

# The mediating role of common stock's liquidity between ownership structure characteristics and corporation's value: Evidence from emerging markets



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#### Keywords:

Common stock's liquidity Corporation's value Equity liquidity Ownership structure.

JEL Classification: G10; G14; G32.

Received: 24 February 2023 Revised: 13 April 2023 Accepted: 8 May 2023 Published: 19 May 2023 (\* Corresponding Author)

## Abstract

The study investigated the mediating role of common stock liquidity between ownership structure characteristics and a corporation's value in emerging markets. A quantitative approach was adopted for seventy non-financial listed corporations from seven markets, including Brazil, Egypt, India, Russia, Saudi Arabia, South Africa, and Turkey. The data was collected annually from 2012 to 2021. After removing the outliers using winnowing at 1% and testing the stationary data, the study discovered that ownership structure characteristics and Common Stock's Liquidity, under the control variables, determine the corporation's value in emerging markets by 69.35% according to panel data analysis but by 69.1% according to hierarchical regression analysis. Finally, the study found that Common Stock Liquidity played a significant mediating role, resulting in an average increase of 47.7% in interpreting the change in the value of the corporation in emerging markets. Therefore, common stock liquidity has a significant impact on the value of a corporation and should not be overlooked by top management and investors when making investment decisions in the stock exchange. Thus, common stock liquidity is one of the factors that create value for shareholders in emerging markets.

**Funding:** This study received no specific financial support. **Competing Interests:** The authors declare that they have no competing interests.

## 1. Introduction

The principle of separation of ownership from management was first proposed by economists Berle and Means (1932)in their book "The Modern Corporation and Private Property" published in 1932. In their book, they argue that major corporations have become so complex that efficient management is no longer conceivable. They recommended that owners should instead concentrate on establishing corporate objectives and monitoring performance, leaving operational decisions to experienced management. Since then, this concept has become a cornerstone of contemporary corporate governance philosophy. On the other hand, Common Stock Liquidity is considered one of the determinants of the valuation of these securities according to the theory of market efficiency. Common Stock Liquidity is viewed as one of the factors that influence pricing in the financial markets, with its role being to minimize the risk premium required by market traders. This is based on their ability to convert securities into cash without incurring any capital loss in the securities' value (Ma, Anderson, & Marshall, 2019). Maximizing corporation value is the primary purpose that management seeks to achieve under corporate governance (Wagdi, Salman, & Abouzeid, 2021). This is achieved by creating cash flows for the corporation

whose present value is greater than its value discounted at the weighted average cost of capital (WACC), which includes the rates of return required by stockholders along with the rest of the funding sources. Therefore, the relationship between the liquidity of ownership and corporate value is of interest (Zuhroh, 2019).

Previous studies have mainly focused on ownership structure characteristics, corporation value, and Common Stock Liquidity in developed markets (Ajina, Lakhal, & Sougné, 2015; Ben Ammar, Hellara, & Ghadhab, 2020; Chung & Lee, 2020; Fraser, Groth, & Byers, 1996; Handoyo, Wicaksono, & Darmesti, 2022; Kothare, 1997; Michaely & Qian, 2022; Rubin, 2007; Tarus, Tenai, & Komen, 2019). However, there is a need to analyse these factors in developing countries. Therefore, the present study aims to examine the role of Common Stock Liquidity in relation to ownership structure characteristics and corporation value for non-financial listed corporations from seven emerging markets. Based on the above, this study examines the mediating role of common stock liquidity in the relationship between ownership structure and corporation value. While previous studies have covered this topic in international markets (see: Bousnina, Gana, and Dakhlaoui (2022)), the variables proposed for the current study have not been extensively studied in combination in emerging markets. Therefore, the current study seeks to fill a knowledge gap in the analysis of the study variables, which include independent variables of ownership structure characteristics, an intermediate variable of common stock liquidity, dependent variables of corporation value, and control variables of corporation size, and financial leverage. The study is divided into 5 sections: Introduction, Literature Review and Theoretical Framework, Study Methodology and Design, Data Analysis, and Hypothesis Testing, and Conclusions and Recommendations.

## 2.Literature Review and Theoretical Framework

The agency theory emerged from the separation between management and ownership, and the agency problems result from the relationship between owners and managers (agents). Smith (1826) was the first to point this out (see: Smith (1826)). The problem of agency arises as a result of the asymmetry of both "data and information "and the disparity of benefits for both parties, where managers may exploit their" data and information" and make decisions to achieve their personal interests, without considering the interests of the owners wishing to maximize their wealth. This leads to a conflict of interests between the owners and managers, which reduces the corporation's value by increasing the costs of agency (Jensen & Meckling, 1976). Therefore, the agency problem is a determining factor in the corporation's value according to certain characteristics. These characteristics include concentration ownership, institutional ownership, managerial ownership, foreign ownership, government ownership, and family ownership.

