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Agency Control on Capital Market Efficiency: Evidence from Earnings Announcement

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Abstract

This study investigates how agency control influences the market's response to new information disclosed during earnings announcements. The aim is to investigate the potential connection between agency control and market efficiency. The research employs an event study as the principal metric and ordinary least squares to evaluate the relationship between agency control and the firms' cumulative earnings announcement returns. This study analyzes the effect of earnings announcements on abnormal returns, utilizing 93,244 daily data from all listed firms between July 2018 and December 2019, specifically during the reporting of year-end financial statements as of December 31, 2018. The study reveals that firms under concentrated ownership and family control do not conform to the semi-strong form of market efficiency, as evidenced by the absence of significant abnormal returns during the event. Insignificant abnormal returns following earnings announcements indicate that the market has assimilated the firms' financial information before the announcement date, as these stakeholders possess privileged access to the firms' information well in advance of the announcements. As a result, the market no longer receives new information from the event or encounters any significant unforeseen news. Consequently, the study determines that agency control may affect the market efficiency of a capital market. The study advises policymakers to examine this issue and adopt measures to alleviate information asymmetry between controlling and non-controlling shareholders.

Keywords: *Earnings announcement, market efficiency, IDX market.*

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INTRODUCTION

Market efficiency theory states that the information revealed by a particular event immediately influences stock prices (Patra & Hiremath, 2022; Brouty & Garcin, 2023; Fama et al., 1969). This definition states that the market immediately adjusts stock prices after spreading information at the time of earnings announcements. However, there may be anomalies in market prices. This is likely due to information asymmetry concerns. Information asymmetry, also known as imbalanced information, can cause markets to respond inefficiently to new information. Several factors can influence markets, and overcoming information asymmetry can improve market efficiency.

Researchers have demonstrated that information asymmetry adversely affects the market. Huynh et al. (2020) reported that information asymmetry adversely affects firms' value. Other scholars associate the issue with earnings management (Pernamasari, 2022; Richardson, 2000), insider trading (Jamadar et al., 2022; Huddart & Ke, 2007), financial distress (Jan, 2021), corporate fraud (Ghafoor et al., 2019), and trading costs (Bhattacharya et al., 2013). Despite the difficulty in addressing the issue, several researchers suggest that financial and non-financial disclosures effectively alleviate the problem (Suharsono et al., 2020; Romito & Vurro, 2021). In numerous empirical studies (e.g., Chod & Lyandres, 2021; Jabeen & Shah, 2011; Choi et al., 2013), the information asymmetry surrounding earnings announcements is frequently associated with agency control. According to Raimo et al. (2020), agency theory suggests that information asymmetry exists between management and owner. Information asymmetry is a concept that explains how different ownership structures may have more access to a firm's information than others due to their ability to influence the firm's management to access the data prior to the earnings releases or announcements. This may consider not new to the market if a specific investor has access control to the financial information prior to the earnings releases. A release of information to significant shareholders as a signal or other indicators may occur prior to the announcement, which can lead to abnormal returns before the earnings release. When the market anticipates the earnings announcement in advance, abnormal returns after the event are prevented. As a result, the earnings report does not provide stockholders with any unexpected or noteworthy information.

The aforementioned studies have consistently illustrated the strong relationship between information asymmetry and ownership structure. Nevertheless, there is a scarcity of research that directly connects agency control with market efficiency, particularly in the context of the Indonesian equity market. This study's significance lies in the fact that the founding family members primarily manage and own the ownership structures in Indonesia, indicating a reduced degree of separation between the owner and management. Table 1 presents the report of Claessen et al. (2000), which illustrates the characteristics of publicly listed firms in Indonesia. The table suggests that the publicly listed firms in IDX are controlled by highly concentrated ownership, primarily family ownership. The data also suggests that the majority of firms in the IDX market maintain control through a pyramidal structure. Another study by Nam and Nam (2004) reported that among other Asian countries, Indonesia has the highest ownership concentration, followed by Malaysia and Thailand, while Korea has the lowest concentration.

Table 1. Characteristics of Publicly Listed Firms in Indonesia

Means of Enhancing Control:		
Pyramidal ownership with ultimate owners	*	66.9%
Cross shareholding		1.3%
Controlling owner alone		53.4%
Management by controlling family	**	84.6%
Concentration of Control (20% cut-off point)		
Widely held	***	5.1%
Family	*	71.5%
State		8.2%
Widely held financial	***	2.0%
Widely held corporation		13.2%

* The highest among the nine Asian countries
** Among the highest among the nine Asian Countries
*** The lowest among the nine Asian countries

Sources: Extracted from Claessen et al. (2000).

Table 1 shows data from the Asian Development Bank also supports the assertion. The report cited the report of Porta et al. (1998), which revealed an ownership concentration rate of 53% in Indonesia, 46% in Malaysia, 44% in Thailand, and 23% in Korea. Claessen et al. (2000) revealed in another report that the top five shareholders owned 67.5% of the firms in Indonesia, with the largest shareholders owning approximately 48.2%. Furthermore, the widely held firms accounted for only 0.6% of the total. These data suggest a concentration of power in the hands of a small number of owners, which leaves small and public investors with limited ability to safeguard themselves from the appropriation of the large shareholders.

This study examines the impact of agency control on the information asymmetry surrounding earning announcements in the Indonesian equity market context. It explores the relationship between ownership structure in the Indonesian equity market, information asymmetry, and market efficiency from the perspective of earning announcements—a perspective rarely explored in previous studies. Faulkender and Petersen (2012) state that a company's characteristics influence the sources of capital it can access. Research by Siregar and Utama (2008) strengthens this view, by showing that ownership structure has the potential to create an imbalance in access to the company and is also related to earnings management practices. Meanwhile, Jiang et al. (2011) found a positive correlation between shareholder composition and information asymmetry related to earnings announcements. Thus, this research suggests that different types of ownership may contribute to varying levels of market efficiency. Information leaked to major shareholders in the form of signals or other clues can appear before the official announcement, resulting in abnormal returns in the pre-earnings announcement period. When the market has anticipated an earnings announcement in advance, the information from the earnings report loses the element of novelty, so it does not trigger abnormal returns after the announcement.

