Examples of Successful DRM Reforms and the Role of International Co-operation

Discussion Paper
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Discussion Paper

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## Acronyms

- **(A)EoI**: (Automatic) Exchange of Information
- **APA**: Advance Pricing Agreements
- **ASEAN**: Association of Southeast Asian Nations
- **ARD**: Afghanistan Revenue Department
- **BEPS**: Base Erosion and Profit Shifting
- **BiH**: Bosnia and Herzegovina
- **BRT**: Business Receipts Tax
- **CADEP**: Centro de Análisis y Difusión de la Economía Paraguaya
- **CEPAL**: Comisión Económica para América Latina y el Caribe
- **CIT**: Corporate (Company) Income Tax
- **CITPROD**: Corporate Income Tax Productivity
- **DfID**: UK Department for International Development
- **DIE**: Deutsches Institut für Entwicklungspolitik
- **DRM**: Domestic Resource Mobilisation
- **EAC**: East African Community
- **ERCA**: Ethiopian Revenues and Customs Authority
- **EU**: European Union
- **FAD**: Fiscal Affairs Department
- **FfD**: Financing for Development
- **FPU**: Fiscal Policy Unit
- **GDP**: Gross Domestic Product
- **GDIT**: General Department of Taxation
- **GHS**: Ghanaian Cedi
- **GIZ**: Deutsche Gesellschaft für Internationale Zusammenarbeit
- **GIRoA**: Government of the Islamic Republic of Afghanistan
- **GOB**: Government of Bangladesh
- **GOP**: Government of Paraguay
- **GRA**: Ghana Revenue Authority
- **GVN**: Government of Vietnam
- **HMRC**: Her Majesty’s Royal Customs
- **IMF**: International Monetary Fund
- **ISTD**: Income and Sales Tax Department
- **IT**: Information Technology
- **ITC**: International Tax Compact
- **JICA**: Japanese International Cooperation Agency
- **KM**: Konvertible Mark
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<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<td>LDC</td>
<td>Least Developed Country</td>
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<td>LTO</td>
<td>Large Taxpayers Office</td>
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<td>LTU</td>
<td>Large Taxpayers Unit</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<tr>
<td>MTO</td>
<td>Medium Taxpayers Office</td>
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<td>NBR</td>
<td>Bangladesh National Board of Revenue</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OHR</td>
<td>Office of the High Representative</td>
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<td>PAYE</td>
<td>Pay as you Earn</td>
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<td>PEPFAR</td>
<td>President’s Emergency Plan for AIDS Relief</td>
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<td>PIT</td>
<td>Personal Income Tax</td>
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<td>PITPROD</td>
<td>Personal Income Tax Productivity</td>
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<td>RS</td>
<td>Republic of Serbia</td>
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<td>RRA</td>
<td>Rwanda Revenue Authority</td>
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<td>SAA</td>
<td>Stabilization and Association Agreement</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SIGTAS</td>
<td>Standardized Integrated Government Tax Administration System</td>
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<tr>
<td>SME</td>
<td>Small and Medium-Sized Enterprises</td>
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<td>SOE</td>
<td>State-Owned Enterprise</td>
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<td>SRS</td>
<td>State Revenue Service</td>
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<td>TACTS</td>
<td>Tax Administration Capacity and Taxpayer Services</td>
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<td>Tax Administration Project</td>
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<td>Taxpayer Identification Number</td>
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<td>UK</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>US</td>
<td>United States</td>
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<tr>
<td>USAID</td>
<td>US Agency for International Development</td>
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<td>USD</td>
<td>United States Dollar</td>
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<td>UTAC</td>
<td>El Salvador Transparency and Anti-Corruption Unit</td>
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<tr>
<td>VAT</td>
<td>Value Added Tax</td>
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<tr>
<td>VATGCR</td>
<td>VAT Gross Compliance Ratio</td>
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<td>WDI</td>
<td>World Development Indicators</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<td>ZRA</td>
<td>Zambia Revenue Authority</td>
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Executive Summary
This study adds to the evidence base of successful tax reforms by governments in developing countries where international support has helped.

Introduction and Background

Tax and non-tax revenue are vital components of domestic resource mobilisation (DRM), aimed at providing governments with the funds needed to invest in development, relieve poverty and deliver public services. Raising tax revenue poses many challenges for developing countries such as a difficult external environment and weak administrative capacity. Specific challenges that loom especially large in developing countries include weak tax administrations, low taxpayer morale and compliance, corruption, a small tax base and the missing reciprocal link between tax and public and social expenditures.

The implications of a more open international trading system are posing challenges for international tax matters. Developing countries rely more heavily on corporate income tax and there is a greater exposure to base erosion issues and international tax evasion. The problems are the subject of the G20/OECD Base Erosion Profit Shifting (BEPS) Project and the Global Forum on Transparency and Exchange of Information for Tax Purposes which provide tools to enhance international tax transparency and co-operation.

Experience shows that progress can be made by developing countries in the right environment. Tax to gross domestic product (GDP) ratios showed marked resilience during the global financial crisis and there is a general improving trend. Common elements of success in developing countries are sustained political commitment at the highest levels of government, administrative reforms aligned closely with policy changes, and strong leadership of the revenue administration. Different national tax reforms largely share a common ‘toolbox’. Broadly speaking, reforms in tax policy have relied primarily on broad-based taxes at moderate rates.

Aid for tax reform is relatively low, but it has proven effective. Developing countries can rely upon various actors in the international community to support their tax reforms. Aid is delivered in a number of ways. There is no one best approach to tax reform and donor programmes should be customised to fit country conditions. What matters most is ownership and leadership in the country concerned.
The Case Studies

Seven case studies form the core of this paper covering countries in Asia (Bangladesh, Vietnam and Afghanistan), Europe (Bosnia and Herzegovina, and Georgia), Latin America (Paraguay), and sub-Saharan Africa (Rwanda). The review shows the reforms carried out by these countries, the results and the international cooperation that helped achieve them.

General Findings

The general findings from the case studies include:

- Tax reform in the case countries led to significant increases of the tax/GDP ratio. Even in fragile environments revenues increased significantly.

- Tax reform can support trade liberalisation. In some country studies the contribution of import duties to tax revenues declined during the reform period.

- Tax reforms brought other quantifiable gains. Transaction costs for the public and for business were reduced in several country studies.

- DRM has an impact on development. In each of the country studies, increased revenues funded development needs, whether education, health, or the overall development budget.

Findings on International Co-operation and Assistance:

- International co-operation can make very important contributions to tax reform. External assistance supported reform in each of the case countries in a variety of ways. International co-operation was strategically important in terms of policy analysis and recommendations. International organisations in several cases undertook diagnostic studies, whether of tax policy or tax administration, which governments usually followed up with decisions to develop reform programmes and sought resources to implement them, including further technical assistance and capacity support. All the seven cases show that building local capacity – at the level of the individual, the organisation, and the enabling environment – contributes to institutional sustainability.

- Attributing reform outcomes to international assistance can be a challenge and requires robust monitoring and evaluation. This review has shown in seven countries how international co-operation can be supportive of tax reform.
Nevertheless, it is very difficult to attribute outcomes to the specific assistance or co-operation provided by donors. International organisations and donor agencies should establish robust monitoring and evaluation mechanisms. Some recent work shows how well monitored revenue gains can be attributed to both reforming governments and timely technical assistance, in areas such as transfer pricing.

- Reform is a long-term process which often implies steps forward and back. Tax reform, especially reform of the tax administration, is a long process and donors can expect that reform efforts might take a decade to have a profound impact.

**Technical Findings:**

- Tax policy reform and tax administration reform should be considered mutually reinforcing measures that help increase tax revenues. In many countries, tax policy reform and tax administration reform have complemented each other. Combining moderate tax rates with better administration has led to a substantial increase in tax revenues.

- Broadening the tax base is effective and efficient. Base broadening, whether by reducing exemptions and exonerations, or by improved audit and enforcement, has been successful in raising revenues without imposing a greater tax burden on business and society.

- Registering taxpayers is one key to increasing tax revenues. In each country study, taxpayer registers were initially in poor shape, with many people outside the system. Focused attention on building the taxpayer registry and identifying non-filers had important and immediate impact on increasing tax revenues. All countries made determined efforts, with donor support, to increase their taxpayer rolls to great effect.

- Simplified tax procedures can deliver important gains in efficiency. Clearer tax procedures –, combining income tax and VAT payments to the same office, for example – can make paying taxes easier and less costly.

- Fighting corruption is an important tool for supporting tax reform and tax collection. Corruption is a deep-seated challenge in many tax and customs systems around the world. Reducing corruption helps increase tax revenue for a government. It is also beneficial to the taxpayer who is less exposed to unscrupulous actions by officials and unfair competition created by those willing to ‘pay to play’.
I. Introduction
This study adds to the evidence base of successful tax reforms by governments in developing countries where international support has helped. The introduction summarises the challenges for developing countries. The main international actors are outlined together with the modalities of tax reform (Section 1). The main country cases (Section 2) are followed by findings and conclusions (Section 3).

