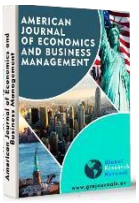

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Article

Determinants of Financial Security in Securities Markets: Panel Data Evidence from Emerging Economies

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Abstract: Abstract Financial market stability in emerging economy securities markets has been historically compromised by low volatility, a high susceptibility to global shocks, and institutional weaknesses. With these markets increasingly integrated into the global financial system, stability at both the asset level and system level has become a top priority of policymakers and investors alike. Although previous studies investigate the asset level risk, systemic financial stress, or the institutional quality associated with financial stability, none of them takes a designed joint setting that could enable us to understand both types of interactions that may drive the financial stability. This research bridges that gap through the increasingly widely utilized integrated analytical framework. This research employs asset-level downside risk measures based on parametric Value at Risk (VaR) derived from panel data of a sample of emerging economies. We capture systemic instability by building a composite Financial Stress Index using Principal Components Analysis; and we use Structural Vector Autoregression models to analyze the transmission of domestic and external shocks. The results show that domestic macroeconomic imbalances and global financial shocks are the key contributors to financial tumult in emerging securities markets. Also, average performance measures fail to recognize the substantial tail risk among asset returns. The results also suggest that higher institutional quality, in terms of political stability, bureaucratic quality, and effective protection of property rights, is associated with lower financial stress. Foreign investment inflows and remittances help with market liquidity, and they act as shock absorbers in times of crisis. Furthermore, market development mechanisms in countries with widespread share issue privatization also make them more resilient to financial shocks. In any case, the study showed that emerging securities markets are financially stable not because of short term performances in the market but because of the interrelation of effective risk management, macroeconomic policies, and institutional strength.

Keywords: Financial Security, Emerging Economies, Value at Risk (VAR), Financial Stress Index (FSI), Principial Component Analysis (PCA), Structural Vector Autoregression (SVAR).

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1. Introduction

Financial security in emerging economies is a dual mandate: it requires the protection of individual asset value against volatility and the insulation of the broader financial system from systemic collapse [1]. Unlike developed markets, emerging economies face heightened sensitivity to external shocks, political instability, and structural imbalances. As these markets integrate further into the global financial architecture, understanding the determinants of their stability becomes paramount for policymakers and investors alike.

The objective of this study is to synthesize empirical evidence to identify the drivers of financial security across three dimensions: micro-level asset risk, macro-level systemic

stress, and the mediating role of institutional quality [2]. While traditional literature often treats these dimensions in isolation, this article argues that financial security is a complex equilibrium maintained by the interaction of robust macroeconomic discipline, deep market liquidity, and high-quality governance.

2. Materials and Methods

To provide a comprehensive assessment of financial security, this study employs a multi-layered methodological framework combining risk management metrics with econometric modeling of panel data [3].

To assess security at the individual asset level, the study utilizes the Parametric Value at Risk (VAR) framework. This method calculates the maximum probable loss over a specific time horizon (t) at a given confidence level (1-α). Assuming asset returns follow a normal distribution N (μ, σ^2). The VAR is mathematically defined as:

$$VaR_{\alpha} = V_0 \times (z_{\alpha} \cdot \sigma\sqrt{t} - \mu t)$$

Where:

- V_0 is the initial portfolio or asset value.
- z_{α} is the critical value from the standard normal distribution corresponding to probability α (e.g., 1.645 for 95% confidence).
- σ represents the volatility (standard deviation) of returns.
- μ represents the expected return.

This approach allows for the quantification of downside risk beyond intuitive estimation, specifically capturing the "tail risk" inherent in volatile emerging markets [4].

Systemic instability is measured using a composite Financial Stress Index (FSI). The FSI aggregates stress indicators across three critical sectors: banking (B), securities (S), and foreign exchange (FX).

To ensure comparability, each raw indicator (X_{it}) is first standardized (z-score normalization) to create a uniform metric (Z_{it}):

$$Z_{it}=\frac{X_{it}-\bar{X}_i}{\sigma_i}$$

The aggregate FSI is then constructed as a weighted sum of these standardized sub-indices:

$$FSI_t = \sum_{i=1}^{n} \omega_i Z_{it}$$

Where the weights (ω_i) are derived using Principal Component Analysis (PCA). The model decouples common variance via PCA over the banking, securities, and FX markets so that the index measures systemic stress rather than idiosyncratic noise in a single sector [5].