Therefore, the study examines the impact of agency control on the existence of abnormal returns during earnings announcements, specifically focusing on the following areas of interest. **Firstly,** the study scrutinizes market efficiency in the context of high ownership control. According to Shiri et al. (2016), the presence of a more concentrated ownership structure increases information asymmetry during earnings announcements, which might influence the market efficiency in a particular market. **Secondly,** the study measures the identity of the largest shareholders by investigating the impact of family control over the market efficiency level. By assessing international corporate finance data from 2003 to 2009, Martínez-Ferrero et al. (2018) reported the adverse selection effect by which family owners take advantage of insider information before the earnings announcement release. The study contributes to the literature by being the first to relate agency control to market efficiency. The significance of the study lies in its potential to warn policymakers about the impact of agency control on market efficiency in the Indonesian equity market.

The investigation of the study centers on three primary theories: market efficiency, information asymmetry, and agency theory. Market efficiency is concerned with the immediate response of stock prices to new information (Wang and Wang, 2022). In contrast, information asymmetry theory posits that information is not equally accessible to all parties, and one of the two parties may possess more information than the other (Chod & Lyandres, 2021).

The agency theory, which focuses on mitigating conflicts of interest between shareholders as principals and executives as firm agents, is closely associated with the aforementioned theories. This approach addresses how to resolve of shareholder-manager conflicts by separating ownership from control. This theory primarily posits that all individuals are self-interested and believe those involved act in their best interests (Dong et al., 2021). The problem occurs when the goals and interests of the parties involved are different. Managers will probably make decisions or take actions that are advantageous to themselves. However, shareholders can constrain managerial authority by employing various strategies. Diverse mechanisms, including suitable contracts, oversight systems, market competition, appropriate executive remuneration, and a board of directors, can regulate and affect managerial actions. Controlling shareholders possess voting rights that can influence the managers' positions (Fos & Holderness, 2023), making managers' decisions more congruent with those of the controlling shareholders. From a different perspective, managers systematically adjust their earnings reports to align with the expectations of primary shareholders, utilizing various ethical and non-legal earnings management strategies. Managers experience pressure to attain substantial earnings growth and performance to secure their employment. The inaccurate data in the earnings announcement may negatively impact minority shareholders (Ezzamel, 2020). Agency theory often links these failure domains to problems in control and monitoring.

The discussion on ownership structure may encompass ownership concentration and identity (Martinez-Garcia et al., 2023). A situation known as concentrated ownership occurs when a small number of owners hold the majority of the shares. Increased ownership concentration can lead to a system where a controlling owner can actively monitor management's choices, become heavily involved in the company's management, and diminish independent control. In other words, ownership concentration implies that the higher the percentage of ownership in the hands of one or a few controlling shareholders, the higher the control concentration, and vice versa. A higher level of ownership concentration implies that investors have more substantial monitoring power over managerial decisions than firms with dispersed ownership, enabling them to safeguard their investments proactively. Owners with a significant share may take actions, either directly or indirectly, over firms' decisions, such as the election of board members and the replacement of firms' management by their voting power. Large shareholders genuinely shape the decisions that the firm's management appears to make. When this phenomenon occurs, it has the potential to impact the interests of non-controlling shareholders negatively. Therefore, highly concentrated ownership can reduce agency costs. Still, on the other hand, it may ignore smaller investors' interests or influence the firms' performance by excessively monitoring managers for their benefit. Bebchuk and Roe (1999) also argued that high ownership concentration could result in the dominant owners extracting the firm's resources at the expense of a minority.

Hence, this study examines the market efficiency in ownership concentration, drawing on the previously mentioned arguments. The study examines the relationship between share concentration and the cumulative average of abnormal returns earned post-earning announcements, formulating the following hypotheses.

H1: **A relationship exists between shared concentrations and the cumulative average abnormal returns post-earnings announcement.**

The study examines the identity of the largest shareholder by assessing family firms. The study views family ownership as a distinctive identity for a firm. Family ownership issues are an attractive financial topic considering that in an emerging market like East Asia, this type of ownership controls more than two-thirds of the firms (Claessens et al., 2000). Family owners are typically associated with a family legacy and hold relatively long shares (Jabeen & Shah, 2011). Compared to non-family firms, family firms possess the knowledge and long-term investment perspective necessary to develop strategies during challenging circumstances and periods (Lumpkin et al., 2010). However, given the family firms' complexity, empirical research has yet to reach a consensus on whether family control is beneficial or detrimental to firm performance (Pindado et al., 2014). According to Liu et al. (2017), family-controlled firms engage in less accrual-based earnings management than non-family firms as they tend to maintain legitimacy.

In order to maintain their family interests, family investors often appoint family members or relatives to hold positions in top management and on the board (Chen et al., 2000). However, independence will become an issue when family members are present on the firm’s executive board. Firms with family control are often associated with less effective management and a lower level of professionalism (Martínez et al., 2007). They tend to hire management and employees because of their family relationships (Kellermanns & Eddleston, 2004). Investors in family firms may obtain a private gain from the firms and the market at the cost of other minority interests by having special access to the inside information (Fama & Jensen, 1983; Doidge et al., 2009).

Consequently, outside investors perceive family owners as the controlling party of the firms, reporting accounting information for their interests, thereby reducing the credibility of the information. Firms with significant family control typically disclose less information, leading to an increase in information asymmetry.