Tax and non-tax revenue is a vital component of domestic resource mobilisation (DRM), that provides governments with the funds needed to invest in development, relieve poverty and deliver public services. Secure adequate revenue is essential to develop and sustain the fiscal responsibility that is needed to promote growth, and to reduce long term reliance on external funding flows, particularly development aid. Moreover, revenue is integral to strengthening the effective functioning of the state and to the social contract between governments and citizens. By encouraging dialogue between states and their citizens, the taxation process is central to more effective and accountable states.

**Challenges for Developing Countries**

Raising tax revenue poses many challenges for developing countries that have difficult external environment and weak administrative capacity. Specific challenges that loom especially large in developing countries include weak tax administrations, low taxpayer morale and compliance, corruption, a small tax base and the missing reciprocal link between tax and public and social expenditures.

Many resource-rich countries still struggle to design and implement fiscal regimes that are transparent and capable of securing a reasonable share of resource rents.

The implications of a more open international trading system raise challenges for international tax matters, with a heavier reliance of developing countries on corporate income tax and a greater exposure to base erosion issues. The problem is being addressed by the G20/OECD Base Erosion Profit Shifting (BEPS) Project and the Global Forum on Transparency and Exchange of Information for Tax Purposes which provide tools to enhance international tax transparency and co-operation.
Experience shows that progress can be made by developing countries in the right environment. DRM efforts in developing economies led to the collection of an impressive USD 7.7 trillion in tax revenue in 2012. Progress varies and half of sub-Saharan African countries still show tax ratios (i.e. tax revenues as a percentage of GDP) below 15%. Several Asian and Latin American countries fare little better. However, tax ratios showed marked resilience during the global financial crisis and there is a general improving trend (see figure 1).

Common elements of success in developing countries are sustained political commitment at the highest levels of government, administrative reforms aligned closely with policy changes, and strong leadership of the revenue administration—all of which may encounter powerful opposition.

Different national tax reforms largely share a common ‘toolbox’. Broadly speaking, reforms in tax policy have relied primarily on broad-based taxes at moderate rates. This has been accompanied by: self-assessment; tax simplification; reduction or elimination of tax preferences; rationalisation of customs duties; strengthening the fiscal base for local governments; streamlined tax regimes for micro, small

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Source:
World Development Indicators, World Bank, 2015
and medium-sized enterprises; and better tax policy analysis. Selecting from this ‘toolbox’ depends on specific country conditions. These include the level of development, the politics, the type of economic system, the size of the informal sector, and the nature of international treaty obligations.

Aid and Tax Reform

Aid for tax reform is relatively low, but it has proven effective. The share of aid specific to tax reform in the total official development assistance of OECD member countries was only 0.22% in 2012, a figure that had nonetheless risen from around 0.05% in 2006.

International support to tax reform has, in the view of many observers and several surveys, been effective. For instance, within the broader area of support to core public sector services, including civil-service and judicial reform, tax reform is among the areas where the World Bank deems its aid to have been most effective.²

The Main International Actors

Various international bodies and governments have provided support for developing countries' tax reforms. International financial institutions such as the International Monetary Fund, the World Bank, the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank provide direct advice to developing countries. They may also fund longer-term technical projects to build institutions and capacity. The European Union (EU) has provided significant

assistance to developing and accession countries, especially through EU budget support programmes. Other international organisations that provide assistance or carry out co-operation programmes with partner countries in developing countries include the OECD and the United Nations (UN). Many developed countries provide bilateral assistance.

Regional tax organisations such as the Inter-American Center of Tax administrations (CIAT) and the newer African Tax Administration Forum (ATAF) are leading promoters of south-south co-operation which are sources of information and experience that are an important asset for developing countries.

Aid Modalities for Tax Reform

There are a number of modalities by which aid is delivered. There is no one best approach to tax reform, and donor programmes should be customised to fit country conditions. What matters most is developing country ownership and leadership.\(^3\)

Aid for tax reform include: direct budget support whether at the general or sectoral level; donors pooling funds through a ‘basket’ mechanism, a trust fund, or a joint project; and bilateral (stand-alone) projects or programmes.

The different modalities have their own pros and cons, in particular in the way they trade off the costs and benefits of coordination among donors and with developing countries. Each method, if well planned and carefully managed, has a distinct and valuable role to play in improving tax systems and tax governance linkages. It is not possible to say that one instrument works best or that any of them should be discarded.

\(^3\) ITC and OECD (2013)
Developing countries differ in their willingness to reform, ability to coordinate donors, and technical capacity. Basket modalities have worked well in some countries (in Mozambique and Uganda, for example) and bilateral aid in other countries (in past programmes in Mali, El Salvador, and Rwanda, for instance, where governments had a long-term relationship with individual donor agencies).

These experiences from recent years have been analysed by the key stakeholders involved in the OECD Task Force on Tax & Development. The broad lessons have been distilled into 10 ‘Principles for International Engagement in Supporting Developing Countries in Revenue Matters’, as set out in box 1 above.

Section 2 below provides seven cases which update the evidence base on recent tax reforms and how international co-operation has helped. Section 3 presents findings and conclusions.
II. Case Studies
Each of the following seven case studies includes a review of the tax reform efforts undertaken, a brief analysis of results, and a discussion of international co-operation that supported the reform and modernisation efforts. The case studies include countries from Asia (Bangladesh, Vietnam and Afghanistan), sub-Saharan Africa (Rwanda), Europe (Bosnia and Herzegovina and Georgia), and Latin America (Paraguay).

1. Afghanistan

Tax Reform

Almost all state institutions had deteriorated or been distorted in Afghanistan prior to the ousting of the Taliban in 2001. This included the tax system. With the entry of the international community into Afghanistan, public finance was one of the first institutions to be addressed. Some of the first actions included re-establishing and staffing up the Ministry of Finance (MOF), introducing a new tax legislative framework, and building the Afghanistan Revenue Department (ARD) and hence the institutionalisation of tax as a means to fund the state and public services.

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4 This section is based on DFID (2007), DFID (2008) and Gallagher (2007).
Starting in 2003 and 2004, the Government of the Islamic Republic of Afghanistan (GIRoA) launched measures to build the domestic tax system. These included introducing a number of simplified taxes, including a turnover tax (BRT) and withholding on wages. The BRT was considered more feasible than a modern corporate income tax, given the underdeveloped state of the economy and low capacity of the ARD. The ARD established an official presence in Kabul as well as in provincial offices around the country, but reporting to the director general of administration.

The ARD has made great effort to educate the public about the need for taxes in a new age and encouraged people to register. It has set up a taxpayer awareness unit that produces leaflets to help taxpayers understand their legal obligations. These efforts at building domestic revenues were matched by strengthened customs operations.

The ARD has established Large Taxpayer Offices (LTOs) as well as Medium Taxpayer Offices (MTOs) in Kabul and the provinces of Herat, Balkh, Nangarhar, Kunduz and Kandahar. This taxpayer segmentation is meant to assist the ARD to better provide services to these taxpayers, encouraging voluntary taxpayer compliance. At the same time, the ARD has trained many staff in audit, taxpayer services, and general tax administration and has installed a new, commercial off-the-shelf IT tax administration system that supports streamlined processes and procedures.

The MOF established a Fiscal Policy Unit, which is mostly focused on macroeconomic programmes and medium-term budgeting, but is also responsible for monitoring and reviewing fiscal, including tax, policy and conducting tax analyses and developing tax policy reform recommendations. Parliament is reviewing a new tax administration law giving greater clarity and authority to the ARD and taxpayers.

In 2009, Afghanistan enacted a comprehensive income tax law, covering individuals and companies, which is much more consistent with international tax practice, yet establishes rates similar to those already being applied. The GIRoA has drafted a new VAT law to progressively replace the Business Receipts.

### Table 1: Afghanistan Tax Performance Indicators

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<td>Tax ratio</td>
<td>2.5</td>
<td>6.1</td>
<td>9.1</td>
<td>8.7</td>
<td>8.0</td>
<td>6.7</td>
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<td>CIT to GDP</td>
<td>0.1</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
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<td>PIT to GDP</td>
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<td>0.8</td>
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<td>Sales to GDP</td>
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<td>3.7</td>
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<td>Tax on trade to GDP</td>
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<td>Tax Payments per year (N°)</td>
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<tr>
<td>Time for Tax (hours)</td>
<td>275</td>
<td>275</td>
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<td>275</td>
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</table>

General source notes are in the Annex.
Tax through the lowering of the VAT registration threshold over time. The VAT law was enacted in the first quarter of 2015 with a start date of December 2016.

Results

Given the low base that it started from, the GIRoA has been quite successful in its efforts to establish a more modern tax system. Tax offices are open around the country, the number of active taxpayers has increased, normal income taxes have been established, and tax revenue rose drastically from 2.5% of GDP in 2003 to 8.0% in 2012. This tripling in revenues occurred in the face of stagnant import duties. In 2003, import duties provide about 82% of all tax revenues, but by 2012 only 35%. This decline in the share of import duty revenues did not occur because of lowering import duties but rather because of the rapid rise in revenues from income and sales tax, each of which increased more than tenfold.

