

RESEARCH ARTICLE

# Ownership Structure and Stock Return Asymmetries in ASEAN-5 Stock Markets: A Firm-Level Analysis

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**Abstract:** This paper explores the relationship between ownership structure and the skewness in the stock return distribution among ASEAN-5 equity markets, including Indonesia, Malaysia, the Philippines, Singapore, and Thailand during 2007–2015. This study adds to the existing literatures that ownership structure can explain skewness of the stock returns. The empirical results reveal that stock returns in ASEAN-5 markets present asymmetric distribution. Further, by employing firm-level data, the results show that ownership structure, cumulative daily stock returns, firm size, and market-to-book ratio significantly affect future skewness of the stock returns.

**Keywords:** ASEAN-5, Corporate Governance, Ownership Structure, Skewness, Stock Market

**JEL Classifications:** C10, C33, G10, G32

One important underlying assumption on financial decision making is risk-averse behavior of the investors. Risk-averse investors require an entire future distribution of returns to make their judgment to allocate their assets and make investment decisions. Modern theories in finance commonly assume normal distribution of asset returns to derive models for asset pricing, risk management, and asset allocation purposes. However, a number of previous empirical studies show that stock returns are asymmetrically distributed (Kraus & Litzenberger, 1976; Beedles, 1979; Alles & Kling, 1994; Hong, & Stein, 2003). Some empirical works suggest that investors require payment for negative skewness and expected return increases with negative skewness (Das & Sundaram, 1999; Harvey & Siddique, 2000).

Most commonly, negative skewness in daily returns has been documented in several aggregate stock

market indices. Albuquerque (2012) presented that cross-sectional heterogeneity in firm announcement events can lead to conditional asymmetric stock return correlations and negative skewness in aggregate returns for the US data. Bae, Lim, and Wei (2006) linked the studies of return asymmetries and the cross-country studies of corporate governance and attempted to investigate how corporate governance affects the skewness in world stock market indexes. Using stock index and corporate governance index data compiled by La Porta, Lopez-De-Silanes, Shleifer, & Vishny (1998) from 38 countries, they found that negative skewness is most intense in stock markets that have the highest score on the property rights index.

There are empirical studies in the Asia region that indicate that stock returns at the firm level display positive skewness (Fujii & Takaoka, 2005; Hongviseschai & Sukcharoensin, 2013). However,

these studies do not use corporate governance variables to explain skewness. The first paper to address this issue is Bae et al. (2006), who investigated the relation between corporate governance index and return skewness in a country-level analysis. They found that the stock return distributions of the emerging markets with poor corporate governance system tend to exhibit as more positively skewed than those of developed countries with a good corporate governance system. This relation is traced back to the asymmetric information disclosure of emerging countries: good news is published immediately whereas bad news is restrained. Their results are consistent with the more recent work which reports results for the US market (Rolle & Lehnert, 2012). The relation between the corporate governance index and the skewness of stock returns for a large sample of US firms was explored. They argued that a firm-level skewness was determined by information flow, and companies with good corporate governance were more informative and transparent than their less shareholder-protective counterparts. Therefore, they suggested that differences in the quality of corporate governance matter to idiosyncratic skewness. Then, these previous empirical evidences verify the hypothesis and disclose a significant relation between the level of corporate governance and idiosyncratic skewness. Firms with stronger shareholder rights are associated with more positively skewed stock returns.

Interest in corporate governance in developed countries has grown significantly since the 1990s. In the ASEAN, the interest in corporate governance has been highlighted after the 1997 financial crisis, subsequent to the outbreak of the Thai baht currency crisis in 1997. This situation led to intense liquidity problems for local capital markets in ASEAN. Cheung and Chan (2004) reported that corporate governance in Asia had been improved after the crisis. Better investor protection and more transparent information have enhanced the development of local capital markets.

