DOMESTIC RESOURCE MOBILIZATION CASE STUDY: RWANDA

Leadership in Public Financial Management II

(LPFM II)

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Leadership in Public Financial Management II (LPFM II)

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Executive Summary

Rwanda has achieved considerable progress in building its tax system over the past two decades. The country's tax revenues have risen from ten percent of GDP in 2000 to 16 percent in 2016.

Major contributors to the country's progress come from both improvements in tax administration and tax policy. Key milestones include creation of the Rwanda Revenue Authority in 1998, replacement of an inefficient sales tax with a more modern value-added tax (VAT) in 2001, and preparing for and entering into membership into the East African Community (EAC) Customs Union in 2009 (effective 2010). Measures of productivity or efficiency of Rwanda's VAT and income tax collections improved steadily from 2001 through 2016 and are now among the strongest in East Africa.

These reforms have added to the tax take, but as important is that Rwanda has steadily been improving both its internal administrative processes and the business-enabling environment for taxpayers. Key improvements within tax administration in recent years include, among other things, increasing taxpayer outreach and raising the number of registered taxpayers, providing better services, enhanced use of information technology, and improved techniques and capacity in risk management and in conducting taxpayer audits.

Streamlining and modernization at the RRA have contributed to an improved business-enabling environment – as indicated by the wide prevalence of e-filing and by changes in World Bank indicators since 2006, charting the increased ease for businesses of paying taxes and trading across borders.

Rwanda has benefited from considerable donor support in its efforts to modernize its tax system. The United Kingdom's Department for International Development (DFID) was there from the start, helping to define and design the new Rwanda Revenue Authority, providing funding for construction, equipment, and even providing international experts in the early stage to act in line functions within the new tax administration. Indeed, DFID provided a high level of technical and material assistance for two decades.

Acknowledgments

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Preface

Programs to strengthen domestic resource mobilization (DRM) in developing countries are critically important not only to reduce reliance on donor funding—but more importantly, to provide governments with a dependable, steadily expanding, and sustainable source of revenue for investing in development and delivering essential public goods and services. Transparent DRM systems can also be a foundation for building good governance and enhancing accountability in public finance management. In addition, DRM programs can deliver major economic benefits by creating tax systems that foster more efficient private sector development.

The 2015 Addis Ababa Action Agenda on Financing for Development placed DRM front and center as a goal in its own right and as the most viable mechanism for achieving the Sustainable Development Goals. To follow up on the Addis Agenda, the Addis Tax Initiative was established, underpinning the international community's commitment to help developing countries strengthen their DRM efforts.

In seeking to improve revenue performance, developing countries face enormous challenges. These include weak administrative and enforcement capacity, an inherently narrow tax base owing to low incomes, a prevalence of informal sector activities, and a culture of low tax compliance.

Notwithstanding these challenges, many developing and transition countries—including Rwanda—have shown remarkable progress in strengthening DRM. This case study tells the story of Rwanda's successful efforts to enhance revenue system performance.

Acronyms

AFRITAC	Africa Regional Technical Assistance Center (IMF)
ASYCUDA	Automated Systems for Customs Data
ATAF	African Tax Administration Forum
CIT	corporate income tax
CITPROD	corporate income tax productivity
CITR	corporate income tax rate
CPI	Corruption Perception Index
CPIA	Country Policy and Institutional Assessment
CY	calendar year
DFID	Department for International Development
DRM	domestic revenue/resource mobilization
DTF	distance to frontier
EAC	East African Community
FY	fiscal year
GDP	gross domestic product
ICF	Investment Climate Facility for Africa
IDA	International Development Association
IMF	International Monetary Fund
IPAR-Rwanda	Institute of Policy Analysis and Research-Rwanda
M&E	Monitoring and Evaluation
MINECOFIN	Ministry of Finance and Economic Planning
na	not available
nd	no date
OTA	Office of Technical Assistance (U.S. Treasury)
PIT	personal income tax
PITPROD	Personal Income Tax Productivity
RPF	Rwanda Patriotic Front
RRA	Rwanda Revenue Authority
Rwf	Rwandan franc
SARA	semi-autonomous revenue authority
SSA	Sub-Saharan Africa
SSC	Social Security contributions
SIGTAS	Standardized Integrated Government Tax Administration System
USAID	United States Agency for International Development
VAT	value added tax
VATGCR	VAT gross compliance ratio
VATPROD	VAT productivity

Domestic Resource Mobilization Case Study: Rwanda

Rwanda gained its independence from Belgium in 1962, but had intermittent internal, violent conflict for the next three decades, culminating in the Genocide of 1994. The genocide and the instability leading up to it caused a collapse of both the economy and national institutions during 1994-95 – although that period was followed by a strong rebound in the late 1990s.

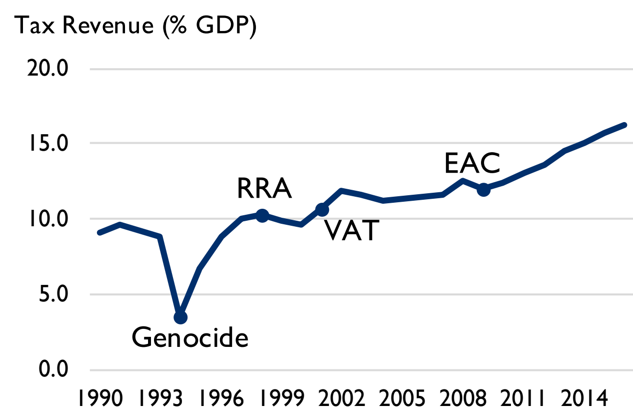
In 2000, Rwanda began the implementation of its economic development strategy called Vision 2020. Since the kickoff of Vision 2020 in 2000, the economy has tripled in size, and about 15 percent of the population has risen out of extreme poverty. Annual economic growth has averaged 7.5 percent over the past 15 years (i.e., 2001 to 2016). The IMF lauds macroeconomic policy implementation that has kept a lid on debt, inflation, and fiscal balances as well as reducing Rwanda's dependency on foreign assistance.

An important component of Rwanda's development strategy has been the rebuilding and further development of its fiscal systems, primary of which is that of domestic resource mobilization (DRM).

Rwanda's Success in Improving Domestic Resource Mobilization

Rwanda has been able to increase tax revenue by about 6 percentage points of GDP over the past 17 years, as shown in Figure 1, while reducing administrative burdens on business. Key milestones in the development of DRM over the past two decades include the creation of the Rwanda Revenue Authority (RRA), introduction of the Value-Added Tax in 2001, and Rwanda's full entry into the East Africa Community's customs union.

Figure 1: Rwanda's Rising Tax Ratio, 1990-2016

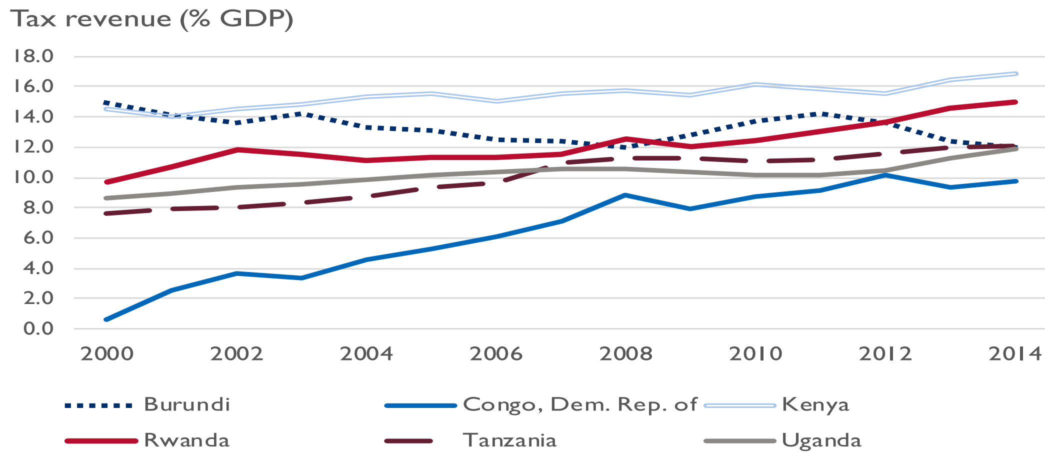


Source: Annex B.

