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Digital Payment Systems in India : Trend and Structural Changes after Demonetisation

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Abstract

Significant developments have been made towards a digital payment system since the 1960s yet more than 85 percent retail transactions in the world are held in cash. Higher Cash to GDP ratio (nearly 11 to 13 % in emerging economies like India, Brazil and China) and higher cost of cash (which can be even more than one per cent of their GDP) along with exponential growth in online business transactions, forced countries around the world towards digital payment system. In India the government has taken various steps to promote digital payments and one of the main objectives of the demonetisation exercise was to promote digital payment. In this article, an attempt has been made to study the trend and structural growth of digital payment transactions during the last decade. Based on RBI's payment system indicators w.e.f. 2005-06 to 2018-19, The study observed that digital transactions have registered a high growth in last 13 years.

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Keywords : Digital Payments; Fund Transfer; Electronic Clearance; Card payments; Instruments; Demonetisation; Cash; Brazil; China; India

I. Introduction

HISTORICALLLY VARIOUS INNOVATIONS have been made in payments systems to cope with the requirement of economic progress. The drawbacks in barter system (the very first kind of payment mechanism) was substituted with the use of goods of common use like salt, cocoa beans and shells etc. in 9000 BC followed by the invention of coin by Lydia Kingdom in 700 BC. Another breakthrough innovation in the payment system that completely changes the payment was the introduction of *cheque* (a documentary assurance of payments for a trader) by the Romans. This system generates the need for a specialised intermediary (banks) to pay the trader on the customer's behalf.

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Over the period of time, the share of card payment transactions has declined but the share of the prepaid instruments, mobile banking transactions has grown up. In terms of growth, mobile banking and prepaid payment instruments has grown with higher growth rate than other digital modes and mobile phones have been emerged as the most important mode for digital payment. Thus, the mobile phone penetration may play a significant role in transforming payment behaviour of Indian and government should focus on making them more secured and user-friendly modes of payments.

The pre and post period analysis of demonetization found that digital transactions have witnessed a positive change after the demonetization period is contrary to the negative trend in physical transactions. The results of Mann Whitney U-test showed a significant increase in the numbers, as well as value of digital payments after demonetization and it has been successful in promoting cashless transaction in the country. The growth in mobile-based payment transactions is a good sign for the growth of cashless economy as on an average every household has easy and economical access to mobile phones. The mobile banking is not only going to transform Indian Payment system but also boost financial inclusions in India.

5.1 Limitation and scope for future research

The study is based on secondary data and had been more meaningful if primary data about public perception on digital payments could have been included. For analysing the demonetisation, smaller data set was used. Further research can be conducted to study its long term implications. In near future, the researcher should test the results of this study with a larger data set and they may yield some contradictory results. Future researchers can also focus on a comparative study of new digital payment modes like m-wallet, UPI, PPIs in term of their growth.

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