To study the issue of skewness in the ASEAN, this study further extends the stream of research on the stock return skewness using firm-level data from ASEAN-5 equity markets. Academically, there are limited numbers of research regarding the relationship between ownership structure and asymmetry in stock return distributions at the firm level, particularly in the emerging markets. This article provides fruitful empirical evidence to understand the link between the

corporate governance mechanism and the firm-level skewness ASEAN-5 stock market.

More specifically, this study tests the competing hypothesis for such the relationship. The *incentive-alignment hypothesis* states that as executives gain greater ownership stakes, they are more likely to disclose all information to the public to signal firm quality. Stock prices of high quality firms should distribute normally. In addition, the *discretionary-disclosure hypothesis* and the *risk-sharing/coinsurance hypothesis* predict a positive relationship between corporate insider ownership and the level of skewness. On the other hand, the *diversification-control hypothesis* proposes that firms with a high level of managerial ownership structure have lower risk-taking activities and hence reflect a lower level of skewness than their counterparts, which have a lower level of managerial ownership. This hypothesis expects a negative relationship between managerial ownership and the level of skewness.

## Literature Reviews and Hypothesis Development

The main objective of this paper is to examine the determinants of skewness in the daily returns of firm-level return distributions and test whether corporate governance can predict future positive skewness. In this section, the literatures on asymmetric distribution of the stock returns are reviewed, and then, the study proposes the determinants of the stock return asymmetries including the corporate governance variable.

### *Stock Return Asymmetries*

An important effort in statistical analysis is to estimate a location parameter for the distribution. The normal distribution is a symmetric distribution with well-behaved tails and a single top at the center of the distribution; therefore, the mean is an appropriate location estimator. Modern theories in finance usually assume normal distribution of asset returns to develop models for asset pricing, risk management, and asset allocation purposes (Markowitz, 1952; Sharpe, 1964; Black & Scholes, 1973). The normal distribution is, then, important for investors to make their judgment to allocate their assets and make investment decisions.

However, asymmetric distribution for asset returns has regularly been observed in empirical financial economics. In this case, the mean and median do not provide similar estimates for the location. Skewness can be detected in the form of negative or positive skewness, depending on where the data points are deviated from the data average. If data points are skewed to the left, it is known as negative skewness, and vice-versa.

The findings of skewness in stock returns have triggered the development of various theories pointing to describe which underlying economic mechanisms these stylized facts reflect. There is a large body of literatures on this matter for more than three decades; several seminal works find evidence of skewness across different markets and asset classes.

Hong and Stein (1999) proposed another reason for skewness. Analyzing the implications of short sale constraints, they developed the following intuition. As the price of a share falls, more information is unveiled, specifically the price at which market participants with differing valuations see value. Their differing views were not previously available to the market due to short sale constraints. Then, Hong and Stein (2003) tested which shares had more disagreement among investors; it can be shown by increases in turnover and higher skewness.

As previously discussed, a large body of literatures has documented negative skewness on aggregate stock market returns. There are also evidences that firm-level stock returns are well described by a mixture of normal distribution (Kon, 1984; Zangari, 1996; Haas, Mitnik, & Paolella, 2004). Further, Fujii and Takaoka (2005) studied the returns distribution for individual firms using Japanese data. Positive skewness in the returns was more apparent for smaller companies. Their results are consistent with the results reported for the US market (Duffee, 1995; Chen et al., 2001).

### ***Corporate Governance and Stock Return Asymmetries***

A conflict of interest exists in any relationship where one party is likely to act in the best interests over others. The problem occurred because the agent who is supposed to make the decisions that would best serve the principal is obviously driven by self-interest, and the agent's own best interests may diverge from the principal's best interests. In corporate finance, this

agency problem usually refers to a conflict of interest between management and stockholders. The manager acts as the agent for the shareholders or principals. He is supposed to make decisions that will maximize shareholders' wealth. However, it is in the manager's own best interest to maximize his own wealth as well.