Other countries in the region have also been making progress in raising their tax-to-GDP ratio, as shown in Figure 2 below. In 2000, Kenya and Burundi had had the highest tax ratio of the entire group, but Rwanda's tax ratio has risen more dramatically than others over this period; and by 2014 was second only to that of Kenya.

The main contributors to Rwanda's resource growth were the value added tax (VAT), personal income tax (PIT), Social Security Contributions (SSC), and a variety of non-tax revenues, all shown in Table 1.

Figure 2: Tax ratios in Rwanda and Neighboring Countries



Note: Data from IMF's World Revenue Longitudinal Data.

Table 1: Contributors to Increased Domestic Resource Mobilization, 2001 - 2015

	2001	2015	Change
	Percent of GDP		
Total resources	**12.1**	**18.9**	**6.8**
VAT	3.3	5.2	2.0
PIT	1.1	3.8	2.7
SSC	0.5	1.0	0.5
Non-Tax	0.9	2.1	1.2

Note: "Total resources" includes taxes and social security contributions.

Rwanda has been able to achieve much improvement in DRM by increasing the efficiency of collections and strengthening voluntary compliance. For instance, VAT, PIT, and corporate income tax (CIT) all showed nearly steady increases in revenue productivity (i.e., revenue collection as it relates to the tax rate and the tax base or GDP) for the entire post-2001 period. Table 2 presents revenue productivity information for Rwanda over the recent time period and compares this with revenue productivity in Sub-Saharan Africa (SSA) as a whole.

Table 2: Comparative Revenue Productivity Indicators

	Rwanda			*SSA Top Performers in 2012/13*				*SSA*	*World*
	2001	*2008*	*2016*	*Botswana*	*Lesotho*	*Mauritius*	*Seychelles*	*2012/13*	
VATPROD	0.22	0.25	0.29	0.41	0.56	0.47	0.62	0.33	0.42
VATGCR	26	31	38	77	56	64	85	49	66
CITPROD	0.06	0.07	0.10	0.19	0.85	0.18	0.25	0.12	0.15
PITPROD	na	0.07	na	0.39	0.35	0.35	na	0.20	0.22
Taxpayers to staff	na	na	161	45	na	237	na	316	677
Cost to collect $100 (in US$)	na	3.01 (2009)	2.96	0.88	1.99	1.81	na	2.38	1.24

Note: Data for Rwanda are in Annex C. All other data are from USAID Collecting Taxes database: https://www.usaid.gov/data/dataset/cdeb8a1b-3440-4e88-b6cb-81b2428f8cea

Despite the fact that revenue productivity for VAT, CIT, and PIT have all increased considerably, Rwanda still falls short of the mark compared to the Sub-Saharan Africa (SSA) averages. High performers in SSA that Rwanda might aspire to reach include Botswana, Lesotho, Mauritius, and Seychelles, all of which have high revenue productivity for PIT, CIT, and VAT. These countries also fare comparatively well in terms of cost of collection; for example, Botswana has a cost of collection of 0.88 well below even global averages. Shortfalls in revenue productivity notionally arise from two sources: administration cum compliance gap and the tax policy gap. Much of the progress over the past 17 years seems to have come from closing the administration cum compliance gap, while the tax policy gap (exemptions and other reliefs allowed to different types of taxpayers) remains wide.

Although revenue productivity information for the PIT is limited, it is nonetheless clear that PIT has played an important role in rising revenues. For instance, PIT revenue was 3.78 percent of GDP in 2015 compared to only 1.06 percent in 2001, representing more than a threefold increase. Part of this increase is due to overall tax system strengthening and enhanced compliance, but it is also clear that, with a rapidly growing and modernizing economy, more and more people both entered the formal tax-paying economy and, on average, moved into higher income tax brackets in a progressive income tax system.[1]

Rwanda's improvement in revenue collections has gone hand-in-hand with improvements in how the tax and customs system affects the country's business-enabling environment. Modernization and streamlining of procedures of the Rwanda Revenue Authority (RRA) have lowered obstacles that businesses face. Indeed, better performance by Rwanda on the Paying Taxes indicators of the World Bank's Doing Business report demonstrates this progress.[2] From 2006 to 2017, Rwanda's Paying Taxes distance-to-frontier (DTF) score, measuring the degree to which a country is applying tax best practices, rose from 75 to 85 percent.[3] Furthermore, the number of tax payments the

[1] According to the Rwanda Statistical Yearbook 2016, the percentage of Rwandans working for wages more than doubled between 2005/06 and 2013/14.

[2] For more information on the World Bank's Doing Business methodology and program, visit www.doingbusiness.org.
[3] Indicating that the country was closer to the "frontier" of best practice. The 2017 number is from the DB 2018 report.

typical company must make – one component of the Paying Taxes overall score – declined from 25 to eight per year.

An important measure of taxpayer ease of paying taxes is the degree to which taxpayers can file and pay their taxes online. In Fiscal Year (FY) 2016/17, 97 percent of large taxpayers, 96 percent of medium taxpayers, and 61 percent of small taxpayers paid their taxes online.

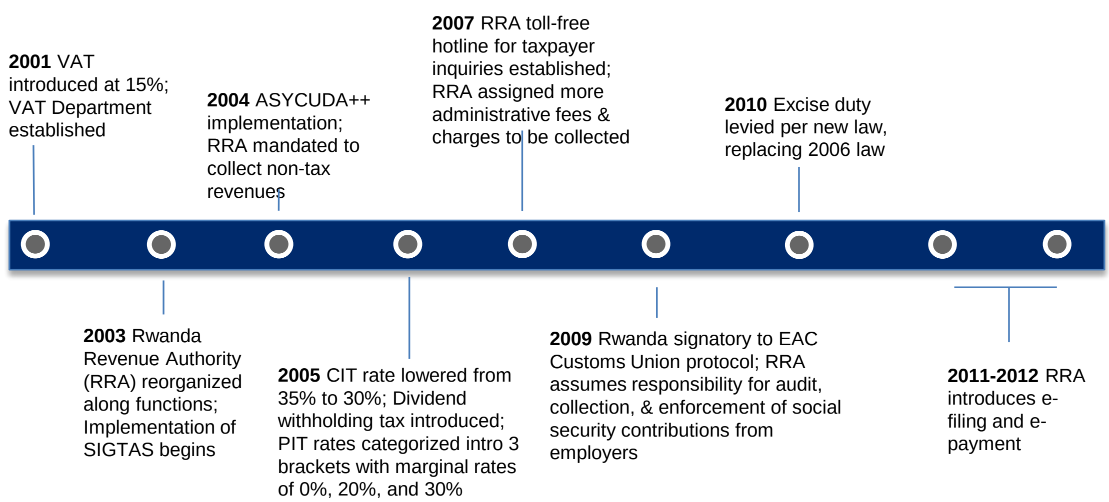
RRA's modernization efforts, such as introducing automated systems and streamlining processes and application of risk-management programs, have contributed to making it easier to conduct international trade. For instance, the Doing Business DTF score for Trading Across Borders, which measures the overall degree to which a country is applying best practices, shows considerable, steady improvement. From 2008 to 2017, Rwanda's score on this indicator rose from 22 to 72 percent.

How Rwanda Achieved These Results

Although some tax policy reforms—such as replacing a cumbersome sales tax with a modern VAT in 2001 and some subsequent income tax reforms—have been implemented, much of the credit for increasing DRM since 2001 must be given to steady improvements in tax administration and organizational change.[4] Tax administration improvements have helped lower taxpayer compliance costs, increase compliance, and positively impact overall revenue collections.