To identify the causal determinants of stress, the study utilizes a Structural Vector Autoregression (SVAR) model. The structural relationship is modeled as:

$$AY_t = C + \sum_{k=1}^{p} B_k Y_{t-k} + \varepsilon_t$$

Where Y_t includes the vector of endogenous variables (FSI, Interest Rates, Output Gap), allowing for the analysis of impulse response functions to determine how shocks (e.g., a global oil price drop) propagate through the domestic financial system [6].

3. Results and Discussion

The micro, macro, and institutional dimensions of financial stability in EMs: Some key findings from the empirical analysis. Micro-analyzing it in its application to the parametric Value at Risk (VaR) model for securities markets, the average daily return often disguises large downside risks [7]. The analysis shows that the standard deviation of returns is much larger than expected returns, which means greater volatility and greater risk of catastrophic losses. At a confidence level of 95 percent, for example, securities could fall about 8.8 percent in a day. Moreover, assessment of cumulative risk shows that within a time horizon of five days, the potential loss rises to almost 19.7%. The results validate the merit of statistically grounded risk management models [8], as our findings confirm that decision-making based on intuition or experience is insufficient

Regression analysis has isolated four channels at the macroeconomic level that significantly affect the Financial Stress Index (FSI). The answer firstly revolves around domestic macroeconomic imbalances, whereby falling real output growth and increasing current account deficits substantially worsen financial tension [9]. Even the reduction of foreign exchange reserves undermines the ability of central banks to stabilize domestic currencies. Second, emerging markets are incredibly susceptible to shocks in the global financial market, such as changes to first-world interest and commodity rates. From examining it we found that the negative shocks to commodity prices hampered bank balance sheets in exporting economies, usually causing liquidity shortages. Third, the effect of financial linkages is more ambiguous. Trade openness facilitates international diversification, but financial liberalization prematurely exposes us to massive, sudden capital flow reversals. Fourth, contagion effects are important; regional shocks tend to affect domestic financial stress the most compared to global non-regional shocks, especially in regions such as Emerging Asia [10].

Institutional and Market Structures: Panel Data Evidence. In particular, whilst strong property rights increase external finance, elevated political risk and poor bureaucratic quality deeply exacerbate financial tensions. Along with the depths of the markets, FDI and remittances are positively linked to stock market capitalization [11], with the latter acting as cyclical countercyclical buffers during times of crisis. Furthermore, share issue privatization programs create liquidity externalities that enhance resilience in the entire market. Taken together, these findings imply that financial security in new markets is likely to be rooted more in political and institutional arrangements than mediated by the market alone [12].

The Institutional "Shock Absorber" A critical insight from this study is the role of political institutions as "Shock absorbers". During periods of economic transition or external pressure, the effectiveness of the bureaucracy and the rule of law determines whether a shock triggers a crisis [13]. When policymakers face intense political pressure without autonomous institutions, they often pursue sub-optimal policies that exacerbate systemic instability.

The evolution of banking and markets, the relationship between the banking sector and securities markets evolves over time. In early development stages, they act as complements-a strong banking system provides the infrastructure necessary for market growth [14]. However, the findings suggest a substitution effect in mature markets, where high levels of bank credit may eventually crowd out equity financing.

Liquidity and externalities, the positive impact of privatization IPOs extends beyond the firms themselves [15]. By deepening the market, these issuances attract foreign capital and improve liquidity for private firms, creating a virtuous cycle of financial development.

4. Conclusion

The emerging market panels agree with the evidence that financial security is not an inevitable by–product of Emerging market panels show that financial security is more than just good market returns; it is a capital maintained through solid institutions and managed risks. Financial security is shown in this analysis to be at its highest level where there is concurrently high macroeconomic discipline, combined with deep, reasoned markets based on sound economic principles, managed through high-quality governance. While external shocks – the US Federal Reserve hiking rates – and internal imbalances – fiscal deficits – will unavoidably create pressure, the impact is much lessened with credible and autonomous political institutions.

