Introduction

In low- and middle-income countries, where resources are scarce, tax reform is a mechanism to generate additional domestic revenues. As government resources grow, the health sector has the potential to benefit from increased allocations. However, increased government spending on health depends significantly on whether it is a political priority. Rwanda provides an example of a country that has been committed to improving both its tax and health systems. Moreover, Rwanda has recognized the critical linkage between domestic resource mobilization and sustainable economic development, including increasing public financing for health.

In 1994, Rwanda emerged from a four-year civil war and genocide that resulted in tremendous human loss and devastated the country’s already weak infrastructure and economy. As a result of the genocide, life expectancy fell to less than 30 years and GDP dropped by nearly 40 percent. Since then, there has been a strong political will to restore the country. In 2000, Rwanda announced its ambitious goal of becoming a middle-income country by 2020. To meet this target, the Rwandan government established Vision 2020, a long-term strategic plan that set Rwanda’s development priorities (Figure 1). One pillar, human resource development and a knowledge-based economy, includes a joint focus on (1) health and population and (2) education.
As Rwanda has strived to meet the goals of Vision 2020, it has increased its development-related investments.\textsuperscript{4,5} This has required Rwanda to mobilize greater domestic resources, particularly as it aims to reduce its dependency on foreign aid. Vision 2020 identified expanding the tax base as a critical strategy to raise domestic revenues, providing a strong motivation for tax reform.\textsuperscript{4,5} As a result of a series of reforms, tax revenue as a percent of GDP rose from 3.6% in 1994 to 13.4% in 2013.\textsuperscript{2}

**Figure 1. Key Components of Vision 2020**

<table>
<thead>
<tr>
<th>Pillars</th>
<th>Cross-Cutting Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Good governance and a capable state</td>
<td>1. Gender equality</td>
</tr>
<tr>
<td>2. Human resource development and a knowledge-based economy</td>
<td>2. Protection of environment and sustainable natural resources management</td>
</tr>
<tr>
<td>3. A private sector-led economy</td>
<td>3. Science and technology, including information and communications technology</td>
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<tr>
<td>4. Infrastructure development</td>
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<tr>
<td>5. Productive and market-oriented agriculture</td>
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<tr>
<td>6. Regional and international economic integration</td>
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Improvements in tax generation have benefitted the health sector. Rwanda has focused on investments in human resource development, as it has recognized the socioeconomic value of building a healthy and educated population.\textsuperscript{5} In the early 2000s, Rwanda “reoriented” its government expenditures toward basic health and education.\textsuperscript{6} Health and education continue to remain a high priority and are among the top three funding areas in the Economic Development and Poverty Reduction Strategy II (2013-2018) – Rwanda’s most recent medium-term development strategy.\textsuperscript{7}

This case study looks at the tax reforms Rwanda has introduced over the past two decades to increase domestic revenue collection, the subsequent improvements in revenue generation, and the impact these changes have had on the health sector.

**Overview of Key Tax Reforms**

Over the past two decades, Rwanda’s tax system has undergone major policy and administrative reforms, which have contributed to widespread improvements across the revenue system.

**Pre-Reform Tax System**

Rwanda’s tax system dates back to colonial rule (1885-1962), when the first tax legislation was passed. This included a graduated tax, a tax on real property, and a profits tax. Six years after gaining independence, the country enacted laws to introduce customs and excise duties in 1968, but otherwise made few changes to the colonial era tax system.\textsuperscript{4} Additionally, the tax system suffered from weak administration and enforcement, which led to poor tax collection and low tax revenue ratios, as characterized by the IMF.\textsuperscript{8}

This issue was further exacerbated during the genocide, when the average tax revenue ratio fell from 8.2 percent to 3.6 percent of GDP.\textsuperscript{9} In comparison, Burundi, which had a similar GDP per capita and neighbors Rwanda, had an average tax revenue ratio of approximately 15 percent of GDP during the same time period.\textsuperscript{2,2}

**Tax Reform Initiatives\textsuperscript{4,8,10}**

In the immediate aftermath of the genocide, Rwanda sought to quickly stabilize the economy. During this time, the Government implemented a series of tax policy reforms to increase domestic revenues.\textsuperscript{9} In 1997, it also established the Rwanda Revenue Authority (RRA), which is a semi-autonomous revenue authority that is responsible for revenue collection and enforcement. Since 2000, Vision 2020 has provided Rwanda with a strong impetus to improve its capacity to mobilize domestic resources.

