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Transparency and Liquidity: Determinants of Market Efficiency in the Tunisian Financial Market

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Abstract—The role of corporate integrity and transparency in improving market efficiency is often assumed, yet this relationship remains less clear in emerging markets. This paper examines the Tunisian Stock Exchange using daily data from 38 listed firms over the period 2017–2022.
The study explores how disclosure practices relate to liquidity, volatility, and overall market efficiency. A composite integrity index and a variance ratio measure are used alongside regression models.
The results indicate that corporate integrity does not have a significant effect on market efficiency. By contrast, firm growth and trading activity appear to play a more important role.
Keywords—Corporate integrity, Transparency, Market Efficiency, Volatility, Liquidity

I. INTRODUCTION

Prices in financial markets tend to reflect available information, although the speed of adjustment may vary. Transparency contributes to this process by reducing information gaps and supporting investor confidence. Corporate integrity is closely related to these mechanisms, particularly through disclosure and governance practices.

However, the relationship is not always clear. Transparency is generally expected to improve market efficiency, yet empirical results differ, especially in emerging markets.

Structural constraints still matter. Limited liquidity, ownership concentration, and weaker regulatory environments can reduce the impact of governance-related signals.

The link between corporate integrity and market efficiency is therefore not straightforward. Similar observations appear in studies on emerging financial systems [2], [12]. The Tunisian Stock Exchange is a useful case here. It is relatively small, less liquid, and still affected by informational frictions. In practice, these conditions shape how transparency is reflected in prices.

This paper focuses on this context. It relies on panel data from 38 listed firms over the period 2017–2022. The aim is to examine the role of corporate integrity in market efficiency. Market efficiency is measured using a variance ratio approach, while corporate integrity is captured through a composite index.

The rest of the paper is organized as follows. Section II reviews the literature. Section III presents the data and methodology. Section IV discusses the results. Section V concludes.

II. LITERATURE REVIEW

The literature on market efficiency includes both early and more recent contributions. Fama [7] provides a foundational definition, where market efficiency is linked to the ability of prices to reflect available information, making returns difficult to predict.

Later work in behavioral finance questions this view by showing that investor decisions are not always fully rational [9]. This perspective builds on earlier research on decision-making under uncertainty [18].

Market efficiency is usually described through three forms—weak, semi-strong, and strong—depending on the type of information reflected in prices [8]. At the same time, efficiency is also related to how well markets allocate resources and operate with low transaction costs.

Liquidity plays an important role in this case. When markets are liquid, assets can be traded more easily and without large price changes [10]. Several studies underline this point, especially during periods of volatility, where liquidity providers help stabilize the market [4], [25].

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In emerging markets, however, liquidity is often limited. This is linked to factors such as shallow market depth, ownership concentration, and weaker institutional structures [38]. The presence of institutional investors also matters, as their long-term strategies can improve both liquidity and stability [39].

Volatility is another key element. High volatility reflects uncertainty and can affect how prices are formed. It also influences investor behavior. In unstable environments, investors may reduce their activity, which in turn affects liquidity.

These reactions can reinforce existing inefficiencies, especially in emerging markets. Volatility may also make it harder to distinguish between fundamental price movements and short-term fluctuations. In this sense, it does not only reflect uncertainty but can also contribute to it.

External factors also play a role. In interconnected markets, shocks can spread across countries, affecting both volatility and efficiency [31]. Macroeconomic instability, including inflation, has been shown to increase volatility and influence investor decisions [3], [24].

More recent work also looks at market microstructure. Elements such as trading systems, the speed of information, and investor behavior all influence price formation, particularly where institutional frameworks are still developing [1].

Transparency and corporate integrity are increasingly discussed in this case. Transparency helps reduce information asymmetry and can improve investor confidence [30]. However, in emerging markets, disclosure is sometimes perceived as formal rather than substantive, which limits its impact [26].