On the other hand, there are seven patterns of corporation values: Par value (which is the value according to the securities issued by the corporation), Paid value (corporation value according to what has been paid by stockholders, which is usually according to the par value added to the issuance premium mechanism or discount), Market value or market capitalization (that is the corporation's value according to the values of its securities in the trading market, which is usually the result of the forces of demand and supply), the stand-alone value (that corporation's value according to the accepted valuation under mergers and acquisitions), filter value (that is the corporation's value according to the assets of the issuing corporation after payment of priority rights, according to the market price of both assets and liabilities), and fair value or intrinsic value (that is the corporation's value according to the benefits and risks involved in its activities and the value it provides through the management of the assets in its possession). In this regard, market value and fair value are the basis for traders' decisions about the securities issued by the corporation. Under the hypothesis of fully efficient markets, the fair value of the corporation must be equal to its market value. Fair value is one of the most important basic determinants when traders decide to buy or sell financial assets. The main goal of determining these factors is to estimate the levels of return and risk from investing in the stock market, in order to identify stocks with price imbalance and achieve extraordinary profits as a result of the difference in market value from their fair value. Such imbalance leads to an increase in demand for common stock, while demand for overvalued stocks decreases as they become overpriced, and the market mechanisms tend to balance them. The efficiency of the market mechanism determines the dynamics of assets reaching their fair value. However, defining a clear concept of fair value is complex and not as straightforward as many expect. It depends on various factors, such as general economic conditions and changes in the industry to which the issuing corporation belongs.

The theory of market efficiency gains importance in terms of the determinants of the relationship between fair value and the market value of corporations. This theory is regarded as the foundation for building the rest of the theories of financial thought. Determining the level of efficiency of a capital market is the basis for selecting the most appropriate entrances to select, price, and evaluate securities. Efficient markets are those where the prices of securities reflect all available information about their underlying value, and any new information is quickly reflected in the price. This theory has important implications for the practice of investment management and asset pricing, as it considers historical, current, and internal data and information. However, valuing the value of corporations is not an easy task, considering the multiplicity of factors governing this assessment. These factors include the extent to which the securities market is efficient, which governs the estimation of ownership funds instead of the extent of distortions in the interest rate structure. This affects the value of the debt funds included in the financing structure used to acquire the corporation's assets, which is the subject of evaluation. In all cases, a huge amount of financial and non-financial data is needed, especially if the market is not characterized by any level of efficiency, which is affected by the extent of information asymmetry between traders in the market.

The concentration of ownership among major stockholders has two conflicting effects: the convergence of interests and the effect of administrative immunization (managerial entrenchment). In terms of the convergence of interests, the presence of a concentration of ownership among major stockholders leads to the convergence of interests between managers and the rest of the stockholders. When a major investor controls the majority of the stocks, he has a great advantage in influencing management to implement the decisions he prefers, which affects the performance of the corporation issuing those stocks. Several previous studies have examined the relationship between the degree of concentration of ownership and equity liquidity, including (De Cesari, Espenlaub, Khurshed, & Simkovic, 2012; Le, 2019; Tang, Gu, Zhang, & Liu, 2022; Udomsirikul, Jumreornvong, & Jiraporn, 2011). These studies found a positive relationship between the degree of concentration of ownership and equity of stock trading. This result was interpreted in light of the dependence of corporations on ownership funds in their financing structure versus minimizing dependence on debt funds (such as issuance of bonds or bank loans).

Unlike the situation with regard to the impact of immunization, the existence of a concentration of ownership of major investors in a corporation includes the possibility of using their capabilities in order to seize the wealth of small investors by making investment decisions and taking actions that serve their own interests, which negatively affects the liquidity of stocks, as some previous studies have indicated, including (Brockman & Olsen, 2013; Prommin, Jumreornvong, Jiraporn, & Tong, 2016; Uno & Kamiyama, 2009; Wang, 2022). These studies have concluded that there is an inverse relationship between the rates of concentration of ownership coupled with administrative immunization on the one hand, and the rates of liquidity of stock trading on the other hand. Some studies have indicated that this result is more prominent in emerging and developing markets, where immunization rates are greater compared to developed markets, rather than in markets with a structure financed by bank loans. Managerial ownership is defined as the percentage of stocks owned by members of the board of directors compared to the total number of stocks. Some studies (Abbassi, Hunjra, Alawi, & Mehmood, 2021) call it internal ownership. It has been indicated in this regard that there are two effects of the managerial ownership structure on the liquidity of stocks. The first effect is the convergence of interests due to the high relative weight of managerial ownership as a percentage of total stocks. The second effect is the difficulty other investors face in achieving effective control over the management of the issuing corporation in light of the low rates of free trading (free float). The high relative weight of managerial ownership makes managers immune from external investors, giving them a greater opportunity to work to achieve their interests in a way that may harm the interests of external investors and affect the low liquidity of stocks.

Some studies (Abbassi et al., 2021) have found an inverse relationship between the relative weight of managerial ownership and equity liquidity. However, a study by (Madyan & Firdausi, 2019) concluded that there is no significant relationship between the ratio of the structure of managerial ownership and the liquidity of stocks. Institutional ownership is defined as the relative weight of stocks held by institutions, organizations, and other legal firms to the total number of stocks (Ahluwalia, Mishra, & Tripathy, 2020). There are opposing views on the impact of institutional ownership structures on equity liquidity. Studies by Abbassi et al. (2021); Ahluwalia et al. (2020); Madyan and Firdausi (2019), and Tang et al. (2022) suggest that the ratio of institutional ownership structure has a direct impact on equity liquidity. These studies have interpreted this as evidence that long-term institutional investments have the incentive to control corporations, which leads to ensuring increased liquidity in the stocks issued by these corporations. This is in agreement with Cooper, Groth, and Avera (1985), who argue that high liquidity is a desirable quality of a corporation, particularly for institutional investors who often trade in huge volumes.