Figure 3 provides a skeletal timeline of tax reforms introduced over the last two decades. Annex A provides more detailed information.

Figure 3: Timeline of Major Tax Reforms, 2001 - 2016



Note: See Annex A.

[4] Annex A presents these changes over this period in tabular format.

Tax administration[5]

Tax administration reforms began with the establishment of the Rwandan Revenue Authority (RRA), and continued with further modernization focusing on reorganization, computerization, and streamlining of taxpayer services. In the later, more recent stages, the RRA has been devoting greater attention to risk management and tax enforcement.

The Rwandan Revenue Authority (RRA) was created in 1998 as a semi-autonomous revenue authority (SARA), subordinate to the Ministry of Finance and Economic Planning (MINECOFIN), responsible for the collection of taxes, import duties, and many non-tax revenues. Initially headed by an expatriate, a Rwandan national became the RRA's Commissioner General in 2001. Whether new hires or transferred from the Rwanda revenue service, all RRA staff were recruited after passing a qualifying exam—a process implemented with support of advisors from the United Kingdom's Department for International Development (DFID).

Reforms started in earnest in 2003, when the RRA reorganized around functions rather than tax type. As part of this reorganization, the RRA established the Domestic Taxes Department. Starting in 2004, efforts to strengthen the enforcement and control aspects of the RRA included the creation of the Large Taxpayers' Office and a Small and Medium Taxpayers' Office as components of the Domestic Taxes Department, expanded computerization, improved enforcement and penalty authorities, consolidation of VAT and income-tax identification numbers, and the development of the first comprehensive compliance strategy (2008).

The RRA has taken many steps to reduce the cost of paying taxes for business, steps that also improve the effective control over domestic taxpayers and importers, reduce administrative costs, and keep taxpayers better informed. A key backbone for these measures was RRA's development of its information technology (IT) system. Notably, by 2004, the RRA had implemented the Standardized Integrated Government Tax Administration System (SIGTAS), a business analysis software that supports data management for each taxpayer and facilitates tax returns processing, enforcement, and audit. SIGTAS implementation eventually paved the way for automation of RRA frontline taxpayer services, such as e-filing and e-payment. The RRA also improved many of its internal corporate services, such as finance and human resources.

In the early days of RRA, tax compliance requirements imposed costly constraints and delays on taxpayers. Filing for any of the domestic taxes, or even the procedures for obtaining a tax clearance certificate, required that a taxpayer physically walk into an RRA office to process paperwork and thereafter go to a bank for payment and then return to the RRA. This resulted in long queues at RRA offices as well as at banks, especially around peak filing deadline times. The finalizing of a return, filing, and payment for VAT, income tax, or Pay as You Earn (PAYE) on average took over 23 days.[6] In 2011 and 2012, however, the RRA launched e-filing and e-payment-- greatly reducing

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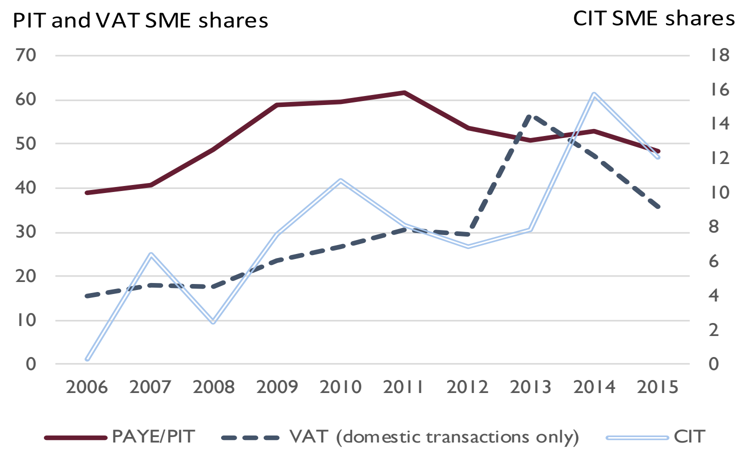
[5] This section draws from AfDB (2010) as well as from discussions with Mr. Kieran Holmes, former DFID Rwanda Revenue Authority Program Manager.

[6] For indicators mentioned here, see Investment Climate Facility for Africa's project fact sheet "Rwanda: Modernization of Tax Administration," available from www.icfafrica.org/download/document/0a291064-bb13-42c9-b7c2-a3af00bfad56.

these taxpayer compliance burdens. Similarly, RRA reports that it now takes three days to get a taxpayer compliance certificate versus the 10 days that was previously customary.[7] Taxpayers can also directly pay their tax at the bank without having to make double trips to the RRA.

Administrative enhancements at the RRA to enhance taxpayer education and assistance during 2010 and 2012 included the creation of a call center to which taxpayers can send queries and get almost immediate responses, usually by email on the same day. This was complemented by the establishment of a taxpayer training center, where taxpayers can go to learn about tax law obligations and rights, and form completion or data entry methods.

Figure 4: Share of SME payments in PIT, VAT, and CIT, 2006 - 2015



Note: Data in Annex B, author's calculations

Improved taxpayer education and assistance have been effective, in particular, in helping RRA staff to bring more of the informal sector into the tax net. According to the country's National Institute of Statistics, the informal sector in 2011 produced about 46 percent of GDP, yet had been mainly untaxed. RRA training and outreach programs sought to bring more companies hidden in the informal sector into the tax fold. Accordingly, from 2010/11 to 2011/12 SME registration doubled from 42,538 to 90,485, while the respective revenue collected rose from Rwf 385.2 billion to Rwf 651.9 billion. More broadly, however, the RRA's attention to outreach to the informal and SME sector has resulted in raising revenues. For instance, revenues from PIT from SMEs in 2006 came to 0.81 percent of GDP and was about two-thirds that from larger companies. By 2016, SMEs contributed 1.81 percent of GDP in PIT/PAYE, just about matching the larger companies' contribution, and accounting for half of the overall increase in PIT revenues during this period.[8] RRAs' successes in this area are more fully treated in a recent report by the African Tax Administration Forum-ATAF (2016).

This concentration on outreach, particularly to the small enterprise sector, has had some important revenue impact, as shown in Figure 4. In 2006, SMEs only accounted for about 0.4 percent of all company income tax revenues. By 2014, their share had increased to 15.8 percent, and dropped a bit to 12.1 percent in 2015. Less dramatic, but still important, are the increases in shares paid by

[8] Almost all PIT is paid by companies as Pay as You Earn (PAYE).

SMEs in terms of PIT/PAYE and VAT over the same period. Their PIT/PAYE share rose from 38.3 to 48.3 percent and for VAT from 15.4 to 35.9 percent.

A key facilitator of the surge in VAT from SMEs was RRA's requirement for most enterprises to begin using electronic billing machines (EBM). Such EBMs comprise two components: a certified invoicing system and a sales data controller. EBMs facilitate VAT payment and reduce the tax collection cost to the RRA, but the main intent is to control against underreporting of sales through not issuing or falsifying sales receipts.[9] Together, these reforms to the VAT collection system and toward facilitation of taxpayer declarations and payments contributed to a sharp step-up of RRA's collection of core taxes by more than 2 percent of GDP between 2010 and 2013 (see Annex B).

A study in 2014 showed that firms that had purchased and were using the EBMs by the first quarter of 2014 were paying 6.5 percent more VAT than they otherwise would have. The results are preliminary but since adoption of the EBMs was quite rapid and most firms by this time had purchased and were using the EBMs, they seem telling. These results are also consistent with the rise on VAT performance indicators over the same period. For instance, VATPROD rose from 0.23 in 2012 to 0.30 in 2014; and, VATGCR rose from 29 to 39 over the same period.