Agency theory is the rudimentary foundation for argument on the relation between corporate governance and firm value as well as stock returns distribution. The seminal work of Berle and Means (1932) provides the foundation for research. The central premise of their work was the recognition of problems associated with the separation of ownership and management. Jensen and Meckling (1976) expanded these ideas significantly through the introduction of agency theory. According to agency theory, a firm represents a nexus of contracts between principals (owners) and agents (managers). They proposed that owners and managers had contradictory risk preferences. This may lead to managerial decisions that depart from shareholder preferences.

Corporate governance mechanisms may reduce agency problems and, at the same time, induce agency costs. With assumptions in a perfect world, where capital market has neither transaction nor agency costs of external finance, the traditional capital asset pricing model (CAPM) predicts that expected returns on equity only depend on the level of systematic risk associated with the market portfolio. Under this circumstance, corporate governance should be insignificant. However, under an imperfect world in which agency problems exist, the induced agency costs create a case for differences in the firm-specific corporate governance system to be important for explaining expected returns in a cross-section of firms (Lombardo & Pagano, 2002; Drobetz, Schillhofer, & Zimmermann, 2004).

There are many studies that highlight the importance of corporate governance. La Porta et al. (1997, 1998, 2000) showed that corporate governance was an important element in financial market development and firm value. They claimed that legal protection of investors was a predominantly vital indicator of effective corporate governance and reported evidence that strong investor protection was connected with expansive financial market, dispersed ownership structure, higher dividend payments, and efficient allocation of capital across firms. Later, Bae et al. (2006) argued that differences in the quality of

corporate governance also affected stock return asymmetries.

In line with the *incentive-alignment hypothesis*, managerial shareholdings can create incentive aligned effects. The *incentive-alignment hypothesis* states that as executives gain greater ownership stakes, they are more likely to disclose all information to the public to signal firm quality. As the number of shares held by insider ownership increases, the managers have more likelihood of displaying higher levels of quality through less idiosyncratic volatility than firms with lower level of managerial ownership. Stock prices of high-quality firms should distribute normally.

Moreover, Eng and Mak (2003) discovered that good corporate governance was an extraordinary level of transparency and disclosure, consequently tumbling the possibility of insiders' wealth expropriation. Kanagaretnam, Lobo, and Whalen (2007) documented that good corporate governance led to more informative stock prices. Firms with stronger shareholder protection exhibited lower information asymmetry. Consequently, higher ownership structure can be associated with stronger stock market reactions in both directions. The markets have reacted not only towards positive news but also towards negative news, resulting in more tail observations. Therefore, the *incentive-alignment hypothesis* expects that managerial ownership has no significant impact on the level of skewness.

$H_0$ : There is no relationship between stock return skewness and insiders' ownership.

On the other hand, La Porta et al. (1998) demonstrated that positive return skewness was more pronounced in stocks from markets that have lower scores on the good corporate governance index. Poor governance that reflected in managerial ownership can be explained in two dimensions. First, the *discretionary-disclosure hypothesis* highlights the importance of information disclosure as a source of positive firm-level skewness due to the degree of managers' discretion over the firm's information. There are empirical studies that emphasize the importance of corporate governance issue and relations to accounting and information flow (Basu, 1997; Ahmed & Duellmann, 2007; García Lara, García Osmá, & Penalva, 2009). Good news only has a positive impact on the firm's stock price, but bad news can have both a positive effect and a negative effect. The manager has an incentive to reveal all positive and

all negative news but will be less detailed on reasonably negative news or withhold them (Skinner, 1994).

A more contemporary work by Albuquerque (2012) related positive stock skewness to firm-level heterogeneity that was reflected in the timing of firm announcement events. The firm-level skewness models suggested that the degree of firm-specific skewness can be inclined to managerial decisions on the disseminating and managing of information. Companies that vary in their information policies will exhibit different levels of skewness. Also, Nagar, Nanda, and Wysocki (2003) argued that managers were reluctant to provide extensive information because disclosure reduced their private control benefits. This reduced disclosure in turn led to greater information asymmetry in capital markets and the inability of capital markets to monitor the performance of managers.

