Harmonization, Banking Regulation, and Islamic Banks", *The International Journal of Accounting* Vol. 36, No. 2, pp. 169-193.
17. Lian K K, Chen W Y and Fah T L (2005), "Stock Price Effects of Inclusion in and Exclusion from the Kuala Lumpur Stock Exchange Composite Index", pp. 98-108, paper presented at Malaysian Finance Association (MFA), Kuala Terengganu, Terengganu.
18. Lynch A W and Mendenhall R R (1997), "New Evidence on Stock Price Effects Associated with Changes in the S&P 500 Index", *Journal of Business*, Vol. 70, No. 3, pp. 351-383.

19. Masulis R W (1980), "The Effects of Capital Structure Changes on Security Prices: A Study of Exchange Offers", *Journal of Financial Economics*, Vol. 8, No. 2, pp. 139-177.
20. Mazilan M (2001), "The Performance of Syariah-Approved Stocks of KLSE: A Comparative Study", paper presented at Institute of Islamic Understanding Malaysia IKIM, February, pp. 13-14.
21. Maxam C L (1998), "The Index Effect Revisited", *Wall Street Journal*, Vol. 236, No. 17, pp. C1-C4.
22. Mimi Hafizah A and Obiyathulla I B (2001), "Stock Price Effect and Volume Effect of KLSI", Master Thesis, International Islamic University, Malaysia.
23. Noor Azuddin Y and Mohd Hasimi Y (2002), "Portfolio Formation Using Islamic-Approved Stocks in Malaysia", *Capital Markets Review*, pp. 67-86, Kuala Lumpur Stock Exchange (KLSE) and Research Institute of Investment Analysts Malaysia (RIIAM).
24. O'Rourke A (2003), "The Message and Methods of Ethical Investment", *Journal of Cleaner Production*, Vol. 11, pp. 683- 693.
25. Tan O G and Gannon G L (2002), "Information Effect' of Economic News: SPI Futures", *International Review of Financial Analysis*, Vol. 11, No. 4, pp. 467-489.
26. Webley P, Lewis A and Mackenzie C (2001), "Commitment Among Ethical Investors: An Experimental Approach", *Journal of Economic Psychology*, Vol. 22, No. 1, pp. 27-42.
27. Wilkens S and Wimschulte J (2005), "Price and Volume Effects Associated with 2003's Major Reorganization of German Stock Indices", *Financial Markets and Portfolio Management*, Vol. 19, No. 1, pp. 61-98.
28. Zamri A and Haslindar I (2002), "A Study of Performance of the KLSE Syariah Index", *Malaysian Management Journal*, Vol. 6, No. 1-2, pp. 25-34.
29. Zamri A, Haslindar I and Yuserrie Z (2003), "The Impact of Delisting from KLSE Syariah Index", *Journal of Accounting, Management and Economics Research*, Vol. 3, No. 2, pp. 109-118.

Appendix

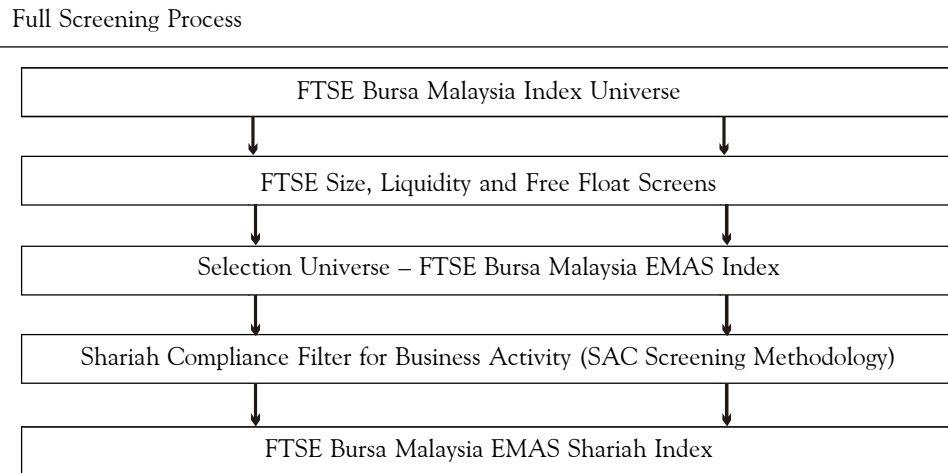
FTSE Bursa Malaysia EMAS Syariah Index

FTSE Group is an independent company whose sole business is the creation and management of indices and associated data services. The company originated as a joint venture between the *Financial Times* and the London Stock Exchange. On January 12, 2006, FTSE Group and Bursa Malaysia announced that they had signed a cooperation agreement to create a new series of equity indices for Malaysia. The new FTSE Bursa Malaysia Index Series was officially launched on June 26, 2006. The FTSE Bursa Malaysia EMAS Syariah Index was added to the series on January 22, 2007.

FTSE Bursa Malaysia EMAS Syariah Index comprises constituents of the FBM EMAS index that are Syariah-compliant, according to the Securities Commission's SAC screening methodology (Table 1) and FTSE's screens of free float, liquidity and investability. The indices have been designed to provide investors with a broad benchmark for Syariah-compliant investment. The launch of FTSE Bursa Malaysia EMAS Syariah Index will create more opportunities for investors seeking Syariah-compliant investments to benchmark their investments and for asset managers to create new products serving the investment community. There is now a sufficiently-wide array of Syariah-compliant products in the capital market to fulfill the needs of investors looking for faith-based investing. Hence, investors buying Syariah products in Malaysia can be assured of "end-to-end" Syariah compliance.

Source: Quarterly Bulletin of ICM (2007).

Table 1: Full Screening Process of FTSE Bursa Malaysia EMAS Shariah Index



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