Modernization efforts in RRA's customs operations have led to streamlined processes, greater application of risk-management, introduction of an approved operator program that greatly facilitates imports from trusted traders, and overall lower costs to carry out trade while protecting revenues. In 2004, the RRA introduced UNCTAD's Automated System for Customs Data (ASYCUDA++) -- a customs operations and data system widely used among developing countries – which has led to the automation and streamlining of functions and greater control over core processes, while enhancing data collection, management, and reporting. Without ASYCUDA, it would be difficult to introduce risk management techniques that are essential to operating streamlined processes that facilitate trade while protecting revenues. The RRA has also implemented systems and processes for mobile declarations and mobile payments and established customs single-window operations at many of the country's border posts.[10]

A notable feature of the RRA is that it is has followed a continual path of improvement in its systems, methods, organization, and staff, thus ensuring improved capacity and better service to taxpayers. Experiences around the world have shown that semi-autonomous revenue authorities often face important external attacks on their autonomy and integrity, leading to declining revenue productivity after a few years of high performance. Rwanda has been able to buck this tendency, presumably because of the overall improvement in the country's governance system. Annex C treats this specific issue in greater depth.

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[9] The VAT law, as amended in 2012, requires all VAT payers whose sales exceed RWF 20 million (about $30,000) in the prior year to use electronic billing machines.

[10] Information about customs modernization provided by note from the RRA to the author in 2017.

Tax policy

Rwanda undertook its first major tax policy reform of the post-genocide era with the introduction of the value added tax (VAT) in 2001. VAT replaced the sales tax, which had many exemptions and produced little revenue. Before 2001, the sales tax had been producing generally about 2 percent of GDP in revenues, whereas VAT produced 3.3 percent of GDP in revenues in its first year, rising to 4.0 percent in 2005 and 5.2 percent in 2016. Other significant changes in tax policy included: increasing the VAT rate from 15 to 18 percent in 2002, increasing the income tax on professional remuneration in 2004, and reducing the CIT rate from 35 to 30 percent, effective in 2005.

In 2003, the RRA was assigned responsibility for collecting some non-tax revenues, such as fines and fees; revenue from public property and assets; and proceeds from the sale of government vehicles. This duty was expanded with the addition of various administrative fees in 2007 that would now be collected by the RRA instead of other government agencies. Then in 2010, the RRA also assumed responsibility for the audit, collection, and enforcement of Social Security contributions from employers.

In 2005, Rwanda revised several tax laws, resulting in a new tax code that took effect in 2006. This revision led to streamlined procedures, the harmonization of tax incentives, and lower CIT rates.

In 2008 and 2009, the Rwandan government introduced tax incentives for liquefied petroleum gas and energy-saving devices. The policy objective was to make these devices more affordable to increase penetration of their use by households and industry, but of course, it had a negative though small impact on revenue.

Rwanda became a signatory to the East African Community (EAC) Customs Union protocol effective in 2010. The protocol establishes common external tariffs, eliminates internal tariffs, and includes other reforms that would both result in lower tax revenues for the government and in lower protectionism from regional competition. For instance, the EAC required the removal of the sugar surcharge. It also required the Rwandan government to repeal the VAT charge on transport, specifically a tax on foreign trucks moving goods in and out of Rwanda.

One area where harmonization with EAC practices helped to stabilize revenue was the replacement of the ad valorem levy on fuels with a specific or unit-value fuel tax, set at a Rwandan franc (Rwf) value per liter. A key benefit of the new policy is that the government revenue per liter sold became independent of fluctuating international fuel prices. A unit tax also has the advantage over an ad valorem tax in that it actually helps to stabilize the domestic price of the excisable product. [11]

More recent reforms, such as assigning local taxes to the RRA to collect local taxes, imposition of a special levy on petroleum specifically to fund infrastructure investment, imposition of VAT on

[11] A specific unit tax can help stabilize domestic prices as well as tax revenues. However, the treasury runs the risk of declining real revenues if the tax rate is not updated on a regular basis to account for general price inflation. This was precisely the case of the Philippines where unit excises on tobacco and alcohol remained unchanged two decades. In the U.S., the federal excise tax on gasoline, which is mostly earmarked for the Highway Trust Fund, has not been adjusted since 1993 and its contribution to the general fund has been sinking ever since.

telephony, and mining royalties, have also contributed to raising the tax ratio. Together, these measures have added between 1 and 1 ½ percent of GDP to the tax ratio.[12]

Donor Support

International donors provided key support to tax modernization efforts in Rwanda. Principal among them was the United Kingdom's Department for International Development (DFID).

DFID implemented support to the RRA in several phases. The first two phases focused on the provision of advisory services to support the establishment of the RRA, including construction of and equipping of facilities. During these early years, DFID placed expatriate experts in various line management positions, combining advisory and training functions with selected implementation responsibilities. Advisers worked alongside senior management to assist in developing stronger management systems and corporate planning and monitoring processes.

Subsequent phases of DFID assistance—starting in 2002—have included support to the strengthening of organizational and human capacities, including technical, material, and capacity-building assistance in the following areas:[13]

- Review and revision of laws (e.g., new CIT, PIT, VAT, and excise laws).
- Organization-wide computerization for both domestic taxation and customs operations, namely, SIGTAS, ASYCUDA, and purchase of hardware.[14]
- Revision of procedures in line with the automation program and best international practices.
- Human resources operations, including the review and rewriting of job descriptions, roles, functions, and requirements to meet the new demands of a more modern RRA.
- Advisory and material assistance with taxpayer outreach programs, taxpayer education, and interaction with the private sector.
- Assistance with trade facilitation, establishment of one-stop border posts with neighboring countries, and introduction of cargo scanning and other technologies in customs operations.
- Installation of better infrastructure, modernization of offices, and generally greater use of IT.
- Financing for training of RRA staff, both overseas and in country. Capacity building was a high priority; this has had important spillover effects as many RRA officials have gone on to become senior players elsewhere in the government.

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[12] See IMF staff report (2017b).

[13] Based on discussion with Kieran Holmes, former DFID Rwanda Revenue Authority Program Manager.

[14] Rwanda originally installed ASYCUDA++ version but today operates ASYCUDA World version.

Through 2013, DFID helped the RRA establish its in-house training facility that provided the organization with its own internal capability to professionalize its staff. Staff development has focused on core skills and competencies regarding various specializations associated with revenue collection and various functions (inspection, audit, taxpayer services); this included proficiency in implementing work routines and sound knowledge of tax and other relevant laws and regulations and accountancy principles.

The Investment Climate Facility for Africa (ICF) provided a grant of over US$2 million to the RRA to streamline processes for domestic tax administration and raise taxpayer awareness of RRA services and procedures. According to ICF, this grant helped the RRA during 2009 to 2012 to improve online filing and payments, streamline the taxpayer clearance process, and set up a taxpayer-training center.

Since June 2014, the IMF's East Africa Regional Technical Assistance Center (in Dar es Salaam, Tanzania) has been supporting the RRA with a variety of short-term assistance activities**.** These activities have included advice, guidance, and training on compliance planning, the strengthening of enforced collections, quality assurance for electronic taxpayer services, compliance in the telecommunications sector, and project management. Similarly, since 2015 the U.S. Treasury's Office of Technical Assistance has been providing intermittent assistance to help improve business processes in areas such as audit and debt management, taxpayer segmentation, and dispute resolution (appeals).

Unfinished Business

Despite its overall success in increasing compliance, system efficiency, and revenue – as reflected in steady improvements in productivity indicators related to VAT, CIT, and PIT – Rwanda's CIT and VAT revenue productivity remain low compared to worldwide averages, as illustrated in Table 2. For the CIT and VAT, tax incentives are a major contributing factor. For instance, in recent years, in an effort to substitute domestic products (especially textiles and leather products, cement, computers, and others) for imported goods, the Rwandan government has offered business tax incentives by eliminating VAT on imported inputs. These tax incentives cost the treasury revenue. For instance, according to FYRRA (2017), in FY 2016/17 revenues forgone on domestic taxation came to 38 percent of domestic tax collections, and revenue foregone due to exemptions granted on imports amounted to 34 percent of customs collections. Almost all domestic tax expenditures were from VAT exemptions.

