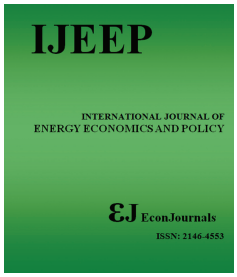

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Stock Market Return, Market Capitalization and Financial Stability in the Middle East and North Africa Region: The Moderating Role of Renewable Energy

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ABSTRACT

This study investigates the relationship between stock market return, stock market capitalization, and financial stability in the Middle East and North Africa (MENA) region, with particular emphasis on the moderating role of renewable energy development. Using an unbalanced panel of 16 MENA countries over the period 2000-2021, the analysis employs the System Generalized Method of Moments (SGMM) to address potential endogeneity, unobserved heterogeneity, and dynamic effects. The results indicate several important results. First, stock market return has a positive and significant effect on financial stability, suggesting that higher equity performance contributes to increased financial stability. In contrast, stock market capitalization shows a positive but statistically insignificant effect. Furthermore, findings also indicate that a higher share of renewable energy significantly enhances financial resilience. Nevertheless, the interactions term between stock market return, stock market capitalization and renewable energy do not exert any significant effect on financial stability. These findings imply that financial stability in the MENA region is primarily driven by market performance and the integration of renewable energy, while the sheer size of the stock market plays a limited role. Policies promoting renewable energy and stronger equity performance could therefore jointly enhance banking sector resilience.

Keywords: Stock Market Return, Stock Market Capitalization, Financial Stability, Renewable Energy, Middle East and North Africa, System Generalized Method of Moments
JEL Classifications: G10, G18, O16, Q42

1. INTRODUCTION

Financial stability is widely regarded as a fundamental pillar of a well-functioning economy, as it underpins sustainable growth, efficient resource allocation, and resilience to macroeconomic shocks. A stable financial system facilitates credit provision, supports investment and innovation, and enhances confidence among households and firms. In contrast, episodes of financial instability often result in severe economic downturns, fiscal pressures, and long-lasting social costs, as evidenced by numerous banking and financial crises (Minsky, 1986; Gorton, 1988; Schinasi, 2004). Consequently, identifying the key drivers of financial stability has become a central objective for policymakers and researchers, particularly in regions exposed to structural vulnerabilities and external shocks.

Within this framework, the role of stock market development in shaping financial stability has been extensively examined in the literature. Stock market returns are commonly interpreted as signals of investor confidence, economic expectations, and risk perceptions, while stock market capitalization reflects the size, depth, and maturity of equity markets relative to the economy. A substantial body of research argues that higher stock market returns and deeper equity markets can enhance financial stability by improving liquidity, facilitating capital mobilization, strengthening firms' balance sheets, and diversifying sources of

financing away from the banking sector (Levine, 1997; Levine and Zervos, 1998; Demirgüç-Kunt and Levine, 2001). From this perspective, stock markets contribute to financial resilience by absorbing shocks and reallocating capital more efficiently.

However, empirical evidence also points to potential destabilizing effects of stock market development. High returns and rapid growth in market capitalization may reflect excessive risk-taking, speculative bubbles, and heightened volatility, especially in economies with weak regulatory frameworks and limited market oversight (Kindleberger and Aliber, 2011; Brunnermeier and Oehmke, 2013). These conflicting findings suggest that the relationship between stock market return, stock market capitalization, and financial stability is complex, context-dependent, and influenced by broader structural and macroeconomic factors.

Despite the extensive literature on stock market development and financial stability, relatively few studies have examined the moderating role of renewable energy development in this relationship. The transition toward renewable energy has important macro-financial implications, as it can reduce dependence on fossil fuels, mitigate exposure to energy price volatility, and promote more sustainable and diversified growth paths (Sadorsky, 2012; Apergis and Payne, 2014). By stabilizing energy costs and improving long-term economic fundamentals, renewable energy development may influence financial markets and alter the way stock market performance and size affect financial stability. Nevertheless, existing studies largely analyze financial markets and energy transition dynamics separately, leaving their interaction insufficiently explored.

