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Umar Butt  
*Zayed University, [umar.butt@zu.ac.ae](mailto:umar.butt@zu.ac.ae)*

Trevor William Chamberlain  
*McMaster University*

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Article

# Blockholdings, Dividend Policy, Stock Returns and Return Volatility: Evidence from the UAE

Umar Butt <sup>1</sup> and Trevor William Chamberlain <sup>2,\*</sup>

<sup>1</sup> Finance & Economics Department, College of Business, Zayed University, Dubai P.O. Box 19282, United Arab Emirates; umar.butt@zu.ac.ae

<sup>2</sup> DeGroote School of Business, McMaster University, Hamilton, ON L8S 4L8, Canada

\* Correspondence: chambert@mcmaster.ca

**Abstract:** This paper examines the relationship between the presence of blockholdings and stock returns and return volatility in the United Arab Emirates. Earlier studies report mixed results for the direction of the relationships across both developed and emerging markets. This study focuses specifically on these relationships in a dividend policy framework. This study further investigates the role of blockholder type by distinguishing between government, individual and corporate blockholders. Our results indicate that blockholder ownership reduces stock return volatility for both non-dividend-paying and dividend-paying stocks, does not impact returns and is not perceived as expropriating the wealth of other investors. We also conclude that the blockholders do not exhibit rent-seeking behavior through the extraction of dividends and investors in UAE firms embrace the role of blockholders and the reinvestment of profits.

**Keywords:** blockholders; stock return volatility; dividend policy



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## 1. Introduction

In this paper, we investigate the impact of the presence of blockholdings on stock returns and return volatility in the UAE market, taking into account the dividend policy of the firm. Prior to 1 June 2021, the UAE Commercial Companies Law required that fifty-one percent of companies be owned by UAE nationals, including individual Emiratis, firms with Emirati owners and the UAE government<sup>1</sup>. This local ownership requirement resulted in the formation of blockholders owning listed companies with owner concentrations ranging from nineteen percent to almost one hundred percent. This framework allows for a rich sample to investigate the impact of blockholdings on stock return volatility.

Theory suggests that blockholders serve dual roles. They can reduce agency problems and associated costs by controlling and overseeing management, thus adding value to shareholders (Morck et al. 1988; Mikkelson and Ruback 1985). Alternatively, they may use their influence to extract private control benefits, impacting minority shareholders (Thomsen 2005). Blockholders also decrease free float and trading volume, increasing market illiquidity and expected returns (Brockman et al. 2009; Amihud 2002; Pástor and Stambaugh 2003). The effect of blockholdings on stock returns and volatility is less clear. Some argue that blockholders, by cooperating with managers, can raise volatility (Attanasio 1990; Eden and Jovanovic 1994). Others propose that blockholders reduce information asymmetry and enhance market stability (Alford and Berger 1999; Hong and Stein 2007). Rubin and Smith (2009) assert that dividend policy shapes the relationship between institutional ownership and stock returns/volatility. Xu and Malkiel (2003) and Dennis and Strickland (2002) suggest that blockholders may hinder investment and liquidity. Rösch and Kaserer (2010) propose that ownership dispersion is crucial for liquid markets, particularly in markets with high ownership concentration, like those with government blockholders (Bar-Isaac and Shapiro 2020). Thomsen (2005) notes that large

shareholders may prefer low dividends for control benefits, while minority shareholders prefer higher dividends.

The UAE government has undertaken substantial investments in a range of public companies including Emirates Airlines, Emirates NBD Bank and the Emirates Integrated Telecommunication Company. These investments represent a strategic and demonstrably effective alignment between the public and private sectors. The UAE's unique approach to fostering growth, stability and innovation underscores the importance of government–business collaboration in a nation's economic landscape. The legislative framework of the UAE which, until recently, mandated that more than fifty percent of the shares of a UAE company had to be owned by UAE nationals, offers a unique approach for conducting an empirical inquiry into the effects blockholdings have on the behavior of a firm's stock<sup>2</sup>.

The present study examines how blockholder ownership affects stock return volatility as well as stock returns and dividend policy, accounting for firm characteristics and other control variables. Relatedly, the study examines the consequences of the tradeoff between the potential reduction in informational asymmetry and agency costs on the one hand and the potential extraction of private benefits on the other. The study attempts to answer three important research questions in the UAE context:

- i. How does the presence of blockholders affect stock return volatility?
- ii. How does the presence of blockholders affect stock returns?
- iii. How does the presence of blockholders affect firm dividend policy?

Our findings underscore the influence of ownership on stock return volatility, aligning with our a priori expectations. Specifically, the active participation of the government in the UAE's public companies, characterized by substantial ownership percentages, serves as a stabilizing force in times of market turmoil. The government's ability to maintain its stock positions effectively bolsters overall market stability, a role particularly crucial given the absence of market makers in the UAE market. Notably, the largest shareholder appears to assume the role of stabilizing stock prices, thereby mitigating return volatility. Furthermore, our analysis suggests that blockholders, despite their significant ownership stakes, refrain from market intervention to earn abnormal returns. Instead, their primary contribution appears to be that of reducing stock return volatility, without substantially affecting the overall level of returns or influencing the dividend payout. These practices bolster investor confidence and foster market stability. Our research also reveals a distinct pattern in the relationship between return on equity (ROE) and return volatility. Specifically, for dividend-paying stocks, a positive relationship emerges, suggesting that superior financial performance is associated with stability within this subset of companies. Conversely, non-dividend-paying stocks exhibit no such relationship.

