**Inefficient Infrastructure Services and Trade Flows: Evidence from Nigeria and its Trading Partners**

**Bashir Adelowo Wahab**

**School of World Economy, National Research University Higher School of Economics (HSE), Moscow, Russian Federation**

Email address: [bwahab@hse.ru](mailto:bwahab@hse.ru)

**Abstract**

Though Nigeria has been successful in the implementation of major trade reforms ranging from trade liberalization to regional integration and other bilateral and multilateral trade agreements, which in effect have led to significant tariff reductions. However, these reforms often fall short of addressing a series of non-tariff barriers that often have more devastating effects on trade than actual tariffs, thus contributing significantly to its low competitiveness in the international trade arena. Thus, this study examines the relative impacts of transport and information and communications technology (ICT) components of trade-related infrastructure on bilateral trade flows between Nigeria and its major trading partners. An augmented standard gravity model that featured variables for the transport infrastructure component (maritime transport, ratio of total roads network to total population and airport infrastructure) and ICT component (the number of internet users, fixed broadband internet, and telephone subscribers) was estimated using bilateral trade data on 22 major trading partners of Nigeria for the period 2005-2021. Panel instrumental variables technique (pooled two-stage least squares technique leveraged on fixed and random effects models) was used for the analysis. The findings show that both the transport component and ICT component had a significant impact on the volume of trade flows between Nigeria and its trading partners. In the exports model, the differential impact of the transport infrastructure component is higher than the ICT component, but the differential impact of the ICT component is greater in the imports model. This suggests that efficient provision of both transport and ICT infrastructure facilitates trade while the inefficient provision of either or both hinders it. Therefore, greater attention must be placed on improving both components of transport and ICT infrastructure. Policy recommendations are discussed in the conclusion.

**Keywords:** Inefficient Infrastructure services, Bilateral trade flows, Gravity model, Panel instrumental variables, Nigeria and trading partners.