This gap is particularly evident in the Middle East and North Africa (MENA) region. MENA economies are characterized by high exposure to oil and gas price fluctuations, relatively concentrated stock markets, and heterogeneous levels of financial development (Mhadhbi and Guelbi, 2024; Mensi et al., 2023). While stock market returns and capitalization have increased in several MENA countries over the past two decades, financial stability remains sensitive to external shocks, commodity price cycles, and capital flow volatility. At the same time, many countries in the region have adopted ambitious renewable energy strategies to support economic diversification, reduce energy-related risks, and enhance long-term sustainability. These developments raise important questions about whether renewable energy can play a stabilizing role in the interaction between stock market dynamics and financial stability in the region (Bachir et al., 2025; Taghvaee et al., 2024).

The central problem addressed by this study lies in the lack of an integrated analytical framework that jointly examines stock market return, stock market capitalization, renewable energy development, and financial stability. Existing research tends to focus either on the financial determinants of stability or on the macroeconomic effects of renewable energy, without accounting for their potential interaction effects. This fragmented approach limits our understanding of whether renewable energy development can strengthen the stabilizing role of stock markets or mitigate their potential destabilizing effects, particularly in energy-dependent economies.

Accordingly, the objective of this study is to investigate the impact of stock market return and stock market capitalization on financial stability, while explicitly examining the moderating role of renewable energy development in the MENA region. By incorporating renewable energy as a moderating factor, this study seeks to provide a more nuanced understanding of how energy transition dynamics interact with financial market development to shape financial stability outcomes.

The choice of the MENA region as a case study is justified by its unique economic and structural characteristics. The region's strong dependence on fossil fuels, evolving stock markets, and increasing commitment to renewable energy adoption make it an ideal laboratory to explore the interaction between financial markets and energy transition policies (Alkhurayji and Alhoshan, 2025; International Energy Agency, 2025). Insights drawn from the MENA context are therefore highly relevant not only for regional policymakers but also for other emerging and resource-dependent economies pursuing sustainable development strategies.

This study contributes to the literature in several important ways. First, it extends the financial stability literature by jointly analyzing stock market return and stock market capitalization within a moderating framework that incorporates renewable energy development. Second, it provides novel empirical evidence from the MENA region, which remains underrepresented in studies at the intersection of finance, energy, and financial stability. Third, it offers policy-relevant implications by highlighting the potential role of renewable energy development as a complementary instrument for enhancing financial stability in stock market–based financial systems.

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 presents the data, variables, and empirical methodology. Section 4 reports and discusses the empirical findings. Section 5 provides robustness checks and additional analyses. Finally, Section 6 concludes with policy implications and suggestions for future research.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Stock Market Return and Financial Stability

Stock market returns capture the performance of equity markets and are widely used as indicators of investor confidence, risk appetite, and economic outlook. A growing body of theoretical and empirical research argues that higher stock market returns contribute positively to financial stability (Yang, 2024; Akin and Akin, 2024). From a portfolio theory perspective, rising returns increase household and institutional wealth, leading to stronger balance sheets and higher consumption and investment, which in turn support financial system resilience (Fama, 1981; Arestis et al., 2001). Well-performing equity markets also improve

firms' access to financing through equity issuance, lowering their reliance on potentially fragile credit markets (Demirgüç-Kunt and Maksimovic, 1998; Demirgüç-Kunt, A., Levine, R., editors. 2001).

Empirical studies provide mixed evidence on this link, but several show that sustained positive returns can reduce instability by enhancing market liquidity and reducing the likelihood of bank stress. For example, Bekaert et al. (2014) find that stock market performance is inversely related to the frequency and severity of financial crises, suggesting that higher returns can cushion shocks. Similarly, Caporale et al. (2004) show that robust equity returns increase the ability of financial systems to absorb adverse macroeconomic developments in emerging markets.