\textsuperscript{a} Tax revenue ratio data for sub-Saharan African countries and low- and middle-income countries are not available for this period. Burundi has been used as a reasonable, but imperfect, comparison.
Many of the reforms have helped the tax system align with the objectives of Vision 2020, including macroeconomic stability and reduced dependence on foreign assistance (Table 1). Tax policy reforms since the early 2000s have focused on widening the tax base, including the establishment of a Value-Added Tax (VAT) in 2001, as well as encouraging foreign direct investment and strengthening tax compliance. In 2000, Rwanda also began to roll-out its National Decentralisation Policy, which involved fiscal decentralization.

Table 1. Overview of Key Tax Policy and Administrative Reforms

<table>
<thead>
<tr>
<th>Mid-90s to 2000</th>
<th>Policy Reforms</th>
<th>Administrative Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rapid revenue generation</strong></td>
<td>• Enactment of temporary export tax on coffee</td>
<td>• Creation of Large Enterprise Unit to collect taxes from 150 largest taxpayers – precursor to RRA</td>
</tr>
<tr>
<td></td>
<td>• Standardization of sales tax for domestically produced goods and imports</td>
<td>• Establishment of Rwanda Revenue Authority (RRA) (1997)</td>
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<td></td>
<td>• Increased excise tax for alcohol, soft drinks, and petroleum</td>
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<table>
<thead>
<tr>
<th>Early to mid-2000s</th>
<th>Policy Reforms</th>
<th>Administrative Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Widening the tax base</strong></td>
<td>• Introduction of VAT, replacing sales tax (2001)</td>
<td>• Reorganization along functional lines vs. tax categories (2003-4)</td>
</tr>
<tr>
<td></td>
<td>• Enactment of new income tax legislation (2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establishment of new excise taxes (2006)</td>
<td></td>
</tr>
</tbody>
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|                                                    | • Implementation of laws to improve tax collection, create audit and appeals protocols, and institute penalties for tax evasion (2005-6) | • Introduction of other software to support customs operations. HR management, financial management, taxpayer audits |

<table>
<thead>
<tr>
<th>Late 2000s to 2011</th>
<th>Policy Reforms</th>
<th>Administrative Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synchronize policies with East African Community (EAC) Customs Union</strong></td>
<td>• Joins EAC Customs Union (2009)</td>
<td>• Collection of social security funds (2010)</td>
</tr>
<tr>
<td></td>
<td>• Enactment of policies to comply with EAC practices – i.e. elimination of internal tariffs, establishment of common external tariff</td>
<td>• Introduction of electronic filing (2010-13)</td>
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<tr>
<th></th>
<th>Modernization (cont’d)</th>
<th>Implementation of electronic tax registration</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• Collection of social security funds (2010)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Introduction of electronic filing (2010-13)</td>
<td></td>
</tr>
</tbody>
</table>

Source: African Development Bank (2010); Land (2004); IMF (2000).

As part of this process, Rwanda began to channel resources collected through local tax sources, such as taxes on property, directly to districts. In 2009, Rwanda joined the East African Community (EAC) Customs Union, which led to a number of new measures to harmonize Rwanda’s tax policies with those of the EAC in order to facilitate intraregional trade. Meanwhile, Rwanda also introduced reforms to modernize and improve the efficiency of its tax administration system. In 2003, the RRA restructured its organization along functional lines (e.g. human resources, information technology, domestic taxes) rather than around specific taxes (e.g. income tax, VAT). Around the same time, the RRA began to adopt new technologies to computerize administrative processes, such as tax returns processing, taxpayer audits, and tax filing. Efforts to modernize the RRA are an ongoing process.

These reforms were heavily supported by bilateral and multilateral organizations. Most notably, DFID provided long-term technical assistance from 1998 to 2010 and invested approximately £24 million in the RRA over this period. DFID’s support to the RRA included giving guidance on the creation of laws and regulations for its establishment, providing technical assistance across all aspects of its mandate, and supplying physical infrastructure and human resource and information technology systems. The IMF also provided a resident adviser between 1997 and 1998 to help establish and develop the capacity of the RRA.