In addition, Bae et al. (2006) proposed that business groups in economies where investors' rights are poorly protected facilitated risk sharing or coinsurance by smoothing income flows. Therefore, the resources are allocated among affiliated companies. These firms use wide-ranging cross-subsidization such as debt guarantees, equity investments, and internal transactions to sponsor poorly performing firms at the expense of well-performing firms. This *risk-sharing/coinsurance hypothesis* proposes that stock returns of group-affiliated firms are more positive skewed than they are for independent firms. Since business groups are a more prevalent organizational form and normally reflected in closely held entrepreneur firms, therefore, stock returns of high managerial ownership firms in emerging markets will be more positively skewed. Ownership concentration promotes intercorporate goals of risk reduction and mutual assistance among business group for firms in Asian region (Gedajlovic & Shapiro, 2002). With all these regards, the *discretionary-disclosure hypothesis* and the *risk-sharing/coinsurance hypothesis* leads to the following hypothesis:

$H_{1a}$ : There is a positive relationship between stock return skewness and insiders' ownership.

As an alternative, this study proposes the *diversification-control hypothesis*. Equity stakes lessen those activities related to positive skewness because managers have fewer opportunities to protect their wealth against risk than well-diversified outside

shareholders (Zhou, 2001; Jin, 2002; Bouwens & Verriest, 2014). Unlike the institutional holdings, managerial ownerships are much less likely for managers to diversify their risk due to much smaller amount of capital. For them, owning the firm's share means assuming risk that they cannot diversify away. Given the manager's exposure to risk, they may want to reduce firm-specific risk by underinvesting in projects that increase firm risk and overinvesting in risk-reducing activities (Jin, 2002; Jensen, Murphy, & Wruck, 2004). All these activities may reduce the level of positive skewness of the firm's stock return distribution. This incidence motivates these less diversified managers to take less risk (Smith & Stulz, 1985), which leads to the following alternative hypothesis.

H<sub>1b</sub>: There is a negative relationship between stock return skewness and insiders' ownership.

## Data and Research Methodology

This study focuses on the relationship between ownership structure, one of the most important internal mechanisms of corporate governance, and an individual firm's skewness of the return in a cross-section of publicly listed firms in ASEAN-5 countries. The data employed in this study is obtained from Thomson Reuters Eikon and Datastream International. Further, for each firm in each of the countries in ASEAN-5, the daily stock prices and market capitalization information were acquired. To achieve more reliable estimates for return asymmetries in any calendar year, a firm-year data should have at least 200 days of stock returns in any particular year across five countries. This selection process leads to an ultimate sample of 2,216 firms during the period of 2007–2015 from ASEAN-5 equity markets.

Skewness is a measure of the asymmetry of probability distributions. Negative skewness or left-skewed distribution has fewer large negative values and a longer left tail, while positive skewness has fewer large positive values and a longer right tail. To calculate the skewness, daily stock return data in each year and for each firm in each country are employed. Then, the skewness is computed using the measure described in Pearson (1895). Then, it is adjusted for the conditional coefficient of skewness (*SKEW*), which is as follows:

$$SKEW_i = \frac{(n(n-1)^2 \sum_{t=1}^n R_{it}^3)}{(n-1)(n-2)(\sum_{t=1}^n R_{it}^2)^{3/2}} \quad (1)$$

where  $R_{it}$  represents the daily return of stock  $i$  at day  $t$  and  $n$  is number of observations. Basically, if *SKEW* is 0, then it means the distribution is symmetric. The positive value of *SKEW* indicates the right skewness while the negative value refers to negative skewness.