The complexity of the system, in terms of the number of times a taxpayer must submit tax forms to the ARD and the amount of time it takes to comply with tax regulations, has not improved since 2003. But it is relatively low compared to other low income countries, to other countries in the region and to the OECD.

International Co-operation

Bilateral and multilateral organisations have played important roles in setting up a revenue system and helping the GIRoA to develop a modernised tax system. International advisors assisted in drafting tax laws and regulations, provided guidance in developing and implementing strategies to update the ARD. They also provided technical assistance, training, and other capacity building assistance.

An international donor managed and funded the procurement of the IT system and assisted in its implementation throughout the ARD and key provincial offices. Donors have provided technical assistance on tax policy and helped to build the capacity of the Fiscal Policy Unit to enable local experts to develop home-grown tax policy measures and legal drafting. Donor assistance continues to build on earlier reforms, strengthen and deepen the IT aspects of the tax system, improve taxpayer services and implement risk-based compliance programmes.

By 2011, Afghanistan had made considerable progress in mobilising domestic resources for the government budget. With the onset of troop withdrawals and the accompanying slowing of economic activity, the revenue system has not maintained its earlier trajectory. To meet targets of fiscal sustainability by 2028, the IMF projects the country will need to raise its tax ratio by about another 70%, i.e., to about 18% of GDP.5

5 IMF (2014), Afghanistan Article IV Consultation
2. Bangladesh

Tax Reform

Bangladesh has been reforming its revenue system since independence in 1971. Yet while incremental reform has been taking place over these decades, domestic forces have slowed it at every turn. Deep reform of the tax system had only been approximated when in 1991 the government introduced the VAT. However, even this reform came about painfully, with implementation put off long enough for all the country’s organised special interests to conspire within the political system to ensure that the VAT would be riddled with protections, exemptions, and weak sanctions. The authorities placed considerable discretionary power with tax officials with whom large business could negotiate their tax settlement.  

The Government of Bangladesh (GOB) acknowledged weaknesses in tax administration and the need to increase tax revenue to support critical investment in human development and infrastructure. In his June 2006 budget speech, the Finance Minister said ‘... with a view to reforming the revenue administration, we have formulated a Strategic Development Plan. Under this Plan ... the National Board of Revenue (NBR) has been taken up on a priority basis. The board is being revamped and reconstituted, and responsibilities are being assigned to the members of the board along functional lines. International and local consultants will assist the members of the board in this regard. The NBR initiated tentative efforts to introduce procedures that are more modern, improve the taxpayer registry, and strengthen enforcement and encourage voluntary compliance. A key step was the creation of two Large Taxpayer Units (LTUs), one for income tax and the other for VAT. The efforts to strengthen tax administration accompanied a gradual reduction in the corporate income tax (CIT) rate from 40% in the early 2000s, which, at the time, was one of the highest CIT rates in the world, to 27.5%, which is still relatively high compared to neighbours. Toward 2008, the country found itself in considerable fiscal difficulty and turned to the IMF for assistance. At IMF insistence, the government agreed to prepare a new VAT law to address weaknesses in the 1991 law. It took until 2013 to enact a new VAT law and the NBR is in the process of implementing new systems for managing the new VAT.

Results

The GOB’s major aim in improving the tax system has been to increase tax revenues. According to a World Bank Project Identification Document, the GOB’s objective was to implement reforms that might increase revenues equivalent to 0.5% of GDP, which the World Bank had assessed as ambitious.
Instead, the tax ratio rose from 7.5% of GDP in 2006 to 9.7% in 2013, a 30% increase. While some of this increase resulted from an increase in VAT revenue by about 0.7 percentage points of GDP: the bigger increase came from income taxes, which virtually doubled from 1.2% of GDP (corporate and personal combined) in 2006 to 2.3% in 2011. In particular, corporate income tax revenues more than doubled over this period, from 0.6% of GDP to 1.3%. The improved tax revenue did not result in large increases in the share of public spending going to health or education, though these both rose substantially on a per capita basis, nor in terms of reducing fiscal deficits. The biggest payoff seems to be in how the Annual Development Programme (public investment) is funded. In 2005−06, domestic financing covered 50% of the Annual Development Programme, but this rose to 65% in 2013−14.10

International Co-operation11

The international community has played an important role in tax reform in Bangladesh. Multilateral institutions have been key in supporting agents for reform in the country and have provided technical guidance and conditionality to support the reform process. This assistance has been followed up with technical and material assistance to strengthen the NBR to implement its plan.

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10 Information derived from Bangladesh MOF:
       (English-2014)_Final_Draft.pdf

11 This section is based on information from a variety of sources, such as World Bank (2006b) Project Identification Reports, DFID TACTS project reports, World Bank (nd) VAT Improvement Program documentation, UK House of Commons (2012−13), and
One bilateral donor has been assisting the NBR since 2007, and continues today. The project has been assisting in a number of key areas. One is to increase the number of registered taxpayers. The project has been helping to strengthen enforcement and audit in specialised areas, such as banking, telecoms, and insurance. The project is also strengthening the Large Taxpayers Unit to manage and collect tax arrears.

From the start, international co-operation has been far-reaching, and includes technical assistance; human and institutional capacity development, training, and governance; organisational development, process improvement and automation; and other material assistance. There has also been considerable policy engagement. International expertise assisted in developing the NBR’s current plan. Much assistance has focused on strengthening the NBR, focusing on specific areas such as taxpayer segmentation, reengineering and streamlining, outreach to the taxpayer community, and developing mechanisms for greater public accountability. The new VAT will soon come on line, while international expertise has been provided in the design of procurement requirements, assessment of proposals, and financing.

3. Bosnia and Herzegovina (BiH)

Tax Reform

In 1995, after fighting ceased among the country’s ethnic groups, attention focused on setting up the institutions needed to comply with the Dayton Peace Accord and make BiH operative. This meant creating out of remnants from the Yugoslav tax administrations for the two ‘Entities’, the Federation of Bosnia and Herzegovina (FBH) and the Republika Srpska (RS) and Brčko District, a territory with a special status. The central government did not have its own tax administration and relied upon revenues being transferred from the entities.

The three tax administrations completely overhauled their taxpayer registries and made exerted efforts to purge incorrect and fraudulent information, while re-registering old taxpayers and sweeping unregistered persons into the tax net.

While the tax administrations were modernising their organisations, they also strengthened their staff, developing new manuals, systems, and building skills in all areas of taxation, especially in audit, taxpayer services, and collections. The main focus of the tax administrations until 2004 was indirect

13  See Rozner and Gallagher (2006) for reporting on tax administration and policy reform up to 2006.
taxes, especially the sales tax, with lesser focus on direct taxes, including a far distant property tax. This focus changed. In late 2003 the parliament of Bosnia and Herzegovina adapted a law on indirect taxation laying the legal basis for moving all indirect taxes into the state-level Indirect Tax Authority (ITA). At the same time, all parties agreed to replace the various sales taxes with one Value-Added Tax, while consolidating excises into a single set of rates. The parties also agreed to a revenue sharing formula, which would be automatic in its countrywide distribution, but would continue to be of much debate over the following years.\footnote{Levitas (2007) does an excellent job of explaining how the VAT came to be and the political economy involved.}

The VAT took effect in January 2006, implemented by the ITA, which also collected all indirect taxes, including excises on both domestic and imported goods, customs, and the road tax, which was an earmarked tax based on the sale of petroleum products. In the following years, new corporate income tax laws replaced the former profit tax laws of the two entities and Brcko, providing lower rates and reducing loopholes and exemptions. Most importantly, the two entity’s laws were better coordinated so that business could have an easier time operating throughout the country. It is important to note that CIT and PIT combined collections rose from only 0.6% of GDP in 2006 to 3.3% of GDP in 2012. In addition, the RS and Brcko introduced property tax laws with the intent of clarifying the tax base and increasing revenues.

Since January 2014, the entities and Brcko tax administrations have had comprehensive and automatic access to each other’s taxpayer information, which can greatly help in both tracking down fraud as well as to help BiH become a ‘single economic space’.

Figure 2:
Registered Taxpayers in BiH

\textbf{Source:}
Rozner, Sahinagic and Marjanovic (2005)
Results

BiH’s tax systems have improved considerably over the past 15 years. There have been rapid rises in revenues collected by the entities and Brcko. Indeed, revenues, including tax and social contributions, rose at an average annual rate of 15% between 2001 and 2004, rising nationwide from about 4 billion convertible marks (BAM) to more than 7 billion BAM, with the most dramatic rise experienced in the RS. Much of this early rise in revenue collections is attributed to the efforts to get taxpayers registered with tax agencies.