Continue strengthening the RRA

The RRA must continue to build and strengthen its systems, approaches, and staff. Two areas in which the RRA might make focused efforts include improving the taxpayer registry and the methods employed for mitigating compliance risks. Both of these areas have been mentioned in the RRA's most recent strategic plan and in advisory and diagnostic mission reports.

Control costs and raise more revenue

One area that has received scant attention but warrants examination is how to improve RRA efficiency, in terms of reducing the cost of collecting revenue. In 2004, it cost the RRA about Rwf

2.60 to collect Rwf 100. By the later years of the same decade, this cost had risen to about Rwf 3.30, and by 2014, it had declined to about Rwf 2.01. In the most recent fiscal year, FY 2016/17, the cost of collection had again risen, reaching Rwf 2.96. Tax collection in Africa is expensive for various reasons. Nonetheless, the three SSA countries with high revenue productivity, mentioned earlier, have lower cost ratios than Rwanda, namely, Botswana at 0.88, Lesotho at 1.99, and Mauritius at 1.81.[15] The worldwide average cost of a national tax system is at less than 1 percent of revenues. The RRA and the Ministry of Finance and Economic Planning must undertake efforts to assess the most effective means of reducing this cost of tax administration, without, of course, reducing tax revenue productivity or taxpayer services.

Improve tax policy and policy analysis

There is room for improving tax policy and tax policy analysis to reduce the tax policy gap.

For the VAT and CIT, tax incentives have created a large policy gap while it is not clear what has been their impact on business, investment, and job creation.

The RRA and MINECOFIN have limited staff capacity to perform tax policy analysis or estimate the economic impacts of revenue measures. This issue was raised in a 2008 program evaluation by DFID, but has not been addressed by the Rwandan government or any international donors. This may be one reason for introducing tax measures that run counter to other economic objectives.

Lessons Learned

DRM assistance in Rwanda has yielded considerable value for money. Most donor assistance during 1996-2013 came from DFID, while international programs of the IMF, the Investment Climate Facility for Africa, and others have continued more recently. The total value of this assistance, despite being one of the largest donor tax assistance programs in Africa over the past two decades, has not exceeded US$40 million—an amount that is less than the amount the RRA collects in any three weeks, according to several DFID documents. Donor assistance did not create the Rwandan tax system, but it certainly played a role in its design and implementation.

An unusual feature of DFID assistance included providing expat experts for several years as full-time, resident line managers at a leadership level in the RRA. This was a rather unusual approach—though Burundi did the same—but there are no means to assess how fruitful this measure was, whether it should be repeated elsewhere, and if so, under what conditions

The key lessons learned are as follows:

First, *revenue mobilization is a cumulative process.* While the implementation of VAT is one major tax policy reform, the case of Rwanda shows that a continual series of relatively small improvements in tax administration coupled with sensible but smaller tax policy measures can have meaningful impact on overall revenue collections over the years. For instance, the rollout of EBMs along with enhanced support to voluntary compliance and taxpayer outreach has each had incremental impact on compliance and revenue performance.

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[15] Data from USAID Collecting Taxes 2012-13.

Second, *DRM success requires strong political, economic, and institutional foundations*. The durability of the RRA owes much to an enabling external environment of good governance and the rule of law to curb corruption and ward off political interference. Indeed, RRA modernization has benefited from a stable political and economic environment as well as from sustained, strong political support.

Third, *better monitoring and evaluation (M&E) of DRM projects* is sorely needed. Although the DFID project and the ICF produced reports on program objectives and outputs, it is difficult, from a review of their reports, to attribute key successes in boosting revenue or cutting taxpayer burdens to specific changes in policy, administration, or other factors that helped MINECOFIN or RRA to achieve specific results. The assessment of the impact of EBMs on VAT revenues is a notable exception and serves as an example of the type of M&E that can be useful.

Some indicators that DRM projects, especially those whose objectives include improving the business-enabling environment, should consider include[16]

- *Taxpayer cost of compliance surveys,* which are a relatively low-cost way of assessing how much businesses spend merely on complying with tax law and regulations. This method can serve to both target reforms and assess the economic impact of reform.[17]
- *Savings to taxpayers* in terms of queuing, record keeping, data management, and filing of forms both ex ante and ex post from innovations such as e-filing, e-payments, elimination of nuisance taxes, consolidation of taxes, charges and fees, among others.
- *Revenue impacts*, ex ante and ex post, from specific administrative measures, such as cleansing the taxpayer registry, reregistration, implementation of risk-management of audit system, and specialized training in fields such as audit of the financial and insurance sectors.
- *Saving in tax administration staff and related costs* that arise from certain modernization and streamlining of processes, such as online filing, online taxpayer compliance certifications, and risk-based audit selection. Such saving can be redirected to priority areas, such as collections and audit of high-risk, high net worth taxpayers.

[16] This lesson learned repeats that found in the Bosnia and Herzegovina DRM Case Study of this same series.

[17] See Coolidge, Ilic, and Kisunko (2011) for in-depth discussion of how to conduct a taxpayer cost of compliance survey.

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Annex A: Tax Policy and Administration Milestones

<table>
<tr><th>Year</th><th>Policy</th><th>Administration</th></tr>
<tr><td>1994</td><td colspan="2">Genocide and Provisional Constitution</td></tr>
<tr><td>1997</td><td></td><td>RRA Act enacted</td></tr>
<tr><td>1998</td><td></td><td>- RRA operations start under the Ministry of Finance and Economic Planning. First Commissioner General appointed: was an expatriate expert funded by DFID.
- All former tax service staff required to pass external exams</td></tr>
<tr><td>2000</td><td></td><td>Tax Advisory Councils established in 2000 with local government and opinion leaders to mobilize the public such that the RRA tax education team can address tax issues. Tax Advisory Councils started with the presence of original 10 Provinces and later were extended to an addiitonal 4 Provinces, the city of Kigali, and the 30 districts across the country.</td></tr>
<tr><td>2001</td><td>Rwanda repeals sales tax, enacts VAT Code, and raises VAT rate from 15% to 18%</td><td rowspan="2">- 2001 Rwandan named as Commissioner General
- New, national constitution enacted
- Many RRA managers replaced with more junior professionals
- VAT Department established
- Taxpayers' Day created. Every year, a new theme is developed in line with the RRA's commitment to customer care, better tax service approaches, and tax education campaign</td></tr>
<tr><td>2002</td><td></td></tr>
<tr><td>2003</td><td>Ministerial order modifies VAT</td><td>- RRA reorganized along functional lines
- RRA initiates implementation of the Standardized Integrated Government Tax Administration System (SIGTAS)</td></tr>
<tr><td>2004</td><td></td><td>- RRA mandated to collect more non-tax revenues
- VAT registry updated
- Tax training institution established
- RRA implements ASYCUDA</td></tr>
</table>

