Digitization in Kenya that is Revolutionizing Tax Design and Revenue Administration

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I. Introduction

- Digital revolution taking place in developing countries and especially in Africa has produced three important outcomes in the financial sector:
  - First, a retail payments and settlement platform has emerged
  - Second, it has enabled financial inclusion via ease of entry - financial services at the doorstep
  - Third, a combination of these two produces a game-changing environment that cuts across all the sectors of the economy and across market segments – extreme case of formalizing informal markets
- Recent studies like Mckinsey Report 2016 show that digital finance services has the potential to:
  - Provide access to financial services for 1.6 billion people in emerging and developing economies
  - Increase the volumes of loans extended to individuals and businesses by $2.1 trillion
  - Allow governments to save $110 billion per year by reducing leakage in spending and tax revenues.
- Evidence is thus mounting to show that digital revolution has produced fundamental changes in fiscal policy formulation and implementation.
- In Kenya, the digital revolution started with M-Pesa - a money transfer product that has developed into a retail payments and settlement in real time. These developments have become important for tax designs and revenue administration in Kenya

II. How has Digitization Progressed in Kenya

- Kenya has been successful with financial inclusion in the last ten years driven by the developments in digital financial services (DFS)embodied by M-Pesa technological platform.
- M-Pesa was developed as a bank product in partnership of Safaricom, a telecommunication (Telco) company and the Commercial Bank of Africa (CBA) - other products like Airtel Money, Orange Money and Yu Cash also emerged
  - Initially, the M-Pesa platform was used for money transfer and then it developed into a platform for payments of goods and services.
- The DFS has had four endogenous innovative stages in Kenya:
  - The **First Generation -** where the mobile phone technological platform was used for transfers between users and later payments and settlement. This was made easier in 2006 for M-Pesa type of products to be rolled out in the market when the Government amended the communication law to recognize electronic units of money. A national retail payments and transactions platform emerged.
  - The **Second Generation** followed with virtual savings accounts using the same M-Pesa technological platform – A virtual banking service (costless to transfer from M-Pesa to savings account) emerged. In addition other banks negotiated to link their customers through the M-Pesa technological platform.
  - The **Third Generation** that followed was a development of virtual microcredit supply supported by information capital for participants in this technological platform. This is where transactions and savings data was used to generate credit scores for use as the basis to evaluate and price micro credit.
  - The **Fourth Generation** a natural progression to allow for cross-border payments and international remittances based on the M-Pesa technological platform

II. How has Digitization Progressed in Kenya…

- These four innovative and virtuous generations of the M-Pesa technological platform have shaped the financial market and the developments in the banking sector in Kenya.
- New products have been introduced in the market that has allowed the poor and the middle-income groups to benefit from the financial services at affordable prices and within reach.
- Such products include: Savings products such as M-Shwari, introduced 4 years ago, which has over 15 million customers out of which 67% are aged between 18-34 years. There are also KCB - Pesa and M-Kesho. These products have led to increased savings in the country.
- DFS has provided a platform to manage banks' micro accounts, especially for banks that had no appropriate technology for managing small value accounts with irregular flows.
- Deposit accounts have increased from 2.55 million in 2005 to nearly 34 million in 2015 with over 90% of these deposit accounts being micro accounts. The number of micro accounts has increased more than twelve-fold from about 2.14 million accounts in 2005 to over 32 million accounts in 2015.
- These developments have benefited tax designs due to ease of payments infrastructure and perhaps affected the tax base.

II. How has Digitization Progressed in Kenya…

- The digital platform also presents a full menu of financial services that transcends across market segments – Safaricom has partnered with 25 banks and over 700 businesses to facilitate deposits, bank transfers and the regular payment of utility bills, insurance premiums, and loan instalments.
- Currently, there are a number of businesses using the online shopping platform to reach customers who eventually make their payments through DFS.
- The employment opportunities created by the digital financial system (mobile financial services providers' agency network, agency banking among others), and the thriving m-commerce and on-demand services.
- New types of financial services are emerging as individuals transact using mobile phone financial services leaving digital data trails (Manyika *et al*., 2016) that are valuable to tax authorities.
- DFS has led to the emergence of strong banks leveraging on the platform to manage micro-accounts, build deposits and extend financial services to previously unbanked and underserved population. The Kenyan banks have used this platform to reach to more Kenyans and expand the financial inclusion frontier in Kenya.