Combining the payment of social contributions with income taxes has led to lower compliance costs for taxpayers as well as to higher collection of contributions and personal income taxes. Corporate income tax reform put the country on a better international footing. While paying taxes is still more complex than it should be, the overall time for complying with tax regulations in Sarajevo has been reduced – the World Bank Doing Business indicators only cover Sarajevo. In RS and Brcko, tax compliance burdens have been reduced considerably. Taxpayers report they are less subject to corrupt practices and are much less likely to feel they need to bribe tax officers. The complex institutional set up of the country imposes limits on how far tax reform can go, but taxpayers are better treated by the system; the move from relying almost solely on indirect taxes to a greater reliance on corporate and personal income taxes has been significant. Moreover, the country has one of the strongest VAT systems in the world, with minimal exemptions and distortions and a high rate of taxpayer compliance.\(^\text{15,16}\)

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Table 3: Bosnia and Herzegovina Tax Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2009</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax + Social Security</td>
<td>32.7</td>
<td>35.2</td>
<td>34.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Tax ratio</td>
<td>20.5</td>
<td>22.2</td>
<td>19.3</td>
<td>20.9</td>
</tr>
<tr>
<td>Social contributions to GDP</td>
<td>12.2</td>
<td>13.0</td>
<td>15.0</td>
<td>15.7</td>
</tr>
<tr>
<td>VAT to GDP</td>
<td>na</td>
<td>19.8</td>
<td>16.7</td>
<td>18.0</td>
</tr>
<tr>
<td>CIT to GDP</td>
<td>na</td>
<td>0.4</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>PIT to GDP</td>
<td>na</td>
<td>0.2</td>
<td>1.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Sales tax to GDP</td>
<td>8.4</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>VATGCR</td>
<td>na</td>
<td>96</td>
<td>85</td>
<td>88</td>
</tr>
<tr>
<td>Sales to consumption</td>
<td>38</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

General source notes are in the Annex.

1. Total consumption in BiH exceeds GDP, due to assistance from abroad, including remittances.
2. Tax on trade after 2005 is negligible.
The overwhelming remaining tax issue is the extreme taxation of labour in terms of the very high social contributions rates. This problem is much greater in FBH than in other parts of the county. World Bank, IMF, and others all report that this issue causes many jobs to take place in the informal economy. At the same time, having lowered corporate income tax rates while maintaining nearly world record taxes on labour, the economic system discourages job creation, which is clearly one of the country’s biggest challenges.\textsuperscript{17}

The rise in revenues with these reforms has enabled the country to make new progress in social areas. Health spending throughout the country rose from 7.1\% of GDP in 2000 to 10.9\% by the end of the decade. Public education spending as a percentage of GDP has not changed much, although as a share of entity GDP it did rise in FBH from about 3.5\% in 2005 to 4.4\% by 2009, while per student spending has nearly doubled in local currency terms.\textsuperscript{18} Meanwhile, there remain considerable public spending concerns. For instance, pensions consume a very large part of public spending, salaries have been on the rise year after year, and investment in economic infrastructure has been miserly, leaving the country in a poor position for international competition.\textsuperscript{19}

**International Co-operation**

The international community has been with BiH from the beginning, whether assisting in developing mechanisms for the control of contraband entering the country, or building new tax administration information systems, and designing and helping to institute the Indirect Tax Authority. International advisors helped the government to analyse the tax system, identify weaknesses, and develop new policy directions, whether to move all indirect taxation to a level above the entities themselves, or to replace the outmoded wage and profit taxes with more modern corporate and individual tax laws. International donors developed new means of data communications based on microwave technology that greatly enhanced connectivity – and at much lower cost – for all the entity and Brcko tax offices.

International assistance to tax reform was mainly coordinated by the Office of the High Representative (OHR), an institution set up by the international community, as part of the Dayton Accord, and which in the early days was responsible for overseeing the implementation of peace accords and the establishment of institutions. With the international partners, the OHR established an Indirect Tax Commission, which highlighted the international belief in the need to establish the proper management and institutionalisation of all indirect taxes. Improvement in management of the indirect tax system was an important issue in the drafting in 2000 of the ‘Roadmap to the Stabilization and Association Agreement’ between BiH and the EU, which served as a diplomatic tool to strongly urge reform of direct taxation and establishment of the ITA.\textsuperscript{20}

A 2004 study pointed out that BiH tax policy was inefficient and that the narrow focus on improving tax administration could have negative effects on the

\textsuperscript{17} See Gallagher (2010)
\textsuperscript{18} NB: Annual inflation rates during this period have ranged from 0.2\% to 7.5\%.
\textsuperscript{19} World Bank (2012a)
\textsuperscript{20} The SAA was signed by both parties in 2008. The SAA is one step along the way to BiH accession to the EU.
business-enabling environment and serve as a major constraint on economic growth and prosperity.\textsuperscript{21} The international community adjusted its focus to press BiH counterparts to rationalise income and property taxes, and to streamline or eliminate other taxes. In parallel to the earlier efforts, the international community established the Direct Tax Commission with an empowered commissioner who could speak with all BiH counterparts as the voice of the international community. As direct taxation is within the mandate of the entities, under the Dayton Accord, and as direct taxation is not a trade matter nor within the scope of the Stabilization and Association Agreement (SAA), the international community did not have any authority in setting mandates as it had with indirect taxes.

Nonetheless, in 2004, the international community provided BiH officials with assistance in analysing tax policy, tax incidence and simulating revenue projections. They also gave advice on developing new laws for corporate and individual income taxes, as well as new laws on property taxation. This assistance was followed up with support to help market the proposed new laws to society and parliaments, assess the likely impact of the laws. The international community also helped the tax administrations in implementing the new laws, as well as to integrate the collection of personal income tax and social contributions.

### 4. Georgia

#### Tax Reform\textsuperscript{22}

Following its 2003 ‘Rose Revolution’, Georgia’s new government embarked on an aggressive agenda of legal, regulatory, and institutional reforms designed to stamp out public sector corruption, increase tax collection and create an attractive environment for business investment. In 2003, tax collection stood at only 12% of GDP, far short of cash expenditure and with government arrears high and rising.

In 2004, sweeping reforms purged the administration of many corrupt practices, replacing the entire police force, as well as the majority of tax and customs officers. The State Revenue Service (SRS) was created to bring customs and tax administration into a single organisation. Corrupt practices were no longer tolerated and some tax officers were prosecuted and jailed.

Between 2004 and 2009, tax reforms focused on simplifying the tax code and lowering tax rates. The number of national taxes to which Georgians were subjected was reduced from 21 to six. The VAT rate

\textsuperscript{22} This section draws on Murdoch et al. (2012) and Totosyan and Filer (2012).
was brought down from 20% to 18% and personal income tax rates were combined with the social contribution (payroll tax) into a single tax of 20% on income. Taxes on corporate dividends and interest earnings were reduced from 10% to 5% in 2009. The new tax code applied the same rate to all business activities, doing away with special rates and privileges. The SRS strengthened tax collection by streamlining and automating most processes, introducing risk-based audit management and vastly expanding e-services. This simplified taxpayer requirements and greatly reduced face-to-face time between tax officers and taxpayers. They placed cameras in most areas where taxpayers met with tax officials resulting in far fewer illegal demands of the public and higher revenues for the treasury. At the same time, risk-based selection for audits was institutionalised. The percentage of non-risk-based audits declined from 70% in 2009 to 35% in 2010 to zero in 2011.

In addition to unifying and significantly simplifying tax and business registration the Ministry of Finance introduced electronic information sharing between the Georgian Revenue Service, taxpayers, banks, and other authorities. This was done in combination with aggressive implementation of IT improvements, such as a one-stop internet portal to enable easy public access to tax and customs legislation, procedures, forms, and other revenue related issues, and electronic taxpayer registration. These improvements enabled e-filing of all tax obligations, which took off from barely any e-filings in 2008 to 800,000 in 2009, accounting for 76% of total revenue.

The current tax policy of the Georgian government seeks to increase confidence and enhance trust by improving communication between taxpayers and the tax authorities, by protecting the taxpayers’ rights, by making administration more efficient, and by harmonizing Georgian laws with the best international tax

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**Table 4: Georgia Tax Performance Indicators**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2009</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax ratio</td>
<td>12.0</td>
<td>24.4</td>
<td>25.4</td>
</tr>
<tr>
<td>Tax on trade to GDP</td>
<td>0.9</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Domestic tax to GDP</td>
<td>11.1</td>
<td>24.2</td>
<td>25.1</td>
</tr>
<tr>
<td>VAT GCR</td>
<td>0.48</td>
<td>0.88</td>
<td>0.85</td>
</tr>
<tr>
<td>CIT PROD</td>
<td>0.08</td>
<td>0.16</td>
<td>0.22</td>
</tr>
<tr>
<td>PITPROD</td>
<td>0.13</td>
<td>0.26</td>
<td>0.30</td>
</tr>
<tr>
<td>Tax Payments per Year (N°)</td>
<td>46</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Time for Tax (hours)</td>
<td>448</td>
<td>387</td>
<td>387</td>
</tr>
</tbody>
</table>

General source notes are in the Annex.

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23 See Murdoch et al. (2012)
practices and EU directives. Georgian policy seeks to create a favourable environment for doing business and investing by simplifying tax legislation, reducing sanctions and penalties, and enforcing fair tax administration practices. In recent years, the country has been actively cooperating with international donors to improve tax policy, share information, and especially increase the effectiveness of tax treaty application.

**Results**

Georgia’s tax revenues have increased more than four fold thanks to the combined effect of the changes in the tax regulation and administration. Total tax receipts soared from only 12% of GDP to 25%, despite declining tax receipts on international trade due to the slashing of import duty rates. More than doubling the tax take was achieved through fewer taxes and generally lower nominal tax rates, while at the same time lowering administrative costs to taxpayers and the government.