Siregar and Utama (2008) reported that family-controlled firms in the Indonesian equity market significantly influence the firms' earning management strategy. Therefore, it assumes that family-controlled firms tend to have more significant information asymmetry problems than non-family firms. Based on the arguments, this study tests the market efficiency in family ownership. The investigation examines the relationship between shared concentration and the cumulative average earning abnormal returns post-earning announcements and formulates the following hypotheses.

H2: **A relationship exists between family ownership and the cumulative average abnormal returns post-earnings announcement.**

RESEARCH METHOD

Data and Sample

The study examines the comprehensive IDX market, disclosing its financial statements for the fiscal year concluding on December 31, 2018. In the second quarter of 2019, the Indonesia Stock Exchange (IDX) documented 634 listed companies. However, the study could not include 13 organizations from the dataset, including five that failed to disclose their earnings release, five delisted, two merged, and one suspended. The sample size decreased from 634 to 621 enterprises, representing 98.26% of the total. The study deems the sample size adequate to yield a representative market characterization.

Using 93.244 daily data of all listed firms from July 2018 to December 2019, this investigation examines the impact of the earnings announcement on the abnormal returns from a short-term perspective. Chung and Hrazdil (2011) contended that a short-horizon return predictability measure captures the overall degree of market reaction more effectively. It offers a more comprehensive method for evaluating the market in processing new information. Based on that argument, the investigation analyzes daily stock return data from days 0 to 30 following earnings release, with an estimation window extending from days 120 to 30 before the earnings announcement. The study sourced the investigation data from Indonesia's official stock market website, www.idx.co.id.

Measuring Shared Concentration and Family Control

The study represents agency control (CONS) by utilizing the percentage of the largest shareholder composition presented in the audited financial statement as of December 31, 2018. The IDX market utilizes the Extensible Business Reporting Language (XLBR) report to determine the identity of the largest shareholder. Numerous investigations frequently implement similar measurements (e.g., Lins et al., 2013; Thomsen & Pedersen, 2000). The study quantifies ownership identity by utilizing dummy variables of 0 and 1, and it measures shared concentration by calculating the percentage of the largest shareholders.

Measuring Abnormal Returns

The study uses the market model to measure abnormal returns. Researchers commonly use market models for daily data assessment (Sorescu et al., 2017; Chiah et al., 2016; Campbell & Wesley, 1993). The steps start by calculating the daily returns of each stock using the following formula (Minenna, 2003).

$$R_{i,t} = \ln \frac{P_{i,t}}{P_{i,t-1}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \; 1$$

Where:

$R_{i,t}$ = The daily return;

$P_{i,t}$ = closing price on day t;

$P_{i,t-1}$ = closing price on day t - 1;

The next step involved calculating the abnormal returns of the firms. The equations below illustrate how to measure the abnormal return on earnings using the market model (Benninga, 2014).

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{mt}) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. \; 2$$

Where:

$AR_{i,t}$ = abnormal return;

$R_{i,t}$ = Daily stock returns;

R_{mt} = Daily market index returns;

α_i = Intercept of firm and market returns in estimation window;

β_i = Slope of firm and market returns in estimation window.

Finally, the study proceeds with the computation of the cumulative abnormal returns for the stocks. The cumulative abnormal return (CAR) represents the total abnormal return (AR) for the firm's stock prices during a specific period, calculated using the following formula.

$$CAR_{i,t} = \sum_{t=1}^{n} AR_{i,t} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. \; 3$$

Where:

$CAR_{i,t}$ = cumulative abnormal return;

$AR_{i,t}$ = abnormal return.

Estimation model

The study utilizes ordinary least squares to assess the relationship between the firms' cumulative earnings announcement returns (CARs) and their ownership structures, which include concentrated ownership (Cons) and family (Fam). It investigates the relationship by using three control variables: earnings per share (EPS), total asset size (Size), and debt-to-equity ratio (DER). The regression model uses these variables as supplementary explanatory variables to determine whether the control variables will influence the examination results. Therefore, the following estimation model is employed to quantify the correlation between the independent variables and the observed dependent variable.

Model:

$$CAR_{i,t} = \beta_0 + \beta_1 Cons + \beta_2 Fam + \beta_4 EPS + \beta_5 Log(Size) + \beta_6 DER + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots.. 4$$

Where:

$CAR_{i,t}$ = Cumulative abnormal returns during post-earning announcement periods;
Cons = Largest share composition;
Fam = Dummy variable of family ownership;
EPS = Earning per share reported in Q_4 2018;
Log (Size)= Natural log of total assets on Q_4 2018;
DER = Debt-to-equity ratio on Q_4 2018.

Hypothesis Testing

This research utilizes 90%, 95%, and 99% confidence levels, corresponding to acceptable errors of 10%, 5%, and 1%, respectively. Lind et al. (2005) indicate that the sample size will range between the estimated population mean of 1.645, 1.96, and 2.58 standard deviations, corresponding to the 90%, 95%, and 99% confidence intervals. Consequently, an absolute t-value of 2.58 or greater indicates that a distribution is abnormal at a 99% confidence level (Sig***). The distribution is abnormal at a 95% confidence level (Sig**) if the value lies between 1.96 and 2.58. The distribution is considered abnormal at a 90% confidence level (Sig*) if the result lies between 1.645 and 1.96. A value below 1.645 signifies the anticipated distribution; hence, the AR, CAR, or DER are deemed negligible. The value is less than 1.645, 1.96, and 2.58 for each corresponding confidence level.

RESULTS AND DISCUSSION

Results

Descriptive Statistics

Table 2 below displays the descriptive data for shared concentrations and family control firms. The table displays the variables of shared concentration and dummy ownership for family and government entities. The mean shared concentration is 53%, with maximum and minimum values of 99% and 7%, respectively. The report shows that the mean dummy variables for family and government ownership are 68% and 7%, respectively, implying that family firms primarily comprise the IDX firms.