Corporate integrity plays a related role. It ensures that disclosure reflects actual firm behavior and not only compliance, which strengthens credibility and reduces information asymmetry [22]. In this context, credible disclosure practices reduce information asymmetry and contribute to improved liquidity and more stable market conditions [14].

The effectiveness of transparency also depends on its credibility. In practice, investors may rely more on observable indicators such as liquidity or volatility than on formal disclosures. As a result, the role of transparency can differ across markets.Finally, institutional quality and governance remain important. Stronger governance frameworks and better disclosure standards tend to improve investor confidence and support more efficient price formation [29], [36].

In the Tunisian context, structural frictions such as limited liquidity and information asymmetry may weaken the relationship between transparency and market efficiency. As a result, the expected positive impact of corporate integrity may not fully materialize in asset pricing dynamics.

Based on these considerations, the following hypothesis is proposed:

H1: Corporate integrity has a significant impact on market efficiency.

In emerging markets, weak governance and symbolic disclosure practices may limit the effectiveness of transparency, reinforcing information asymmetry [27]. In this context, credible disclosure practices contribute to improved liquidity and more stable market conditions [14], while liquid markets are better able to absorb shocks and reduce volatility [22]. Conversely, weak transparency and governance may trigger liquidity shortages and amplify market instability, reinforcing negative feedback loops in financial markets [33].

During periods of market stress, firms may reduce transparency or delay negative disclosures, weakening corporate integrity and increasing information asymmetry [17]. This multidirectional interplay highlights that market efficiency cannot be achieved by addressing any one of these variables in isolation.

Leveraging these theoretical and empirical insights, the subsequent section presents the data, variables, and methodological approach employed to empirically assess the determinants of market efficiency in the Tunisian Stock Exchange.

III. MATERIALS AND METHODS

A. Data Collection

The sample consists of 38 firms listed on the Tunisian Stock Exchange between 2017 and 2022. The selection of the sample is driven by the empirical necessity to capture a comprehensive, longitudinal view of market dynamics.

We use:

Daily closing prices to compute volatility and variance ratios

Annual reports to build the integrity disclosure index

Firm-level variables such as liquidity, growth, and market capitalization

Macroeconomic indicators (inflation, interest rates)

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B. Market Efficiency Measure

To capture the dynamic unobserved heterogeneity across the sampled firms and address potential issues of heteroskedasticity and serial correlation common in emerging market financial data, we specify a panel data regression model. The baseline model is estimated using Panel Estimated Generalized Least Squares (EGLS) to ensure robust standard errors and accommodate the longitudinal nature of the 2017–2022 dataset.

The structural equation is formally defined as follows:

Market Efficiency Coefficient (MEC) is computed using the variance ratio method.

$MEC_{it} = \alpha + \beta 1\ GR_{it} + \beta 2\ P/B_{it} + \beta 3\ LIQ_{it} + \beta 4\ VAR\_RM_{it} + \beta 5\ INFLAT_{it} + \beta 6\ INTEGRITY_{it} + \varepsilon_{it}$

A ratio close to 1 indicates higher efficiency.

The use of panel data techniques is particularly relevant in this study, as it allows for controlling unobserved heterogeneity across firms while capturing both cross-sectional and temporal variations.

This approach enhances the robustness of the results and provides a more reliable assessment of the relationship between corporate integrity and market efficiency.

Where:

MEC_{it} indicates the efficiency of the market. Following Hasbrouck and Schwartz, MEC is calculated as a unique measure of market efficiency [7]:

$MEC_{it} = Var(long_{\ it}) / Var(short_{\ it})$.

The daily return (r_t) is calculated as Ln (P_t / P_{t-1})

$INFLAT_{it}$ is the monthly inflation rate. Data are sourced from the official website of the Tunisian central bank. High inflation erodes purchasing power and increases market uncertainty, potentially causing inefficiency.

VAR_RM_{it} (Market Volatility) : Represented by the variance of market returns, it is a direct measure of price fluctuations and uncertainty within the market.