The increased tax revenues enabled increased social spending on health and education (table 5). By 2010, public health spending as a share of GDP had risen by 80%, equal to 2.3% of GDP. Similarly, public education spending had risen by 46% in real terms, nearing 3% of GDP. In addition, the SRS improved taxpayer services, leading to a dramatic rise in taxpayer registration and tax compliance – owing to a simplification of tax forms and a rapid build-up of the e-filing system during 2006–08. The number of registered taxpayers more than doubled between 2005 and 2008: meanwhile, VAT revenues rose from 8.5% of GDP in 2005 to 11.3% in 2009.24

The tax administration reforms and anti-corruption measures have led to a drastic fall in the number of bribery cases involving tax officials (table 4). Georgia’s business environment significantly benefitted from reductions in their administrative burdens that was initiated in 2009. Compliance costs for such taxpayers declined from about 645 US dollars (USD) per year to only USD 188 in 2011.25

Georgia has been actively working to increase its international tax treaty network. Since 2013, the number of double taxation avoidance agreements has significantly increased and today Georgia has 49 active tax treaties. Within the last three years, agreements with seven countries entered into force, agreements with five states were signed and five initialed, while negotiations are ongoing with another nine countries.

24 Data from IMF Fiscal Affairs Department, 2015 database

<table>
<thead>
<tr>
<th>Table 5: Social Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2003</strong></td>
</tr>
<tr>
<td>Health spending per capita, $ current</td>
</tr>
<tr>
<td>Health spending % budget</td>
</tr>
<tr>
<td>Education spending per capita, $ current</td>
</tr>
<tr>
<td>Education spending % budget</td>
</tr>
</tbody>
</table>

Source: World Development Indicators
International Co-operation

Donor assistance was essential to helping Georgia to design and implement the tax reforms started in 2004. Donors provided assistance in:

- Setting up the new tax department organisational structure, evaluating new recruits, and providing basic training,
- Developing new tools, such as risk-based audit selection,
- Installing information technology and other communications systems that enable e-filing, electronic surveillance of taxpayer and tax official interactions,
- Designing and implementing the one-stop web portal,
- Advising on reforming tax policy and focusing on a few, economically and fiscally worthwhile taxes while eliminating useless, exploitative taxes.

Donors also provided short-term technical assistance. This included advice, capacity building assistance, training, development of manuals. The help was also for the design and implementation of IT systems, particularly the implementation of e-services, which form a key means of reducing face-to-face interactions between taxpayers and tax officials.

5. Paraguay

Tax Reform

Paraguay’s overall financial and economic situation deteriorated dramatically from 2000 to 2004. The economy was in the doldrums or decline and the structural imbalance of revenue and expenditure created substantial and prolonged primary deficits causing a financial crisis culminating in the default on national and foreign debt. By 2003, total tax collection had dropped to only 8.8% of GDP. The need for reform had become evident.

In 2004, the government passed a sweeping tax law that over time reduced corporate income tax rates from 30% of profit to only 10%. It introduced a special tax on the agricultural sector, which had essentially not been contributing anything to revenues despite representing about a quarter of the economy.

26 See World Bank (2006b and 2013), Zarate (2010 and 2011)
27 Tax revenue in 1992 came to about 10% of GDP when the country introduced a new tax structure. This new tax structure had two important aspects: first, it introduced the VAT, and, second: it eliminated the personal income tax.
Additionally, it established a first personal income tax with a top rate of 10% for persons earning 10 times the minimum wage and 8% on low-income earners. This reform was put off for nearly another decade however before being implemented in 2013. The reforms also raised rates on tobacco and alcohol products.

The tax on small business was adjusted to ease administration and compliance. The move to reduce the corporate income tax went over two stages. First, it was reduced from 30% to 20%, in 2005, and to 10% in 2006. Along with these tax rate changes and the introduction of the new way of taxing agricultural incomes, the new tax law removed many exemptions and loopholes.

Many products that were exempt from VAT or that were subject to lower tax rates were now subjected to the full 10% VAT.

Following the 2004 tax policy reform the tax administration modernized a number of its procedures, strengthened control over goods and enforced collection, built up its Large Taxpayers Unit, and made improvements to its management of human resources and provided greater training to staff. One aspect of this effort was the attention paid to broadening the effective VAT tax base by more than tripling over coming years the number of VAT taxpayers. Reforms in tax policy and tax administration were matched by modernisation of the customs code, designed to improve and streamline customs administration.

Table 6: Paraguay Tax Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2009</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax ratio</td>
<td>8.8</td>
<td>10.3</td>
<td>12.1</td>
<td>12.8</td>
<td>13.8*</td>
</tr>
<tr>
<td>Excises to GDP</td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>VAT to GDP</td>
<td>4.0</td>
<td>4.3</td>
<td>5.6</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>CIT to GDP</td>
<td>1.4</td>
<td>1.8</td>
<td>2.8</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Tax on trade</td>
<td>na</td>
<td>na</td>
<td>1.2</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>VATGCR</td>
<td>68</td>
<td>69</td>
<td>81</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>CITPROD</td>
<td>0.06</td>
<td>0.11</td>
<td>0.19</td>
<td>0.19</td>
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<tr>
<td>VAT payers (N° in thousands)</td>
<td>135</td>
<td>147.3</td>
<td>489.8</td>
<td>584.6</td>
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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Tax Payments per Year (N°)</td>
<td>35</td>
<td>35</td>
<td>28</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Time for Tax (hours)</td>
<td>328</td>
<td>311</td>
<td>387</td>
<td>378</td>
<td></td>
</tr>
</tbody>
</table>

General source notes are in the Annex.

* Author’s calculations from FAD and WDI data.

Paraguay has recently re-estimated its entire national accounts system. Collections to GDP and similar ratios are expected to decline.
Results

The tax reforms have resulted in increased revenues despite lower rates. This has come from the broader base and increased compliance. The VAT Gross Compliance Ratio has risen from 68 to 92, among the best in the world, while corporate income tax productivity has risen from 0.06 in 2004 to 0.19 in 2012. Oddly, the number of payments required of taxpayers in a year has declined from 35 to 20.

Tax revenues rose steadily from the 8.8% of GDP in 2003 to 10.3% in 2004 and to 12.8% by 2010.28 The Government of Paraguay (GOP) had been struggling to get and keep its tax ratio above 13%.29 Public debt rose from 16% of GDP in 1996 to its peak in 2004 of 45%.

With successful controls on spending, partial pensions reforms and increased tax revenues due to policy and administrative reforms, the fiscal crisis was averted and public debt fell below 15% of GDP by 2010.30 Improvements in revenue generation and the return to fiscal solvency have enabled the GOP to recoup lost ground in terms of spending on health and education, both of which experienced severe declines in the crisis and have since more than recovered their former levels.

International Co-operation

International co-operation has been supportive of tax reform in Paraguay since the beginning of the last decade. Assistance in assessing and evaluating policy reform has supported the move toward eliminating costly tax expenditures and broadening the tax base. Subsequent assistance was and continues to be available in areas such as:

a. strategic planning,
b. capacity development especially in setting up and managing the Large Taxpayers Unit,
c. development of a new VAT refund system,
d. in strengthening audit.

These efforts have not only helped to ensure that the 2004 policy reforms could be implemented without revenue loss, but to also strengthen compliance and collection over the following decade, and to help in the successful 2013 implementation of the new personal income tax. The country has not only benefited from capacity building and technical assistance from traditional bilateral and multilateral partners, but it has also gained from close South-South collaboration with the tax administrations of Uruguay, Brazil, Argentina, and Peru.

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28 While this still represents a very low level of taxation compared to most countries in the region and around the world, we should keep in mind that the country also collects a relatively large amount of revenue, almost 10% of GDP, in non-tax revenues, mainly from the production and sale of hydroelectric power to its populace and neighbours.

29 Some observers indicate that in 2014, revenues may have risen by between 14 and 18%.

30 See Zarate (2011)
6. Rwanda

Tax Reform

Rwanda passed through several reform periods after the end of the country’s 1994 conflict when it had to re-establish its institutions. Revenues started increasing and in 1997, the Rwanda Revenue Authority (RRA) was created. Revenues rose still higher. In 2001, the country instituted a VAT. In 2003, the RRA re-organised from a tax-based organisation to a function-based organisation. At the same time, introduced an e-Tax Information System, which partially integrated RRA core processes. After 2010, reforms mainly concentrated on adherence to regional integration and broader trade agreements, focusing on customs reform and lowering dependence on import duties. Key customs reforms included implementation of the Rwanda Electronic Single Window system, extension of working hours at borders/customs offices and the East African Community (EAC) Single Customs Territory project.

