Empirical Economics Review 15(1): (March 2025), pp. 1-21 *ISSN 2222-9736*
https://doi.org/10.5281/zenodo.14990124

Econometric Modeling of the Bank Stress Index-Macroeconomic Fundamental Relationship in Tunisia

Nada Dammak[*] and Néjib Hachicha[**]

Faculty of Economics and Management
University of Sfax, Tunisia

Abstract: This work examines the link between bank stress and a set of macroeconomic variables with regard to the Tunisian context. Indeed, the Tunisian banks' behavior and future strategy cannot remain neutral; especially face to the serious difficulties the Tunisian economy is currently experiencing. The empirical validation of this study involves a sample of ten Tunisian banks' half-yearly data, collected from the Central Bank, covering the period 1998-2021. This econometric work aims to provide significantly interesting results in regard to the Tunisian banking system's vulnerability to certain macroeconomic variables associated with positive shocks, mainly inflation, exports, GDP, *among others*. In addition, the investigated variables are non-stationary in level but stationary in first difference, and the methodology of Johansen-Juselius (1990) makes it possible to empirically demonstrate the persistence of long-term relationships linking such variables as EXP, GDP, INF, TCH, SBP and stress index. At this level, we maintain a long-term relationship indicating that the banking stress index tends to be very elastic with respect to inflation and the exchange rate. It is worth noting, above all, that the correction model estimate of the banking stress index in Tunisia proved to demonstrate a short-term variation, absolutely, insensitive to the adjustments of the various variables investigated, particularly; exports, GDP, inflation, exchange rate and balance deficit.

Keywords: Stress Index, Banks, Macroeconomic Variables, Fragility

JEL Classification Number: G21, E, F62, G01

[*] PhD in Finance. Email: nada_dammak@yahoo.fr; [**]Email: nehachicha@gmail.com