As for the impact of blockholding on dividend policy, two views have been elaborated in the literature. One, sometimes referred to as the expropriation hypothesis, argues that a blockholder only receives a portion of the benefit when a dividend is paid compared with the benefits obtained through the control of the firm's retained earnings (La Porta et al. 2000). The alternative view, referred to as the substitution hypothesis, suggests that blockholders commit to a stable dividend in order to allay market concerns about expropriation risk, believing that the market value effect dominates the gains from the retention of earnings (Faccio et al. 2001). These competing hypotheses are examined in the context of the UAE market in this paper.

#### *Top of Form*

This paper proceeds as follows: Section 2 reviews the strands in the literature that led us to undertake the present study. Section 3 describes the empirical models used to test the above hypotheses, together with the measurement of the variables employed. The results of our tests are discussed in Section 4. The present paper concludes with a synopsis of our findings and their implications for both investors and firms in markets in which blockholders have a substantial presence.

## 2. Literature Review

Early research on the effect of blockholders on stock volatility produced mixed results. [Sias \(1996\)](#), [Dennis and Strickland \(2002\)](#) and [Xu and Malkiel \(2003\)](#) found a positive relationship between the presence of blockholders and stock volatility, utilizing data from the US market. [Attanasio \(1990\)](#) and [Eden and Jovanovic \(1994\)](#) ascribe the positive relationship to collaboration between blockholders and managers. [West \(1988\)](#) and [Lin et al. \(2007\)](#), in contrast, argue that institutional investors are better informed than individual investors and an increase in the information content of the stock price should result in a decrease in stock volatility. [Li et al. \(2011\)](#) investigates the impact of large foreign ownership (LFO) positions in thirty-one emerging markets. The authors find a negative relationship between LFOs and return volatility even after controlling for the impact of large domestic shareholders.

The dividend policy of the firm may also play an important role. [Baskin \(1989\)](#) finds an inverse relationship between dividend yields and stock price volatility. [Ackert and Smith \(1993\)](#), focusing on whether dividend policy supports market efficiency, conclude that when all cash distributions to investors are considered, stock prices are not excessively volatile. [Rubin and Smith \(2009\)](#) build on this and suggest that dividend policy is instrumental in identifying the direction of the relationship between blockholdings and stock volatility. Their hypothesis also follows work by [Grinstein and Michaely \(2005\)](#), who provide evidence that institutions avoid investing in stocks that do not pay dividends. Since institutional investors turn over their portfolios frequently, this could lead to higher volatility in dividend-paying stocks. [Sias \(2004\)](#) suggests that institutional investors follow each other in and out of the same securities, leading to the same conclusion. [Rubin and Smith \(2009\)](#) confirm this hypothesis, finding the blockholding and price volatility relationship to be positive and significant for dividend-paying stocks and negative for non-dividend-paying stocks.

[Wermers \(1999\)](#) and [Bennett et al. \(2003\)](#) report a strong positive correlation between quarterly changes in institutional ownership and same-quarter returns. Their results contain two important details. First, they find that institutions have information that allows them to time their trades (i.e., changes in institutional ownership are positively correlated with subsequent intra-quarter returns) and second, they show that the buying and selling choices of institutions in aggregate have a contemporaneous effect on returns. However, these studies overlooked the role of dividend policy in ascertaining the relationship between blockholdings and stock volatility.

Blockholders possess economies of scale in the collection of information or have access to private, valuable information ([Pound 1988](#); [Ryan and Schneider 2002](#); [Rösch and Kaserer 2010](#)). [Copeland and Galai \(1983\)](#) and [Glosten and Milgrom \(1985\)](#) argue that other market participants face an adverse selection problem in a market in which there are informed traders, leading to increased spreads and reduced market liquidity. Hence, empirically, there should be a negative relationship between the existence of blockholders and stock returns. Other studies, including those of [Becht \(1999\)](#), [Heflin and Shaw \(2000\)](#) and [Sarin et al. \(1996\)](#), examine voting power concentration through blockholdings. They find that both institutions and insiders are better informed and, therefore, greater insider and institutional ownership is associated with lower stock returns and greater return volatility.

In contrast, [Ginglinger and Hamon \(2012\)](#) and [Fehle \(2004\)](#) provide evidence that shareholder concentration can be positively related to market returns if blockholders do not have access to private information, cannot leverage economies of scale in the acquisition of information, or face restrictions on information-based trading. [Fehle \(2004\)](#) examines different institutional blockholder types and finds that the positive effect of institutional ownership on stock returns and (reduced) volatility only holds for mutual funds, while for commercial banks and investment managers, the reverse is true. For insurance companies and pension funds, the relationship is insignificant. An alternate channel is suggested by [Wang \(2007\)](#), who argues that each investor has only partial information and that the accuracy of the information reflected in stock prices increases as the number of investors grows. Improved information about the firm, in turn, leads to lower stock volatility. [Zhang \(2010\)](#), in contrast, argues that with more investors, trading

volume increases, resulting in greater return volatility. [Jankensgård and Vilhelmsson \(2018\)](#) interpret their findings for the Swedish market as consistent with [Zhang's](#) thesis.