$INTEGRITY_{it}$: Defined as honesty, transparency, and ethical conduct in financial reporting. It is measured by a transparency index derived from the annual reports of publicly traded companies for the period 2017-2022.

This index is constructed by identifying the presence (coded 1) or absence (coded 0) of predefined keywords such as "transparency," "financial statements," "IFRS standards," "audit," "governance," "statutory auditor," "risk," "CSR," and "executive compensation." The final integrity index corresponds to the average of these binary indicators for each financial report.

LIQ_{it} (Liquidity): A control variable measured as the ratio of trading volume to market capitalization.

P/B_{it}=(Price-to-Book Ratio): Defined as a company's current share price divided by its book value per share. This ratio reflects investor valuation.

GR_{it}: Represents national economic growth and is included as a macroeconomic control variable.

ε_{it} is the error term.

In addition to their individual effects, the interaction between these variables provides a deeper understanding of market efficiency dynamics. For instance, the relationship between liquidity and volatility is particularly relevant, as higher liquidity may mitigate the adverse effects of volatility by facilitating smoother price adjustments. Similarly, the role of macroeconomic variables such as inflation extends beyond direct market impact, influencing investor expectations and risk perceptions.

By integrating both firm-level and macroeconomic indicators, the model captures a more comprehensive representation of the mechanisms underlying market efficiency in emerging financial systems. From an econometric perspective, the choice of a Panel EGLS specification is particularly appropriate for emerging market data, where cross-sectional heterogeneity and temporal instability are often pronounced.

This method allows for correcting potential heteroskedasticity and serial correlation, thereby improving the efficiency and consistency of the estimators.

In addition, the panel structure enables the simultaneous consideration of firm-specific characteristics and macroeconomic influences, providing a more comprehensive understanding of market efficiency dynamics.The selection of variables is anchored in both foundational market microstructure theory and the specificities of emerging economies.

Variables such as Liquidity (LIQ) and Market Volatility (VAR_RM) provide a comprehensive matrix that isolates the distinct, measurable impact of corporate disclosures on the Market Efficiency Coefficient (MEC_{it}).

This study has chosen a methodological framework that will strengthen and increase the validity of the empirical analysis.

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Additionally, the application of panel data techniques allows for the control of unobserved heterogeneity across firms over time, improving the overall explanatory value of the model.
Similar methodological approaches have been used in previous empirical studies [11].

IV. RESULTS

A. Descriptive Statistics

The statistics indicate substantial variability in growth, liquidity, and volatility among Tunisian firms. Volatility is relatively high, consistent with emerging market characteristics.

TABLE I. DESCRIPTIVE STATISTICS

	MEC	GROWTH	P/B ratio	LIQ	VAR_RM	INFLATION_RATE	INTEGRITY
Mean	0.047766	2.826596	0.040670	0.092899	0.005579	0.071376	0.553158
Median	8.31E-06	2.300000	0.000000	0.047689	0.002583	0.064000	0.600000
Maximum	31.89845	16.90000	1.000000	0.816256	0.232578	0.104000	0.700000
Minimum	0.000000	-0.900000	-9.47E-06	0.000000	0.000000	0.048000	0.400000
Std. Dev.	0.882058	4.229078	0.197527	0.125690	0.012930	0.017367	0.098670

B. Correlation Analysis

TABLE II. CORRELATION MATRIX

	MEC	GROWTH	P/B ratio	LIQ	VAR_RM	INFLATION_RATE	INTEGRITY
MEC	1.000000	-0.017877	0.045829	0.070561	0.217940	0.038940	0.017926
GROWTH	0.017877	1.000000	-0.027309	0.020915	-0.024026	-0.009996	-0.018537
P/B ratio	0.045829	-0.027309	1.000000	0.187528	-0.002851	0.118619	0.109113
LIQ	0.070561	0.020915	0.187528	1.000000	-0.003932	0.101717	-0.040504
VAR_RM	0.217940	-0.024026	-0.002851	0.003932	1.000000	0.003210	-0.007671

Growth correlates positively with efficiency, while liquidity and integrity show weaker associations.