On the other hand, studies by Wang (2022); De Cesari et al. (2012), and Daryaei and Fattahi (2022) have found a negative relationship between the ratio of institutional ownership structure and equity liquidity. These studies interpret this as evidence that institutional investments are short-term and for speculative purposes, meaning that institutions deal as speculators rather than owners. They deal with temporary investments, leaving a stake in current profits and many long-term profits. This makes the relationship between the institutional ownership structure and stock liquidity undefined. It can be said that the role of the institutional ownership structure as a mechanism to activate the liquidity of stocks depends on the time horizon of their investments and the extent to which these investments are concentrated in the corporation. If the investments are long-term, a positive relationship is expected. However, if they are short-term, a negative relationship is expected. Szewczyk, Tsetsekos, and Varma (1992) examined the impact of institutional ownership on new issues of common stock. They found that the absolute amount of the common stock price reaction is inversely proportional to the level of institutional ownership of the announcing corporation. These findings are consistent with the thesis that institutional investors' information acquisition operations diminish preannouncement information asymmetries between corporations' managers and the listing stock market.

On the other hand, the main goal of investors and stockholders is to maximize the value of stocks and, therefore, the value of the corporation. The liquidity of a company's stocks is also crucial for investors and stockholders since they prefer to invest in the stocks of corporations with high liquidity. This enables them to liquidate their stocks when needed for liquidity at a fair price without incurring losses in their value.

Several studies have addressed the relationship between stock liquidity and its impact on the value of a corporation, including Cheung, Chung, and Fung (2015); Prommin et al. (2016); Fang, Noe, and Tice (2009); Li, Chen, and French (2012); Nguyen, Duong, and Singh (2016); Marcet (2017); Chen, Yang, and Yeh (2017); Hansen and SungSuk (2013); Siringoringo and Hutabarat (2019); Farooq and Masood (2016); Tahu and Susilo (2017); Yanti and Dwirandra (2019); Jawed and Kotha (2020); Chia, Lim, and Goh (2020) and Hermuningsih, Kirana, and Erawati (2019). They found a positive correlation between equity liquidity and the value of a corporation. This can be explained as a result of evidence that internal and external investment opportunities can be exploited, as liquid funds are a source of financing investments and making profits in the future. In addition, equity liquidity is one of the indicators of low-risk investing in stocks.

While other studies (Batten & Vo, 2019; Sari & Sedana, 2020; Zhang, Gao, & Li, 2021; Zuhroh, 2019) have pointed to the existence of a negative impact of stock liquidity on corporation value, this can be attributed to a lack of dependence on bank credit in financing (loans), which affects the liquidity consequently the value of the corporation. In addition, poor liquidity of stocks in the stock market can indicate unproductive assets and weak management, which also reflects negatively on corporation value. However, a study by Markonah, Salim, and Franciska (2020) found that there is no significant effect of equity liquidity on the value of a corporation.

Since there are factors other than the ownership structure and liquidity of stocks that may affect corporation value, some control variables will be added to isolate their expected impact on corporation value. While the size of a corporation can affect its value, but this effect is not directional. Nonetheless, studies by Natsir and Yusbardini (2020); Widnyana, Astiti, and Suarjana (2021); Zuhroh (2019) and Daryaei and Fattahi (2022) have found a positive relationship of the size of the corporation on corporation value. However, other studies (Hirdinis, 2019; Niresh & Thirunavukkarasu, 2014) suggest that there is a negative relationship between the size of the corporation value. According to the variation in the results of previous studies, our study considered the size of the corporation as one of the control variables.

Another control variable, which is the rate of debt in the capital structure, is measured by financial leverage. Debt can have a positive or negative effect, depending on the difference between the cost of funds and the rate of return on the corporate's assets. Sometimes, a corporation may rely on loans as part of its financing structure, which can result in loan holders exerting control over the decisions of the corporation's management, especially about decisions to distribute profits, or obtain new debt, and disposing of non-traded assets that provide the best performance and improve the image of the corporation in front of creditors. Such actions may help the corporation obtain and benefit from additional loans. The degree of leverage may reduce opportunistic behaviour by managers and prevent them from making decisions that prioritize their personal interests at the expense of the corporation (Ali, Liu, & Su, 2017). Daryaei and Fattahi (2022) have noted that the degree of financial leverage is related to decisions related to the financial structure of corporations, specifically long-term financing, which can affect its value. Stockholders play an important role in determining the financial structure of a corporation in a way that positively affects its value and increases their own wealth. A study by Isshaq, Bokpin, and Mensah Onumah (2009) found that financial risk has an impact on corporation value. Based on these findings, our study considered financial leverage as one of the control variables.

According to Abbassi et al. (2021), institutional ownership, board size, board independence, and CEO (Chief Executive Officer) duality have a positive impact on the liquidity of the stock market, whereas managerial ownership has a significant and negative impact on the South Asian exchange market. However, according to Mangantar and Ali (2015), corporate governance moderates the effects of ownership structure on firm value. They argue that firm value is influenced by gradual processing in Indonesia. Overall, it is important for corporations to consider both their ownership structure characteristics and the liquidity of their common stock when investors or traders in the stock exchange market assess their value. By doing so, they can better understand how these factors interact and take steps to improve their performance and increase their value.

## 3. Study Methodology and Design

## 3.1. Study Questions

Based on our review of the literature and theoretical framework, our study found different results regarding the impact of the characteristics of the ownership structure, the corporation's value, and the liquidity of common stock in emerging markets. As a result, our study aims to answer the following questions:

- Is there an impact of the characteristics of the ownership structure on the corporation's value in emerging markets?
- Is there a role for common stock's liquidity ratios in figuring out how ownership structure impacts the corporation's value in emerging markets?