Table 2. Descriptive Statistic of Ownership Concentration and Family Control

Statistic	Cons	Fam
Mean	0.53	0.68
Median	0.52	1
Maximum	0.99	1
Minimum	0.07	0
Std. Dev.	0.22	0.47
Skewness	0.05	-0.78
Kurtosis	2.12	1.61
Observation	621	621

Notes: Cons = Largest shared concentration, Fam = Dummy variable of family ownership.

Table 3, supplementary to the preceding table, presents statistics regarding firms' ownership identity as of 31 December 2018. The table indicates that, among 621 sampled firms, family ownership constitutes 68% (424 firms) of the IDX market. This type of firm represents 48% of the total market value, with a market value of Rp. 3,530,948,214,527,480. The second most prevalent ownership category is foreign ownership. Foreign ownership accounts for 25% of the market, comprising 155 enterprises, and has a market equity of Rp. 1,955,169,582,417,410, or 26% of the total market value. The government's influence is minimal, with 42 enterprises, or 7% of the market, contributing to Rp. 1.903.739.811.172.620, which represents 26% of the overall market capitalization.

Table 3. Statistical Distribution by Ownership Identity

Ownership Type	Firms		Market Capitalization	
	No.	In %	Rp.	In %
Family	424	68%	3.530.948.214.527.480	48%
Government	42	7%	1.903.739.811.172.620	26%
Foreign	155	25%	1.955.169.582.417.410	26%
Total	**621**	**100%**	**7.389.857.608.117.510**	**100%**

Shared Concentration and Abnormal Returns

The regression analysis of cumulative abnormal returns and shared concentration between 0 and +5, 0 to +10, 0 to +15, and 0 to +30 is shown in Table 4. This analysis is done with and without the control variable. Table 4 indicates a coefficient value of 0.2471 for the initial week of the earnings announcement. The number rises to 0.2522 when the models incorporate EPS, Log (Size), and DER control variables. The study indicates an insignificant relationship of coefficient value with cumulative abnormal returns, regardless of the inclusion of control variables. Upon incorporating the control variables, the trend remains comparably consistent throughout the larger intervals of (0, +10), (0, +15), and (0, +30), with coefficient values of 0.1115, 0.0437, -0.1078, and 0.1134, 0.0354, and -0.1106, respectively. The results demonstrate that shared concentration does not substantially affect the cumulative abnormal returns over all examined periods. Table 4 indicates that the control factors do not influence the link between shared concentration and cumulative abnormal returns.

Table 4. Cumulative Abnormal Return and Shared Concentration

Window	C	Cons	EPS	Log (Size)	DER	R^2	T-Value	Prob.	Sig.
(0, 5)	-0.3125	0.2471				0.0323	0.586	0.558	No
	-5.5145	0.2522	-0.0144	2.0697	0.0088	0.0367	0.630	0.529	No
(0, 10)	-0.1793	0.1134				0.0387	0.377	0.706	No
	-3.9209	0.1115	-0.0034	1.4831	0.0154	0.0439	0.423	0.672	No
(0, 15)	-0.1149	0.0354				0.0292	0.155	0.877	No
	-3.6450	0.0437	-0.0022	1.3983*	0.0097	0.0354	0.162	0.871	No
(0, 30)	-0.0304	-0.1106				0.0608	-0.564	0.573	No
	-2.0904	-0.1078	0.0003	0.8434	-0.0048	0.0639	-0.576	0.565	No

Notes:

Shared concentration (Cons) coefficient value without the control variables,

Shared concentration (Cons) coefficient value with the control variables.

* Significant at the 90% confidence level,

** Significant at the 95% confidence level,

*** Significant at the 99% confidence level,

Number of observations: 621.

The study indicates that there is no association between shared concentration and abnormal returns following earnings announcements (see Table 4). The research substantiates the argument that substantial owners inherently diminish agency costs (Coffee, 2005). Due to their superior access and communication with the firm's management, large shareholders may receive information earlier than non-controlling or external investors (Fan & Wong, 2002). The substantial shareholders dominate the market, rendering new information largely ineffective in impacting stock returns in firms with concentrated ownership, therefore making extraordinary returns improbable. This analysis concludes to reject Hypothesis H1, indicating no meaningful association between shared concentration and post-earnings announcement abnormal returns in the IDX market.

Family Ownership and Abnormal Returns

The regression of cumulative abnormal returns and family ownership with and without the control variable is shown in Table 5 for the windows (0, +5), (0, +10, (0, +15), and (0, +30). The table indicates a coefficient value of -0.1911 for the initial week of the earnings announcement. The coefficient diminishes to 0.1842 when the model incorporates EPS, Log(Size), and DER control variables. The study indicates an insignificant coefficient value during the initial week of the results announcement, irrespective of including control factors. The trend remains generally consistent throughout larger intervals of (0, +10), (0, +15), and (0, +30), with coefficient values of -0.1895, -0.1426, -0.1601 and -0.1976, -0.1497, -0.1676*, respectively, when the model incorporates and omits the control variables. The results reveal insignificant coefficient values in family-owned firms across all examined periods. The table indicates that the control factors do not influence the significance pattern of family ownership for cumulative abnormal returns.