<table>
<tr><th>Year</th><th>Policy</th><th>Administration</th></tr>
<tr><td>2005</td><td>- Law 26/2005 provides for excise tax reform and more sanctions
- CIT rate lowered from 35% (since 1997) to 30%
- New income tax legislation, through Law No. 16 of 2005. The top marginal corporate and personal income tax rates are 30%. Personal income tax rates are progressive with income categorized into three brackets with marginal rates of 0%, 20%, and 30%
- 4% annual turnover tax on intermediate business owners (i.e., an alternative small business tax);
- Dividend withholding tax introduced
- Depreciation allowances on capital assets rationalized and simplified</td><td>Law No. 25 of 2005, enacted to improve tax collection, set up audit procedures, strengthen tax appeals process, and introduce speedy sanctions and penalties for tax evasion</td></tr>
<tr><td>2007</td><td></td><td>- Additional administrative fees and charges assigned to RRA
- RRA introduces toll-free telephone/hot line in October 2007 to enable taxpayers lodge in their inquiries and any tax-related information free of charge</td></tr>
<tr><td>2009</td><td rowspan="2">- Rwanda signatory to the EAC Customs Union protocol in July 2009. The EAC Customs Union protocol is enshrined into the East African Community Customs Management Act of 2004. The protocol establishes common external tariffs, eliminating internal tariffs.
- EAC: Harmonization of Rwanda's tax regime and administration with that of the EAC (in 2009 and 2010)
- Excise duty levied per new Law No 28/2010, which modifies the 2006 Law. Excise on import based CIF on arrival in Kigali and on local products on the selling price exclusive of taxes
- Tax incentives introduced for liquefied petroleum gas and energy-saving devices
- Removal of the sugar surcharge in Law No. 71 of 2008.
- VAT charge on transport revised. This was a tax on foreign trucks transporting goods in and out of Rwanda. It was introduced to ensure the competitiveness of Rwandan transporters.</td><td>RRA assumes responsibility for the audit, collection, and enforcement of Social Security contributions from employers</td></tr>
<tr><td>2010</td><td></td></tr>
<tr><td>2011</td><td></td><td>RRA introduces e-filing and e-payment</td></tr>
<tr><td>2012</td><td></td><td>RRA migrates to ASYCUDA World</td></tr>
</table>

Year	Policy	Administration
2013		August 2013, new legislation requiring VAT firms to purchase Electronic Billing Machines (EBMs) from RRA-authorized vendors. EBMs produce certified receipts and provide information in electronic form to RRA and others, on automated basis. The intent of the EBM is to reduce under reporting of sales. By end 2014, about 80% VAT firms were using EBMs.

Annex B: Economic, Revenue, and Revenue Performance Data

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Economic Data																
GDP, nominal Rwf billions	205.7	229.9	261.1	271.2	168.2	324.8	411.6	546.4	605.5	606.8	676.0	742.0	797.0	993.0	1,206.0	1,440.0
Real GDP growth per year	-	11.8	13.6	3.9	-38.0	93.2	26.7	32.7	10.8	0.2	11.4	8.5	13.2	2.2	7.5	9.4
Household consumption, % GDP	83.7	84.7	82.6	84.3	137.3	96.9	94.3	94.5	92.8	86.2	86.5	83.3	83.6	82.0	80.4	79.8
Imports, % GDP	14.1	18.1	18.3	20.5	64.8	25.8	26.2	25.7	23.2	24.5	24.8	24.3	23.7	23.6	24.8	25.2
Exports, % GDP	5.6	7.3	5.6	5.2	6.3	5.2	6.0	7.8	5.6	6.3	6.4	8.5	7.0	8.5	11.1	11.5
Net ODA, % Gross National Income	11.3	18.9	17.3	18.1	94.9	53.5	34.0	12.5	17.8	20.7	18.7	18.4	21.7	18.5	23.9	22.4
Tax Revenue Data																
Total Tax, % GDP	9.1	9.6	9.3	8.8	3.6	6.7	8.8	10.1	10.3	10.0	9.7	10.7	11.9	11.6	11.2	11.3
Direct taxes, % GDP	2.4	2.1	2.2	2.2	0.9	0.9	2.4	2.6	2.9	2.7	2.7	3.2	3.7	3.5	3.1	3.5
Taxes on goods and services, % GDP	3.6	3.8	3.5	3.8	1.4	3.1	3.5	4.0	4.7	5.5	5.2	5.5	6.0	5.8	5.8	5.8
Taxes on international trade, % GDP	2.9	3.4	3.3	2.7	1.3	2.7	2.8	3.4	2.6	1.9	1.7	1.9	2.1	2.2	2.2	2.0
PIT/PAYE, % GDP	1.01	-	0.84	-	0.68	-	0.49	0.79	0.66	0.95	0.98	1.06	1.28	1.57	1.71	1.71
CIT, % GDP	0.45	-	0.27	-	0.58	-	1.49	1.81	2.32	1.82	1.67	2.16	2.42	1.91	1.39	1.76
- Income tax small business	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Income tax large business	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VAT/Sales, % GDP	-	-	-	-	-	-	2.6	1.4	2.0	2.1	2.0	3.3	3.8	3.9	3.9	4.0
- Imports, % GDP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Domestic transactions, % GDP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
small business, % GDP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
large business, % GDP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Non-tax revenue, % GDP	1.4	1.4	1.3	0.7	0.0	0.4	0.8	0.6	0.6	0.6	0.5	0.9	0.8	0.8	1.0	1.2
SSC, % GDP	-	-	-	-	-	-	0.30	0.35	0.41	0.48	0.51	0.51	0.54	0.59	0.90	0.83
Revenue Performance Data																
VAT rate	-	-	-	-	-	-	-	-	-	-	-	15	18	18	18	18
VATPROD	-	-	-	-	-	-	-	-	-	-	-	0.22	0.21	0.21	0.22	0.22
VAT GCR	-	-	-	-	-	-	-	-	-	-	-	26.1	25.0	26.1	26.8	27.9
VAT % from Imports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CITR rate	-	-	-	-	-	-	35%	35%	35%	35%	35%	35%	35%	35%	35%	30%
CITPROD	-	-	-	-	-	-	0.04	0.05	0.07	0.05	0.05	0.06	0.07	0.05	0.04	0.06
PITPROD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COST (tax admin cost/$100 revenue)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-
DB Paying Tax DTF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DB Paying Tax Payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DB Paying Tax Time	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trading across borders DTF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trading across borders, cost to import $	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firms expected to give gifts in meetings with tax officials (% of firms)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Economic Data												
GDP, nominal, in Rwf billions	1,716.0	2,065.0	2,623.0	3,017.0	3,323.0	3,846.0	4,435.0	4,864.0	5,389.0	5,837.0	6,525.8	-
Real GDP growth per year	9.2	7.6	11.2	6.3	7.3	7.9	8.8	4.7	7.0	7.0	11.8	-
Household consumption, % GDP	78.7	75.2	79.9	80.8	80.8	80.2	79.4	77.8	77.8	79.6	76.8	-
Imports, % GDP	25.0	25.2	29.8	29.7	30.0	30.6	31.9	31.9	32.9	35.1	14.4	-
Exports, % GDP	12.1	15.7	12.6	11.7	12.0	13.8	12.8	14.1	14.7	14.3	15.0	-
Net ODA, % Gross National Income	19.4	18.9	19.4	17.5	18.0	19.6	12.2	14.5	13.2	13.4	-	-
												-
Tax Revenue Data												-
Total Tax, % GDP	11.5	11.6	12.5	12.1	12.4	13.0	13.6	14.6	15.0	15.8	15.6	-
Direct taxes, % GDP	3.7	4.1	4.6	4.5	4.9	5.2	6.5	6.4	6.1	6.4	-	-
Taxes on goods and services, % GDP	5.6	5.9	6.2	6.1	6.5	6.9	6.9	7.1	7.8	7.7	-	-
Taxes on international trade, % GDP	2.0	1.7	1.7	1.4	1.0	1.1	1.1	1.1	1.1	1.2	-	-
PIT/PAYE, % GDP	2.09	2.41	2.50	2.73	3.09	3.25	3.56	3.80	3.62	3.77	3.78	-
CIT, % GDP	1.63	1.73	2.15	1.75	1.71	1.83	1.99	2.54	2.45	2.16	2.86	-
- Income tax small business	0.01	0.11	0.05	0.13	0.18	0.15	0.14	0.20	0.39	0.26	0.46	-
- Income tax large business	1.63	1.62	2.10	1.62	1.53	1.68	1.85	2.34	2.06	1.90	2.40	-
VAT/Sales, % GDP	3.9	4.1	4.5	4.1	4.0	4.1	4.2	5.8	5.5	5.2	5.2	-
- Imports, % GDP	1.8	1.7	2.0	1.8	1.5	1.6	1.7	0.8	1.3	1.8	1.7	-
- Domestic transactions, % GDP	2.1	2.4	2.5	2.4	2.4	2.5	2.5	5.1	4.1	3.4	3.6	-
small business, % GDP	0.3	0.4	0.4	0.6	0.6	0.8	0.7	2.9	2.0	1.2	1.2	-
large business, % GDP	1.8	2.0	2.0	1.8	1.8	1.7	1.8	2.2	2.2	2.2	2.3	-
Non-tax revenue, % GDP	0.8	0.7	2.0	0.5	0.5	1.0	1.2	1.9	1.7	2.1	-	-
SSC, % GDP	0.66	0.80	0.89	0.85	0.85	0.93	0.97	1.09	1.03	1.02	-	-