The literature on stock returns and volatility and their relationship with the presence of blockholders is clearly mixed. A market in which blockholders play an important, and possibly dominant, role offers a rich setting for exploring these relationships further. The UAE data, upon which this study relies, are sufficiently granular such that we can separately study the impacts of government, corporate and individual blockholdings. To this analysis, we now turn.

### 3. Data and Variables

In this paper, we consider all domestic companies listed on UAE stock exchanges for the period 2005 to 2019<sup>3</sup>. The data were hand-collected and were only available from the beginning of 2005. The sample includes all small, medium and large firms to avoid any selection bias. We collected daily stock prices along with data on the percentage of shares owned by the largest and second largest shareholders. During the period of study, at least fifty-one percent of a company's shares had to be held by a UAE national, either individual or corporate. Here, we examine blockholdings in public companies by individuals, private firms and government-owned subsidiaries.

#### 3.1. Dependent Variables

Our chief variables of interest are stock returns and return volatility. Return is measured as the average daily return for a given year and is calculated using the log of returns ( $\ln(P_t) - \ln(P_{t-1})$ , where  $P_t$  is the daily price of the stock at time  $t$ ). Volatility is measured as the total daily standard deviation of return. Dividend policy, as a moderating factor in the relationship between returns and return volatility with blockholdings, is also positioned as a dependent variable and measured by the dividend payout ratio.

#### 3.2. Independent Variables

Our primary independent variable is the percentage of shares held by the largest shareholder. We also explore the ownership concentration amongst government-owned subsidiaries and private owners, both individual and corporate. As noted earlier, conventional academic practice identifies blockholders as investors who hold more than five percent of the outstanding shares (see, for example, [Demsetz and Lehn 1985](#); [Demsetz and Villalonga 2001](#)). However, we find that firms in the UAE have ownership concentrations ranging from nineteen percent to almost one hundred percent (99.89%)<sup>4</sup> for the largest shareholders and from five percent to forty-eight percent for the second largest shareholders. It is important to note, however, that a very high percentage of ownership is an outlier, and we trimmed the data at 0.5% on both tails to omit extreme values.

#### 3.3. Control Variables

We identified a set of control variables for our study, following earlier works in the literature, including those of [Wei and Zhang \(2006\)](#) and [Rubin and Smith \(2009\)](#). Return on assets (ROA) is measured as net income divided by total assets. Return on equity (ROE) is calculated as net income divided by shareholders' equity. Both are alternatively used to control for accounting profitability. [Szczygielski and Chipeta \(2023\)](#) note the asymmetric relationship between returns and volatility and attribute it to the leverage effect. To control for this effect, we use leverage as one of the control variables and measure it as the ratio of total debt to book value of total assets following [Pástor and Veronesi \(2005\)](#). The size of the firm (SIZE) is also included as a control variable and is measured as the natural logarithm of total assets. To control for growth, we use the ratio of market price to book value per share for common stock (M/B) as a proxy, following [Cao et al. \(2008\)](#) and [Rubin and Smith \(2009\)](#). Finally, we control for industry and time effects by including a dummy variable for each industry (DIndustry) and year (DYear) in our sample<sup>5</sup>.

Table 1 presents the summary statistics for the two subsamples of firms, non-dividend-paying and dividend-paying. We calculate the mean and median for the stock return and return volatility, our measure of ownership concentration (LargestShareholder and SecondLargestShareholder) and control variables, as defined above. For comparison purposes, we provide *t*-tests for the differences in means for dividend-paying and non-dividend-paying stocks.

**Table 1. Summary Statistics.** This table provides summary statistics for publicly listed companies in the UAE for the period 2005–2019. The table reports the means and medians for return volatility, return and largest shareholders (blockholder) along with a set of firm financial ratios (control variables) for non-dividend- and dividend-paying stocks. The last column reports the *t*-test value for the difference in the means of non-dividend- and dividend-paying stocks. \*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

|                          | Non-Dividend-Paying |        |      | Dividend-Paying |        |      | T-Test for the Difference in Means (Non-Dividend–Dividend) |
|--------------------------|---------------------|--------|------|-----------------|--------|------|--|
|                          | Mean                | Median | N    | Mean            | Median | N    |  |
| Return Volatility        | 1.21                | 0.23   | 1661 | 1.48            | 0.29   | 976  | −1.26  |
| Return                   | −0.25               | −0.04  | 625  | −0.18           | −0.02  | 615  | −0.44  |
| LargestShareholder       | 0.59                | 0.54   | 1252 | 0.57            | 0.57   | 899  | 2.26 **  |
| SecondLargestShareholder | 0.23                | 0.22   | 1209 | 0.21            | 0.22   | 894  | 0.06   |
| ROA                      | 0.01                | 0.01   | 1040 | 0.08            | 0.01   | 1007 | −1.75 *  |
| ROE                      | 0.01                | 0.01   | 1038 | 0.07            | 0.03   | 1008 | −2.18 **   |
| Leverage                 | 0.45                | 0.51   | 1049 | 0.27            | 0.55   | 1009 | 0.24   |
| Size                     | 20.45               | 20.54  | 1053 | 21.90           | 21.53  | 1009 | −16.22 ***   |
| Growth                   | 48.38               | 0.86   | 763  | 10.29           | 0.70   | 781  | 1.21   |
| EPS                      | 0.52                | 0.01   | 1065 | 1.01            | 0.07   | 1024 | −2.68 ***  |
| Payout Ratio             |                     |        |      | 0.38            | 0.72   | 1024 |  |
| DPS                      |                     |        |      | 0.62            | 0.08   | 1027 |  |