However, alternative perspectives highlight that high returns may also signal excessive risk-taking, asset price bubbles, and increased volatility, factors that can destabilize financial systems. Studies by Kindleberger and Aliber (2011) and Brunnermeier and Oehmke (2012) show that prolonged bull markets often precede systemic crises when they reflect speculative bubbles rather than fundamentals. The contagion effects across financial intermediaries and credit channels can then propagate instability.

In the MENA region, where equity markets are relatively shallow and dominated by a few sectors, stock market returns may have a particularly strong and complex impact on stability (Mhadhbi and Guelbi, 2024; Mensi et al., 2023). Positive returns can attract foreign capital and foster financial development, but they can also amplify vulnerability to external shocks and herd behavior.

Hypothesis 1: Higher stock market returns are positively associated with financial stability.

2.2. Stock Market Capitalization and Financial Stability

Stock market capitalization was considered a key measure of equity market size and depth. Theoretically, larger stock markets can promote financial stability through several channels (Elsayed et al., 2024; Tang et al., 2022). First, they broaden the investor base, enhancing risk sharing and reducing the concentration of financial risk in particular institutions. Second, larger markets improve liquidity, making it easier for investors to enter and exit positions without large price impacts, which attenuates volatility (Levine and Zervos, 1998). Third, greater market capitalization encourages diversification opportunities across sectors and firms, reducing systemic risk (Ang and McKibbin, 2007; Bavoso, 2021).

Empirical evidence supports a generally positive link between market capitalization and financial stability. For example, (Beck et al. (2000); Brunnermeier and Oehmke, 2013) find that countries with deeper equity markets experience fewer and less severe banking crises. In emerging markets, Singh (2003) shows that higher market capitalization is associated with lower financial fragility, as broader capital markets can better absorb shocks to individual firms or industries.

Nevertheless, there are caveats. In economies with weak institutions, poor corporate governance, or limited regulatory oversight, increasing market size can coincide with rising speculative trading and volatile capital flows. Claessens and Yurtoglu (2013) note that deeper markets can attract short-term capital and amplify boom-bust cycles unless accompanied by strong regulatory frameworks.

In the MENA context, stock markets tend to be small relative to GDP compared to advanced economies, and they often display high concentration levels, particularly in banking and energy sectors (Boubakri et al., 2009). This structure raises questions about whether greater market capitalization consistently enhances financial stability or whether it may instead reflect a concentration of risk.

Hypothesis 2: Higher stock market capitalization is positively associated with financial stability.

2.3. The Moderating Role of Renewable Energy in the Relationship between SMR-SMC and Financial Stability

The growing literature on energy-finance linkages emphasizes that energy sector dynamics can significantly shape financial markets and macro-financial stability. Historically, oil and gas have dominated energy markets in the MENA region, creating strong correlations between energy price volatility and financial market performance. Such dependence exposes financial systems to external shocks, making stock market dynamics more volatile and potentially less stabilizing (Aladwani, 2024; Mhadhbi and Guelbi, 2024; Sánchez García and Cruz Rambaud, 2023).

Renewable energy development has emerged as a strategic priority for many MENA countries, offering the potential to diversify energy sources, reduce reliance on fossil fuels, and mitigate external shock transmission. From an economic growth perspective, renewable energy investments can improve long-term productivity, generate employment, and attract green financing (Zhang et al., 2012). Recent studies also suggest that renewable energy deployment may enhance financial stability through risk diversification, improved predictability of energy costs, and reduced exposure to volatile oil markets (Apergis and Payne, 2014; Sadorsky, 2012).

In the context of stock markets, renewable energy development can alter sectoral compositions, attract sustainable investment funds, and reduce systemic risk associated with energy price shocks. For example, Ozturk and Acaravci (2013) find that renewable energy progress is associated with lower macroeconomic volatility, which could translate into more stable equity returns. Similarly, Bekun et al. (2019) argue that renewable energy adoption enhances economic resilience, which may strengthen the stabilizing role of equity markets.