Figure 1. Digitization has supported Financial Inclusion

III. The Role of the Government

- The digital economy requires a strong analog foundation, consisting of regulations that create a vibrant environment for economic agents to leverage on digital technologies (World Bank, 2016).
- The rapid digital revolution in Kenya's financial sector was supported by "test-and-learn" approach adopted by the Central Bank of Kenya and the telecommunication (Telco) regulator, Communication Authority of Kenya.
- In 2006, Kenyan government amended the communication law to recognize electronic units of money that enabled mobile phone based transactions to take off.
- The National Payments and Settlement Law was not in place, the Central Bank invoked the Trust Law and also issued guidelines for operating the Mobile Phone based transactions.
- The guidelines set for the network of M-Pesa agents were agreed between the Communication Authority of Kenya (CAK), and the Central Bank of Kenya (CBK) – no room for regulatory arbitrage.
- Kenya's combination of a supporting policy environment with a sound regulatory and supervisory framework allowed space for innovators and entrepreneurs to introduce financial innovations and a diversification of products into the market – so did not stifle innovations
- The Government gradually moved out of cash and cheque payments to online payments platform such as RTGS, Electronic Funds Transfers and G-Pay system to eliminate cash payments and thus supporting DFS
- The Government also used M-Pesa for targeted social protection program and as payment gateway for eCitizen service charges – provides a widespread use of M-Pesa and DFS.

IV. DFS Platform Supports Tax Design and Payments

Kenya Revenue Authority (KRA) Reform Agenda

- KRA Digitization Reforms - main business digitization initiatives included: customs system, Integrated Tax Management System (ITMS), Vehicle Management System (VMS), Enterprise Resource Planning System, Data Warehousing and Revenue Portal, Disaster Recovery and Business Continuity Plan, IT infrastructure improvement, IT security enhancement, a Common Cash Receipting System (CCRS), Performance Dashboard, and e-learning systems.
- Administration of trade taxes was modernized by 2005 implementation of the Simba system. It enabled the automation of about 90 percent of the customs operations and dispensed with the need for taxpayers to physically visit KRA offices.
- To facilitate clearance and registration of imported motor vehicles, in April 2007, the Simba system enabled an interface with the Vehicle Management System (VMS) which allowed seamless flow of motor vehicle details into the VMS.
- After the 2005 launch of Simba System, KRA introduced electronic banking to expedite payment of duties and taxes through a secure electronic process (EFT, RTGS). Later on, the Authority developed a Common Cash Receipting System (CCRS) (a dedicated application for direct revenue collection through commercial banks) which was interfaced with relevant KRA business systems (Simba, ITMS and VMS systems).
- The CCRS allowed for a single view of the taxpayer, reduced physical interactions in the payments process, improved reconciliations, matched payment and bank reports online and allowed for real time monitoring of revenue collection – CCRS is currently the main payment gateway for iTax system(used mostly by large taxpayers)