Here, it should be noted that the level of concentration of ownership in corporations is a function of both "institutional ownership" and "managerial ownership". These variables can affect the decision-making process in corporations, as the characteristics of the ownership structure are the basis for decision-making in these corporations.

#### 3.2. Study Hypotheses

Based on our questions, we formulated the following hypotheses:

H<sub>i</sub>: There is not a significant impact of the ownership structure on the corporation's value in emerging markets. H<sub>2</sub>: There is no role for common stock's liquidity in figuring out how ownership structure impacts the corporation's

value in emerging markets.

Table 1 includes the variables tested for these hypotheses.

	Table 1. Study variables.							
Variables			Symbol	Previous studies				
Dependent variable	Market value of stockholders' equity	Tobin's Q	тQ	Arian, Galdipur, and Kiamehr (2014); García-Meca and Pedro Sánchez- Ballesta (2011); Handriani and Robiyanto (2018); Isshaq et al. (2009) and Sidhu (2016)				
Intermediate	i stock ity	The logarithmic value of trading volume	TV	Chen, Hou, and Lee (2012); Chordia and Swaminathan (2000) and Lee and Rui (2000)				
variable	Common liquid	Turnover rate	TOV	Alaoui Mdaghri, Raghibi, Thanh, and Oubdi (2021) and Prommin, Jumreornvong, and Jiraporn (2014)				
Control variables	Corporation size	The logarithmic value of net assets	CZ	Isshaq et al. (2009) and Natsir and Yusbardini (2020)				
	Financial leverage	The weight of total debt to total assets	FL	Nadarajah, Ali, Liu, and Huang (2018); Ma et al. (2019); Chia et al. (2020) and Tran, Hoang, and Tran (2018)				
Independent	ship ure	Ownership concentration	E1	Le (2019) and Natsir and Yusbardini (2020)				
variable	ner uct	Management ownership	E2	Chen et al. (2012)				
vai labic	Owi stri	Institutional ownership	E3	Ahluwalia et al. (2020); Cooper et al. (1985) and Szewczyk et al. (1992)				

## 3.3. Study Models

Under the assumption that time series are stationary with constant variance, we removed the outliers using winnowing at 1% for the continuous variables. The study investigated the mediating role of common stock liquidity in the relationship between ownership structure and a corporation's value in emerging markets, according to function No.1.

Corporation value = f market value of debt + market value of stockholders' equity

# Function No.1

The current study suggests that the characteristics of the ownership structure have a significant effect on corporate value on the basis of three variables: common stock liquidity, corporation size, and finally financial leverage. However, the study finds that the debt markets in emerging markets are weak, so it relies on the book value of debts, as the bulk of debt instruments are usually bank loans. Therefore, the study includes function no. 2.

 $\label{eq:corporation} \mbox{Corporation's value:} = f \mbox{ book value of debt } + \mbox{ ownership structure} + \mbox{ corporation size} + \mbox{financial leverage} \mbox{ Function No.2}$ 

For the value of debt, the study deletes this variable based on the weakness of the debt market in emerging markets, so function 3 is as follows:

Market value of stockholders' equity = f Ownership Structure + Corporation Size +Financial Leverage Function No.3

Due to the lack of data on the characteristics of the ownership structure in all the markets under investigation, the study measured it through three variables: Ownership Concentration, Management Ownership, and Institutional Ownership. Therefore, the study has function no. 4.

Market value of stockholders' equity =  $\hat{f}$  Ownership Concentration + Management Ownership + Institutional Ownership +Corporation Size +Financial Leverage

Function No.3

From the above, the equation of the statistical model can be built as shown in Equation 1. The dependent variable (market value of stockholders' equity) is measured using Tobin's Q. Table 1 shows all the variables of the study.

From the above, the study model was formulated as follows

$$TQ_{i,t} = \beta_0 + \beta_1 T V_{i,t} + \beta_2 T O V_{i,t} + \beta_3 C Z_{i,t} + \beta_4 F L_{i,t} + \beta_5 E \mathbf{1}_{i,t} + \beta_6 E \mathbf{2}_{i,t} + \beta_7 E \mathbf{3}_{i,t} + \mathcal{E}_{i,t}$$
(1)

The study tested Equations 1 where (i) represents the Corporation and (t) represents the time.  $\beta_0$  is a constant term;  $\beta F$  is the slope of (F) the variable, but  $\mathcal{E}_{i,t}$  is random error.

The study tested these models after removing the outliers using winnowing at 1% and testing the stationary data through panel data analysis and hierarchical regression analysis.

## 4. Data Analysis and Hypothesis Test

## 4.1. Study Sample

The study sample includes seventy non-financial listed corporations from seven emerging markets, including Brazil, Egypt, India, Russia, Saudi Arabia, South Africa, and Turkey. The data were collected on an annual basis during the period from 2012 to 2021 through the Reuters financial database. Appendix A contains a list of the sample's components.

## 4.2. Stationary of Data

The assumption of stationary (constant variance) exists in many time series methods. One of the defining characteristics of a stationary process is that the mean, variance, and autocorrelation values do not vary over time. The study examined the data for stationarity to ensure that the mean and variance were invariant according to a unit root test. The stationarity of the time series of the basic independent and dependent indicators at level zero was evaluated according to the constant level. This was done through the Augmented Dickey–Fuller (ADF), Philips–Perron (PP), Im, Pesaran and Shin W-stat (IPSW), Levin, and Lin and Chut (LLC) tests at a significance level of less than 0.05.