Despite these insights, few studies explicitly examine how renewable energy development moderates the relationship between stock market indicators and financial stability, particularly in the MENA region. Given the region's historical dependence on fossil fuel revenues and nascent renewable sectors, the moderating effects of renewable energy are likely to be significant. If renewable

energy reduces macroeconomic volatility and dependency on volatile energy prices, it may mitigate destabilizing spillovers from equity market fluctuations and amplify the positive effects of stock market returns and market capitalization on financial stability.

Hypothesis 3: Renewable energy positively moderates the relationship between stock market returns and financial stability.
Hypothesis 4: Renewable energy positively moderates the relationship between stock market capitalization and financial stability.

3. METHODOLOGY

3.1. The Sample

To investigate the relationship between stock market return, stock market capitalization, and financial stability, with a focus on the moderating role of renewable energy, we used a panel of 16 MENA countries over 2000-2021. The MENA region is particularly relevant due to its strong dependence on oil and gas revenues, relatively shallow and sector-concentrated equity markets, and heterogeneous levels of financial development. All these factors amplify the interactions between stock market performance and financial stability. Additionally, in recent decades, many countries have implemented ambitious renewable energy strategies aimed at economic diversification and long-term sustainability, making the region an ideal setting to explore how renewable energy may moderate these effects.

There are two main sources for the data used in this study. Data relative to stock market return, stock market capitalization, financial stability, bank capital, net interest margin, bank nonperforming loans and liquidity risk are collected from the global financial development (GFD) database of the World Bank. However, Economic indicators such us GDP growth and inflation are retrieved from the World Development Indicators database. The list of countries included in this study are given in Table 1.

3.2. The Empirical Approach

To examine the dynamic relationship between stock market performance, market capitalization, and financial stability in the MENA region, this study employs the System Generalized Method of Moments (SGMM). The SGMM estimator by developed by Arellano and Bond (1995) and Blundell and Bond (1998) is particularly well-suited for this analysis as it addresses three key econometric challenges commonly encountered in panel data studies: Endogeneity, unobserved heterogeneity, and dynamic effects. By incorporating lagged dependent variables as regressors, SGMM captures the persistence of financial stability over time, while using internal instruments derived from lagged levels and differences mitigates potential endogeneity arising from reverse causality or omitted variables.

Table 1: List of countries

S. No.	Countries	S. No.	Countries
1.	Algeria	9.	Morocco
2.	Bahrain	10.	Oman
3.	Egypt, Arab Rep.	11.	Qatar
4.	Iraq	12.	Saudi Arabia
5.	Jordan	13.	Syrian Arab Republic
6.	Kuwait	14.	Tunisia
7.	Lebanon	15.	United Arab Emirates
8.	Libya	16.	Yemen, Rep.

The system framework, which combines equations in levels and first differences, also controls for country-specific fixed effects, accounting for structural and institutional differences across MENA economies. Furthermore, SGMM provides efficient and consistent estimates even in panels with a relatively small-time dimension and a moderate number of cross-sectional units, and allows for robust testing of instrument validity through Hansen/Sargan tests and serial correlation via AR(1) and AR(2) statistics.

The empirical strategy followed in this paper is based on two steps. In the first step, we investigate the impact of stock market return and stock market capitalization on financial stability in the MENA region during the period 2000-2021. Hence, the econometric model to be tested is given in the equation (1).

$$FINS_{i,t} = \alpha_0+\alpha_1 FINS_{i,t-1}+\alpha_2 SMR_{i,t}+\alpha_3 SMC_{i,t}+\alpha_4 CAP_{i,t}+\alpha_5 NIM_{i,t}+\alpha_6 NPLS_{i,t}++\alpha_7 LTD_{i,t}+\alpha_8 GDPG_{i,t}+\alpha_9 INF_{i,t}\varepsilon_{i,t} \quad (1)$$

In the second step, we check whether renewable energy consumption could moderate the nexus between stock market return, stock market capitalization and financial stability. To this end, we propose the following econometric model presented in the equation (2).

$$FINS_{i,t} = \alpha_0+\alpha_1 FINS_{i,t-1}+\alpha_2 SMR_{i,t}+\alpha_3 SMC_{i,t}+\alpha_4 RENC_{i,t}+\alpha_5 SMR*RENC_{i,t}+\alpha_6 SMC*RENC_{i,t}+\alpha_7 CAP_{i,t}+\alpha_8 NIM_{i,t}+\alpha_9 NPLS_{i,t}++\alpha_{10} LTD_{i,t}+\alpha_{11} GDPG_{i,t}+\alpha_{12} INF_{i,t}\varepsilon_{i,t} \quad (2)$$

All variables used in study are defined in Table 2.