Revenue System Results

Rwanda’s efforts to improve revenue generation through tax policy and administrative reforms appear to be largely successful. Between 2000 and 2013, Rwanda’s tax revenue ratio increased by four percentage points from 9.6 to 13.4 percent of GDP, despite declining tax revenues from international trade, due to trade liberalization and integration with neighboring countries through the EAC. However, this decline in revenues from import duties was offset by increases from domestic tax revenues, particularly from taxes on income, profits, and capital gains (Figure 2). Furthermore,

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1 Between 1998 and 2010, the average exchange rate was approximately 1 GBP to 1.7 USD, making this amount approximately 40 million in USD.1
Rwanda has made improvements to facilitate the process of filing taxes in recent years. In 2015, Rwanda ranked 27\textsuperscript{th} (out of 189 countries) globally in terms of ease of paying taxes, which was a significant improvement from its ranking of 50\textsuperscript{th} (out of 178 countries) in 2008.\textsuperscript{13,14}

**Figure 2. Trends in Tax Revenue, 1990-2013**

![Graph showing trends in tax revenue, 1990-2013.](image)

Through 2011, Rwanda has also improved revenue productivity primarily through expanding the tax base, rather than raising tax rates. Corporate income taxes, personal income taxes, and value-added taxes have all increased revenue production as a share of GDP relative to the tax rate (Table 2).\textsuperscript{15} This broadening of the tax base is due to increased compliance brought about by strengthening the tax administration system.

**Impact on Health Financing**

As domestic resources have expanded through taxation in Rwanda, government spending on health has also increased, both relative to trends in tax revenue and other government expenditure, and as a share of general government expenditures (WHO) and GDP. Political support for health has facilitated increased allocations to this sector, which have led to substantial health system improvements.

**Government Health Spending**

Between 2000 and 2013, per-capita government spending on health rose nearly seven-fold, from 4 to 26 in constant prices (2005 US$) (Figure 3).\textsuperscript{17} This rate of increase far exceeded changes in tax revenue, overall government spending, and spending on education, which all grew between two- and three-fold over the same time period. Government health spending as a share of general government expenditures has also grown since 2000,

### Table 2. Revenue Productivity Indicators, Rwanda\textsuperscript{c}

<table>
<thead>
<tr>
<th>Type of tax</th>
<th>Acronym</th>
<th>Definition</th>
<th>2007</th>
<th>2008</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate income tax</td>
<td>CITPROD</td>
<td>The portion of GDP in revenue that is mobilized for each point of the average tax rate</td>
<td>0.04</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Personal income tax</td>
<td>PITPROD</td>
<td></td>
<td>0.07</td>
<td>0.09</td>
<td>0.18</td>
</tr>
<tr>
<td>Value-added tax</td>
<td>VATGCR</td>
<td>The ratio of potential VAT collections — if all final household consumption had been taxed at the standard rate — to actual VAT collections</td>
<td>16</td>
<td>28</td>
<td>25</td>
</tr>
</tbody>
</table>

\textsuperscript{c} Definitions from USAID’s Collecting Taxes Indicator Glossary included in Paniagua and Kamenov (2014).\textsuperscript{16}

CITPROD represents how well the corporate income tax (CIT) performs in terms of revenue collection, given the tax rate. CITPROD is the portion of GDP in revenue that is mobilized for each point of CIT rate.

PITPROD provides an indication of how well the personal income tax (PIT) in a country does in terms of producing revenue. PITPROD is the portion of GDP in revenue that is mobilized for each point of the average PIT rate.

VATGCR is the VAT gross compliance ratio which is the ratio of potential VAT collections — if all final household consumption had been taxed at the standard rate — to actual VAT collections.
which suggests an increasing priority on health. This share has more than doubled during this period, from 9 percent in 2000 to 22 percent in 2013 (Figure 4). As of 2011, Rwanda is one of only two African countries that have surpassed the Abuja Declaration target of allocating 15 percent of annual government budgets towards health, even after excluding external resources. General government health expenditures (GGHE) as a share of GDP has also steadily increased, more than tripling from 2 percent in 2000 to 7 percent in 2013 (Figure 4).