There is not a significant difference between the returns and the return volatilities of the two subsamples. Dividend-paying stocks have significantly higher ROA and ROE values. The mean ROA for dividend-paying stocks is eight percent compared to one percent for non-dividend-paying stocks and the mean ROE for dividend-paying stocks is seven percent compared to one percent for non-dividend-paying stocks. The differences are significant at ten percent in the case of ROA and five percent in the case of ROE. This is not surprising as a higher return translates into the ability of the firm to pay dividends. As for the control variables, the size of dividend-paying firms is significantly larger at the one-percent level when compared to non-dividend-paying firms. Likewise, dividend-paying firms have a higher EPS than non-dividend-paying firms at the one-percent level. We also conducted further testing, not reported here, and found that government ownership is significantly higher in dividend-paying firms. The largest shareholder in non-dividend-paying firms has a larger ownership interest than the largest shareholder in dividend-paying firms does. In contrast, we find that the difference in the second largest shareholdings is statistically insignificant.

### 3.4. Empirical Models

In this section, we examine the effect of independent variables on the returns, volatility of returns and payout ratios of the stocks in our sample given a set of control variables. Since we are using panel data, the residuals of our regression models are likely not independent as volatility is correlated across firms and should be adjusted for this time dependency. Following earlier works in the literature (Petersen 2009; Rubin and Smith 2009), we employ a two-dimensional clustered standard errors approach. Clustered standard errors also account for heteroskedasticity across clusters of observations. We also control for firm fixed effects since the values for some of our variables tend to persist for some firms given the

unique nature of the UAE market. We control as well for industry and year effects. The following models are employed in our empirical analysis<sup>6</sup>:

$$\text{ReturnVolatility}_{i,t} = \alpha + \beta_1 \text{Return}_{i,t} + \beta_2 \text{LargestShareholder} + \beta_{3, \dots, n} \text{Control}_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$\text{Return}_{i,t} = \alpha + \beta_1 \text{ReturnVolatility}_{i,t} + \beta_2 \text{LargestShareholder} + \beta_{3, \dots, n} \text{Control}_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$\text{Payout Ratio}_{i,t} = \alpha + \beta_1 \text{Return}_{i,t} + \beta_2 \text{LargestShareholder} + \beta_{3, \dots, n} \text{Control}_{i,t} + \varepsilon_{i,t} \quad (3)$$

with  $\text{Control}_{i,(t)} = \text{ROE}_{i,t}, \text{ROA}_{i,t}, \text{Leverage}_{i,t}, \text{Growth}_{i,t}, \text{Size}_{i,t}$ , and  $\varepsilon_{i,t}$  = error term

In Equation (1), we examine the effect of blockholdings on stock volatility while controlling for the variables identified earlier. The direction of the relationship conveys important information about the role of the ownership structure. Since the UAE government has a significant stake in many of these firms and can minimize risk by holding stocks for long periods, we expect the relationship to be negative. [Rubin and Smith \(2009\)](#) attribute the positive relationship they found for dividend-paying stocks to the institutional turnover hypothesis and a negative relationship for non-dividend-paying stocks to the institutional preference hypothesis.

In Equation (2), we measure the effect of blockholder ownership on stock returns after controlling for firm characteristics and accounting variables. Earlier studies (e.g., [Azzam 2010](#)) found a positive and significant relationship between stock returns and blockholder ownership and argued that blockholders have information that allows them to time their trades and encourages positive feedback trading. Since a large portion of blockholders in the UAE market are government organizations or companies owned by members of the royal families, the investment strategies of such blockholders likely differ from investors seeking only profit<sup>7</sup>. Such blockholders are peculiar to markets such as the UAE and one of their primary goals is to bring stability to the market. Hence, we do not anticipate a positive relationship in our sample. This is in keeping with our earlier hypothesis that return volatility is negatively correlated to blockholder ownership.

In Equation (3), we examine the effect of blockholder ownership on dividend policy as measured by the payout ratio. Existing works in the literature (e.g., [Shleifer and Vishny 1986](#)) suggest that blockholders can exert influence on management and may extract personal benefits. Prior research has provided mixed results on the relationship. For example, [Short et al. \(2002\)](#) find a positive relationship between dividend payout and institutional ownership while [Maury and Pajuste \(2002\)](#) find that the presence of large shareholders affects the payout ratio negatively. Here, we investigate this relationship in a setting in which blockholdings are pervasive and in which it seems likely that large blockholders focus on market stability and risk minimization. [Faccio et al. \(2001\)](#) show that dividend payout ratios are lower in Asia when there are multiple large shareholders. Similarly, [Al-Najjar and Kilincarslan \(2016\)](#) report that increasing state ownership in Turkey has reduced the need to pay dividends. We anticipate that the relationship in our sample is negative.