Table 2: Variable definition

Variables	Definition	Measures
FINS	Financial stability	Bank Z-score
SMC	Stock market capitalization	Stock market capitalization to GDP (%)
SMR	Stock market return	Stock market return (%, year-on-year)
RENC	Renewable energy consumption	Renewable energy consumption (% of total final energy consumption)
SMR*RENC	Interaction variable	The interaction between RENC and SMR
SMC*RENC	Interaction variable	The interaction between RENC and SMC
CAP	Bank capital	Bank capital to total assets (%)
NIM	Net interest margin	Bank net interest margin (%)
NPLs	Nonperforming lonas	Bank nonperforming loans to gross loans (%)
LTD	Liquidity risk	Bank credit to bank deposits (%)
GDPG	Economic growth	GDP (annual % growth)
INF	Inflation	Inflation, consumer prices (annual % growth)

4. EMPIRICAL FINDINGS

4.1. Descriptive Statistics and Correlation

This sub-section presents the descriptive statistics and correlation analysis of the study variables, providing an initial overview of their distribution, central tendency, and variability. Descriptive statistics are provided in Table 3, while Table 4 checks for multicollinearity problem.

Table 1 presents the descriptive statistics for all variables included in the analysis. The descriptive statistics show considerable variation across the MENA countries in financial, market, energy, and macroeconomic indicators. Stock market returns and capitalization exhibit high volatility and heterogeneity, while renewable energy consumption remains relatively low on average. Bank-specific and macroeconomic variables, such as capital adequacy, NPLs, GDP growth, and inflation, also display substantial dispersion, highlighting the diverse conditions in the region and justifying the use of panel data methods.

Table 4 presents the correlation matrix of the study variables, providing insights into the pairwise relationships among financial stability, stock market indicators, renewable energy consumption, and macroeconomic controls.

As shown in Table 4, the correlations between the independent variables are all very weak, indicating minimal linear association among them. This suggests that multicollinearity is not a concern in the model, and the estimates of the regression coefficients are unlikely to be biased due to interdependence between explanatory variables.

4.2. Discussion of the Empirical Findings

4.2.1. The effect of stock market return, market capitalization on financial stability

The result of the effect of SMR and SMC on financial stability in the MENA region are given in Table 5. Diagnostic tests are satisfactory, supporting the dynamic panel model: the AR(1) test is significant, the AR(2) test is insignificant, and the Sargan test confirms the over-identification of the model indicating the absence of second-order serial correlation and the validity of the instrument set.

The results of Model 1 indicate that stock market development in the MENA region significantly supports financial stability. The positive and statistically significant coefficient on stock market return suggests that higher equity market performance is associated with reduced banking sector vulnerability, reflecting a stabilizing effect of well-functioning stock markets. This relationship can be explained by the ability of larger and deeper equity markets to provide alternative sources of financing, improve liquidity, and enhance risk-sharing among financial institutions, thereby increasing the capacity of the financial system to absorb shocks. This finding is similar to the findings of Tang et al., (2022), Elsayed et al., (2024); and Mhadhbi and Guelbi, (2024).

Table 3: Summary statistics

Variable	Mean	Standard deviation	Min	Max
FINS	23.02	12.70	0.02	66.63
RENC	3.15	4.57	0.00	22.40
SMR	7.97	26.92	−43.79	169.81
SMC	52.29	47.06	0.05	345.35
CAP	10.08	2.93	4.80	16.00
NIM	3.03	1.50	0.17	20.50
LTD	74.39	39.77	9.22	214.15
NPLs	9.18	6.57	1.08	26.50
GDPG	3.29	9.02	−50.34	86.83
INF	5.59	12.00	−10.07	154.76

In contrast, stock market capitalization has the correct sign, but it is not statistically significant, which suggests that the relative size of the stock market does not have a strong direct impact on financial stability once the other determinants are controlled. This pattern suggests that market performance, and not market scale, is the main financial factor driving banking soundness.