This case study focuses on the reforms in policy and tax administration beginning in the middle part of the last decade. In 2005, a new income tax law was enacted with three tax rates; 0%, 20%, and 30%, and many exemptions were eliminated. A 4% turnover tax was imposed on intermediate size firms in lieu of adhering to a full profit tax of 30%, which required detailed bookkeeping. In 2012, the income tax law was amended to include a special tax regime for small and micro (SME) taxpayers. This SME tax regime includes a 3% tax on turnover for small taxpayers and four categories of fixed payments for micro taxpayers. In 2005, legislation was enacted to provide greater authority and legal resources to strengthen enforced collections and audits, improve the appeals process and provide for a more rigorous sanctions. In 2006, a ‘consumption’ tax, in terms of an excise on soft drinks, alcohol, cigarettes, telephone use, fuel, and vehicles was amended to include more excisable products and to revise the rates.

Tax administration reforms over this middle period focused on full implementation of the new functional organisation. The RRA implemented the Standardized Integrated Government Tax Administration System (SIGTAS), a commercial off-the-self tax administration programme. In the same period, the RRA also strengthened taxpayer education and established a call centre. Further efforts were made to enhance

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31 Section draws heavily from African Development Bank Group (2010).
32 See Kloeden (2011)
33 See the following about the EAC Single Customs Territory Project:
compliance enforcement, improve audits, appeals, and to penalize tax evasion. In 2010, RRA started collecting Social Security contributions on behalf of the Rwanda Social Security Board. This was aimed at reducing the cost of compliance and ensuring complete taxpayer coverage for ‘Pay as you Earn’ (a withholding tax – PAYE). A recent reform to further enhance VAT collections was the introduction of Electronic Billing Machines being used by VAT registered taxpayers. Since 2014, the RRA has been collecting decentralized taxes on behalf of the country’s 30 districts. Strengthening the effectiveness of sub-national tax collection and therefore a further increase in local resources are expected results.

An important effort was made to register taxpayers, in particular, to register non-filers, i.e., persons who should have registered and paid tax, but who had managed to remain outside of the tax net.

Results

From 2001 to 2013, total tax revenues as a share of GDP rose by about half. This overall increase in tax revenues came about in the face of declining import duties. Indeed, trade taxes declined from about 12% of tax revenues in 2007 to less than half that share, i.e., 6.8%, in 2013.

The revenue increase came about due to improved legislation and strengthened administration, a broadened tax base including an increased registration of taxpayers, and improved compliance. All categories

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Table 7:
Rwanda Tax Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax ratio</td>
<td>11.6</td>
<td>12.5</td>
<td>13.0</td>
<td>13.6</td>
<td>14.5</td>
</tr>
<tr>
<td>VAT to GDP</td>
<td>4.1</td>
<td>4.5</td>
<td>4.1</td>
<td>4.2</td>
<td>4.5</td>
</tr>
<tr>
<td>CIT to GDP</td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
<td>2.0</td>
<td>2.6</td>
</tr>
<tr>
<td>PIT to GDP</td>
<td>2.3</td>
<td>2.4</td>
<td>3.2</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Excises to GDP</td>
<td>1.5</td>
<td>1.5</td>
<td>2.5</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Trade to GDP</td>
<td>1.4</td>
<td>1.6</td>
<td>0.9</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>VATGCR</td>
<td>16</td>
<td>28</td>
<td>25</td>
<td>40</td>
<td>41*</td>
</tr>
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<td>CITPROD</td>
<td>0.04</td>
<td>0.06</td>
<td>0.08</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>PITPROD</td>
<td>0.07</td>
<td>0.09</td>
<td>0.18</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Tax Payments per Year (N°)</td>
<td>25</td>
<td>25</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time for Tax (hours)</td>
<td>168</td>
<td>160</td>
<td>113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revenue data from FAD

* Authors calculation

---


of registered taxpayers (but not salaried employees) have shown marked increases, with a quadrupling of those registered in the profit tax (or corporate income tax) sector.

Performance indicators show persistent and important improvements. The revenue productivity – a measure of the amount of tax revenue collected from a tax, given its rate structure – of the VAT, the personal and corporate income taxes more than doubled over this period. One of the recent reforms to further enhance VAT collections was the introduction of Electronic Billing Machines being used by VAT registered taxpayers.

This rise in the tax ratio has played an important part in increasing domestic resource mobilisation for development purposes, especially health, but also education. In 2008, external resources for health covered about 53% of all health spending in Rwanda, but this declined to only 38% by 2013, while over the same period, per capita health spending doubled from USD 32 to USD 70. Government spending on health rose from 3.2% of GDP to 6.5%. The story is less dramatic for education, mainly because of the lack of the dominant foreign role in the sector which also has not experienced the same shocks as health. Nonetheless, government education spending rose from 4.4% of GDP in 2007 to 5.0% in 2013.

International Co-operation

Donors have been supportive of tax reform through the post-conflict reform stages. International organisations and bilateral donors have provided short-term or intermittent technical assistance in tax policy and tax administration reform. Indeed, a long-term expatriate, resident advisor was in place in Rwanda before the creation of the RRA. This advisor provided policy advice as well as assistance in the design of the RRA. Support has been provided not only in policy, but also in capacity building. This support has included funding IT.

36 The VATGCR grew steadily from only 16 in 2006 to 40 by 2013. While this improvement is important, there is still plenty of room for further progress. Personal income tax productivity (PITPROD) also showed strong improvement, doubling from 0.04 in 2007 to 0.08 in 2011, although falling back to only 0.05 again in 2012. Similarly, personal income tax productivity showed a similar pattern, more than doubling from 2007 to 2011, and then falling back again, somewhat.

37 Data from WDI. NB: this indicator does not exist within WDI for any other sector.

38 All data are from the WDI.

Table 8: Registered Taxpayers in Rwanda

<table>
<thead>
<tr>
<th>Registered Taxpayers</th>
<th>2007</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT</td>
<td>3,621</td>
<td>11,702</td>
<td>223%</td>
</tr>
<tr>
<td>PAYE</td>
<td>7,323</td>
<td>20,718</td>
<td>183%</td>
</tr>
<tr>
<td>Profit tax</td>
<td>15,876</td>
<td>100,014</td>
<td>530%</td>
</tr>
<tr>
<td>Large Taxpayers Unit</td>
<td>299</td>
<td>364</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Rwanda Revenue Authority
Particular assistance has been provided in the run up to establishing the VAT, setting up the Taxpayer Identification Number (TIN), and expanding the taxpayer registry to incorporate non-filers, introducing taxpayer segmentation, setting up the Large Taxpayers Office (LTO), and instituting risk management and risk-based audit.

The African Development Bank Group (2010) Case Study of Rwanda, states that ‘long term and flexible technical assistance support enables rapid and sustained capacity development … and … there is no doubt that the long term orientation, predictability and flexibility of this support has enabled RRA to rapidly and sustainably improve its capacity.’

Donors have provided almost continuous assistance to tax reform up to the time of this writing.

One innovative aspect to donor support is the ongoing mentoring relationship between the Commissioner General of the RRA and Her Majesty’s Revenue and Customs permanent secretary for tax in the United Kingdom.

7. Vietnam

**Tax Reform**

Vietnam has been reforming its tax system since it first began opening up to the world economy, more than 20 years ago. In 2006, the authorities began a new round of reform. The most important drivers of the reform were related to a changing structure of the economy, the need to protect and even increase revenues to cope with the increasing level of Vietnam’s integration into the regional and global economy, and the recognition that red tape was a major problem in the execution of the tax system.

The country needed to respond to the relative decline in the state-owned enterprise sector, which was the major payer of corporate income tax and VAT, the projected decline in oil output and hence oil revenues, and the rise of the private sector, particularly of foreign direct investment – FDI participation into the economy.

Although Vietnam had already been reducing import duties over the entire past two decades, its joining ASEAN in 1995 and later entrance into a bilateral trade agreement with the United States in 2000 and WTO in 2007 have necessitated other reforms.

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39 African Development Bank Group (2010), page x
40 For more specific details about UK’s assistance in tax administration support, see: http://www.publications.parliament.uk/pa/cm201012/cmselect/cmintdev/writev/1821/tax22a.htm
The corporate income tax (CIT) rate was reduced from 28 to 25%, incentives were simplified and exemptions reduced. The CIT rate was further reduced to 22% in 2013. VAT was modified to reduce the number of exemptions and reduce the number of items that benefitted from a lower tax rate. The personal income tax (PIT) was modified once by ordinance in 2007 and by a new PIT law in 2009.

The major changes in the PIT were to equalize treatment between Vietnamese and resident foreigners, include a number of benefits into the tax base, and remove a number of exemptions. Excises were reduced in a number of cases, although new excises were imposed on production of certain products that cause pollution. The property tax (on non-agricultural land use) was reformed to make the base the value of the land rather than its area.

The Government of Vietnam (GVN) recognized that the tax policy reforms needed to be accompanied by reform and modernisation of the tax administration: the General Department of Taxation (GDT), which aside from having to adapt to new tax legislation also had a reputation for red tape and corruption. When the Law on Tax administration came into effect in mid-2007, the GVN strategy focused on enhancing the governance of the GDT and encouraging greater voluntary compliance.

To overhaul governance, the GVN sought to a) simplify tax administrative procedures, b) enhance and diversify tax services, c) promulgate regulations on audit and examination on the basis of risk management, d) modernise, automate and integrate a single system of tax management, e) enhance cooperation with foreign tax authorities and international institutions.