#### 4. Empirical Results

We estimate the models introduced in the previous section to document the effect of blockholder ownership on stock returns and return volatility. In addition, we examine the effect of blockholdings on dividend policy. We begin by looking at the impact of the largest and the second larger blockholdings on the dependent variable and then examine the data on a more granular level. In particular, we investigate the effects of blockholding on dividend- and non-dividend-paying firms' stock returns and return volatilities overall and then for each of the three blockholding groups: government, Emirati firms and Emirati individuals.

#### 4.1. Effect of Blockholder Ownership on Stock Return Volatility

The results in Table 2 show that ownership affects stock return volatility. The negative coefficient for LargestShareholder is significant at the one-percent level. This is in keeping with our expectations since, as we stated earlier, the government is an active investor in public companies in the UAE and owns major share percentages. The government is able to hold on to stock positions in turbulent times and, in doing so, provides stability to the market. Market makers have not been introduced into the UAE market, so the largest shareholder plays this role through the stock they own. They stabilize the stock price and thereby reduce return volatility. The coefficient for the second largest shareholder, though negative as well, is not significant. Likewise, excepting size, none of the control variables are statistically significant. The relationship between return and return volatility is negative and significant at the one-percent level<sup>8</sup>.

**Table 2. Regression results (Full sample).** Regression results for Equations (1)–(3) using a sample of companies listed on UAE stock exchanges for the period 2005–2019. The sample contains non-dividend- and dividend-paying stocks. Standard errors are reported in the parentheses. \*\*\* represent significance at the ten-percent, five-percent and one-percent levels.

|                          | Return Volatility      | Return                 | Return Volatility      | Return                 | Payout               |
|--------------------------|------------------------|------------------------|------------------------|------------------------|----------------------|
| Return                   | −0.365 ***<br>(0.0280) |                        | −0.365 ***<br>(0.0280) |                        |                      |
| Return Volatility        |                        | −0.438 ***<br>(0.0336) |                        | −0.438 ***<br>(0.0336) |                      |
| ROE                      | 0.0053<br>(0.0988)     | −0.00798<br>(0.1080)   |                        |                        | 0.00127<br>(0.7350)  |
| ROA                      |                        |                        | −0.0201<br>(0.1140)    | 0.00491<br>(0.1250)    |                      |
| Leverage                 | 0.00363<br>(0.0034)    | 0.000556<br>(0.0038)   | 0.00288<br>(0.0055)    | 0.000734<br>(0.0060)   | −0.00584<br>(0.0103) |
| Growth                   | −0.000086<br>(0.0001)  | 0.000020<br>(0.0001)   | −0.000081<br>(0.0001)  | 0.000018<br>(0.0001)   | 0.000072<br>(0.0045) |
| Size                     | −0.234 ***<br>(0.0635) | −0.00642<br>(0.0701)   | −0.235 ***<br>(0.0637) | −0.00598<br>(0.0703)   | 0.124<br>(0.1850)    |
| LargestShareholder       | −3.505 ***<br>(0.5970) | −0.0842<br>(0.6670)    | −3.505 ***<br>(0.5970) | −0.0843<br>(0.6670)    | −1.422<br>(1.4840)   |
| SecondLargestShareholder | −0.002900<br>(0.0070)  | 0.000095<br>(0.0077)   | −0.002900<br>(0.0070)  | 0.000095<br>(0.0077)   | 0.002970<br>(0.0147) |
| Constant                 | 6.807 ***              | 0.243                  | 6.832 ***              | 0.232                  | −0.324               |
| Year                     | Controlled             | Controlled             | Controlled             | Controlled             | Controlled           |
| Industry                 | Controlled             | Controlled             | Controlled             | Controlled             | Controlled           |
| Observations             | 911                    | 911                    | 911                    | 911                    | 697                  |
| R-squared                | 0.261                  | 0.178                  | 0.261                  | 0.178                  | 0.013                |
| F Test                   | 21.09                  | 12.9                   | 21.09                  | 12.9                   | 0.823                |
| Prob > F                 | 0.000                  | 0.000                  | 0.000                  | 0.000                  | 0.0132               |

#### 4.2. Effect of Blockholder Ownership on Stock Returns

As can be seen in Table 2, blockholder ownership has no effect on stock returns. This is consistent with our findings that the presence of blockholders reduces volatility. The results for stock returns indicate that blockholders do not manipulate the markets to expropriate abnormal returns. This result coupled with the results of the previous section suggest that blockholders play a key role. They help to reduce volatility but do not affect the level of returns. The existence of such blockholders provides assurance to investors and increases confidence in the market. Here, none of the control variables are statistically significant. Once again, the relationship between return and return volatility is negative and significant at one percent.



#### 4.3. Effect of Blockholder Ownership on Dividend Policy

As shown in Table 2, the existence of blockholders does not affect the dividend payout. The results suggest that blockholders do not exert influence to increase or reduce the payout ratio. The UAE is a growing economy and many of the listed firms are in the growth stage, requiring investment and, thus, likely wish to position themselves as attractive to investors. The results suggest that blockholders are neither seeking dividend income nor suppressing dividends at the expense of minority shareholders. This is in contrast with Al-Najjar and Kilincarslan's (2016) findings that blockholders of all kinds (government, foreign investors, families and financial institutions) have a negative influence on the dividend payout ratio. Thomsen (2005) also reports a negative relationship between blockholdings and dividends in the United States and the United Kingdom. As above, none of the control variables are statistically significant.

