**EFFECT OF ELECTRONIC COMMERCE ON OUTPUT AND TOTAL FACTOR PRODUCTIVITY IN KENYA**

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# **Abstract.** Kenya seeks to transform into a middle-income country by 2030 with target annual growth rates of 10 percent. However, this has not been realized since growth rates are under 10 percent while 36 percent of the population lives below the poverty line. Various studies interpret this as an underperformance. However, this study held the view that the economic growth witnessed in the years 2007 to 2018 pointed to a resilient economy characterized by average steady growth rates of 5.4 percent despite the deterioration of the global economic outlook. This resilience coincided with the adoption of e-commerce, increased output in absolute values and emphasis of Information and Communication Technology as a key industry under the economic pillar of the Kenya Vision 2030. The period also saw the emergence of mobile payment gateways, which is a key enabler for E-commerce among others. E-commerce activities increase efficiency and ease of doing business by reducing costs and barriers of operation, which are important for achieving economic growth in transition countries such as Kenya. The main objective of the study was to investigate the effect of e-commerce on output and total factor productivity. The study developed a framework following the neoclassical and endogenous growth theories. The study used quarterly time-series data from the period 2007 to 2018 and applied Ordinary Least Squares regression models. The results showed that e-commerce had a positive effect on output. The effect of e-commerce on Total Factor Productivity was positive when considering the value of mobile payments while that of card payments was negative. The results suggest that continued investments towards e-commerce in terms of capital and mobile payments technology will be important for Kenya to sustain output growth and productivity increase.

# **Keywords.** E-commerce, ICT, Output, Mobile Payments, Total Factor Productivity.

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