The Impact of Digital Transactions and Covid-19 Pandemic on the Velocity of Money: Evidence from Turkey

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Abstract

Digital monetary transactions are revolutionizing the way economies operate by facilitating faster, more convenient, and lower-cost methods of exchanging value. This has several notable macroeconomic consequences, one of the most important being the potential rise in the velocity of money (VoM). This research examines the impact of digital transactions on the VoM in Turkey using quarterly data from 2006 to 2023. We employ an ARDL modeling framework with a bounds-testing approach to investigate the relationship between VoM and digital banking transactions, controlling for a broad set of macroeconomic variables. We identify a stable and positive cointegrating relationship between VoM and digital banking transactions, suggesting that as the volume of digital payments increases, VoM also tends to increase in the long run. This indicates a more efficient flow of funds within the economy, as digital payments enable quicker, cheaper, and more convenient transactions compared to traditional cash-based systems. However, this long-term phenomenon is not observed in the short-run dynamics. Policymakers need to be cautious about the underlying positive relationship between digital payments and VoM due to potential risks, such as inflationary pressures, that can arise from a rapid increase in the velocity of money. We also find that the COVID-19 pandemic led to an additional rise in VoM during lockdowns and social distancing measures, extending beyond the adoption of digital payment systems. Robustness checks using alternative measures of digital transactions confirm the consistency of these results.

Keywords: Digital payments, velocity of money, COVID-19, e-money, ARDL