#### 4.4. Dividend Policy, Blockholder Ownership, Volatility and Return

As discussed earlier, the relationship between blockholder ownership and volatility has produced mixed results in previous studies. Rubin and Smith (2009) document a negative relationship for non-dividend-paying stocks and a positive relationship for dividend-paying stocks using US data. Azzam (2010), in contrast, finds a positive relationship between private institutional ownership and volatility for non-dividend-paying firms in Egypt, which he characterizes as institutional herding behavior. Moreover, as Gharbi et al. (2014) point out, blockholders are not necessarily a homogenous group, and their behavior and preferences may differ.

Table 3 presents the regression results for the dividend-paying and non-dividend-paying stock subsamples. In both cases, the relationship between blockholdings (Largest-Shareholder) and volatility is negative and significant at the one-percent level. At the same time, the coefficient for the non-dividend-paying stocks is five times larger than that for dividend-paying stocks, suggesting that the role of large blockholders in stabilizing stock returns is greater for non-dividend-paying stocks. Our results also show that while there is no relationship between ROE and volatility for non-dividend-paying stocks, a significant negative relationship is indicated for dividend-paying stocks. Size is significant in the return volatility regressions for both samples, as it was for the overall sample. Growth and leverage are also significant in the dividend subsample, but only leverage plays a significant role in the case of non-dividend-paying stocks. As in the full-sample regressions, the relationship between return and return volatility is negative and significant at the one-percent level for both subsamples. Finally, the coefficients for the second largest shareholder are, once again, insignificant.

**Table 3. Regression results for dividend-paying and non-dividend-paying subsamples.** Regression results for Equations (1) and (2) using subsamples of dividend-paying and non-dividend-paying stocks for the period of 2005–2019. Standard errors are reported in the parentheses. \*, \*\* and \*\*\* represent significance at the ten-percent, five-percent and one-percent levels.

|                   | Non-Dividend-Paying    |                        | Dividend-Paying         |                        |
|-------------------|------------------------|------------------------|-------------------------|------------------------|
|                   | Return Volatility      | Return                 | Return Volatility       | Return                 |
| Return            | −0.339 ***<br>(0.0430) |                        | −0.0913 ***<br>(0.0225) |                        |
| Return Volatility |                        | −0.439 ***<br>(0.0557) |                         | −0.332 ***<br>(0.0821) |
| ROE               | 0.546<br>(0.4710)      | −0.149<br>(0.5370)     | −0.409 **<br>(0.1630)   | 0.243<br>(0.3130)      |
| Leverage          | 0.572 *<br>(0.3380)    | −0.122<br>(0.3860)     | 0.00805 ***<br>(0.0018) | −0.00203<br>(0.0036)   |
| Growth            | −0.00010<br>(0.0002)   | 0.00003<br>(0.0002)    | 0.00182 *<br>(0.0010)   | −0.00139<br>(0.0019)   |

Table 3. Cont.

|                          | Non-Dividend-Paying    |                     | Dividend-Paying        |                      |
|--------------------------|------------------------|---------------------|------------------------|----------------------|
|                          | Return                 | Volatility          | Return                 | Volatility           |
| Size                     | −0.418 **<br>(0.1660)  | 0.0189<br>(0.1910)  | −0.402 ***<br>(0.0269) | 0.0106<br>(0.0613)   |
| LargestShareholder       | −7.535 ***<br>(1.7430) | −0.0762<br>(2.0360) | −1.452 ***<br>(0.2220) | 0.0652<br>(0.4400)   |
| SecondLargestShareholder | −1.641<br>(2.4370)     | −0.209<br>(2.7760)  | −0.00289<br>(0.0018)   | 0.000316<br>(0.0035) |
| Constant                 | 12.60 ***              | −0.256              | 9.920 ***              | −0.217               |
| Year                     | Controlled             | Controlled          | Controlled             | Controlled           |
| Industry                 | Controlled             | Controlled          | Controlled             | Controlled           |
| Observations             | 371                    | 371                 | 540                    | 540                  |
| R-squared                | 0.36                   | 0.192               | 0.517                  | 0.061                |
| F Test                   | 14.28                  | 6.06                | 37.39                  | 2.26                 |
| Prob > F                 | 0.000                  | 0.000               | 0.000                  | 0.004                |

#### 4.5. Effect of Blockholder Segment on Stock Returns and Volatility

The UAE government takes an active role in promoting economic growth and development and, in doing so, may affect the return and return volatility of those companies in which it has large shareholdings. It also has the capacity to maintain its share positions for long periods. To investigate the role of government further, we use dummy variables to distinguish among three groups of blockholders: government blockholders, Emirati-owned firm blockholders and Emirati individual blockholders. A dummy variable is set equal to one for each group and zero otherwise. The results are reported in Table 4. We find that government blockholdings have a negative relationship with return volatility significant at the one-percent level. This is in line with evidence that government plays an active role in monitoring firms (Kandil and Markovski 2018). We also find that, for Emirati firms, the relationship is negative and significant. Many of these firms are owned by members of the royal families of the individual Emirates and their goals align with the goals of the government. For individual Emiratis, we find an insignificant relationship, suggesting that this blockholder group does not play a role in decreasing uncertainty in the market. They do not appear to be primarily concerned with risk minimization even when they have a large stake in a company. We also find that returns and blockholdings have an insignificant relationship for all groups. This is in line with our findings for the overall sample and supports the assertion that blockholders are not perceived as expropriating benefits. Once again, the only statistically significant control variable is size (in the return volatility regressions), while return and return volatility are, as before, inversely related to one another at the one-percent level.

