

Empirical Relationship between Currency in Circulation, Digital Payments Modes and Select Macroeconomic Variables in India : An ARDL Approach¹

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Abstract

The banking sector reforms and technological innovations have led to the see-through change in the behavior of monetary aggregates in India. In India, the Reserve Bank of India (RBI) is today enunciating its policies on the roadmap of a cashless economy. In the light of this scenario, the primary aim of this study is to empirically analyze the effect of select digital payment modes and macroeconomic variables on the currency in circulation based on the Baumol-Tobin model using the Autoregressive Distributed Lag (ARDL) econometric approach. The estimated coefficients of the long-run ARDL model of Currency in Circulation (CCN) revealed that credit cards, debit cards, and RTGS transactions had a positive impact on CCN, while EFT/NEFT negatively impacted on CCN. The findings of the study helps to establish the need to include digital payment modes along with macroeconomic parameters in estimating money demand functions and formulating monetary policy for India by the RBI.

I. Introduction

DEMAND FOR MONEY AND its factors reveal the nature and direction of the relationship between the monetary sector and the real sector of an economy. The financial instruments that serve as the 'medium of the payments' role of money have changed over time, as has the elasticity of substitution of the monetary assets. In this context, one can classify money demand as nominal balances and real balances. Nominal money balances is the quantity of money measured in terms of the currency of the country. The quantity of nominal money demand is found to be directly proportional to the price levels prevailing. Hence the role of nominal money or currency in circulation in ensuring price stability is always at the limelight of policymakers of any country. The monetary policy of a country envisions achieving price stability given the

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