C. Regression Results

Table III reports the regression results examining the determinants of market efficiency. Liquidity and market volatility emerge as the main explanatory factors, with liquidity positively affecting efficiency and volatility exerting a strong negative influence.
Economic growth and valuation also display significant effects. In contrast, the integrity disclosure Index shows a positive but statistically insignificant coefficient, indicating that transparency alone does not directly drive efficient price formation in the Tunisian market overall context.

TABLE III. SIGNIFICANT VARIABLES

Variables	Coefficient	t-statistic
C	-0.366245	-1.468792
GR	-0.002494	-2.412869**
P/B	0.157334	2.046446**
LIQ	0.492222	4.531384***
VAR_RM	14.85427	3.373148***
INTEGRITY	0.185218	1.32
INFLAT	2.632178	0.82

** p<0.10, ** p<0.05, *** p<0.01*

The results also reveal notable variations in the behavior of firms within the Tunisian financial market. In particular, firms with higher trading volumes tend to benefit from more efficient price discovery, whereas less active firms remain more exposed to informational frictions.
This observation highlights the importance of considering firm-level dynamics when analyzing market efficiency in emerging markets. The dominance of volatility as an explanatory factor suggests that market efficiency is highly sensitive to macroeconomic instability and external shocks.

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Furthermore, the positive role of liquidity confirms that active trading is essential for improving price discovery and reducing inefficiencies. However, the absence of a significant impact of corporate integrity indicates that governance-related disclosures may not be fully incorporated into market pricing mechanisms.
This may reflect a lack of investor confidence in reported information or insufficient standardization of disclosure practices. Conversely, the strong impact of volatility reflects the sensitivity of the market to macroeconomic uncertainty, which tends to overshadow firm-level governance indicators.
This finding is consistent with the structural characteristics of emerging markets, where external shocks and macroeconomic instability tend to overshadow firm-level governance mechanisms.

Fig. 1: Volatility vs. Market Efficiency

Fig.1 highlights the strong negative relationship between market volatility (VAR_RM) and the Market Efficiency Coefficient (MEC). In the Tunisian context, systemic macroeconomic uncertainty (such as high inflation) tends to dominate firm-specific governance indicators. The figure illustrates the relationship between volatility and market efficiency further confirms the econometric findings. As volatility increases, the dispersion of efficiency values becomes more pronounced, indicating that periods of heightened uncertainty are associated with weaker price formation mechanisms. This pattern is consistent with the characteristics of emerging markets, where macroeconomic instability and external shocks tend to amplify market imperfections.

