Vol.8 Issue.1 April 2023

Review of Socio - Economic Perspectives
ISSN: 2149 - 9276
E-ISSN: 2547-9385

The impact of financial technology on financial stability in the MENA zone

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Article History
Received: 11 December 2022 Revised: 2 March 2023 Accepted: 7 March 2023 Available Online: 1 April 2023

Keywords: Fintech, financial stability, MENA zone, Panel VAR
JEL classification: G21, G28, O33

Citation: Kolli, M. & Amarouche, K.I. (2023). The impact of financial technology on financial stability in the MENA zone, *Review of Socio-Economic Perspectives,* 8(1), 93-106.

Abstract

This article attempts to determine the influence of financial technology (Fintech) on the stability of financial systems in 19 countries of the Middle East and North Africa (MENA) zone; observed over a period of 17 years (2004- 2020). Therefore, our research is based on the panel vector auto regression models (Panel VAR) that are analyzed using the Eviews 12 statistical program. The results show that the fixed effects models are the most significant for estimating the relationship between the fluctuations of financial stability index (FS) and the changes of the explanatory variables selected in our empirical model. At the same time, these results indicate a significant positive relationship between the economic growth (GDPR), the level of financial concentration (BSC) and the volume of banking crises (CPS, LL) on the financial stability index. While, they also confirm the absence of a significant relationship between the dependent variable and financial technology indexes (MPBR, ATM, IU) and the levels of demographic growth (POPG). This may be explained by the fact that the financial systems of the sample countries are mainly traditional and can be attributed to the low level of financial culture of their societies.

1. Introduction

The financial sector is facing recently radical transformations that have led to the emergence of several fintech applications's, which aimed to develop a new financial services and providing them in an easy, fast and inexpensive way, such as: electronic payment systems, blockchain, crowdfunding, cryptocurrency and artificial intelligence systems. With this technological development, digital transformation has become essential to cope with the diversity of remote financial transactions, especially in light of the conditions that most of the financial systems in the world knew with the Covid-19 pandemic. In this context, the MENA zone suffers from a digital paradox, as the region is witnessing a wide use of social media accounts compared to the gross domestic product (GDP) per capita. In addition, the per capita share of using social media in the MENA zone outweighs its counterparts in countries that have the same GDP per capita, however, the level of dependence of the MENA's countries on digital payment systems remains lower than the targeted levels. This disparity in the use of financial technology for social versus economic purposes, characterized the most countries in the MENA zone, which can threat the stability of the financial systems of the region. Accordingly, in this article, we will examine the various repercussions of adopting financial technology on financial stability in a sample of 19 countries in the MENA zone during the period 2004-2020, relying on the panel vector auto regression models (Panel VAR) and the outputs of Eviews 12 statistical program. In order to achieve our research objective, the present paper is organized as follows: The first section develops a review of literature on the subject, the second section presents

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DOI: https://doi.org/10.19275/RSEP151
Article Type: Original Paper