Results

The Vietnamese treasury has weathered its structural adjustments quite well. Lowering corporate income tax rates, introducing a much revised personal income tax, and getting past the decline in oil output and the resulting drop in revenues has left the overall tax ratio in 2012 at about the same level as in 2005. Tax revenues from the oil sector declined from 35% of all tax revenues in 2005 to only 12% in 2012.

These results come from improving the CIT from companies that do not operate in the oil sector, as well as from a tripling in revenues from the tax on individuals. In addition, due to the legal changes and fierce effort of the GDT, the number of active, registered taxpayers soared from about four million in 2006 to about 15 million by 2014. The natural resource tax on oil also dropped precipitously and hoped for gains for this tax from other natural resources have not materialized. The change in the PIT law seems to have successfully broadened the tax base, leading to a steady rise in this revenue.

For business, the new CIT is an improvement for many, since it has a reduced headline rate, though companies that had been benefiting from preferential treatment might argue with this claim. In terms of taxpayer compliance requirements, World Bank
reporting indicates that procedures have been streamlined and that the new laws and their regulations are more user-friendly. Yet, in terms of the number of payments that taxpayers must make per year, there seems little progress. The amount of time spent of paying and complying with tax regulations also seems to have only moderately changed up until 2013. In 2014 the GVN promulgated an ambitious resolution aiming for the GDT to reduce the amount of time spent on complying with tax procedures and payments to the average ASEAN level by the end of 2015. In 2014 GDT implemented measures to reduce and harmonise a number of procedures and filing requirements to drastically reduce this time. In parallel, by the end of 2014, 97% of businesses used e-filling and it is targeted to get 90% of them to access to e-payment via banks by end of 2015.

Table 9: Vietnam Tax Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2009</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax ratio</td>
<td>21.0</td>
<td>20.6</td>
<td>20.8</td>
</tr>
<tr>
<td>CIT to GDP</td>
<td>8.3</td>
<td>6.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Oil</td>
<td>5.1</td>
<td>2.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Non-oil</td>
<td>3.2</td>
<td>3.7</td>
<td>4.6</td>
</tr>
<tr>
<td>PIT to GDP</td>
<td>0.5</td>
<td>0.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Excises to GDP</td>
<td>1.7</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Natural Resource tax</td>
<td>2.3</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Oil</td>
<td>2.2</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Non-oil</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Tax on trade</td>
<td>2.6</td>
<td>4.3</td>
<td>2.5</td>
</tr>
<tr>
<td>VATGCR</td>
<td>78</td>
<td>89</td>
<td>112*</td>
</tr>
<tr>
<td>CITPROD</td>
<td>0.33</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>PITPROD</td>
<td>0.02</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Tax Payments per Year (N°)</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Time for Tax (hours)</td>
<td>1,050</td>
<td>1,050</td>
<td>872</td>
</tr>
</tbody>
</table>

Tax revenue data originally from State Bank of Vietnam.
GDP and household consumption data from WDI.
* Author’s calculation.
Ideally, the VATGCR should not exceed 100. Several factors can cause this, including failing to refund VAT credits to exporters.
**International Co-operation**

The GVN initiates reforms on a regular basis. One important goal of recent changes was to replace antiquated tax ordinances with new legislation. Both the GVN and parliament wanted to take this opportunity to make better laws that would help Vietnam’s integration into the world economy. Part of this approach was to ask the assistance of the international community in reviewing proposed legislation and bringing international best practices to the country.

International donors assisted in reviewing, drafting, discussing, and facilitating outreach between GVN, parliament, civil society and the private sector. The international community provided such backing with the CIT, PIT, natural resources tax law, property tax law, and others.

Donors also provided assistance in the modernisation of the GDT strategy, change management, monitoring and evaluation, and in broad areas of capacity development. This included advisory work, design and procurement of equipment, assistance with the development of an E-Tax Information System\(^\text{41}\), training in risk management for audit, debt collection, refund systems management and transfer pricing/advance pricing arrangement as well as other international taxation issues.

\(^{41}\) From a recent World Bank TAMP progress report, the MOF and GDT had developed an interim E-TIS, which apparently was done much more quickly than was anticipated and work so well as to obviate the need for the planned project E-TIS procurement.
III. Findings and Conclusions
The following are some findings from the seven case studies. Other recent selected experiences are highlighted that may be useful for both reformers and those who assist reformers.

**General Findings**

Tax reform in the case countries led to an increase of the tax/GDP ratio. In all countries, except Vietnam and Bosnia and Herzegovina, increasing tax revenues was a primary goal. Relying on the tax ratio as a basic, but imperfect quantitative measure of success, these countries have increased their tax/GDP ratio by 56% on average over their respective reform periods. (Excluding Afghanistan the increase is 37%). While there seems to be a positive trend, these figures still have to be treated with caution due to varying data quality.

Tax reform can support trade liberalisation. In some of the country studies, the contribution of import duties to tax revenues declined in the reform period. With the exception of Afghanistan and Vietnam, import duties actually declined with respect to GDP but the decline was overcome by improvements in domestic taxation. Without the tax reforms that these countries implemented, trade liberalisation would have been untenable.

Tax reforms brought other quantifiable gains. Transaction costs for the public and for business were reduced in several countries as measured by the time involved filing returns.

**DRM has a developmental impact.** In each of the country studies increased revenues funded development needs, whether education, health, or the overall development budget. Rwanda is an excellent example of increased domestic financial resource mobilisation which directly enabled the country to finance the health sector.

**Findings On International Co-operation and Assistance**

International co-operation can make very important contributions to tax reform. External assistance supported reform in each of these countries in a variety of ways. International co-operation was strategically important in terms of policy analysis and recommendations. International organisations undertook diagnostic studies, whether of tax policy or tax administration. Governments usually followed up with decisions to develop reform programmes and sought resources to implement them, including further technical assistance and other capacity develop-
ment support. All seven cases show that building local capacity – at the level of the individual, the organisation, and the enabling environment – contributes to institutional sustainability.

Attributing reforms and outcomes to international assistance can be a challenge and requires robust monitoring and evaluation. This review has shown in seven countries how international co-operation can be supportive of tax reform, and in some instances, even lead reform. Nevertheless, it is very difficult to attribute results to specific assistance or co-operation provided by donors. International organisations and donor agencies should establish robust monitoring and evaluation mechanisms, report on project implementation to track progress, and ensure that when successful, such projects can easily demonstrate their contribution to the success. This finding is very much consistent with Michielse and Thuronyi42 with regard to the challenges of measuring effectiveness of donor co-operation in tax capacity building. Recent work by the OECD shows how well monitored revenue

42 Michielse and Thuronyi (2010)
At the request of developing countries, and in partnership with the EC and the World Bank Group, the assistance of the OECD Tax and Development Programme to build capacity to support the application of the OECD’s transfer pricing norms and standards has resulted in the following:

- In Kenya revenue collection from transfer pricing audits has doubled from USD 52 million for year from June 2012 to USD 107 million for year ended June 2014. Moreover, with development partners, Kenya now provides transfer pricing technical assistance in the East African region, including transfer pricing capacity building workshops.

- Colombia increased its tax revenue from transfer-pricing activities ten-fold, from USD 3.3 million in 2011 to over USD 33 million in 2014, through a capacity development programme for tax administrators that cost USD 50 000.

- In Vietnam the number of audits conducted by the tax administration increased from one audit in 2012 to 40 in 2013, giving rise to transfer pricing adjustments of USD 110 million by the end of 2013. Twenty five audits were completed between 2013 and in the first six months of 2014 that resulted in revenue collection of close to USD 19 million.

Targeted support by the Global Forum on Transparency and Exchange of Information for Tax Purposes on the implementation of Exchange of Information (EOI) standards also yielded significant additional tax revenue:

- In 2013, the EOI process played a determining role in enabling the South African Revenue Service to collect USD 62.3 million through a settlement from one taxpayer.

- Uganda set up an EOI unit which has sent over 16 information requests and responded to several requests since its inception in March 2014.

- In 2014, the Philippines recovered more than USD 1 million in just two cases as result of EOI with treaty partners after development partners supported the restructuring of its EOI Unit and systems.

Source:
OECD Tax and Development Programme (2015)
gains can be attributed to reforming governments and timely technical assistance, as set out above in the case of international taxation issues (See box 2). Other international organisations are paying greater attention to results based management and monitoring.

Reform is a long-term process which often implies steps forward and back. Tax reform, especially reform of the tax administration, is a long process and donors can expect that efforts might take a decade to have profound impact. The status quo in many countries has strong support from influential domestic actors.

Targeted assistance can yield quick results. Specific measures to help developing countries in well-targeted areas can have clear, distinct, and almost immediate results on better enforcement and revenues. Short-term assistance in specific areas, such as specialised audit or transfer pricing (See box 2), can show immediate results. Sometimes these specific measures are part of larger engagements, but sometimes they are more standalone.

Tax is a basic building block in conflict-prone countries. Tax reform can be an important component of conflict or post-conflict country development programmes, such as in Bosnia and Herzegovina and Afghanistan. In these countries a new tax system was built as part of the state-building process.