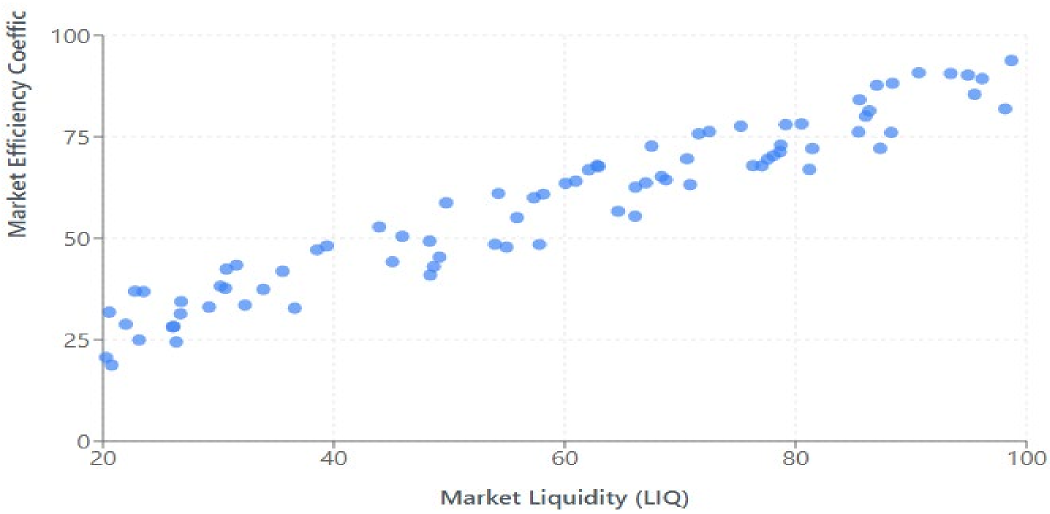

Fig.2:Liquidity vs.Market Efficiency

Fig. 2 illustrates the role of liquidity in shaping market efficiency. The results confirm that liquidity positively affects efficiency, acting as a key mechanism for price stability and market functioning.

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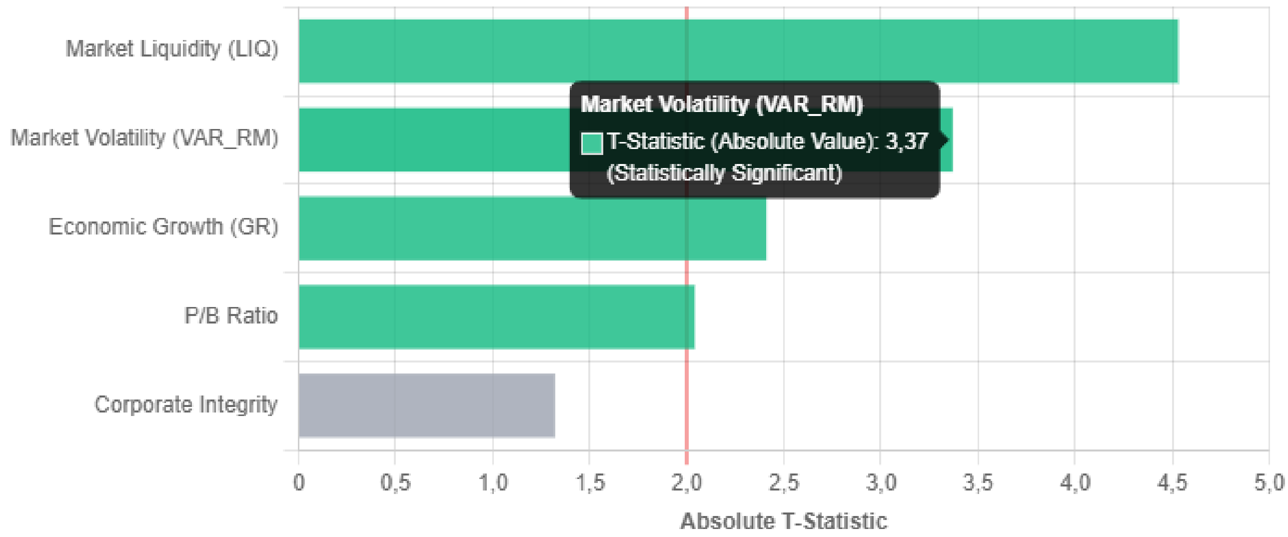

Fig.3: Market Volatility

Fig. 3 presents the absolute t-statistics of the explanatory variables. The results indicate that market-related variables, including liquidity, volatility, and economic growth, are statistically significant and exert a strong influence on the dependent variable.

By contrast, corporate integrity does not reach the conventional significance threshold, suggesting that its effect is not statistically supported within the model.

Overall, the results highlight the dominant role of financial and macroeconomic factors, while non-financial indicators such as corporate integrity appear to have a more limited direct impact.

The analysis of liquidity patterns indicates that market depth remains uneven across firms. Higher levels of liquidity are generally associated with improved efficiency, as they facilitate smoother transactions and reduce the impact of large trades on prices.