## 4.3. Test Hypotheses According to Panel Data Analysis 4.3.1. First Hypothesis Test

The test was conducted through cross-sectional study over a period of 10 years, and the outputs of the inferential statistics were as follows.

	<b>Table 2.</b> 0	outputs of a simple mod	lel test.		
Model 1: Fixed-effects, u	sing 700 observations	3			
Included 7 cross-sectiona	d units				
Time-series length $= 100$	)				
Dependent variable: TQ					
	Coefficient	Std. error	T-ratio	P-value	
Const	-0.317057	0.433156	-0.7320	0.4644	
E1	10.4148	0.988580	10.54	< 0.0001	***
E2	-26.5272	2.61533	-10.14	< 0.0001	***
E3	-2.73863	0.833633	-3.285	0.0011	***
Mean dependent var	2.501120	S.D. 0	lependent var	4.320392	
Sum squared resid	1,0170.77	S.E. c	of regression	3.839302	
LSDV R-squared	0.220475	With	in R-squared	0.216016	
LSDV F(9, 690)	21.683,82	P-val	ue(F)	1.68e-32	
Log-likelihood	-1,929.924	Akail	ke criterion	3,879.849	
Schwarz criterion	3925.359	Hann	an-Quinn	3,897.441	
rho	0.738640	Durb	in-Watson	0.526433	
Note: Joint test on named re	gressors -				

Test statistic: F(3, 690) = 63.3732

with p-value = P(F(3, 690) > 63.3732) = 3.36819e-036

Test for differing group intercepts -

Null hypothesis: The groups have a common intercept

Test statistic: F(6, 690) = 0.446817

with p-value = P(F(6, 690) > 0.446817) = 0.847398

\*\*\*Parametric was significant value at less than 0.01%.

Source: Gnu regression, econometrics and time-series library.

Table 2 presents the statistical results which showed that there was a significant impact of ownership structure on the corporation's value at the 0.01 level. Ownership Concentration, Management Ownership, and Institutional Ownership together affected 21.1% of the corporation's value. The study thus rejects the null hypothesis and accepts the following alternative hypothesis.

There is a significant impact of the ownership structure on the corporation's value in emerging markets.

## 4.3.2. Second Hypothesis Test

The study used the same sample as before, with the addition of a mediating variable and the control variables. The outputs of the study were as follows:

	Table 3	. Outputs of a comp	orehensive model test.		
Model 2: Fixed-effects	, using 700 observati	ons			
Included 7 cross-section	nal units				
Time-series length $= 1$	00				
Dependent variable: TQ	2				
	Coefficient	Std. error	T-ratio	P-value	
Const	1.37912	1.68793	0.8170	0.4142	
E1	9.38858	0.743998	12.62	< 0.0001	***
E2	-16.7579	1.95723	-8.562	< 0.0001	***
E3	0.802559	0.540510	1.485	0.1381	
CZ	-2.18224	0.0735078	-29.69	< 0.0001	***
FL	1.92157	0.184273	10.43	< 0.0001	***
TV	1.99889	0.186080	10.74	< 0.0001	***
TOV	-6.80776	0.669240	-10.17	< 0.0001	***
Mean dependent var	2.501120	S	.D. dependent var	4.320392	
Sum squared resid	3.975744	S	.E. of regression	2.407394	
LSDV R-squared	0.695284	V	Vithin R-squared	0.693541	
LSDV F(13, 686)	120.4061	Р	-value(F)	4.2e-167	
Log-likelihood	-1.601167	А	kaike criterion	3.230335	
Schwarz criterion	3.294050	H	Iannan-Quinn	3.254964	
rho	0.600350	Γ	Ourbin-Watson	0.785660	

Joint test on named regressors -Note:

Test statistic: F(7, 686) = 221.782

with p-value = P(F(7, 686) > 221.782) = 1.7861e-171

Test for differing group intercepts -Null hypothesis: The groups have a common intercept

Test statistic: F(6, 686) = 0.435644

with p-value = P(F(6, 686) > 0.435644) = 0.855209\*\*\*Parametric was significant value at less than 0.01%.

Gnu regression, econometrics and time-series library Source:

Table 3 presents the statistical outputs, where the statistics show that the ownership structure, common stock's liquidity, and control variables all contributed to explaining the variance of 69.35% of the change in the corporation's value. Therefore, common stock's liquidity and control variables play a significant role in figuring out how ownership structure impacts the corporation's value in emerging markets by 47.7%. All parameters of the model are significant at a confidence level of 99%, except for Institutional Ownership, which is not significant. Now, the study rejects the Null hypothesis and accepts the following alternative hypothesis.

There is a role for common stock's liquidity in figuring out how ownership structure impacts the corporation's value in emerging markets.

## 4.4. Test Hypotheses According to Hierarchical Regression Analysis

As a confirmatory test, the study used a hierarchical regression analysis, the outputs of the statistical analysis are shown in the following Table 4.

Table 4. Model summary of hierarchical regression analysis.								
Model		R	R square	Adjusted R square	Std. error of the estimate			
1	а	0.466	0.217	0.214	3.8301			
2	b	0.472	0.223	0.217	3.8228			
3	с	0.833	0.694	0.691	2.4015			

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a Predictors: (Constant), E3, E2, E1. Note:

b Predictors: (Constant), E3, E2, E1, TOV, TV. c Predictors: (Constant), E3, E2, E1, TOV, TV, FL, CZ.