Table 5. Cumulative Abnormal Return and Family Ownership

Window	C	Fam	EPS	Log (Size)	DER	R^2	T-Value	Prob.	Sig.
(0, 5)	-0.312	-0.191				0.032	-0.858	0.391	No
	-5.514	-0.184	-0.014	2.069	0.009	0.037	-0.936	0.350	No
(0, 10)	-0.179	-0.197				0.039	-1.325	0.186	No
	-3.920	-0.189	-0.003	1.483	0.015	0.044	-1.419	0.157	No
(0, 15)	-0.114	-0.149				0.029	-1.218	0.224	No
	-3.645	-0.142	-0.002	1.398*	0.010	0.035	-1.320	0.187	No
(0, 30)	-0.030	-0.168*				0.061	-1.594	0.112	No
	-2.090	-0.160	0.000	0.843	-0.005	0.064	-1.588	0.092	No

Notes:
Family ownership coefficient value without the control variable,
Family ownership coefficient value with the control variables.
* Significant at the 90% confidence level,
** Significant at the 95% confidence level,
*** Significant at the 99% confidence level,
Number of observations: 621.

Discussion

The data reveals an insignificant relationship between shared concentration and family control with abnormal returns following earnings announcements. The result aligns with the principle of information asymmetry, which posits that information is not equally accessible to both parties, leading to one party perhaps possessing more knowledge than the other (Chod & Lyandres, 2021; Dierkens, 1991). The insignificant degree of abnormal returns after an earnings announcement may indicate the existence of insider information before the announcement. The market considers the statement obsolete if a specific investor possessed financial information before the results announcement. When the market anticipates the earnings announcement in advance, the earnings report does not provide any unexpected or substantial information to stakeholders upon its release.

Shared Concentration and Abnormal Returns

Shared concentration does not affect abnormal returns after earnings announcements, and the concept of information asymmetry and agency theory can explain this. Major shareholders have greater access to internal company information in companies with concentrated ownership. Because they are more involved in monitoring the company, they have more comprehensive information about its performance than small shareholders. This causes the announced profit information not to be a big surprise for major shareholders or the market because most of this information has been anticipated or understood by shareholders who have good access. Thus, low information asymmetry reduces the potential for abnormal returns because the market and large shareholders already know profit expectations. Earnings announcements only confirm existing information and do not trigger significant price reactions.

According to agency theory, conflicts of interest between management and shareholders often occur because management may have different personal interests from the owners (El Kouiri, 2023). However, in companies with shared concentration, large shareholders have stronger control and supervision over management. With this close monitoring, management has fewer opportunities to act solely in its interests, such as manipulating earnings or hiding relevant information. With tighter supervision, management tends to be more transparent in reporting profits, reducing information asymmetry between management and shareholders. The earnings announcement does not trigger significant abnormal returns because the information conveyed to the market is more accurate and does not contain surprises.

The findings also support agency theory, which posits that varying ownership structures may have greater access to a firm's information than others, owing to their capacity to influence management to obtain data before the earnings presentation (Martinez-Garcia et al., 2023). The concept posits that higher ownership concentration may result in a scenario where a controlling owner can closely oversee management decisions, engage significantly in the company's administration, and reduce independent oversight. Ownership concentration indicates that an increased percentage of ownership held by one or a few controlling shareholders correlates with heightened control concentration and vice versa. Increased ownership concentration indicates that investors have greater oversight authority over managerial choices and disclosures before public announcements.

The study's findings diverge from the concept of market efficiency, which posits that new information instantaneously influences stock prices (Patra & Hiremath, 2022; Brouty & Garcin, 2023; Fama et al., 1969). The theory suggests that the market promptly adjusts stock prices following the release of information during earnings announcements, resulting in abnormal returns. The insignificant level of abnormal returns in concentrated ownership suggests that agency control may impact market efficiency in a specific market. In companies with concentrated ownership, the market considers announced earnings information as part of a long-term strategy that has been communicated by large shareholders or the company itself. Due to higher transparency and strong monitoring, market expectations do not differ much from the actual results announced. Therefore, abnormal returns after earnings announcements are minimal or insignificant. Overall, shared concentration reduces agency conflicts through tight supervision, reduces information asymmetry, and increases transparency. As a result, the earnings announcement is not a surprise that triggers abnormal returns because the existing information already reflects the company's expected performance.

The study's overall findings are consistent with those of Martinez-Garcia et al. (2023), who contend that a system of increased ownership concentration can result in a controlling owner who can actively monitor management, become deeply involved in the company's management, and reduce independent control. Ownership concentration indicates that an increased percentage of ownership held by one or a few controlling shareholders correlates with heightened control concentration and vice versa. Increased ownership concentration signifies that investors possess greater oversight authority over managerial decisions than in organizations with dispersed ownership, allowing them to protect their investments aggressively. Majority shareholders may exert influence, either directly or indirectly, on corporate decisions, including the election of board members and the removal of management, through their voting power. Substantial shareholders significantly influence the decisions purportedly made by the firm's management.

Family Ownership and Abnormal Returns

The study findings indicate that family investors may nominate family members or relatives to senior management and board posts to safeguard their familial interests, as noted by Chen et al. (2000). This finding suggests that investors in family enterprises may get private benefits from the firms and the market to the detriment of other minority stakeholders, due to their privileged access to insider knowledge (Fama & Jensen, 1983; Doidge et al., 2009). Consequently, the study indicates that family-controlled enterprises exhibit greater information asymmetry issues compared to non-family organizations.

In family firms, major shareholders (i.e., family members) often have direct and in-depth access to the company's internal information. They are also more involved in day-to-day operations and often have management positions. Due to their closeness to the business, family members as majority shareholders generally already know or estimate the company's performance before the official announcement, so there is no big surprise for them or other investors regarding the earnings announcement. Because information asymmetry tends to be low, announced earnings information is already understood or even anticipated by the market, especially for investors aware of family companies' stability (Harymawan & Nismara, 2022; Suryaningrum, 2012). Earnings announcements only confirm already formed expectations, so they do not give rise to significant abnormal returns.