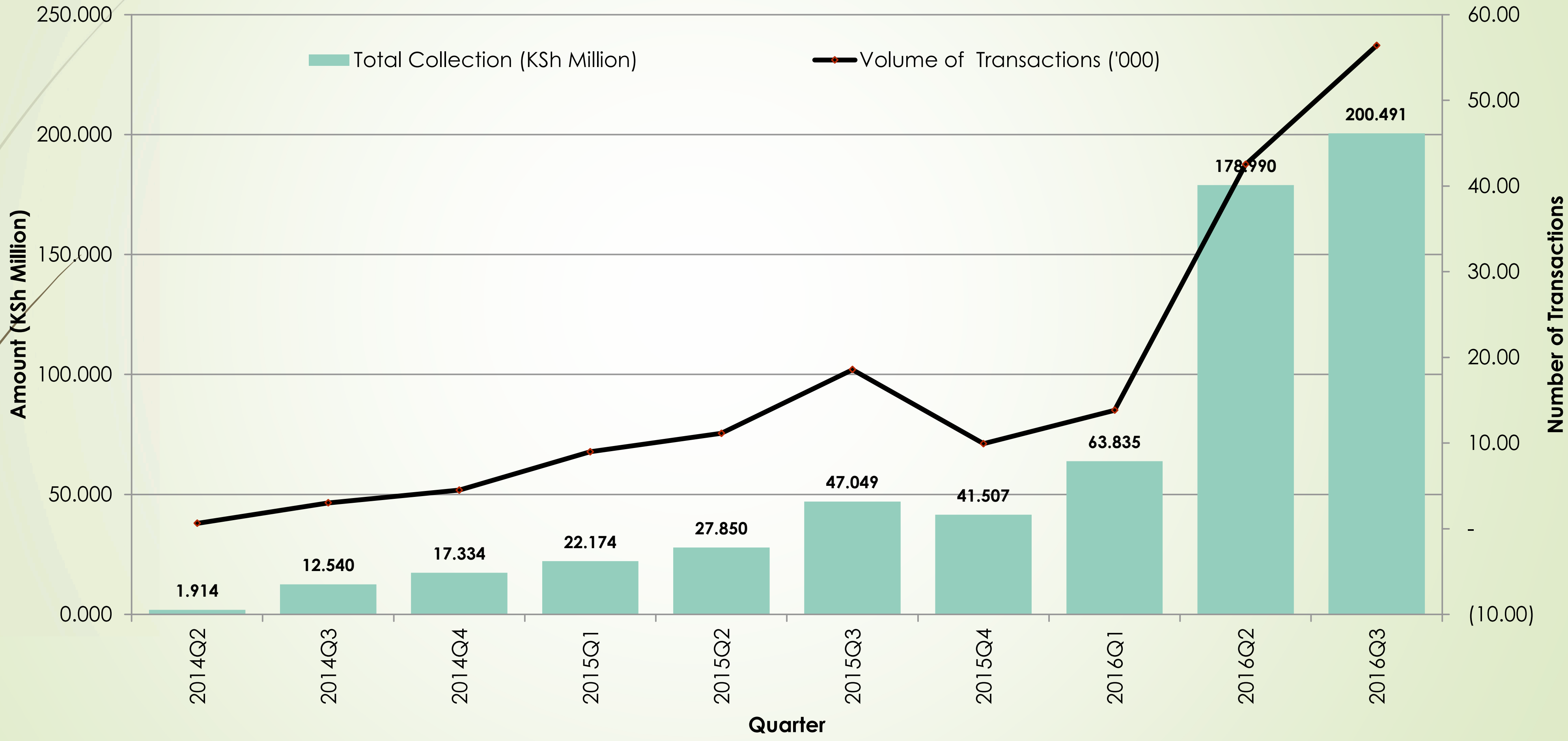
V. Platform to Support Tax Design and Payments

Kenya Revenue Authority Reform Agenda

- Digitization of the domestic tax administration started in July 2004
- In July 2005, the Authority introduced the Electronic Tax Register (ETR) system as an enforcement tool and to record business transactions.
- In September 2007, the authority began the implementation of Integrated Tax Management System (ITMS), which was later on rolled out in December 2008.
- In 2010, KRA introduced additional modules to the ITMS that led to the development of the current iTax system, launched in September 2013.
- The adoption of the iTax system in 2013 has supported the simplification of the tax processes in Kenya, made it easier for taxpayers to comply, reduced time taken by taxpayers when dealing with KRA, enhanced speed and accuracy of extracting data and information on revenue, and generally improved tax administration in Kenya.
- In October 2014, the Authority launched KRA M-service - a mobile phone application to facilitate taxpayers' access to tax information and for payment of taxes – used by small tax payers who make monthly payments.