However, the distribution of liquidity also indicates that some firms face persistent constraints, limiting their ability to fully integrate information into market prices. This reinforces the idea that liquidity is a key determinant of efficiency, but its effect may vary depending on firm-specific conditions.

These results also indicate that market efficiency in the Tunisian context is shaped by a combination of firm-specific characteristics and broader market conditions. While liquidity enhances price discovery, its effectiveness depends on the overall market environment and the level of investor participation. In relatively thin markets, even moderate changes in trading activity can lead to significant price adjustments, reflecting underlying inefficiencies. This highlights the importance of market depth and the need to encourage greater participation to improve overall efficiency.

V. DISCUSSION

The results provide important insights into the determinants of market efficiency in the Tunisian financial market. The following discussion is structured around three key dimensions: interpretation of results, theoretical explanation, and policy implications. In addition, the development of digital financial infrastructures could improve information dissemination and reduce asymmetries in less liquid markets.

A. Interpretation of Empirical Results

The empirical results show that market efficiency in Tunisia is mainly influenced by macroeconomic and market-related factors, rather than firm-level governance indicators.

Liquidity also plays a positive role, confirming that trading activity enhances price discovery.

In contrast, the integrity disclosure index does not exhibit a statistically significant effect, suggesting that transparency alone is insufficient to improve market efficiency in this context.

These results align with broader findings suggesting that macroeconomic instability dominates firm-level governance signals in developing economies [35].

The analysis suggests that market efficiency in emerging economies cannot be explained solely by firm-level characteristics.

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Instead, it reflects a complex interaction between institutional factors, investor behavior, and macroeconomic conditions. In the Tunisian context, the dominance of volatility highlights the vulnerability of the market to external shocks, while the role of liquidity emphasizes the importance of market depth.
This combination indicates that improving efficiency requires coordinated efforts at both the micro and macro levels. In practice, market conditions do not always evolve in a predictable way. Some firms react differently to similar shocks, and this may depend on internal constraints or investor perception. These differences are not always captured by formal indicators. In the Tunisian market, such variations remain visible, especially during periods of instability. This highlights the limits of purely quantitative approaches.

B. Theoretical Explanation

The results highlight the structural nature of market inefficiencies in emerging economies. Rather than being solely driven by firm-level characteristics, inefficiencies appear to be deeply rooted in the broader institutional and economic environment.
In the Tunisian context, the limited role of corporate integrity suggests that investors may not fully trust or utilize disclosure-based information in their decision-making processes.
Instead, they rely more heavily on observable market signals such as volatility and liquidity. This behavior reflects a form of adaptive rationality, where market participants adjust their strategies based on the perceived reliability of available information.
These results can be interpreted through the lens of information asymmetry and institutional theory. In emerging markets, where regulatory enforcement remains limited, corporate disclosures may lack credibility. This leads to a "cheap talk" phenomenon, in which investors discount formal transparency signals and rely instead on observable market indicators or informal information channels.
This phenomenon has also been documented in studies on corporate communication and disclosure credibility [28]. As a result, the signaling effect of corporate integrity becomes conditional on the strength of institutional frameworks and the reliability of enforcement mechanisms.
This interpretation is also supported by recent empirical evidence highlighting the limited credibility of disclosures in emerging markets [26], [34].
This perspective also highlights the limitations of relying exclusively on formal disclosure frameworks in emerging markets. Similar limitations are discussed in the literature on financial reporting and governance practices [16].
In such environments, informal networks, reputation effects, and market sentiment often play a more significant role in shaping investment decisions.
This reinforces the idea that corporate integrity cannot be assessed solely through disclosure indicators, but must also be understood within a broader institutional and behavioral context.
This also suggests that improving market efficiency in emerging economies requires not only enhancing transparency but also strengthening institutional credibility and investor trust.
While corporate integrity is expected to reduce information asymmetry, its effectiveness depends on the credibility of disclosures and the ability of investors to interpret and trust available information.
In the absence of strong enforcement mechanisms, transparency may fail to produce its intended effects, leading to a disconnect between formal governance practices and actual market outcomes.