The market often views family companies as stable and conservative performing entities due to their focus on sustainability and reputation (Claußet al., 2022; Conz et al., 2024). This stability causes the market to have more realistic expectations regarding the performance of family companies, including announced profits. As a result, there isn't much room for surprises from the earnings announcement. When market expectations align with actual results, earnings announcements only confirm what was already expected and do not trigger a big reaction. This reduces the chance of abnormal returns because the market has anticipated these results. Because family companies have strong control and direct involvement in the business, internal information tends to be better controlled and more transparent. Information asymmetry is lower because family owners tend to ensure that the information conveyed to the public is accurate and not manipulative to maintain the family's reputation (Fang et al., 2017; Widagdo et al., 2021). With low information asymmetry, earnings information does not bring surprises to the market. As a result, stock price reactions after earnings announcements tend to be flat or insignificant so that abnormal returns do not occur.

Family companies usually have stronger internal controls due to their concentrated ownership (D'Este & Carabelli, 2022; Weiss, 2014). Family members with strategic positions will more directly supervise operations and ensure that the information published is in accordance with reality. Additionally, because family firms focus on sustainability, they tend to avoid earnings management practices that could undermine public trust. With strong supervision, the potential for earnings manipulation is reduced, making announced earnings information more transparent and reliable. As a result, the market does not overreact to earnings announcements, and abnormal returns after earnings announcements become insignificant. Thus, family firms tend to have lower levels of information asymmetry and less agency conflict. Strict internal supervision, transparency of information, and market expectations of stable performance mean that announced earnings information does not surprise the market. Therefore, family control does not produce abnormal returns after earnings announcements because the announcements align with realistic market expectations.

CONCLUSION

The study indicates that firms with concentrated and family ownership do not operate in the semi-strong form of market efficiency, as evidenced by the absence of significant abnormal returns following the event. The market has assimilated the firms' financial information before the earning announcement date, as these types of ownership have special access to the firms' information long before the announcement dates, as indicated by the absence of significant abnormal returns in the post-earning announcements. Consequently, the information that was disclosed during the event is no longer novel to the market and does not offer any substantial unexpected news. Consequently, the research establishes that ownership structure and identity may influence the efficacy of a market. The outcome suggests that agency control in ownership structure may influence the information asymmetry surrounding earnings announcements. The study does not measure abnormal returns occurring before earnings announcements, a topic that opens for future research. However, the study benefits stakeholders by presenting arguments that agency control could potentially impact the efficiency of the capital market. Therefore, the study advises policymakers to examine this issue and adopt measures to alleviate information asymmetry between controlling and non-controlling shareholders.

In detail, the theoretical contribution of the results showing the absence of the influence of shared ownership and family control on abnormal returns strengthens the view that an efficient market will quickly and precisely integrate relevant information (such as ownership information) into stock prices. This provides additional empirical evidence that ownership structure does not always influence stock price reactions, especially in efficient markets and with low information asymmetry. Agency theory, shared ownership, and family control are often assumed to be able to reduce agency conflicts by tightening internal supervision. However, these results indicate that this mechanism does not always trigger significant changes in market reactions to earnings announcements. The control exercised by large or family shareholders may focus more on long-term stability than the immediate impact on short-term share prices.

This research makes a practical contribution to investors and shareholders. For investors, these results indicate that companies with a concentrated ownership structure or under family control may not provide significant opportunities for abnormal returns during earnings announcements. Investors can interpret that profit information has been predicted or anticipated by the market in these companies. Therefore, this ownership structure may not be an effective focus for investors seeking speculative opportunities or seeking returns from unusual price movements. For other shareholders, especially in companies with concentrated or family ownership structures, these results indicate that family companies or companies with shared ownership tend to be more stable in their market reactions. This signals that the company's strategy is likely more oriented toward long-term sustainability than short-term share price fluctuations.

For regulators and policymakers, these findings emphasize the importance of transparency and oversight in companies, especially those with concentrated or family-controlled ownership structures. The low abnormal returns after earnings announcements indicate that earnings information in this company may already be open and understood by the market. Therefore, policies that encourage transparency and accurate reporting can be strengthened to ensure that the information available in the market remains efficient. Policies that support internal monitoring practices in family companies and companies with shared ownership can be strengthened to maintain market stability. This could take the form of guidance regarding risk management, especially in the context of how strong internal controls can reduce the risk of information uncertainty for the public. With a more controlled ownership structure and minimal information asymmetry, regulators can focus more on implementing policies that advance information management in sectors that are more sensitive to information.

List of Abbreviations

Indonesia Stock Exchange (IDX), Extensible Business Reporting Language (XBRL), cumulative earnings announcement returns (CARs), concentrated ownership (Cons), family (Fam), earnings per share (EPS), total asset size (Size), debt-to-equity ratio (DER).

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REFERENCES

Bebchuk, L. A., & Roe, M. J. (1999). A theory of path dependence in corporate ownership and governance. *Stan. L. Rev.*, *52*, 127. https://doi.org/10.2307/1229459.

Bhattacharya, N., Desai, H., & Venkataraman, K. (2013). Does earnings quality affect information asymmetry? Evidence from trading costs. *Contemporary Accounting Research*, *30*(2), 482-516. https://doi.org/10.1111/j.1911-3846.2012.01161.x.

Brouty, X., & Garcin, M. (2023). A statistical test of market efficiency based on information theory. *Quantitative finance*, *23*(6), 1003-1018. https://doi.org/10.48550/arXiv.2208.11976.

Campbell, C. J., & Wesley, C. E. (1993). Measuring security price performance using daily NASDAQ returns. *Journal of financial economics*, *33*(1), 73-92. https://doi.org/10.1016/0304-405X(93)90025-7.