On the basis of these results, some policy measures tailored for the situation of transition economies are proposed, which could also be relevant to Central Asia. In macroprudential supervision, regulators should incorporate parametric Value at Risk (VaR) and Financial Stress Index monitoring, while issuing regular financial stability reports as early warning systems. Stable FDI must be complemented with institutional reforms, namely, greater regulatory autonomy and lesser political interference, as well as stronger property rights. Governments should speed up share issue privatization to expand capital markets and improve liquidity.

Central Asia. With this in mind, regulators should include parametric Value at Risk and Financial Stress Index monitoring as part of macroprudential supervision, noting that frequent publication of a financial stability report can serve as an early warning. If the goal is to secure stable foreign direct investment, then domestic institutional reforms must aim to establish regulatory independence with minimal political interference and solid property rights. Governments should fast-track share issue privatisation to deepen capital markets and enhance liquidity.

REFERENCES

[1] A. Burxanov, "Method of Assessing Financial Risk in the Securities Market," *Actuar. Finance Account. Sci. J.*, vol. 5, no. 11, pp. 121–127, 2025, doi: 10.55439/AFA/vol5_iss11/1270.

[2] H. Sadia, A. Bhatti, and J. Azeez, "Determinants of Financial Stress: Panel Data Analysis of Emerging Countries," *Bus. Econ. Rev.*, vol. 14, no. 2, pp. 57–78, 2022, doi: 10.22547/BER/14.2.3.

[3] Y. Bayar, "Financial Development and Poverty Reduction in Emerging Market Economies," *Panoeconomicus*, vol. 64, no. 5, pp. 593–606, 2017, doi: 10.2298/PAN150403014B.

[4] C.-Y. Park and R. V. M. Jr, "Determinants of Financial Stress in Emerging Market Economies," *J. Bank. Finance*, vol. 45, pp. 199–224, 2014, doi: 10.1016/j.jbankfin.2013.09.018.

[5] P. Evrim-Mandaci, B. Aktan, G. Kurt-Gumus, and M. Tvaronavičienė, "Determinants of Stock Market Development: Evidence from Advanced and Emerging Markets in a Long Span," *Bus. Theory Pract.*, vol. 14, no. 1, pp. 51–56, 2013, doi: 10.3846/btp.2013.06.

[6] C. A. Yartey, "The Determinants of Stock Market Development in Emerging Economies: Is South Africa Different?," International Monetary Fund, 2008.

[7] B. Bortolotti, F. de Jong, G. Nicodano, and I. Schindele, "Privatization and Stock Market Liquidity," *J. Bank. Finance*, vol. 31, no. 2, pp. 297–316, 2007, doi: 10.1016/j.jbankfin.2006.04.008.

[8] International Monetary Fund, "Global Financial Stability Report: Durable Financial Stability," *IMF*, 2011.

[9] A. Demirguc-Kunt and M. S. Martinez Peria, "What Explains the Variation in Banking Crises?," *J. Financ. Stab.*, vol. 8, no. 4, pp. 273–286, 2012, doi: 10.1016/j.jfs.2012.01.002.

[10] R. La Porta, F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, "Law and Finance," *J. Polit. Econ.*, vol. 106, no. 6, pp. 1113–1155, 1998, doi: 10.1086/250042.

[11] R. Levine, "Finance and Growth: Theory and Evidence," *Handb. Econ. Growth*, vol. 1, pp. 865–934, 2005, doi: 10.1016/S1574-0684(05)01012-9.

[12] G. W. Schwert, "Why Does Stock Market Volatility Change Over Time?," *J. Finance*, vol. 44, no. 5, pp. 1115–1153, 1989, doi: 10.1111/j.1540-6261.1989.tb02647.x.

[13] G. L. Kaminsky and C. M. Reinhart, "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems," *Am. Econ. Rev.*, vol. 89, no. 3, pp. 473–500, 1999, doi: 10.1257/aer.89.3.473.

[14] K. Forbes and R. Rigobon, "No Contagion, Only Interdependence: Measuring Stock Market Comovements," *J. Finance*, vol. 57, no. 5, pp. 2223–2261, 2002, doi: 10.1111/0022-1082.00494.

[15] F. Allen and D. Gale, "Review of Economic Studies," *Rev. Econ. Stud.*, vol. 67, no. 1, pp. 1–33, 2000.