

## ABSTRACT

Information technology by far has been the greatest transformational force defining new business dynamics around the globe since half a century. Commercial banks being highly information intensive businesses, have been investing colossal amounts in IT as it yields significant impact on bank strategy and operations. Although it is generally believed that IT has the potential to impact the profitability of organizations positively, empirical evidence pertaining to IT economic value has been found fragmented and inconclusive at best. Apprehensions about the ultimate commercial value of IT have puzzled researchers and executives since past several decades. This apparently obvious yet inconclusive relation was first highlighted by Solow (1987), labelled as Solow's paradox, and later labelled as profitability paradox by Beccalli (2007). The interesting IT paradox has a rich history and has been claimed, unclaimed and reclaimed over time. The persistence of inconclusive empirical literature and the surprising presence of profitability paradox provides the impetus of this research to investigate the impact of different components of IT on banks profitability in Pakistan from 2006-2013 for a sample of 25 Pakistani commercial banks. This research thesis makes two main contributions to the literature. Firstly, the impact of IT on banking industry's profitability has been assessed in components. Secondly, more modern and advanced econometric technique of Difference generalized method of moments has been employed to investigate the impact of IT on bank profitability in Pakistan. Return on assets (ROA) and return on equity (ROE) have been used as indicators of bank profitability whereas two different components of IT, number of automated teller machines (ATM) and investment in banks software have been employed as proxies of IT. Empirical results reveal that the impact of different components of IT on banks' profitability is mixed. Investment in bank software appears to have a positive influence on bank profitability, while the acquisition of ATMs seems to reduce the profitability of banks. Benefits and problems are two conflicting faces of IT use that affect bank profitability in opposing directions. IT is a wide term and encompasses many different components in itself. Hence, it is prudent to analyze the impact of IT in components to have a more clear picture that how

different components of IT impact profitability of banks. It can be concluded that IT paradox is not necessarily a paradox of IT in totality and should be termed as 'IT component paradox' as it may exist for a particular component of IT and may not in case of other. It is recommended that banks do targeted and planned installation of ATMs under joint ownership to achieve cost efficiency, while simultaneously maintaining its benefits to customers. Further, banks should make use of modern banking softwares to increase their range of products. Top management of banks needs to intelligently scrutinize the amounts of financial resources invested in IT by components and should view IT as a profitability factor to develop a sustainable competitive advantage, maintain strategic balance and to meet the operational requirements.