

## The Role of Pension Fund Investments in Shaping Volatility Dynamics in South African Stock Markets

**Eugene Msizi. Buthelezi**

Department of Economics and Finance at the University of Free State, South Africa, Free State, Bloemfontein

### Abstract

This paper examines the role of pension fund investments in shaping volatility dynamics in South African stock markets in South Africa from 2010 quarter 1 to 2022 quarter 4. The paper measures exchange rate volatility using the family of Autoregressive Conditional Heteroskedasticity (ARCH) and Markov-switching dynamic regression (MSDR). It is found that increase contributions by both individuals and employers are positively associated with higher stock market returns, suggesting a potential contribution to improved market performance. In addition, there are two distinct regimes when analyzing the impact of pension fund withdrawals on stock market volatility. In regime 1, pension fund withdrawals are found to contribute to a decrease in stock market volatility, indicating a potential stabilizing effect on the market. However, in regime 2, higher withdrawals are associated with increased volatility, possibly reflecting market uncertainties and selling pressures. Given these pension fund participants and investors should carefully consider the timing and amount of their withdrawals, taking into account the potential impact on stock market returns. There is a need to encourage higher pension fund contributions by individuals and employers can play a crucial role in enhancing stock market performance and stability. Policymakers should closely monitor the impact of pension fund dynamics on market dynamics and ensure the integrity and stability of the stock market.

### Keywords

Pension funds, Stock market returns, Stock market volatility.

**JEL Classifications:** G10; G18; G23.