V.1 The Outcomes of KRA Reforms

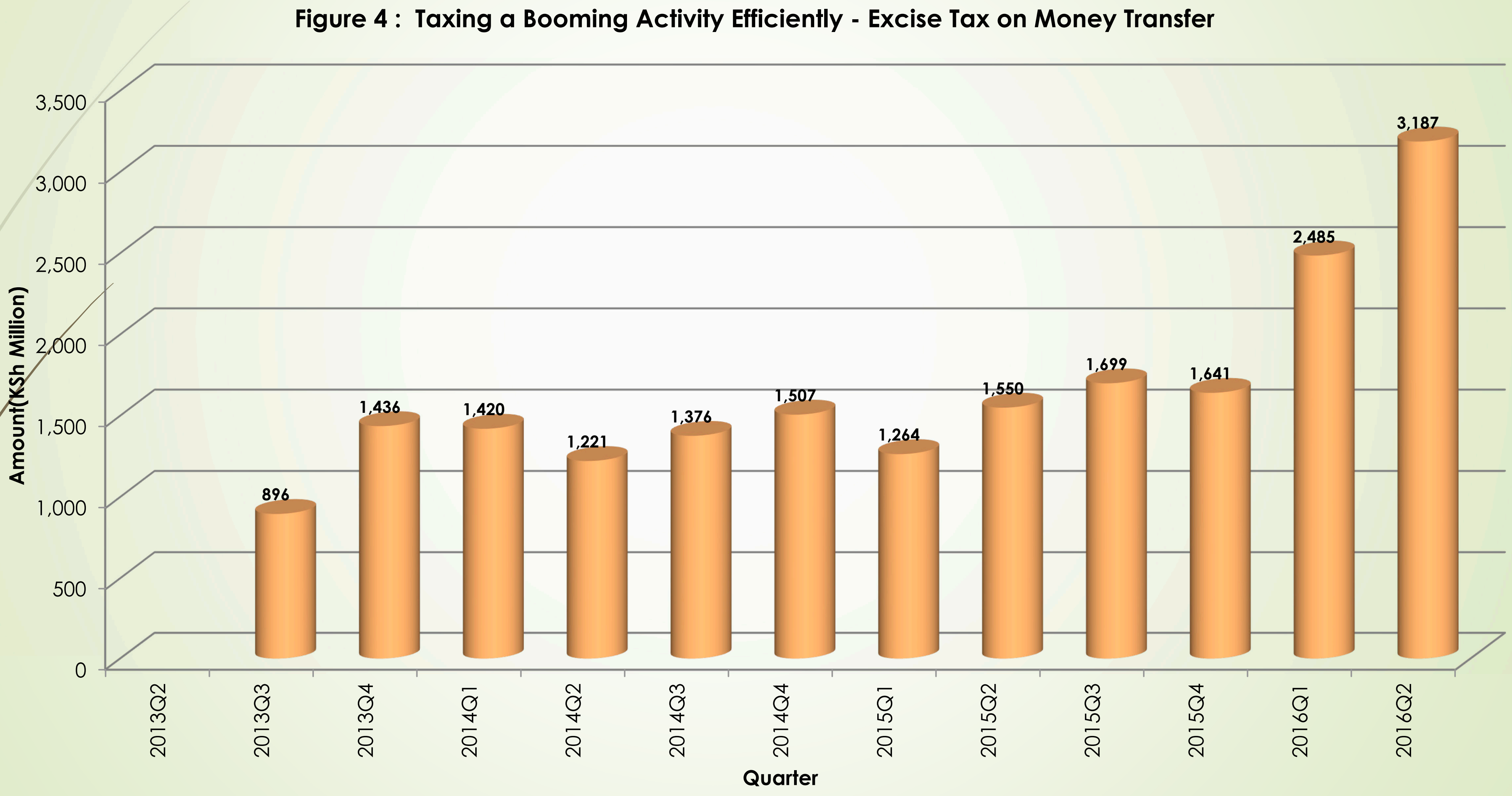
Figure 2: Tax Remittance through KRA M-Service Platform