The other control variables find a positive, though insignificant, effect for bank capital, implying the absence of a material effect of the level of capitalization, as well as a statistically insignificant effect for non-performing loans, suggesting the marginal effect of non-performing loans is not precisely identified under the full set of controls. Consistent with previous results, inflation finds a statistically significant and negative effect, reinforcing the evidence for the macro instability effect.

4.2.2. The moderation role of renewable energy in the SMR-MC and financial stability relationship

Model 2 extends the baseline analysis by incorporating renewable energy consumption and its interaction terms with stock market return and capitalization to investigate whether the energy transition moderates the finance–stability nexus. The results show that, as expected, the direct effect of renewable energy consumption on financial stability is positive and statistically significant (Table 6). This finding indicates that a higher share of energy derived from renewable sources contributes to greater economic and financial resilience, likely by reducing dependence on volatile fossil fuel markets and mitigating exposure to external shocks. In other words, economies with greater renewable energy integration appear better able to support stable banking sector operations, highlighting the potential role of energy transition policies in reinforcing the stability-enhancing effects of financial markets. This result corroborates the works of Lahoucine et al., (2025); Hacıimamoğlu and Sandalcılar (2020). Most interestingly, however, the interaction between renewable energy consumption and the stock market return is positive and statistically significant. Therefore, there is a prospect that the effect of stability provided by a stock market is amplified in the context of a higher proportion of renewable energy-based consumption.

Such an observation, therefore, implies that investment dynamics in promoting sustainability have an amplifying effect on the favorable spillover from stock equity returns to the soundness of banking systems. By contrast, however, stock market capitalization remains statistically insignificant, and so is its interaction with renewable energy consumption, hinting that the structural stock market size is less responsive to the moderating impact of the energy revolution. In addition, bank capital appears to remain

Table 4: Correlation matrix

	RENC	SMR	SMC	CAP	NIM	LTD	NPLs	GDPG	INF
RENC	1.0000								
SMR	0.0315	1.0000							
	0.6358								
SMC	−0.2181*	0.0873	1.0000						
	0.0038	0.2896							
CAP	−0.4178*	−0.2415*	0.3947*	1.0000					
	0.0000	0.0058	0.0002						
NIM	0.0384	−0.0174	−0.2099*	0.2481*	1.0000				
	0.4871	0.7936	0.0054	0.0029					
LTD	0.0898	−0.0291	0.2886*	0.4303*	−0.0367	1.0000			
	0.1145	0.6761	0.0002	0.0000	0.5302				
NPLs	0.4502*	0.1453	−0.3642*	−0.4273*	−0.0479	−0.3226*	1.0000		
	0.0000	0.0618	0.0001	0.0000	0.5240	0.0000			
GDPG	−0.0265	0.2291*	0.1069	−0.1139	0.0023	−0.0454	−0.2064*	1.0000	
	0.6223	0.0005	0.1605	0.1725	0.9673	0.4260	0.0052		
INF	0.0158	0.0846	−0.1216	−0.2884*	0.1657*	−0.2764*	0.2687*	−0.1550*	1.0000
	0.7764	0.2212	0.1221	0.0010	0.0037	0.0000	0.0005	0.0051	

Table 5: Results of the effect of SMR and SMC on financial stability

Variables	Coefficient	Z	P-value
FINS (−1)	0.9669***	13.75	0.000
SMR	0.0121**	2.44	0.014
SMC	0.0248*	1.83	0.087
CAP	−0.0420	−0.36	0.717
NIM	0.5644*	1.74	0.094
NPLS	0.0385	0.60	0.552
LTD	−0.0405**	2.57	0.037
GDPG	0.0468*	1.75	0.088
INF	−0.1717***	−3.06	0.002
AR (1)		−2.69	
Prob		0.007	
AR (2)		−1.10	
Prob		0.922	
Sargan test		39.73	
Prob		0.230	
Obs		63	