C. Implications and Perspectives

The findings carry important implications for policymakers and market participants. Improving market efficiency requires a multidimensional approach that goes beyond disclosure requirements to include stronger institutional enforcement, enhanced market liquidity, and improved transparency credibility.
Furthermore, in an environment increasingly shaped by algorithmic and data-driven trading, the reliability and standardization of corporate information become critical. Without credible transparency, such systems may reinforce existing inefficiencies rather than mitigate them.
These findings also raise important questions regarding the role of financial market development in emerging economies.
While transparency and integrity are often promoted as key drivers of efficient markets, their effectiveness ultimately depends on the broader institutional environment.
In the absence of strong regulatory enforcement and credible governance mechanisms, disclosure practices may fail to influence investor behavior. This suggests that improving market efficiency requires a holistic approach that combines regulatory reforms, market deepening, and enhanced investor protection.

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In this perspective, corporate integrity should be viewed not only as a firm-level attribute but also as part of a broader institutional ecosystem shaping financial market outcomes. From a broader perspective, the results highlight the need for a more integrated approach to financial market development.

Strengthening institutional quality, enhancing regulatory enforcement, and improving financial literacy among investors are essential steps toward building more efficient markets. In addition, the development of technological infrastructures, including digital trading platforms and real-time information systems, may help reduce information asymmetries and improve market transparency.

Overall, the results underline the importance of strengthening the institutional framework in emerging financial markets. In particular, improving regulatory enforcement and enhancing the credibility of financial disclosures could play a critical role in restoring investor confidence.

Without such improvements, even well-designed governance mechanisms may fail to influence market outcomes. This suggests that policy interventions should focus not only on increasing transparency but also on ensuring that disclosed information is reliable, accessible, and effectively used by market participants.

This study has several limitations that should be considered when interpreting the results. First, the analysis is based on a relatively small sample of firms listed on the Tunisian Stock Exchange. While this reflects the structure of the market, it may limit the generalization of the results to other contexts.

In addition, the measurement of corporate integrity relies on a disclosure-based index constructed from annual reports. Although this approach captures observable transparency practices, it may not fully reflect the actual behavior of firms or the credibility perceived by investors.

Another limitation relates to the use of daily data and the variance ratio approach to measure market efficiency. While this method is widely used in the literature, it may not capture all dimensions of efficiency, particularly those related to behavioral factors or investor sentiment.

Despite these limitations, the study provides useful insights into the functioning of emerging financial markets. It highlights the importance of liquidity and volatility while raising questions about the role of governance-related disclosures in such contexts.

Future research could extend this analysis by considering alternative measures of corporate integrity, including qualitative assessments or investor perception indicators. It would also be useful to compare the Tunisian market with other emerging markets in order to better understand the role of institutional factors in shaping market efficiency.

Finally, the increasing role of digital technologies and financial innovation may offer new perspectives. Improved access to information and more efficient trading systems could reduce existing frictions and contribute to more efficient price formation over time.

VI. CONCLUSION

The results of this study show that corporate integrity does not have a significant direct impact on market efficiency in the Tunisian context, while liquidity, growth, and volatility remain the main determinants. These findings suggest that governance mechanisms alone are insufficient to improve efficiency in emerging markets characterized by structural frictions. This finding is also consistent with broader discussions on governance and financial systems in emerging economies [20], [37].

From a policy perspective, improving market efficiency requires strengthening institutional frameworks, enhancing disclosure credibility, and developing market liquidity.

These findings are consistent with previous studies emphasizing that the effectiveness of governance and transparency mechanisms in emerging markets remains conditional on broader institutional and structural factors [21], [23], [34], [35].

The results of this study highlight several policy implications for improving market efficiency in the Tunisian financial market. First, strengthening market liquidity should be considered a priority. Measures aimed at increasing trading activity, such as reducing transaction costs or encouraging institutional investor participation, could enhance price discovery and reduce inefficiencies.