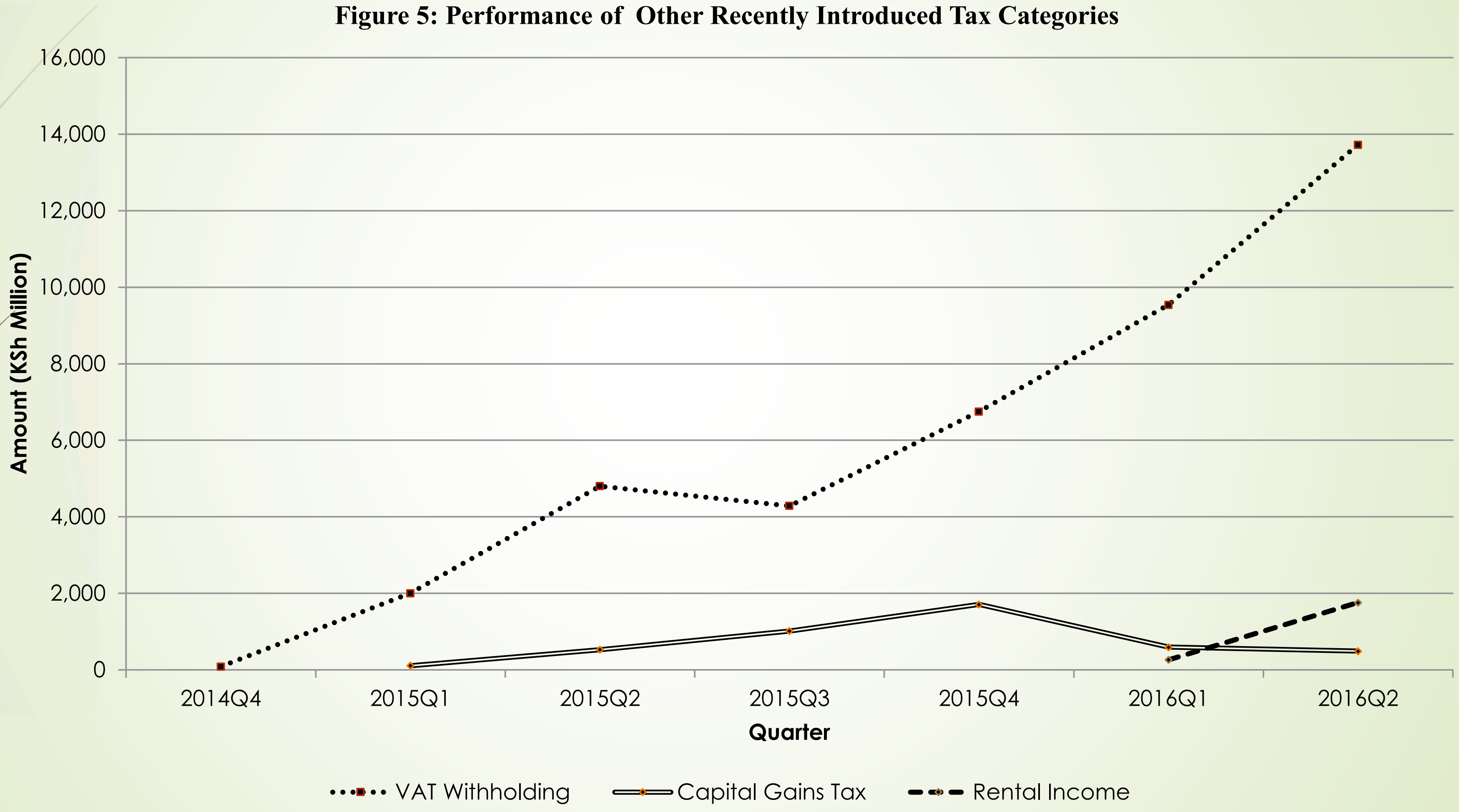
V.1 The Outcomes of KRA Reforms…

- The KRA statistics show that when the system was officially launched in October 2014:
  - 1,411 tax payment transactions were made through the mobile phone financial services in a month with a total value of KSh 5.23 million.
  - The quarter (2014Q4) recorded a total of 4,510 transactions with a total value of KSh 17.33 million.
- In 2016 a tremendous increase in volume and value of tax payment made through the platform was recorded, rising from 13,820 transactions with a value of KSh 63.84 million 2016Q1 to 56,410 transactions worth KSh 200.49 million in 2016Q3.
- The latest statistics obtained (for October 2016) show an average amount of tax payment of KSh 4,175.70 per transaction per month – an indication that this is the most preferred tax payment gateway used by the small taxpayers, mainly found in the informal sector.
- DFS has also expanded the tax base for KRA as evidenced by the introduction of excise tax on money transfer in 2013 – taxing a booming activity with efficiency.