ANOVA							
	Model	Sum of squares	df	Mean square	F	Sig.	
		2837.105	3	945.702	64.465	0.000a	
1	Regression	Residual	10,210.28	696	14.07		
		Total	13,047.39	699	14.67		
		2905.258	5	581.052	39.76	0.000 <sup>b</sup>	
2	Regression	Residual	10,142.13	694	14.614		
		Total	13,047.39	699			
		9056.495	7	1,293.785	224.336	0.000c	
3	Regression	Residual	3,990.892	692	5.767		
	-	Total	1,3047.39	699	1		

Table 5. ANOVA test.

Note: a Predictors: (Constant), E3, E2, E1.

b Predictors: (Constant), E3, E2, E1, TOV, TV.

c Predictors: (Constant), E3, E2, E1, TOV, TV, FL, CZ.

Table 5 presents the statistical outputs, where the statistics show that Ownership Structure contributes to the interpretation of the corporation's value by 21.7% based on adjusted R Square. Common stock's liquidity and Control Variables also contribute to raising the interpretation to 69.1% of the change in the corporation's value. Therefore, the Mediating Role of Common stock's liquidity impacts the corporation's value in emerging markets by 47.4%.

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	Lable 6. 1 test.								
Coeffici	ents								
Madal	В	Unstand coeffic	ardized cients	Standardized	Т	Sig.			
Model		Std. error	Beta	coefficients					
	(Constant)	-0.313	0.43	-0.728	0.467				
1	E1	10.462	0.983	0.479	10.647	0.000			
	E2	-26.475	2.598	-0.405	-10.191	0.000			
	E3	-2.812	0.829	-0.161	-3.393	0.001			
2	(Constant)	-5.705	2.612	-2.184	0.029				
	E1	11.364	1.174	0.52	9.679	0.000			
	E2	-23.553	3.082	-0.361	-7.642	0.000			
	E3	-2.96	0.837	-0.17	-3.537	0.000			
	TOV	0.804	0.992	0.033	0.81	0.418			
	TV	0.568	0.286	0.088	1.983	0.048			
	(Constant)	1.412	1.68	0.84	0.401				
	E 1	9.449	0.741	0.433	12.758	0.000			
	E2	-16.825	1.947	-0.258	-8.641	0.000			
0	E3	0.755	0.538	0.043	1.405	0.161			
3	TOV	-6.808	0.666	-0.278	-10.22	0.000			
	TV	1.99	0.185	0.308	10.739	0.000			
	FL	1.926	0.184	0.227	10.479	0.000			
	CZ	-2.179	0.073	-0.705	-29.845	0.000			

Table 6 shows that all parameters of the model are significant at a confidence level (99%), except for institutional ownership that is not significant. Therefore, the study rejects the Null hypothesis and accepts the following alternative hypothesis.

There is a role for common stock's liquidity in figuring out how ownership structure impacts the corporation's value in emerging markets.

# 5. Conclusions and Recommendations

In corporate governance, the concept of separating ownership from management is a basic premise. It refers to the separation of roles between the owners and managers of a corporation. In this structure, the ultimate control of the corporation is held by the owners, who are typically the stockholders, while the managers are responsible for operating the day-to-day operations of the corporation.

The principle of separation of ownership from management was first proposed by economist Adolf Berle and lawyer Gardiner Means in their 1932 book The Modern Corporation and Private Property. In their book, they argued that large corporations had become so complex that it was no longer possible for owners to effectively manage them. They proposed that owners should instead focus on setting goals for the corporation and monitoring performance while leaving operational decisions to professional managers. This concept has since become a cornerstone of modern corporate governance theory.

Separating ownership from management promotes transparency and accountability and helps to ensure the long-term success of the business. By adhering to this principle, corporations can build trust with their stockholders and stakeholders and create a solid foundation for growth and success.

The ownership structure of a corporation is an important factor in determining its value. Ownership structure refers to the way in which a corporation is owned, including the types of stockholders, the number of stocks they own, and the voting rights they have. It is important to understand how ownership structure affects corporation value because it can have a significant impact on how a corporation is managed and its ability to generate profits, in addition to the corporation's ability to grow sustainably in the long term.

On the other hand, common stock's liquidity is an important factor in determining the value of a corporation. Liquidity refers to the ease with which an asset can be converted into cash without significantly affecting its price. In the case of common stocks, liquidity is determined by the number of buyers and sellers in the market, as well as the trading volume and price volatility. The liquidity of the issued stocks in the trading market cannot be evaluated based on one measure only, whether the value of trade, the volume of trade, or the rate of trade, as

any of these measures is affected by one or more factors: the number of stocks issued, the market value of the stock, the free float rate, the restrictions of trading systems, and ownership limits (such as foreign ownership restrictions or a maximum limit for individual ownership).

Common stock's liquidity is an important factor in determining the value of a corporation because it affects both its ability to raise capital and its stock price. Corporations with higher levels of liquidity are more attractive to investors because they can easily convert their stocks into cash if needed. This makes them less risky investments, which leads to higher stock prices and higher valuations for the corporation. However, corporations with lower levels of liquidity may have difficulty raising capital or may have to accept lower stock prices due to investor uncertainty. Additionally, the common stock's liquidity in emerging markets may be affected by changes in exchange rates, which can increase systemic risks (see: Martinez, Nieto, Rubio, and Tapia (2005)).

The separation between ownership and management is the driver of the agency problem, which has received attention from academics and professionals alike. This is reflected in the emergence of many related fields of study, including agency costs, information symmetry, managerial immunization, governance, etc., which are expected to impact both the performance and value of the corporation. This is consistent with the conclusions of studies by Fu, Kraft, and Zhang (2012) and Margaritis and Psillaki (2010).

