LIQUIDITY RISK AND YIELD CURVE DYNAMICS OF INDIA : A MACROECONOMIC PERSPECTIVE

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A project report submitted

in partial fulfilment of the requirement for the award of the degree of

MASTER OF ARTS

IN

FINANCIAL ECONOMICS

May 2025

MADRAS SCHOOL OF ECONOMICS

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ABSTRACT

The yield curve is often seen as a reflection of market sentiment, capturing expectations about future interest rates, inflation, and economic growth. In a dynamic and globally integrated economy like India, understanding the drivers of yield curve movements is crucial for effective policy formulation and financial market analysis. This study investigates how liquidity risk and key macroeconomic variables shape the Indian sovereign yield curve from April 2003 to March 2024. The term structure is modelled using the Nelson-Siegel framework, which decomposes the curve into three latent factors—level, slope, and curvature. To capture the evolving influence of macro-financial variables over time, a Time-Varying Parameter (TVP) regression is employed. Liquidity risk, represented by the Weighted Average Call Rate (WACR), emerges as a key determinant, significantly affecting the short end of the curve by influencing both level and slope factors, especially during periods of monetary tightening. The base model also incorporates fiscal deficit, economic policy uncertainty index(EPU), and sovereign risk—proxied by the spread between Indian and U.S. 10-year bond yields. An extended version includes inflation, via CPI, and output growth, via IIP. The findings highlight that liquidity conditions and inflation are primary drivers of upward shifts and flattening in the yield curve, while policy uncertainty and sovereign risk exert a more sustained influence on its curvature. Structural break analysis reveals that major events such as the global financial crisis, taper tantrum, inflation-targeting reforms, and the COVID-19 shock have significantly reshaped how these macroeconomic factors influence yield dynamics in India.