V.2 Platform to Support Tax Payments – Taxing a booming activity



V.3 Platform to support Tax payments – Other taxes



VI. Some conclusions on KRA Performance

- Indeed, the digital financial system has had an impact on tax design and tax revenue collection; Digitization has provided an efficient platform for tax payment.
- This is becoming an important tool for supporting the formalization of the hard–to-tax informal enterprises
- The digital platform has also revolutionized revenue administration in the National and County Governments in Kenya through the Integrated Financial Management Information System (IFMIS) which was first rolled out to Government ministries in 2003 and later on in county governments in 2013.
- IFMIS is an automated system used for public financial management that interlinks planning, budgeting, expenditure management and control, accounting, electronic funds transfers, audit and reporting.
- The system has led to efficient recording and reporting for revenues collected by Kenya Revenue Authority (KRA) and those collected directly by MDAs, Counties, among other sources. It has also led to automation of recording and reporting for funds disbursed to National and County Governments, auto bank reconciliations and efficient cash flow management.
- The government has also incorporated a fully automated procurement process in the system, from requisition, tendering, contract award, to payment which enhances visibility and accountability at all levels of the procurement process.

VI.1. The eCitizen Digital Platform

- The introduction of the eCitizen digital platform has reduced bureaucracy and improved access to government services.
- The e-Citizen gateway is a Kenya Government to Citizen (G2C) portal that allows citizens to sign up, apply for government services and conveniently pay using M-Pesa type of payments platforms, credit cards, debit cards and online banking. The system also allows foreign residents to apply for services. Users receive email and SMS notification every time their application has progressed.
- The eCitizen platform provides portals that enable individuals to access government services such as business licenses, permits and registrations; processing of driving license; processing of police clearance certificate; official land title search for Nairobi blocks and passport application.
- In general, the digital platform has revolutionized the way payments to and from the government are made. The payments from Ministries, Departments and Agencies of Government (MDAs) and county governments have been made more efficient and transparent by the Central Bank's G-pay system which reduced paper-work and ensured direct electronic transmission of money directly from the accounts at CBK to the targeted recipients
- In addition, DFS has also supported government's social protection programs - an effective strategy to insulate the welfare of poor people as well as physically challenged.

VII. What do we learn from the Kenyan Case?

- M-Pesa technological platform has revolutionized the various aspects of financial sector businesses leading to a successful financial inclusion and strong banks - via enabling the banks to manage micro-accounts, build deposits and extend financial services to previously unbanked and underserved population.
- Financial inclusion in Kenya stands at 75.3% of the adult population in 2016 compared to 66.9% in 2013 and 30.5% in 2009 and 27.4% in 2006.
- Financial inclusion lowers the preference for cash payments/transactions – most Kenyans have opened banks accounts and also mobile phone financial services accounts making it easier for them to transfer money and make payments (including tax payments) electronically.
- This is formalization of business that allows a trail of income and expenditures for tax purposes
- M-Pesa platform endogenously developed to cover the totality of national retail payments, virtual savings and virtual credit supply platforms – A game changer for Kenya and other SSA economies
- It was therefore a natural progression to other financial sub-sectors and to develop payments products in the market

VII. What do we learn from the Kenyan Case?..

- The period from 2008 to 2015, the growth of the financial sector pulled the overall growth of the economy with it.
- A national payments and settlement system that is efficient, effective and transparent is an important platform for tax payments modules and for government to manage its expenditure flows to targeted activities.
- The KRA has designed tax payments platforms such as *KRA M -Service* – that minimizes leakages and equally there is a potential to design expenditure targeting platforms by the government and minimizes leakages
- The potential is evident for: designing appropriate taxes and tax payments modules; formalizing the informal sector; ease and accessibility of the payments platform will support less tax evasion and finally will enlarge the tax base in Kenya, [EAC target for tax effort is 25%]