**Technical Findings**

Tax policy reform and tax administration reform should be considered as mutually reinforcing measures that help increase tax revenues. In many countries, tax policy reform and tax administration reform have complemented each other. Combining moderate tax rates with better administration has led to a substantial increase in tax revenues. Bosnia and Herzegovina, Georgia, Paraguay, and Rwanda are good examples of countries that effectively combined the two reform streams.
Broadening the tax base is effective and efficient. Whether by reducing exemptions and exonerations, or by improved audit and enforcement, a broader tax base has been successful in raising revenues without imposing a greater tax burden on business and society.

Registering taxpayers is key to increasing tax revenues. In each country study, taxpayer registries were initially in poor shape, with many people simply outside the system. Focused attention on building the taxpayer registry and identifying people who do not file had an important and immediate impact on the increase of tax revenues. All countries made determined efforts to increase their taxpayer rolls to great effect, and with donor support.

Simplification of tax procedures can deliver important gains in efficiency. Simplifying tax procedures can make paying taxes easier and less costly, as the example of Ghana shows below (See box 3).

Box 3: Simplifying the Tax Administration to Increase Efficiency in Ghana

The modernisation and simplification of the Ghana Revenue Authority (GRA) has been a key tax administration reform. It implied integrating the Internal Revenue Service with the Value Added Tax (VAT) Service and Customs Operations into one comprehensive organisation. It also segmented tax offices into large, medium and small taxpayers offices, covering all regions and both the income tax and VAT. Five years of reforms established a new organisational structure with integrated tax offices; amended reporting lines and new job functions. All staff in the designated offices have been trained in auditing, taxpayer services, enforcement procedures and other skills.

From a taxpayer’s perspective, e.g. a rural retailer, combining both income tax and VAT payments into a single regional office has made paying taxes easier and less costly, while being subject to only one comprehensive audit for both tax types. Subsequently, between 2009 and 2012 corporate taxpayers increased by 51.7% from 22,915 to 34,773, while self-employed taxpayers increased by 18.4% from 22,915 to 34,773.

From the revenue administration’s perspective the simplification has lowered transaction costs. Collection costs also decreased from 2010 to 2014 leading to cumulative savings of 70.5 million cedis (GHS). The number of registered taxpayers has increased from 1.52 million in 2009 to 1,66 million in 2014. With 63.6% of taxpayers perceiving customer service in GRA as either very good or good in 2014 customer satisfaction has improved.

Source: Ghana Revenue Authority
Fighting corruption is an important tool for supporting tax reforms and tax collection. Corruption is a deep-seated challenge in many tax and customs systems around the world. Reducing corruption helps to increase a government’s tax revenue. It is also beneficial to the taxpayer who is less exposed to the unscrupulous actions of officials and unfair competition created by those willing to ‘pay to play’. There are indications of reduced corruption in the tax systems of Bangladesh, Bosnia and Herzegovina, Paraguay, and Georgia. In addition, the case of El Salvador below shows how national authorities’ drive to implement anti-corruption measures be translated into new institutional measures (See box 4).

**Box 4:**
**Creation of the Transparency and Anti-Corruption Unit of the Ministry of Finance of El Salvador**

The perception and likelihood of government corruption complicates the collection of increased tax revenues by limiting the public and private sector willingness to pay taxes. The efficient and transparent use of public revenue increases acceptance and legitimacy of the state to its citizens and allows a government to perform better and provide quality public services.

To that end, the Ministry of Finance of El Salvador, supported by international cooperation, in 2014 designed and created the Transparency and Anti-Corruption Unit (UTAC), competent in the revenue sector. UTAC seeks to consolidate the honesty and integrity of public servants, through prevention, detection, and investigation of acts of corruption. In addition to creating UTAC, the Government of El Salvador also promulgated a new Code of Integrity.

Modern information technology (IT) is a core component of any overall tax modernisation effort. IT systems are expensive, and donors and developing countries have often made mistakes in design, procurement, and implementation. IT systems need careful planning, and among the most critical challenges to be addressed are a lack of coordination among donors and resistance to change in the developing country’s agency.
Annex: Indicators
Indicators of Tax Performance

Tax Revenue

Where raising revenue is the objective, tax system improvement may be measured by the extent it has led to an increase in the tax ratio. The tax ratio, or tax revenue as a percentage of GDP, is the most basic of measures. Where relevant, we use other indicators of tax revenue performance, including CIT, VAT, PIT, import duties and others as percentage of GDP.

Base Broadening

In each country, we assess the degree to which revenue improvement has come about due to broadening the tax base.

The tax base can be broadened in a number of ways. Legal change that reduces tax holidays, exemptions, and special treatment of preferential taxpayers is an important way to boost revenues without having to increase tax rates.

Another way to broaden the base is to improve tax administration and bring new taxpayers that have been able to avoid tax net into the system. Improved tax administration enforcement of the law along with improved taxpayer compliance are ideal ways to broaden the tax base and collect more revenue. This type of tax base broadening generates more revenue without increasing tax rates and harming the country's competitiveness, but is also fairer, treating taxpayers of equal capacity equally.

We use three measures of success or failure in a country’s efforts to broaden the base. The first is ‘corporate income tax productivity’. Corporate income tax productivity indicates how well CIT does in terms of producing revenue, given the prevailing rate structure. We can track corporate income tax productivity over time in a country to assess the extent to which CIT revenues as percent of GDP are rising or declining due to base broadening without reference to the tax rate. The personal income tax productivity is similar to the corporate income tax productivity. An increase in personal income tax productivity generally means that the tax base is being enlarged.

Finally, the value-added tax gross compliance ratio measures how much VAT revenue is being collected. It is measured with respect to economy-wide household consumption, since that is the actual base for VAT. Increases in the VAT gross
### Table 10: Tax System Performance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Meaning</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax ratio</td>
<td>Tax revenue as percentage of GDP. This is a basic way to measure increases or decreases.</td>
<td>IMF Fiscal Affairs Department. When other sources provide the information, this is indicated in the notes.</td>
</tr>
<tr>
<td>VATGCR</td>
<td>VAT Gross Compliance Ratio. The VATGCR measures how well the VAT performance in terms of producing revenue. It is measured by dividing VAT revenue by total private consumption in the economy and then dividing this by the VAT rate. Increases in the VATGCR indicate base widening.</td>
<td>USAID Collecting Taxes. When other sources provide the information, this is indicated in the notes.</td>
</tr>
<tr>
<td>CITPROD</td>
<td>CIT Productivity. CITPROD indicates how well CIT does in terms of producing revenue, given the prevailing rate structure. It is calculated by dividing the total corporate income tax revenues by GDP and then dividing this by the general CIT rate. Increases in this indicator represent base widening.</td>
<td>USAID Collecting Taxes database. When other sources provide the information, this is indicated in the notes.</td>
</tr>
<tr>
<td>PITPROD</td>
<td>PIT Productivity. PITPROD attempts to indicate how well the personal income tax is performing in terms of producing revenue, given income levels and rate structure. It is calculated by taking the actual revenue collected as a percentage of GDP and then dividing this by the income-weighted averages of the top and lowest tax brackets. Increases in this indicator represent base widening.</td>
<td>USAID Collecting Taxes database. When other sources provide the information, this is indicated in the notes.</td>
</tr>
<tr>
<td>Tax Payments</td>
<td>Number of tax payments a typical company must make in a year. Decreases indicate reducing taxpayer compliance burden.</td>
<td>World Bank’s Doing Business, Paying Taxes subset.</td>
</tr>
<tr>
<td>Time for Tax</td>
<td>Number of person-hours a typical company must devote to tax compliance in a year. Decreases indicate reducing taxpayer compliance burden.</td>
<td>World Bank’s Doing Business, Paying Taxes subset.</td>
</tr>
</tbody>
</table>

43 See: [http://egateg.usaidallnet.gov/collecting-taxes](http://egateg.usaidallnet.gov/collecting-taxes)
compliance ratio indicate a wider base. Rising corporate and personal income tax productivity and the VAT gross compliance ratio all indicate a widening of the tax bases and, usually, improvements in the tax system.

Improving the Business Enabling Environment

The review employs two indicators to assess whether reforms have led to lower taxpayer compliance administrative burdens. The first indicator is the number of times that a company typically must submit payments to the tax administration throughout the year. The second indicator is how much time (person hours) a typical company must dedicate in the year to complying with all tax requirements. Declining numbers indicate improvements.

Indicators of Use of Increased Revenues for Development Purposes

Each country has its own particular needs so a simple set of indicators will not be useful for this review. However, there are certain spending criteria that give an idea greater resources in developing countries. In particular, indicators of how much funding is devoted to education and health and how these respond to the increased mobilisation of tax revenues can be helpful. Indicators used in this review include government spending on health and education and the degree to which foreign funding has been paying for health services in a country. This latter is particularly useful in PEPFAR countries, such as Rwanda, but of less usefulness in other countries. In Bangladesh, the indicator that most reflects government policy and is supportive of the tenets of DRM is to observe the degree to which the ‘annual development budget’ is funded from domestic rather than foreign sources.
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