Although other sources of health spending also increased between 2000 and 2013, per capita government spending on health increased more rapidly compared to per capita external resources and out-of-pocket (OOP) expenditures (Figure 5). Moreover, as a share of total health spending, government spending on health increased while spending coming from external resources declined, allowing Rwanda to make strides towards its goal of relying less on foreign aid (Figure 6).

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**Figure 3. Tax Revenue and Government Expenditures, 2000-2013**

**Figure 4. General Government Health Spending, 2000-2013**

**Figure 5. Trends in Health Expenditures, 2000-2013**

**Figure 6. Sources of Health Spending, 2000-2013**

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4 Values for general government health spending (retrieved from the Global Health Expenditure Database) include external resources provided to the government.
In 2000, external resources accounted for 52 percent of total health expenditures. By 2013, this value had fallen to 38 percent. During the same time period, financial protection in health also improved, with consumer direct out-of-pocket expenditures as a share of total health expenditures declining from 25 to 18 percent.\(^\text{17}\)

**Conditions Facilitating Allocations to Health**

A key condition that has enabled the increases in government spending on health has been public political support. The Rwandan government’s strong commitment to advancing the health of its population has allowed the sector to benefit from additional resource allocation as tax revenue has improved.\(^\text{4}\) When making resource allocation decisions, the Rwandan government has given important consideration to the potential for widespread impact on the population. For example, the government has supported the community-based health insurance (CBHI) system due to its objective of making health care accessible and affordable to all, including low-income populations. Health has also attracted government funding due to its innovative programs, such as CBHI and performance-based financing, as well as its solid track record of budget execution.\(^\text{19,20}\)

Moreover, increases in government health spending have also been shaped by the Abuja Declaration target of allocating 15 percent of the annual government budget towards health. For example, in the Economic Development and Poverty Reduction Strategy I (2008-2012), Rwanda stated its goal of increasing public expenditure on health from 12 to 15 percent of total government expenditures, as well as increasing per capita public health spending from US$11 to 20 between 2008 and 2012.\(^\text{21}\) Furthermore, in 2008, the Ministry of Health and the Ministry of Finance and Economic Planning came to a consensus that public expenditure on health as a share of total recurrent government spending would reach 15 percent by 2015.\(^\text{22}\) In the context of this political will, increases in tax revenue have enabled Rwanda to meet, and even surpass, these targets.

**Improved Health Outcomes**

Although Rwanda remains a low-income country, it has been recognized globally for its improvement in health outcomes over the last two decades.\(^\text{2,23}\) By 2013, Rwanda achieved a life expectancy of 64 years, which exceeded the average life expectancy both in sub-Saharan Africa and low-income countries.\(^\text{2}\) It is also the only sub-Saharan African country poised to meet the Millennium Development Goals by 2015.\(^\text{24}\)

Increased government health spending made possible by tax revenue gains and political prioritization of health has enabled many of these advancements.

**Conclusion**

Soe-Lin, et al. (2015) found that increasing tax revenue alone was not always associated with increased public health spending. They identified four conditions which can increase the likelihood that governments will choose to direct additional tax-derived revenue toward the health sector: (1) reprioritizing health within the government budget, (2) creation of tax funds specifically for health, (3) earmarking a proportion of tax revenue and, (4) fiscal decentralization to improve social services. Rwanda provides a compelling case for the first and second strategies and demonstrates how strategic tax reforms can catalyze new domestic resources that can be effectively invested in health.

Rwanda’s success can be attributed to strong political will to improve health; a clear vision and strategy, beginning with the recognition of the linkage between domestic resource mobilization and sustainable economic development; and international cooperation to support reform efforts. In spite of suffering one of the worst conflicts in recent history, Rwanda has made noteworthy progress in increasing both tax revenue and government health spending over the past two decades. These increases have translated into significant improvements in health.
Works Cited


The Health Finance and Governance (HFG) project works with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. Designed to fundamentally strengthen health systems, the HFG project improves health outcomes in partner countries by expanding people’s access to health care, especially to priority health services. The HFG project is a five-year (2012-2017), $209 million global project funded by the U.S. Agency for International Development under Cooperative Agreement No: AID-OAA-A-12-00080.

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