The objective of this paper is to provide evidence for the hypothesized relationship between ownership structure and stock return asymmetries. To find the relationship between ownership structure (*OWN*) and stock return asymmetries, *SKEW* is regressed against *OWN* and several other controlling variables. The independent variables are factors expected to influence the stock return skewness as depicted in the following equation:

$$SKEW_{i,t+1} = \alpha_0 + \beta_1 SKEW_{it} + \beta_2 OWN_{it} + \beta_3 CUMRET_{it} + \beta_4 LNSIZE_{it} + \beta_5 LEVER_{it} + \beta_6 MTB_{it} + \varepsilon_{i,t+1} \quad (2)$$

The prediction signs of regression coefficients for insiders' ownership (*OWN*), a proxy for corporate governance, are as follows. Based on the *risk-sharing/coinsurance hypothesis*, a positive coefficients for *OWN* is hypothesized while a negative regression coefficient on *OWN* comes from the *diversification-control hypothesis*. However, if *OWN* is not statistically significant, this supports the *incentive-alignment hypothesis*.

A lagged variable of skewness is included to test for persistence of skewness, and a set of controlled variables is used to lessen the likelihood of any other factor inducing changes in the dependent variable. As proposed by Bae et al. (2006), the explanatory variables included in this study are *CUMRET*, *LNSIZE*, *LEVER*, *MTB*. and a set of dummy variables to control for countries and year effects. *CUMRET* denotes the cumulative daily returns for stock  $i$  during a year at time  $t$ . According to the stochastic-bubble theory of Blanchard and Watson (1982), there are several implications for a variety of stock return patterns. The cumulative daily returns for stocks represent accumulated hidden information tends to come out during stock market crash, then a lower chance for higher positive skewed pattern.

So, a negative regression coefficient on *CUMRET* is expected.

*LNSIZE* is firm size measured in the natural logarithm of the firm's market capitalization for each firm in all countries, denominated in US dollars. It is expected that the regression coefficient on *LNSIZE* should be negative. Small firms tend to have credit constraints, a difficulty to access capital in credit markets, as a result of market imperfection. Some studies predict stock return asymmetries as an implication of capital market imperfections. Gertler and Gilchrist (1994) provided evidence in the US that firm size affects the stock return distribution. They argued that the informational asymmetries increase firms' cost of external capital and were most important to the young and poorly collateralized, all of which tend to be smaller firms.

*LEVER* is the ratio of book value of debt to the book value of assets for the stock *i* at time *t* to control for financial leverage. Debt financing is considered a determinant of the properties of equity returns (Bhandari, 1988; Schwert, 1989). Leverage also affects the higher moments of equity returns and, ignoring leverage's role in determining the higher moments, can result in an erroneous conclusion regarding its impact on the lower moments. Harvey and Siddique (2000) proposed that issuance of debt can be viewed as giving the stockholders the option to buy the assets of the firm at an exercise price equal to the face value of the debt. If equity is considered as a call option, stock returns should be positively skewed even if the underlying returns on the firm value have a symmetric distribution. This implies firm leverage should be negatively related to the level of skewness.

*MTB* is the ratio of the market to the book value of equity for the stock *i* at time *t*. Stocks with a high market-to-book ratio are recognized as glamour stocks, which are typically more expensive than ordinary

shares mainly because there is a high demand for them. Glamour stocks display a significant positive skewness in their return distributions compared with value stocks (Zhang, 2013). The price premium that investors paid for glamour stocks also correlates significantly with the stock return skewness. Therefore, the relationship between *MTB* and the level of skewness is expected to be positive.

## Empirical Results

This paper investigates the relationship between stock return asymmetric distribution and managerial ownership. Table 1 reports the distributional characteristics of firm-level stock returns in ASEAN-5 equity markets including Indonesia, Malaysia, the Philippines, Singapore, and Thailand during 2007–2015. For each firm in each country in a particular year, the sample statistics, including the mean, standard deviation, first quartile, third quartile, and conditional skewness, are computed, and the average of a sample statistic for each country is reported.

