



**SIGMA ECONOMICS**  
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*Promoting the Application of Econometrics*

# **Weakly Reverting Inflation Dynamics: Implications for Zambia's Monetary Policy**

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## **Abstract**

This paper examines Zambia's inflation dynamics through a time-varying parameter error correction model, revealing that inflation has been only weakly mean reverting across successive regimes. Shocks tended to persist rather than dissipate naturally, even when inflation was contained within single digits. This limited self-correcting capacity underscores the need for strong policy anchors. The findings highlight that credibility, expectation management, and structural resilience are indispensable for durable price stability in Zambia.

## **Introduction**

Inflation management in Zambia illustrates the challenges of weak mean reversion. Unlike economies where inflation naturally adjusts back to target, Zambia's inflation process has shown persistence across regimes. Temporary disturbances risk becoming entrenched without firm policy anchors, making proactive monetary management essential.

## **Evidence of Weak Mean Reversion**

- **Persistence of Shocks:** Inflation shocks did not dissipate naturally, even during periods of relative stability.
- **Limited Self-Correction:** Weak mean reversion implies that inflation stability cannot be assumed; policy must actively reinforce adjustment mechanisms.
- **Structural Vulnerabilities:** Heavy reliance on imports and commodity markets amplified the risk that external disturbances embedded themselves in domestic prices.

## Policy Implications

1. **Credibility and Expectation Management:** Sustained credibility and disciplined signalling are required to anchor expectations and prevent drift in response to volatility.
2. **Active Monetary Management:** Weak mean reversion means inflation does not automatically adjust back to target. Policy must actively reinforce the adjustment mechanism through consistent monetary discipline.
3. **Structural Diversification:** Reducing dependence on imports and commodity markets is critical to limit exposure to external shocks.
4. **Adaptive Frameworks:** Flexible policy frameworks must complement credibility gains, absorbing shocks without allowing them to become permanent features of the inflation process.

## Conclusion

Zambia's weakly reverting inflation dynamics imply that monetary policy effectiveness depends less on passive containment and more on proactive credibility, disciplined signalling and structural resilience. Durable price stability requires institutions capable of preventing shocks from becoming entrenched and ensuring that inflation remains anchored even in the face of volatility. These lessons extend beyond Zambia, offering insights for other emerging economies confronting similar structural and external constraints.