**Table 4. Regression results for blockholder groups.** Regression results for Equations (1) and (2) using a sample of companies listed on the UAE stock exchanges for the period 2005–2019. The regressions employ a dummy variable approach to find results for blockholder segments, namely government, firms owned by Emiratis and individual Emiratis. Standard errors are reported in the parentheses. \*, \*\* and \*\*\* represent significance at the ten-percent, five-percent and one-percent levels.

|                   | Government             |                        | Emirati Firms          |                        | Emirati Individuals    |                        |
|-------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                   | Return                 | Volatility             | Return                 | Volatility             | Return                 | Volatility             |
| Return            | −0.373 ***<br>(0.0283) |                        | −0.353 ***<br>(0.0276) |                        | −0.378 ***<br>(0.0284) |                        |
| Return Volatility |                        | −0.438 ***<br>(0.0331) |                        | −0.438 ***<br>(0.0343) |                        | −0.438 ***<br>(0.0329) |

Table 4. Cont.

|                          | Government                         |                                   | Emirati Firms                      |                                   | Emirati Individuals                |                                   |
|--------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|
|                          | Return Volatility                  | Return                            | Return Volatility                  | Return                            | Return Volatility                  | Return                            |
| ROE                      | −0.000974<br>(0.1000)              | −0.00889<br>(0.1080)              | 0.0307<br>(0.0976)                 | −0.00554<br>(0.1090)              | 0.0113<br>(0.1010)                 | −0.0045<br>(0.1090)               |
| Leverage                 | 0.0022<br>(0.0035)                 | 0.000536<br>(0.0038)              | 0.00374<br>(0.0034)                | 0.00047<br>(0.0038)               | 0.00176<br>(0.0035)                | 0.000443<br>(0.0038)              |
| Growth                   | $-7.84 \times 10^{-5}$<br>(0.0001) | $2.01 \times 10^{-5}$<br>(0.0001) | $-6.26 \times 10^{-5}$<br>(0.0001) | $2.44 \times 10^{-5}$<br>(0.0001) | $-5.26 \times 10^{-5}$<br>(0.0001) | $2.70 \times 10^{-5}$<br>(0.0001) |
| Size                     | −0.161 **<br>(0.0637)              | −0.00687<br>(0.0692)              | −0.150 **<br>(0.0665)              | 0.00279<br>(0.0743)               | −0.124 *<br>(0.0675)               | 0.0043<br>(0.0728)                |
| Dummy                    | 0.949<br>(0.7370)                  | 0.185<br>(0.7980)                 | 4.566 ***<br>(0.5630)              | 0.0738<br>(0.6500)                | −1.048<br>(1.0550)                 | −0.0433<br>(1.1360)               |
| Dummy*LargestShareholder | −2.805 **<br>(1.1660)              | −0.305<br>(1.2670)                |                                    |                                   |                                    |                                   |
| Dummy*LargestShareholder |                                    |                                   | −5.675 ***<br>(0.7870)             | −0.00187<br>(0.9020)              |                                    |                                   |
| Dummy*LargestShareholder |                                    |                                   |                                    |                                   | 1.021<br>(1.6290)                  | −0.0945<br>(1.7540)               |
| SecondLargestShareholder | −0.00106<br>(0.0071)               | 0.00015<br>(0.0076)               | −0.00465<br>(0.0069)               | 0.000118<br>(0.0077)              | −0.000797<br>(0.0071)              | 0.000149<br>(0.0076)              |
| Constant                 | 3.756 **                           | 0.219                             | 3.507 **                           | 0.00284                           | 3.540 **                           | 0.0508                            |
| Year                     | Controlled                         | Controlled                        | Controlled                         | Controlled                        | Controlled                         | Controlled                        |
| Industry                 | Controlled                         | Controlled                        | Controlled                         | Controlled                        | Controlled                         | Controlled                        |
| Observations             | 911                                | 911                               | 911                                | 911                               | 911                                | 911                               |
| R-Squared                | 0.340                              | 0.187                             | 0.421                              | 0.331                             | 0.394                              | 0.225                             |
| F Test                   | 27.36                              | 5.47                              | 34.02                              | 27.13                             | 31.29                              | 15.78                             |
| Prob > F                 | 0.000                              | 0.000                             | 0.000                              | 0.000                             | 0.000                              | 0.000                             |

## 5. Conclusions

In this paper, we study the effect of blockholder ownership on stock returns, volatility and dividend policy in the United Arab Emirates. This paper also examines the role of various groups of blockholders and finds that the nature of blockholder ownership influences the behavior of the firm. We control for firm-specific variables and year and industry effects. Given the restrictions on foreign ownership during the period of study, we consider three groups of blockholders: individual Emiratis, Emirati-owned firms and government. In examining the overall effect of blockholder ownership on stock return volatility, we find a negative coefficient, significant at the one-percent level. In later tests, we segregate the blockholders using dummy variables. The results indicate that government and Emirati-owned firm blockholdings have a significant and negative relationship with volatility, while no relationship is indicated for the individual blockholding group. This is in keeping with our hypothesis that the government invests in firms for the long term, actively plays a role in decreasing market risk and improves investor confidence by reducing volatility. While blockholdings do not appear to affect dividend policy, thus offering no support for either the expropriation hypothesis or the substitution hypothesis, we find a negative relationship between blockholdings and volatility for both non-dividend-paying stocks and dividend-paying stocks. However, the coefficient for non-dividend-paying stocks is five times larger than that for dividend-paying stocks in the return volatility regressions. None of our findings indicate a relationship between blockholdings and returns.