The average daily returns are positive and higher in Thailand, Indonesia, and the Philippines (TIP markets) than the more developed countries such as Singapore and Malaysia, which reveal negative returns on average. Overall, the stock return distributions of the samples indicate positive skewness at firm level. The larger conditional skewness means more deviation from normal distribution assumption and infers the higher level of asymmetric information. Accordingly, the Indonesia equity market, which has the largest value of skewness, reveals the highest level of information asymmetry while the Singapore equity market with smallest skewness among sample countries discloses the lowest level of asymmetric information.

One possible explanation is drawn from the report on the ASEAN Corporate Governance Scorecard, which reported that Singapore has the highest score in

**Table 1.** *Distributional Characteristics of Daily Stock Returns in ASEAN-5 Equity Markets*

Country	Mean Return	Standard Deviation	First Quartile	Third Quartile	Conditional Skewness
Indonesia	0.000271	0.032881	-0.006458	0.005052	0.436161
Malaysia	-0.000036	0.037735	-0.007581	0.005167	0.406578
Philippines	0.000298	0.036845	-0.005480	0.003888	0.407778
Singapore	-0.000368	0.044004	-0.005713	0.003539	0.116000
Thailand	0.000267	0.027441	-0.007303	0.006491	0.330894

**Table 2.** *Descriptive Statistics of Dependent and Independent Variables*

	<i>SKEW</i>	<i>OWN</i>	<i>CUMRET</i>	<i>LNSIZE</i>	<i>LEVER</i>	<i>MTB</i>
<b>Mean</b>	0.3458	0.6149	0.0338	18.2611	0.2313	1.5273
<b>Median</b>	0.3068	0.6506	0.0513	17.9700	0.2100	0.9500
<b>Standard Deviation</b>	1.1737	0.2069	0.4119	1.8777	0.1726	2.0375

**Table 3.** *The Pearson Correlations Between Conditional Skewness and Independent Variables*

	<i>SKEW</i>	<i>OWN</i>	<i>CUMRET</i>	<i>LNSIZE</i>	<i>LEVER</i>	<i>MTB</i>
<i>SKEW</i>	1	0.0284	0.3625	-0.0963	-0.0060	0.0490
<i>OWN</i>	0.0284	1	0.0272	-0.2183	-0.0091	-0.0168
<i>CUMRET</i>	0.3625	0.0272	1	-0.0455	-0.0208	0.1449
<i>LNSIZE</i>	-0.0963	-0.2183	-0.0455	1	0.0867	0.2845
<i>LEVER</i>	-0.0060	-0.0091	-0.0208	0.0867	1	0.0110
<i>MTB</i>	0.0490	-0.0168	0.1449	0.2845	0.0110	1

disclosure and transparency section among the ASEAN countries, followed by Thailand and Malaysia as well as the Philippines and Indonesia during the period of the study (Asian Development Bank, 2014). The results on transparency stated in the report support the notion that stock returns in less developed markets tend to be more positively skewed than stock returns in developed markets due to the different quality of disclosure and transparency. As expected, the results found in this study show a similar pattern. Stock returns of listed firms in Indonesia exhibit the largest positive skewness, followed by the Philippines and Malaysia, while the individual stock returns in Singapore present the smallest positive skewness.

The descriptive statistics of dependent and independent variables employed in this study to explore the factors affecting the future skewness from the total number of 12,687 firm-year observations are presented in Table 2. The dependent variable is the conditional skewness of stock returns (*SKEW*) while the independent variables are managerial ownership (*OWN*), cumulative daily stock returns (*CUMRET*), firm size (*LNSIZE*), the ratio of book value of debt to assets (*LEVER*), and the ratio of the market to book value of equity (*MTB*).

Next, this study employs the Pearson correlation, which is a measure of the linear dependence between two variables to explore the correlation between conditional skewness measure and the independent variables in the regression equation.

In general, the results of listed firms in ASEAN-5 stock markets during 2007–2015 presented in Table 3 support the positive correlation between *SKEW* and *OWN*, *CUMRET*, and *MTB*, but *SKEW* is negatively correlated with *LNSIZE* and *LEVER*. As previously discussed, the stock returns are more positively skewed for firms with a high level of managerial ownership, supporting the *discretionary-disclosure hypothesis*.

