Digitalization and Economic Development: Focus on Tax Revenue Mobilization, Governance, and Trade Facilitation

ABSTRACT

Digitalization is a process by which information is converted into numerical data to be processed and stored using Information and Communication Technologies (ICTs). By extension, it refers to the use of ICTs by individuals, businesses, public administrations, and others in their daily activities. It therefore allows a shift from manual or physical processing to automated processing using ICTs. Indeed, ICTS refers to the set of infrastructures, tools, hardware, and software that allow digital access and processing of data. Since the creation of the internet on August 6, 1991, many tools have been developed over the years such as smartphones, browser, connected devices, bigdata, e-commerce, online training, social networks, and many others, which are all related to information technology. This process is called “digitalization” or “digital transformation”. Thus, the world has found itself in a process that will change our lifestyles forever.

Given this rapid rise in the adoption and use of ICTs, they are becoming an indispensable part of the global
economy in the twenty-first century, with many issues and challenges for individuals, businesses, and public administrations. Indeed, digitalization has become an indispensable process for public administrations, in developed and developing countries. Most countries have therefore embarked on a process of digitalization, not only with a view to better public management and adapting the supply of public goods, but also in their interaction with individuals and businesses. Given the importance of the issues related to digitization, the economic literature is gradually beginning to focus on the importance and consequences of ICTs on the socio-economic development of countries around the world. It is in this sense that this thesis contributes through three research axes of two chapters each, to the economic literature.

The first axis analyses the effects of digitalization on the capacity to mobilize more tax revenues. The results suggest that digitization is leading to a change in the behavior of individuals, businesses, and the government with regard to the fiscal contract that binds them. Besides, access to and use of ICTs positively affects the mobilization of tax revenues through increased tax compliance and tax administration effectiveness and reducing corruption. The second axis measures the effects of digitalization on government effectiveness and efficiency. The results show that the government's use of ICTs improves its effectiveness by reducing corruption and increasing the quality of the regulator and accountability. The second chapter shows that ICT investment positively affects the efficiency of public spending on health and education. The last section focuses on Mobile Money payment and intra-zone goods trade. The results suggest that countries that have adopted the use of mobile money services experience an increase in trade of 0.6 percent of GDP compared to those that have not. This result appears to be similar for all developing countries and for African countries.

We conclude with policy recommendations. Digitization and the massive use of technology today is an opportunity for developing countries. It is therefore necessary to facilitate access to ICT and to digitalize as much as possible the administrative steps and procedures. In addition, the infrastructure must be regularly maintained and renewed as needed.

**KEYWORDS**

Africa, developed countries, developing countries, digitalization, direct tax revenue, education, efficiency, goods trade, government effectiveness, health, ICTs, ICT investments, impact analysis, merchant payment; mobile money, P2G, panel data, propensity score matching, public expenditures, tax revenues.