We also find that blockholdings have no impact on dividend payout. As blockholders comprise Emiratis (including the government), the result is in line with our expectations. These results coupled with the documented relationship between volatility and blockholdings suggest that the government is a long-term investor and does not exhibit rent-seeking behavior through the extraction of dividends. This is very promising for investors who wish to invest in the UAE and for the attraction of the capital required to facilitate eco-

conomic growth. Our findings carry significant implications for policymakers in the United Arab Emirates (UAE), as they shed light on the pivotal role of blockholders in stabilizing financial markets and their propensity to eschew rent-seeking behavior. These findings offer valuable insights that can inform and guide the policy formulation process within the UAE's regulatory landscape. First and foremost, the results underscore the importance of blockholders in mitigating market volatility. By acting as a stabilizing force, these key stakeholders contribute to a more resilient and predictable market environment. Policymakers can leverage this knowledge to develop strategies that encourage and support the active participation of blockholders in the nation's financial markets, thereby bolstering overall market stability. Moreover, the absence of rent-seeking behavior among blockholders, as confirmed by this study, aligns with principles of good corporate governance. Policymakers can use this insight to reinforce regulations and corporate governance frameworks that incentivize responsible ownership and discourage detrimental rent-seeking practices. This approach can foster a more transparent and ethical business environment, which, in turn, can attract greater investor confidence and promote sustainable economic growth.

Legislative changes were introduced in 2020 to attract more capital from abroad. An investment climate in which controlling investors are not perceived as using their ownership position to serve their own interests is an important ingredient in ensuring the success of the government's plans. While earlier works in the literature have evidenced a positive relationship between blockholdings and payout ratio, we do not find this in our research, suggesting that investors in UAE firms embrace the role of blockholders and the reinvestment of profits. This is also evident from the fact that the coefficient for the second largest shareholder is statistically insignificant in all regressions, suggesting that these investors understand the role of the largest shareholder and do not focus on stock returns, returns volatility or dividend payout.

This paper paves the way for future research opportunities. Notably, in 2020, the UAE government enacted a policy permitting expatriates to hold up to one hundred percent of a company's shares. While this regulatory change theoretically allows companies to operate without any Emirati ownership, it presents an intriguing avenue for further investigation regarding the potential impact of blockholders on stock returns, market volatility and dividend payouts. Given this recent shift in ownership regulations, it will be important to explore whether the presence of blockholders will, in the future, exert discernible influences on key financial parameters. An examination of their role in shaping stock performance, market stability and dividend distribution could yield valuable insights for both academia and practitioners. This line of inquiry can contribute to a deeper understanding of how corporate governance dynamics evolve in response to an evolving regulatory framework. By delving into these issues, researchers and policymakers can gain nuanced perspectives on the interplay between ownership structures, investor behavior and the financial performance of firms in the United Arab Emirates. Such research endeavors hold the potential to inform future policy decisions and corporate strategies in a context characterized by increasing foreign ownership.

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## Notes

- <sup>1</sup> Here, we refer to the UAE government for simplicity. The UAE is a federation of seven constituent monarchies, which individually own shares in both public and private companies.
- <sup>2</sup> On the other hand, if, as [La Porta et al. \(2000\)](#) suggest, companies pay dividends because they are expected by shareholders, firms with large blockholdings may pay high dividends to reassure minority shareholders that their interests are not being overlooked.
- <sup>3</sup> There are three stock exchanges in the UAE: (i) the Abu Dhabi Securities Exchange, (ii) the Dubai Financial Market and (iii) NASDAQ Dubai. The latter was established to trade international stocks.
- <sup>4</sup> Such ownership concentration is rare and found only in government-owned institutions such as the 99.89% ownership by the Dubai government of Emirates Islamic Bank through Emirates NBD bank. The Dubai government owns 55.76% of Emirates NBD and, as such, to avoid duplication, organizations with such ownership structures are removed from the sample.
- <sup>5</sup> The Variance Inflation Factor (VIF) test in Stata was used to assess multicollinearity. The VIF values reported across all regressions were below the generally accepted limit of three. Indeed, only one VIF value (for the size variable in [Table 2](#)) was above two. Based on these results, we are confident that our study's results are not affected by multicollinearity.
- <sup>6</sup> To test whether variables are stationary or not, we used Fisher's test for panel unit root using an augmented Dickey–Fuller test. The test results indicate that the variables are stationary.
- <sup>7</sup> This is in line with earlier research, e.g., that of [Kang et al. \(2018\)](#), who hypothesize that blockholders are effective monitors and have other objectives in addition to that of maximizing profits.
- <sup>8</sup> The literature on the relationship between return and return volatility is mixed but, on balance, tilts in favor of a negative relationship ([van Vliet et al. 2011](#)).

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