Second, improving the credibility of corporate disclosures is essential. While transparency is formally present, its impact depends on the extent to which investors trust the information provided.

This suggests that regulatory authorities should focus not only on disclosure requirements but also on enforcement mechanisms and audit quality.

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Third, the findings underline the importance of macroeconomic stability. Since volatility plays a dominant role in shaping market efficiency, policies aimed at reducing economic uncertainty could contribute to more stable financial markets.

In addition, the development of financial infrastructure remains crucial. Enhancing trading systems, improving access to information, and promoting digital financial tools could help reduce informational frictions and improve market functioning.

Finally, investor education should not be overlooked. Increasing financial literacy may improve the ability of market participants to interpret available information, thereby strengthening the link between transparency and market efficiency.

Taken together, these measures suggest that improving market efficiency requires a coordinated approach that combines regulatory reforms, market development, and institutional strengthening.

Overall, the analysis points to the importance of considering multiple dimensions when assessing market efficiency in emerging economies. While traditional financial theories emphasize the role of information and rational behavior, the results of this study suggest that structural and institutional factors play an equally critical role.

In particular, the limited impact of corporate integrity indicates that transparency alone is insufficient to drive efficiency in environments characterized by weak institutional enforcement. This underscores the need for coordinated reforms aimed at improving both market infrastructure and governance quality.

Furthermore, the growing importance of liquidity and volatility suggests that policymakers should prioritize measures that enhance market depth and stability. In this regard, strengthening financial regulation, promoting investor confidence, and encouraging long-term investment strategies could contribute significantly to improving market efficiency.

Finally, this study opens several avenues for future research. While the present analysis focuses on the Tunisian financial market, comparative studies across emerging economies could provide a deeper understanding of how institutional contexts influence the relationship between transparency, integrity, and market efficiency.

In particular, future research could explore the role of digitalization and financial innovation in improving information dissemination and reducing asymmetries in less developed markets. Moreover, incorporating behavioral factors and investor sentiment indicators could offer additional insights into how market participants interpret and respond to corporate disclosures.

These perspectives would contribute to refining existing theoretical frameworks and improving empirical assessments of market efficiency in complex and evolving financial environments. In addition, the results of this study contribute to a deeper understanding of the limits of traditional financial theories in emerging market contexts.

While classical models assume that information is efficiently incorporated into prices through transparent disclosures, the findings suggest that this mechanism remains incomplete in environments characterized by institutional fragility.

In such settings, transparency does not automatically translate into credibility, and corporate integrity signals may fail to influence investor behavior. This highlights the need to reconsider the assumptions underlying market efficiency by integrating institutional quality and governance credibility as central explanatory factors.

Furthermore, the findings emphasize the systemic nature of market inefficiencies, which cannot be addressed solely through firm-level reforms. The Tunisian financial market illustrates how structural constraints, including limited liquidity, information asymmetry, and weak enforcement mechanisms, interact to shape market outcomes.

This interconnectedness suggests that improving market efficiency requires coordinated actions across multiple dimensions, including regulatory reforms, market deepening, and enhanced financial transparency.

Without such a comprehensive approach, isolated improvements in corporate governance are unlikely to produce significant changes in market behavior.

Finally, this study highlights the importance of developing context-specific approaches to financial market analysis. Emerging markets exhibit unique characteristics that differentiate them from developed financial systems, particularly in terms of institutional maturity and investor behavior.

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As such, future research should continue to explore these specificities by incorporating alternative indicators of governance quality, informal institutional mechanisms, and behavioral dimensions of financial decision-making.

Expanding the scope of analysis in this way would provide a more nuanced understanding of market efficiency and contribute to the development of more effective policy frameworks tailored to emerging economies.

Ultimately, enhancing market efficiency in emerging economies requires a balanced integration of institutional reforms, market development, and credible governance practices.

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