Chod, J., & Lyandres, E. (2021). A theory of ICOs: Diversification, agency, and information asymmetry. *Management Science*, *67*(10), 5969-5989. https://doi.org/10.1287/mnsc.2020.3754.

Chiah, M., Chai, D., Zhong, A., & Li, S. (2016). A Better Model? An empirical investigation of the Fama–French five-factor model in Australia. *International Review of Finance*, *16*(4), 595-638. https://doi.org/10.1111/irfi.12099.

Choi, J. J., Lam, K. C., Sami, H., & Zhou, H. (2013). Foreign ownership and information asymmetry. *Asia-Pacific Journal of Financial Studies*, *42*(2), 141-166. https://doi.org/10.1111/ajfs.12010.

Chen, G., Firth, M., & Xu, L. (2009). Does the type of ownership control matter? Evidence from China’s listed companies. *Journal of Banking & Finance*, *33*(1), 171-181. https://doi.org/10.1016/j.jbankfin.2007.12.023.

Chung, D. Y., & Hrazdil, K. (2011). Market efficiency and the post-earnings announcement drift. *Contemporary Accounting Research*, *28*(3), 926-956. https://doi.org/10.1111/j.1911-3846.2011.01078.x.
Claessens, S., Djankov, S., & Lang, L. H. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, *58*(1-2), 81-112. https://doi.org/10.1016/S0304-405X(00)00067-2.
Clauß, T., Kraus, S., & Jones, P. (2022). Sustainability in family business: Mechanisms, technologies and business models for achieving economic prosperity, environmental quality and social equity. *Technological Forecasting and Social Change*, *176*, 121450. https://doi.org/10.1016/j.techfore.2021.121450.
Coffee Jr, J. C. (2005). A theory of corporate scandals: Why the USA and Europe differ. *Oxford review of economic policy*, *21*(2), 198-211. https://doi.org/10.1093/oxrep/gri012.
Conz, E., Denicolai, S., & De Massis, A. (2024). Preserving the longevity of long-lasting family businesses: a multilevel model. *Journal of Management and Governance*, *28*(3), 707–744. https://doi.org/10.1007/s10997-023-09670-z.
D'Este, C., & Carabelli, M. (2022). Family ownership and risk: the role of family managers. *Corporate Governance: The International Journal of Business in Society*, *22*(6), 1161–1177. https://doi.org/10.1108/CG-09-2021-0338.
Doidge, C., Karolyi, G. A., Lins, K. V., Miller, D. P., & Stulz, R. M. (2009). Private benefits of control, ownership, and the cross-listing decision. *The Journal of Finance*, *64*(1), 425-466. https://doi.org/10.1111/j.1540-6261.2008.01438.x.
Dong, J. Q., Karhade, P. P., Rai, A., & Xu, S. X. (2021). How firms make information technology investment decisions: Toward a behavioral agency theory. *Journal of Management Information Systems*, *38*(1), 29-58. https://doi.org/10.1080/07421222.2021.1870382.
El Kouiri, K. (2023). Exploring the Development of Agency Theory: Review of theory. *Ibn Khaldun Journal for Studies and Research*, *3*(10). https://doi.org/10.56989/benkj.v3i10.698.
Ezzamel, M., Xiao, J. Z., & Yuan, R. (2020). Can small shareholders protect their interests from expropriation: The case of a Chinese bank. *Management and Organization Review*, *16*(1), 139-168. https://doi.org/10.1017/mor.2019.23.
Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International economic review*, *10*(1), 1-21. https://doi.org/10.2307/2525569.
Faulkender, M., & Petersen, M. (2012). Investment and capital constraints: repatriations under the American Jobs Creation Act. *The Review of Financial Studies*, *25*(11), 3351-3388. https://doi.org/10.1093/rfs/hhs092.
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, *26*(2), 301-325. http://papers.ssrn.com/abstract=94034.
Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of accounting and economics*, *33*(3), 401-425. https://doi.org/10.1016/S0165-4101(02)00047-2.

Fang, H. "Chevy," Memili, E., Chrisman, J. J., & Penney, C. (2017). Industry and Information Asymmetry: The Case of the Employment of Non-Family Managers in Small and Medium-Sized Family Firms. Journal of Small Business Management, 55(4), 632–648. https://doi.org/10.1111/jsbm.12267.

Fos, V., & Holderness, C. G. (2023). The distribution of voting rights to shareholders. *Journal of Financial and Quantitative Analysis*, *58*(5), 1878-1910. https://doi.org/10.1017/S0022109022000655.

Ghafoor, A., Zainudin, R., & Mahdzan, N. S. (2019). Corporate fraud and information asymmetry in emerging markets: Case of firms subject to enforcement actions in Malaysia. *Journal of Financial Crime*, *26*(1), 95-112. https://doi.org/10.1108/JFC-11-2017-0107.

Harymawan, I., & Nismara, K. (2022). Board Gender Diversity and Corporate Innovation: Evidence from Indonesian Family Firms. *Journal of Accounting and Strategic Finance*, *5*(1), 22–39. https://doi.org/10.33005/jasf.v5i1.224.

Huddart, S. J., & Ke, B. (2007). Information asymmetry and cross-sectional variation in insider trading. *Contemporary Accounting Research*, *24*(1), 195-232. https://doi.org/10.1506/0277-1110-4434-M627.

Huynh, T. L. D., Wu, J., & Duong, A. T. (2020). Information Asymmetry and firm value: Is Vietnam different?. *The Journal of Economic Asymmetries*, *21*, e00147. https://doi.org/10.1016/j.jeca.2019.e00147.

Jabeen, M., & Shah, A. (2011). A review on family ownership and information asymmetry. *African Journal of Business Management*, *3*(35), 13550-13558. https://ssrn.com/abstract=1983438.