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenue Performance Data												
VAT rate	18	18	18	18	18	18	18	18	18	18	18	18
VATPROD	0.22	0.23	0.25	0.23	0.22	0.23	0.23	0.32	0.30	0.29	0.29	-
VAT GCR	27.7	30.5	31.0	28.5	27.3	28.1	29.4	41.6	39.0	36.5	37.9	-
VAT % from imports	46%	42%	45%	43%	39%	38%	40%	13%	24%	30%	30%	-
CITR rate	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	-
CITPROD	0.05	0.06	0.07	0.06	0.06	0.06	0.08	0.09	0.08	0.07	0.10	-
PITPROD	-	-	0.07	0.09	0.09	0.09	0.18	-	-	-	-	-
COST (tax admin cost/$100 revenue)	-	-	-	3.01	3.31	3.31	3.31	-	-	2.01	2.96	-
DB Paying Tax DTF	74.5	74.5	76.44	76.91	78.03	78.64	83.09	83.93	80.76	80.96	77.03	74.78
DB Paying Tax Payments	25	25	25	25	25	25	17	17	25	25	25	29
DB Paying Tax Time	168	168	168	160	160	148	148	134	123	119	109	124
Trading across borders DTF	-	-	22.09	30.32	38.04	44.45	47.87	49.42	51.84	75.27	61.15	72.44
Trading across borders, cost to import $	5369	4904	5460	5034	4441	4073	3974	3699	3491	4990	-	-
Firms expected to give gifts in meetings with tax officials (% of firms)	4.9	-	-	-	-	-	-	-	-	-	-	-

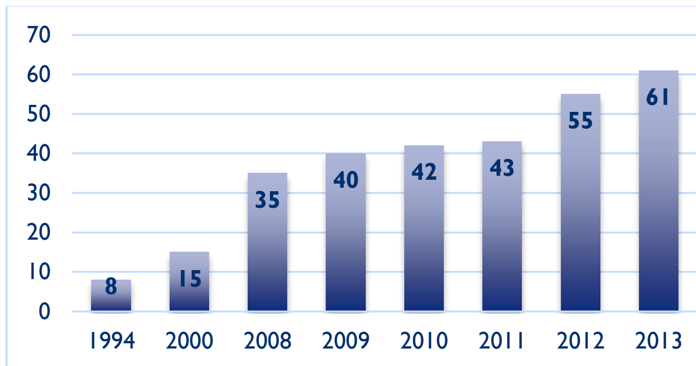
NOTES:
- Not Available
Data sources:
GDP 90-99 from World Development Indicators (WDI), 2000-15 from MINECOFIN
ODA, Exports, Imports from WDI
Tax revenue total, 90-2005 OECD, 2006-2017 RRA
PIT 90-96 from WDI, 97-05 OECD, 06-16 RRA
CIT 90-96 from WDI, 97-05 OECD, 06-16 RRA
SSC from OECD
Customs duties from OECD
CIT rate from RRA, laws,
USAID Collecting Taxes: https://www.usaid.gov/data/dataset/cdeb8a1b-3440-4e88-b6cb-81b2428f8cea.

Paying Taxes and Trading Across Borders from doingbusiness.org
CITPROD, VATGCR author's calculations
PITPROD USAID Collecting Taxes
COST from USAID Collecting Taxes, except for 2015 and 2016 from RRA
Information about tax revenue performance indicators is available at the following USAID website:
https://www.usaid.gov/opengov/developer/datasets/Collecting%20Taxes_About%20the%20indicators.pdf.

Annex C: The Durable Rwanda Revenue Authority

Converting a ministry of finance's tax department into a semi-autonomous revenue authority (SARA), when coupled with other modernization efforts, can yield high returns—and quickly. Experience shows, however, that once a new level of tax receipts is attained, it often plateaus or even declines. In some countries, moreover, there seems to be no clear revenue performance enhancement associated with the transition to a SARA.

Figure C.1: Number of SARAs, 1994-2013



Source: Jenkins (1994), Taliercio (2000), USAID Collecting Taxes data from 2008/07 – 2012/13

In countries where revenue performance has peaked and then receded, two types of pressure cause backsliding. First, the very success of the SARA, in terms of increasing revenues, makes it a target for politically well-placed, powerful interests that would hijack the SARA for their own or their political party's purposes, disregarding the interest of the government and the people. Second, ministers of finance—who play an important role in gathering and allocating resources and in attaining fiscal balance—are often opposed to the very autonomy that makes the SARA a SARA.

Just as SARA failures result from weak external governance and poor rule of law, a governance approach must be taken to ensure that SARAs are protected from external interference and thereby able to exert a more durable influence.

A Review of the Record

Taliercio (2000) explores the creation of SARAs from two perspectives. First, Taliercio examines the premise that greater autonomy in the tax administration will lead to *impressions* of greater organizational competence, improved tax services, and better compliance (including less tax evasion). Second, he examines the proposition that creating a SARA will signal to the private sector the government's deep commitment to reform. Based on surveys of more than 200 taxpayers in 15 countries and using regression analysis, Taliercio finds that (1) survey respondents did attribute greater credibility to reform in cases accompanied by the creation of a SARA and (2) respondents found the degree of institutional autonomy to be positively correlated with organizational performance.

Taliercio's analysis poses two problems for practitioners seeking to enhance domestic resource mobilization. First, he relies on survey respondents' *perception* of organizational performance rather than a direct measure thereof. Second, despite the assessment that organizational performance, as perceived, leads to better taxpayer service and better taxpayer compliance, he finds no statistically significant relationship between the estimated rates of tax evasion and the overall degree of institutional autonomy. The regression results indicate an 11.5 percent degree of confidence for the partial correlation of autonomy with tax evasion—which is not usually considered statistically significant in international research.

Three years later, Taliercio (2004) found that although the SARA does enhance the perceived credibility of reform and produce better organizational performance, the model had already started, nonetheless, to unravel in several countries. His case studies of SARAs in Bolivia, Mexico, Peru, and Venezuela, from the late 1980s to late 1990s, found that in each case, either the SARA's autonomy was reduced or the SARA itself was dissolved. According to Taliercio, Peru was able to withstand pressure to abolish its SARA, the Superintendencia Nacional de Administración Tributaria (SUNAT), because as an agency, it was effective in garnering support from the private corporate sector, thanks to its aggressive but fair campaigns to enforce compliance on many sectors, including both the informal sector and well-connected sectors or companies. Still, the Peruvian president decided to reinstate the SARA in the Ministry of Finance, while otherwise retaining many of its institutional features.