The characteristics of the ownership structure can be summarised using several variables, including those listed above. The researchers have identified five key indicators to summarise the ownership structure: ownership concentration, institutional ownership, management ownership, foreign ownership, and government ownership. This is consistent with the findings of studies by Claessens and Djankov (1999); Cornett, Marcus, Saunders, and Tehranian (2007) and Ding and Suardi (2019).

The objective of this study is to examine the role that common stock liquidity plays in mediating the relationship between ownership structure characteristics and the value of a corporation in emerging economies. The research sample consists of seventy non-financial listed corporations listed in seven different emerging markets, including Brazil, Egypt, India, Russia, Saudi Arabia, South Africa, and Turkey. The hypotheses were tested using 700 observations.

Throughout the study, data were collected on a yearly basis between the years of 2012 and 2021. After removing the outliers using a winnowing at 1% for the continuous variables and testing the stationarity of data, the study used panel data analysis (based on fixed effects) and hierarchical regression analysis to determine how common stock's liquidity and control variables determine how ownership structure affects the value of the corporation in emerging markets. The results showed that ownership structure affects the value of the corporation in emerging markets by 47.7% according to panel data analysis, but by 69.1% according to hierarchical regression analysis.

One limitation of this study is the small sample size, which consists of only seventy non-financial listed corporations from seven different stock exchange markets for ten years. Moreover, due to asymmetry among the markets under investigation, other variables to ownership structure characteristics, such as government ownership and foreign ownership, were not used. Despite these limitations, this study makes a significant contribution to the literature on the issue in emerging markets. It focuses on the mediating role of common stock's liquidity between ownership structure characteristics and the corporation's value. Therefore, future research in this field should aim to overcome these limitations and test the similarity of results between international markets and emerging markets.

The study recommends that future studies include testing the impact of exchange rate changes on stock liquidity in emerging markets, in addition to examining the impact of exchange rate changes on the value of corporations in emerging markets. Furthermore, a correlation between herd behaviour and common stock's liquidity in international markets was found, according to the conclusion of Galariotis, Krokida, and Spyrou (2016). The study believes that testing this effect in emerging markets is very important.

Finally, the liquidity of common stocks has a significant impact on the value of a corporation and should not be overlooked by investors when making investment decisions. Corporations with higher levels of liquidity tend to be safer investments due to their ability to raise capital quickly and efficiently, as well as their efficient markets which ensure accurate pricing for their stocks. Investors should consider these factors when evaluating potential investments to maximize returns while minimizing risk. That agrees with Cooper et al. (1985), which demonstrates that common stock liquidity is related to the price behaviour of the common stock.

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No.	Corporation	Sector	Code	Stocks	Market cap	Average
Form				outstanding		voi. (3m)
1	El Sewedy Electric Co SAE	Industrials	SWDY	2,143,978,592	28.19B	4,453,774
2	GB AUTO	Consumer cyclicals	AUTO	1,085,500,000	5.68B	7,313,871
3	Oriental Weavers	Consumer cyclicals	ORWE	665,107,268	7.32B	2,771,121
4	Telecom Egypt	Technology	ETEL	1,707,071,600	46.09B	1,543,398
5	Juhayna food industries	Consumer non- cyclicals	JUFO	941,405,082	9.78B	2,447,397
6	Ezz steel	Basic materials	ESRS	533,802,313	13.99B	1,859,827
7	Electro Cable Egypt	Industrials	ELEC	3,032,961,366	1.42B	2,521,034
8	Arab Cotton Ginning	Consumer cyclicals	ACGC	261,604,293	816.21M	1,801,342
9	Delta sugar	Consumer non- cyclicals	SUGR	142,198,075	3.15B	269,788
10	Arabian Cement Co SAE	Basic Materials	ARCC	378,739,700	2.56B	118,382
Saudi	Arabia					
11	Alamar foods CJSC	Consumer cyclicals	6014	25,230,000	3.37B	58,359
12	Abdullah Al Othaim markets company	Consumer non- cyclicals	4001	90,000,000	9.77B	118,930
13	Al Yamamah steel industries co	Basic materials	1304	50,800,000	1.17B	240,360
14	City cement co	Basic materials	3003	140,000,000	2.81B	152,086
15	Electrical industries co	Industrials	1303	44,500,000	1.18B	108,587
16	Naqi water co	Consumer non- cyclicals	2282	20,000,000	1.36B	184,129
17	Saudi telecom	Technology	7010	4,990,371,000	181.15B	2,860,246
18	Mobile telecommunications company	Technology	7030	898,729,175	9.33B	1,652,830
19	Savola group	Consumer non- cyclicals	2050	533,342,745	15.23B	246,103

Appendix A. The study sample

Zhang, P., Gao, J., & Li, X. (2021). Stock liquidity and firm value in the time of COVID-19 pandemic. *Emerging Markets Finance and Trade*, 57(6), 1578-1591. https://doi.org/10.1080/1540496X.2021.1898368

