In response to the declining revenues from excises in 2013, the Kenya Revenue Authority moved to a new system to strengthen the enforcement of excise duties on all excisable products except motor vehicles. Key to the system was the rollout of the excisable goods management system, which enables the Kenya Revenue Authority to track and trace stamped and unstamped products throughout the supply chain to prevent smuggling and misreporting of volumes. The system also helps in managing stock and inventory and preventing theft of stamps (African Tax Administration Forum 2016).

## Customs Administration

Since 2017, the Kenya Revenue Authority has embarked on several reforms to strengthen customs compliance and reduce revenue leakages from cargo undervaluation. In 2017, the Kenya Revenue Authority started the rollout of the Integrated Customs Management System to replace the aging web-based SIMBA system that was exploited for tax evasion (Gitaru 2017). The Integrated Customs Management System aims to consolidate all customs cargo clearance processes and includes components for functions such as automated valuation benchmarking, automated release of green-channel cargo, importer validation and declaration. In addition, the system has two-way iTax integration, which enables data sharing on importers to monitor domestic tax declarations. Another key digital initiative for customs administration is the Regional Electronic Cargo Tracking System launched in early 2017, which monitors transit cargo along the north, connecting Kenya with Uganda and Rwanda, and is expected to reduce or eliminate customs revenue leakage.

## Public Financial Management

In 2014, the Kenyan government launched e-Procurement, an online system for submitting and evaluating procurement applications. The aim was to increase efficiency, strengthen governance, and reduce processing time. The system is currently only being used on simpler, more straightforward types of procurement. The government is working with the Kenyan ICT Authority to extend the coverage of the system to include all government entities (such as state-owned enterprises).

To facilitate project monitoring, the Ministry of Finance introduced the Electronic Project Monitoring

Information System (e-Promis) in 2009. e-Promis aimed to coordinate and align development efforts, harmonize project delivery, measure project performance, strengthen accountability, and manage project resources and was designed to provide physical and financial project information to users throughout the government.

## **Impact**

Through digital automation, iTax has strengthened coverage and reduced the costs of tax collection, simplified the tax-filing process, increased customer satisfaction, and reduced compliance costs. Since its introduction, the expanded tax base and administrative reforms enabled through enhanced digitalization have increased tax collection (Ndung'u 2017). iTax increased tax compliance levels while reducing human error and fraud vulnerabilities through comprehensive automation. For example, the number of steps for corporate income tax filing decreased from 59 to 16 (African Tax Administration Forum 2016).

## Risks and Challenges

There are also risks and vulnerabilities in the new administrative process. System vulnerabilities arise from cybercrime, data theft, and performance challenges. It will be important to build a workforce with adequate skills and to ensure proper network coverage. Another challenge is to increase, in a population with relatively low computer literacy, the number of users who adopt digital platforms.

# Annex 2.2. Estimating the Impact of Digitalization on Tax Evasion from Cross-Border Fraud

## **Estimating the Effect of Digitalization**

Cross-border trade fraud resulting from customs duty, excise, and value-added tax (VAT) evasion has important public revenue implications. Previous empirical literature has mainly focused on documenting the extent of tariff evasion, typically relying on disaggregated industry-by-industry measures of misreporting (Fisman and Wei 2004; Mishra, Subramanian, and Topalova 2008; Jean and Mitaritonna 2010). Much less attention has been given to the implications of trade fraud on excise and VAT revenue even though the latter accounts for a large portion of the estimated