In Venezuela and Bolivia, SARAs took more of a low-key approach, seeking to be less disruptive of the corporate sector. In this way, however, they failed to pursue cases they should have and, thus, forfeited the grudging private sector support earned by Peru's SUNAT. Meanwhile, Bolivia's Ministry of Tax Collection, a SARA equivalent, despite apparently good performance, was dismantled within 18 months of its establishment, the only explanation being that it was merely a pilot and the pilot period had ended.

Mann (2004) described three stages of SARA development. In the first stage, leaders decide to establish a SARA and political support for its establishment coalesces. The second is the initial period when the SARA is up and running, generating considerable enthusiasm, and revenue performance is strong. In the third stage, political pressures build up and well-connected rent seekers begin to see the SARA as an opportunity to gather resources for their own purposes or as a means of patronage. This atrophy is not inevitable, but to avoid it, leadership must resist temptation, sponsor additional reforms to refresh the SARA, and mobilize external support—such as from the private sector—to protect the SARA.

Guatemala is an extreme case in point. Mann et al. (2001) documented the tremendous progress that had been made by the Superintendencia de la Administracion Tributaria (SAT, Superintendency of the Tax Administration) in just two years of full operation: compliance had risen drastically, revenues as well, and corruption had clearly declined. However, in a follow-up study, Gallagher et al. (2004) documented the declines in SAT performance during the intervening years, with staff doubling, morale shattered, corruption on the rise, and revenue performance sliding.

The reason for this decline is clear. A new president and a new minister of finance saw the bounty the SAT could offer them personally and the money it could generate for their political party. They installed a new superintendent and set about co-opting the institution. Once the next president was elected, investigations began, and several persons eventually were jailed, including the minister, the superintendent, and the president. After this purge, autonomy was restored to Guatemala's SAT, performance began to rally, and revenue began to climb again. Alas, the whole scheme to exploit the SAT was repeated only a few years later, again implicating the new president and vice president of the country, both of whom were arrested alongside their conspirators. Unlike the first case of institutional takeover, where the malfeasance was brought to a halt by a change in leadership as part of the democratic process, this second, more recent episode was addressed through the intervention of an anticorruption agency, known as the International Commission Against Impunity in Guatemala, which had been established with international support and pursued the case to the very top of the political pyramid.

Shifting the lens to Sub-Saharan Africa, Ebeke, Mansour, and Graziosi (2014) conducted an empirical analysis of three reforms introduced over the past two decades in 41 Sub-Saharan African countries, with an eye to assessing their impact on revenue performance. The three reforms are (1) the introduction of the value added tax, (2) the creation of a large taxpayers unit, and (3) the establishment of a SARA. For purposes of this report, the study's most relevant conclusion is that in these countries, revenue performance is better in the SARA cases than the non-SARA cases, other things being equal. The research also points out that the SARAs are more expensive to operate than traditional, non-autonomous tax administration and have in each case received considerable donor support.

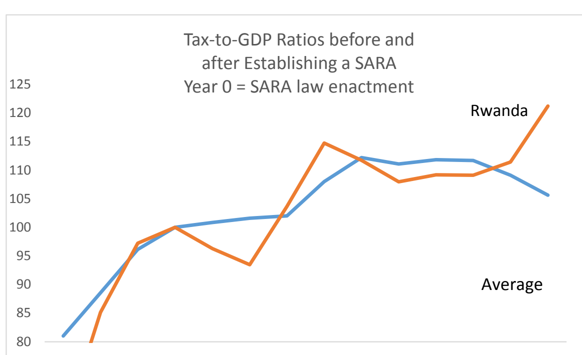
In summary, the SARA experience is diverse. Almost all experts who have reviewed the evidence agree that creating a SARA is no panacea for tax system difficulties. SARAs often (but not always) yield clear-cut success in terms of tax collection. Cross-country econometric evidence in Africa supports the idea that SARAs work—they may collect more revenue and have higher revenue productivity—but they are also more expensive. SARA performance tends to improve during its first few years of operation, but then in many cases falls off. Finally, SARAs tend to be introduced as part of broader modernization initiatives, and it is possible that this broader sweep of modernization is as responsible for the improvement in revenue performance as the creation of the SARA itself.

Rwanda bucks the trend

Rwanda has done well to maintain the progress it made from when it decided to create the RRA to its continuous modernization programs to today. As pointed out, creating revenue authorities has been seen, for the past 30 years, as a governance mechanism for improving revenue performance. But quite often, this revenue performance improvement seems to slack after a few years. This did not happen in Rwanda's case.

Figure C.2 compares the RRA's performance to the average performance of a set of revenue authorities in several comparator countries. Here, each country's tax-to-GDP ratio in the year the revenue authority was created is the base year against which all other years are indexed. The base year value is equal to 100. For instance, if a country's tax-to-

Figure C.2: RRA bucks the trend



Note: Countries and year of SARA are Botswana 2003, Guatemala 1998, Ethiopia 1997, Kenya 1996, Lesotho 2001, Mauritius 2004, Rwanda 1998, and South Africa 1997.

GDP ratio in the year it created the revenue authority were 10 percent and the next year 11 percent, then its index number would rise from 100 to 110. What is most interesting about this graph is that Rwanda, like most of the comparator countries, saw its tax ratio already starting to rise before creation of its revenue authority, then performance leveled off for a time, and finally, began to rise again. In most cases, these two phases were followed by a decline in the tax ratio. However, it is precisely at this time that revenue performance in Rwanda started to take off again.

It is important to understand how it is that Rwanda has been able to gain the apparent benefits of both modernization and creating a SARA over a period exceeding two decades.

On the one hand, the conclusion seems to be that the RRA has maintained a steady, continuing approach to ever improving its systems, methods, organization, and human resources to ensure continued renewal and ever-improving capacity and service to taxpayers. On the other hand, the fact that the RRA has not suffered any of the external attacks, unlike its counterparts in countries such as Bolivia, Guatemala, or Tanzania, makes us look to the strength and quality of governance in the country as the reason why such attacks have not taken place.

General governance in the country is considered to be of relatively high caliber by most national and international observers. There are concerns about the imbalance of power among political parties and fairness in democratic practices, but both large and petty corruption in Rwanda have been non-pervasive and even declining.

With respect to how taxpayers interact with tax officials, the World Bank's World Development Indicators show that very few taxpayers feel the need to bring a gift to their meetings with tax officers, a euphemism for paying bribes. In a comparative survey of corruption and bribery in the East African Community, Hardoon and Heinrich (2011) found that Rwandan, Kenyan, and South Sudanese taxpayers (those who recently had meetings with tax officials) were the least likely to pay bribes (Rwanda and Kenya 14 %, South Sudan 13%) compared to all the other countries, namely Burundi (29%), Ethiopia (41%), South Sudan (38%), Tanzania (23%), and Uganda (39%).

From perhaps a broader perspective, Transparency International's (2015) Corruption Perceptions Index dataset, shows Rwanda tied in the ranking with South Korea as the 43rd least corrupt countries.[18] This is a big improvement from 2007, when Rwanda ranked 111th in the index worldwide. From the 2011 Transparency International study, when asked whether corruption was declining, increasing, or remaining the same, 54 percent of those surveyed in Rwanda indicated that they believed it was declining. This is greater than any of the other East African Community countries, whose scores were Burundi (6%), Ethiopia (41%), Kenya (48%), Sudan (16%), South Sudan (16%), Tanzania (21%), and Uganda (21%).

Add to these measures of corruption and perceived corruption the World Bank's Country Policy and Institutional Assessment (CPIA), which in 2015 showed Rwanda to have the highest score among the 75 IDA-eligible countries that participate in the CPIA program.

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[18] Information about the Transparency International's Corruption Perceptions Index is available at: https://www.transparency.org/news/feature/corruption_perceptions_index_2016.

It seems that Rwanda's general good governance, general lack of corruption, lack of corruption in taxation, and apparent improvement in the battle against corruption may be playing an important role in preserving the institutional reforms and revenue performance gains of the past 25 years.