No.	Corporation	Sector	Code	Stocks outstanding	Market cap	Average vol. (3m)
20	Saudi electricity company	Utilities	5110	4,166,593,815	94.25B	683,730
Russi	a		•			
21	Aeroflot	Industrials	AFLT	3,927,953,419	111.63B	7,427,361
22	NK Lukoil PAO	Energy	LKOH	647,939,601	2.55T	430,597
23	VK Company Ltd DRC	Consumer cyclicals	VKCODR	226,150,707	13.32B	583,534
24	ALROSA ao	Basic materials	ALRS	7,212,635,830	439.25B	9,653,557
25	Novolipetsk steel PAO	Basic materials	NLMK	599,322,724	280.8B	3,788,872
26	Phos Agroao	Basic materials	PHOR	129,500,000	869.72B	52,381
27	NK Rosneft PAO	Energy	ROSN	9,499,755,770	3.27T	2,631,206
28	Unipro	Utilities	UPRO	63.048.706.145	101.32B	42,464,477
29	Yandex NV	Technology	YNDX	361.575.993	505.57B	466.590
30	Rostelekom PAO	Technology	BTKM	3 351 623 329	196 74B	994 922
Turk	PV	reennoiogy	ICIICI	0,001,020,020	100.711	001,022
31	Adel Kalemcilik Ticaretye Sanayi AS	Industrials	ADEL	23,625,000	2.25B	287,781
32	Akcansa Cimento Sanavi ve Ticaret AS	Basic Materials	AKCNS	191,447,068	11.11B	1,329,370
33	Aksa Enerji Uretim	Utilities	AKSEN	1,226,338,236	36.15B	11,933,115
34	Anadolu Efes Biracilikve Malt Sanavi AS	Consumer Non- Cyclicals	AEFES	592,105,263	26.59B	3,651,150
35	Arena Bilgisayar Sanayi ve Ticaret AS	Technology	ARENA	100,000,000	1.34B	1,438,481
36	Arzum Elektrikli EvAletleri Sanayi ve Ticaret AS	Consumer Cyclicals	ARZUM	32,210,000	756.94M	1,176,668
37	Avgaz AS	Energy	AYGAZ	219.800.767	14.73B	822.605
38	Celebi Hava Servisi			-10,000,000	-	022,000
80	AS	Industrials	CLEBI	24,300,000	10.57B	93,403
	Coca-Cola Icecek AS	Cyclicals	CCOLA	254,370,781	40.85B	707,881
40	Datagate Bilgisayar Malzemeleri Ticaret AS	Technology	DGATE	29,999,999	413.7M	497,363
India					I	
41	Asian Paints Ltd.	Basic Materials	ASPN	959,197,790	2.66T	58,017
42	Bharti Airtel Ltd.	Technology	BRTI	5,961,990,755	4.62T	106,795
43	HCL Technologies Ltd	Technology	HCLT	2,707,345,096	3.04T	103,286
44	Hindustan Unilever Ltd.	Consumer Non- Cyclicals	HLL	2,349,591,262	6.06T	59,961
45	Infosys Ltd	Technology	INFY	4,156,013,121	6.62T	315,230
46	ITC Ltd	Consumer Non- Cyclicals	ITC	12,415,154,892	4.8T	437,031
47	Larsen & Toubro Ltd	Industrials	LART	1,405,109,175	3.08T	65,783
48	Nestle India Ltd	Consumer Non- Cyclicals	NEST	96,415,716	1.84T	1,790
49	Tata Steel Ltd	Basic Materials	TISC	12,233,041,750	1.34T	3,136,834
50	Wipro Ltd	Technology	WIPR	5 475 877 488	9.99T	454 154
Brazi		reennoiogy	** 11 11	0,110,011,400	2.221	гот,10т
51	3R Petroleum Oleo E Gas Sa	Energy	RRRP3	203,087,632	9.57B	4,562,506
52	Arezzo Industria e Comercio SA	Consumer Cyclicals	ARZZ3	109,755,194	8.76B	1,375,956
53	Companhia Brasileira De Distribuica	Consumer Non- Cyclicals	PCAR3	269,978,727	5.05B	3,382,545

No.	Corporation	Sector	Code	Stocks outstanding	Market cap	Average vol. (3m)
54	Brazilian Electric Power Co	Utilities	ELET3	2,296,793,197	96.34B	11,570,431
55	Cielo SA	Industrials	CIEL3	2,694,289,252	14.39B	26,356,606
56	CSN Mineracao SA	Basic Materials	CMIN3	5,485,338,838	25.84B	8,533,236
57	Dexco SA	Basic Materials	DXCO3	807,920,901	5.58B	4,568,844
58	EDP - Energias do Brasil SA	Utilities	ENBR3	565,969,448	11.36B	3,137,125
59	Meliuz SA	Technology	CASH3	864,924,254	925.47M	33,188,556
60	Transmissora Alianca	Utilities	TAEE11	344,498,907	12.5B	2,925,859
South	Africa		•			<u> </u>
61	AngloGold Ashanti Ltd	Basic materials	ANGJ	418,600,473	148.35B	1,246,086
62	Bidvest Group Ltd	Consumer non- cyclicals	BVTJ	339,887,742	82.83B	758,142
63	British American Tobacco PLC	Consumer non- cyclicals	BTIJ	2,229,597,212	1.51T	753,053
64	Gold Fields Ltd	Basic materials	GFIJ	891,378,571	169.32B	2,238,825
65	Naspers Ltd	Technology	NPNJn	207,996,439	716.27B	651,246
66	Vodacom Group Ltd	Technology	VODJ	1,935,281,435	238.89B	1,558,134
67	Prosus	Technology	PRXJn	1,309,027,066	1.82T	957,314
68	Mondi PLC	Basic Materials	MNPJ	485,021,136	157.31B	662,948
69	Clicks	Consumer non- cyclicals	CLSJ	243,969,611	66.42B	647,997
70	MTN Group Ltd	Technology	MTNJ	1,805,685,163	261.19B	3,896,558

Note: M: Million B:Billion and T: Trillion.