Table 6: Results of the moderating effect of renewable energy in the SMR, SMC and financial stability relationship

Variables	Coefficient	Z	P-value
FINS(−1)	0.9369***	19.90	0.000
SMR	**0.0127***	**1.75**	**0.081**
SMC	**0.0399**	**0.42**	**0.672**
RENC	**0.0438****	**2.28**	**0.039**
SMR*RENC	**0.0012****	**2.57**	**0.042**
SMC*RENC	**0.0019**	**0.99**	**0.323**
CAP	0.1098	0.57	0.568
NIM	0.5856**	2.51	0.013
NPLS	0.0430*	1.72	0.094
LTD	−0.0364*	1.89	0.079
GDPG	0.0478**	2.66	0.035
INF	−0.1509**	−2.39	0.017
AR (1)		−2.83	
Prob		0.005	
AR (2)		−1.03	
Prob		0.973	
Sargan test		39.53	
Prob		0.140	
Obs		63	

statistically insignificant. To conclude, based on the comparison of both models, it is evident that whereas stock markets consistently present a favorable impact on financial systems across different dimensions, renewable energy consumption acts purely as an intermediary for stock equity rather than stock scale, thus injecting sustainability into financial stability systems without affecting their directional relationship of the baseline relationships. The diagnostic statistics confirm the validity and robustness of the dynamic panel specification.

5. CONCLUDING REMARKS AND POLICY RECOMMENDATIONS

This study examines the impact of stock market return and stock market capitalization on financial stability in the MENA region, with a particular focus on the moderating role of renewable energy development. Using a panel of 16 MENA countries from 2000 to 2021 and applying the System Generalized Method of Moments (SGMM) to address endogeneity and dynamic effects.

The findings provide several key conclusions. First, higher stock market returns and is associated with enhanced financial stability, indicating that well-functioning equity markets can strengthen financial resilience and absorb macroeconomic shocks. Second, renewable energy significantly enhances financial stability in the MENA region. However, it does not significantly moderate the relationships between SMR, SMC and financial stability.

These findings carry important policy implications for MENA countries. First, policymakers should therefore prioritize reforms that enhance liquidity, transparency, and investor protection, as well as initiatives that improve corporate governance and facilitate broader participation in equity markets. Second, Governments should implement policies that promote renewable energy adoption, such as fiscal incentives, public–private partnerships, and investment in clean energy infrastructure, while ensuring that these initiatives complement financial market development. By aligning equity market reforms with sustainable energy policies, authorities

can create synergistic effects, where strong market performance and a diversified energy base jointly enhance the resilience of the financial system against both domestic and external shocks. Third, government, should improve stock market performance through liquidity enhancement, regulatory reforms, and corporate governance improvements, while simultaneously promoting renewable energy adoption through fiscal incentives, investment in infrastructure, and supportive regulatory frameworks. Policymakers should not rely on the combined effect of market development and energy transition alone, but rather ensure that both financial markets and the energy sector are strengthened individually, creating complementary conditions for long-term financial resilience.

Despite the insights provided, this study has several limitations that should be acknowledged. First, the analysis focuses on 16 MENA countries from 2000 to 2021, which may limit the generalizability of the findings to other regions or to periods beyond 2021, given the rapid evolution of financial markets and renewable energy adoption. Second, although the SGMM approach mitigates endogeneity and dynamic effects, unobserved factors such as institutional quality, political risk, and macroeconomic shocks may still influence the results.

The study suggests avenues for future policy-oriented research. Future studies could examine the roles of institutional quality, green financing instruments, and financial inclusion in strengthening the link between renewable energy, stock market development, and financial stability. Comparative analyses across regions could also provide additional insights for designing effective policies that balance energy transition and financial stability objectives.

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