Jamadar, Y., Ong, T. S., Kamarudin, F., & Abdullah, A. A. (2022). Future firm performance, corporate governance, information asymmetry and insider trading–a systematic literature review using PRISMA. *International Journal of Sustainable Economy*, *14*(3), 309-329. https://doi.org/10.1504/IJSE.2022.123878.

Jan, C. L. (2021). Financial Information Asymmetry: Using Deep Learning Algorithms to Predict Financial Distress. Symmetry 2021, 13, 443. https://doi.org/10.3390/sym13030443.

Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. *Entrepreneurship theory and Practice*, *28*(3), 209-228. https://doi.org/10.1111/j.1540-6520.2004.00040.x.

Jiang, H., Habib, A., & Hu, B. (2011). Ownership concentration, voluntary disclosures and information asymmetry in New Zealand. *The British Accounting Review*, *43*(1), 39-53. https://doi.org/10.1016/j.bar.2010.10.005.

Liu, M., Shi, Y., Wilson, C., & Wu, Z. (2017). Does family involvement explain why corporate social responsibility affects earnings management?. *Journal of business research*, *75*, 8-16. https://doi.org/10.1016/j.jbusres.2017.02.001.

Lumpkin, G. T., Brigham, K. H., & Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship & regional development*, *22*(3-4), 241-264. https://doi.org/10.1080/08985621003726218.

Martinez-Garcia, I., Basco, R., Gomez-Anson, S., & Boubakri, N. (2022). Ownership concentration in the Gulf cooperation council. *International Journal of Emerging Markets*, *17*(1), 219-252. https://doi.org/10.1108/IJOEM-03-2020-0290.

Martínez-Ferrero, J., Rodríguez-Ariza, L., García-Sánchez, I. M., & Cuadrado-Ballesteros, B. (2018). Corporate social responsibility disclosure and information asymmetry: the role of family ownership. *Review of Managerial Science*, *12*, 885-916. https://doi.org/10.1007/s11846-017-0232-5 .

Minenna, M. (2003). Insider trading, abnormal return and preferential information: Supervising through a probabilistic model. *Journal of Banking & Finance*, *27*(1), 59-86. https://doi.org/10.1016/S0378-4266(01)00209-6.

Nam, S. W., & Nam, I. C. (2004). Corporate governance in Asia. *Asian development bank institute*, 1-211. https://www.adb.org/sites/default/files/publication/159384/adbi-corp-gov-asia.pdf.

Patra, S., & Hiremath, G. S. (2022). An entropy approach to measure the dynamic stock market efficiency. *Journal of Quantitative Economics*, *20*(2), 337-377. https://link.springer.com/article/10.1007/s40953-022-00295-x

Pindado, J., Requejo, I., & De la Torre, C. (2014). Family control, expropriation, and investor protection: A panel data analysis of Western European corporations. *Journal of Empirical Finance*, *27*, 58-74. https://doi.org/10.1016/j.jempfin.2013.10.006.

Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, *106*(6), 1113-1155. https://doi.org/10.1086/250042.

Pernamasari, R. (2022). The Effect of Earnings Management and Profitability on Stock Prices Future: Information Asymmetry as Moderating. *Asian Journal of Economics, Business and Accounting*, *22*(16), 9-16. https://doi.org/10.9734/ajeba/2022/v22i1630631.

Raimo, N., Vitolla, F., Marrone, A., & Rubino, M. (2020). The role of ownership structure in integrated reporting policies. *Business Strategy and the Environment*, *29*(6), 2238-2250. https://doi.org/10.1002/bse.2498.

Richardson, V. J. (2000). Information asymmetry and earnings management: Some evidence. *Review of quantitative finance and accounting*, *15*, 325-347. https://link.springer.com/article/10.1023/A:1012098407706.

Romito, S., & Vurro, C. (2021). Non-financial disclosure and information asymmetry: A stakeholder view on US listed firms. *Corporate Social Responsibility and Environmental Management*, *28*(2), 595-605. https://doi.org/10.1002/csr.2071.

Shiri, M. M., Salehi, M., & Radbon, A. (2016). A study of impact of ownership structure and disclosure quality on information asymmetry in Iran. *Vikalpa*, *41*(1), 51-60. https://doi.org/10.1177/0256090915620876.

Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The international journal of accounting*, *43*(1), 1-27. https://doi.org/10.1016/j.intacc.2008.01.001.

Sorescu, A., Warren, N. L., & Ertekin, L. (2017). Event study methodology in the marketing literature: an overview. *Journal of the Academy of Marketing Science*, *45*, 186-207. https://link.springer.com/article/10.1007/s11747-017-0516-y.

Suharsono, R. S., Nirwanto, N., & Zuhroh, D. (2020). Voluntary disclosure, financial reporting quality and asymmetry information. *Journal of Asian Finance, Economics and Business*, *7*(12), 1185-1194. http://dx.doi.org/10.13106/jafeb.2020.vol7.no12.1185.

Suryaningrum, D. H. (2012). Knowledge Management and Performance of Small and Medium Entities in Indonesia. *International Journal of Innovation and Technology Management*, *3*(1), 35–41. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2686887.

Wang, J., & Wang, X. (2021). COVID-19 and financial market efficiency: Evidence from an entropy-based analysis. *Finance Research Letters*, *42*, 101888. https://doi.org/10.1016/j.frl.2020.101888.

Weiss, D. (2014). Internal Controls in Family-Owned Firms. European Accounting Review, 23(3), 463–482. https://doi.org/10.1080/09638180.2013.821814.

Widagdo, A. K., Rahmawati, R., Murni, S., Wulandari, T. R., & Agustiningsih, S. W. (2021). Corporate Governance, Audit Quality, Family Ownership and Earnings Management. KnE Social Sciences. https://doi.org/10.18502/kss.v5i5.8839.