Since the Hausman test indicates that fixed-effect estimation is more appropriate, the regression estimation, thus, contains firm and year dummies for each time period (not shown). Table 4 reports the regression results for the listed firms in ASEAN-5 equity markets.

The results of the panel regressions show statistically significant explanatory ability, which indicates the cumulative daily return, firm size, market-to-book ratio, and insiders' ownership influence the predicted stock returns distribution. In other words, current cumulative return has negative explanatory power for the prediction of skewness in the following period. It means the higher the current cumulative return, the lower the magnitude of the firm-level skewness in the next period. The results support prior findings that negative skewness is most significant in stocks around the world that have experienced higher returns in the previous 12-month period (Chen et al., 2001; Bae et al., 2006).

Besides, skewness tends to be more largely positive with higher holdings of managerial ownership.

**Table 4.** *The Fixed-Effect Panel Regression for the Prediction of Future Conditional Skewness*

Variable	Coefficient
Constant	8.1952*** (0.0000)
SKEW	-0.1149*** (0.0000)
OWN	0.2742*** (0.0233)
CUMRET	-0.2937*** (0.0000)
LNSIZE	-0.4345*** (0.0000)
LEVER	-0.1996 (0.1513)
MTB	0.0211* (0.0707)
<b>Adjusted R<sup>2</sup></b>	0.1726
<b>F-Statistic</b>	2.0859*** (0.0000)

Note. \*, \*\*, and \*\*\* denote significance levels at 10%, 5%, and 1%, respectively. *p*-Values are in parentheses.

Industry and year dummies are included but not shown in the table.

Therefore, the results support the *discretionary-disclosure hypothesis*. High managerial shareholdings allow insider managers to be more opportunistic in disclosing information. Managers with more shareholdings may have a wider scope to hide bad news or to release bad news more slowly than managers with less shareholdings, especially in the ASEAN, where many of the firms are family owned with a high concentration of shareholdings.

Predicted skewness is also negatively related to firm size, meaning smaller firms and glamour stocks tend to have larger positive skewness, accordingly. One reason to explain why ASEAN firms exhibit such a reverse relationship between size and the conditional skewness is that managerial discretion rises noticeably in small-capitalization firms or in firms followed by fewer analysts. The managers of these firms have a relatively broader scope for hiding bad news from the market.

Conditional skewness is positively related to market-to-book ratio. The implication is that growth stocks in the ASEAN tend to have larger positive skewness. A higher market-to-book ratio implies that

investors expect management to create more value from a given set of assets, all else equal, therefore inducing managerial discretion in disseminating information to the public. One explanation is that investors overreact to growth aspects (good news) for growth stocks. Another explanation is that market-to-book ratio itself is one form of a risk measure.

Finally, the lagged variable of skewness is negative and significant, so it reveals that the skewness in different periods is not persistent. Further, the leverage variable, as a control variable, is not significantly correlated with conditional skewness.

## Conclusion

The investigations of distributions of stock return are widely examined in well-developed markets. However, there is limited number of literatures exploring the distribution of stock returns using firm-level data. This paper aims to reveal the association between conditional skewness of the stock returns in ASEAN-5 equity markets and the corporate insiders'



ownership. The sample includes 2,216 individual firms listed in the stock markets of Indonesia, Malaysia, the Philippines, Singapore, and Thailand during 2007–2015. The use of firm-level data adds to the current literatures on the relationship between the stock return skewness and ownership structure in emerging markets. The findings suggest that skewness can be positively explained by ownership structure and market-to-book ratio while negatively described by the cumulative stock returns and firm size. Most interestingly, this finding is supported by the discretionary-disclosure hypothesis. The results reveal important implications on a firm-level analysis on which corporate governance variable has an effect on the asymmetric distribution of stock returns. Further investigation would be to explore the impact of crisis on the stock return distributions.

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