

Fiscal Affairs Department

# Understanding Revenue Administration

An Initial Data Analysis  
Using the Revenue  
Administration Fiscal  
Information Tool

*Andrea Lemgruber, Andrew  
Masters, and Duncan Cleary*

Fiscal Affairs Department

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*Prepared by Andrea Lemgruber, Andrew Masters, and Duncan Cleary*



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# Executive Summary

This paper analyzes the results of the first round of Revenue Administration Fiscal Information Tool (RA-FIT)<sup>1</sup> country survey in an aggregated manner, for the most part by income group, but on occasion also by IMF region. As could be perhaps expected from such a large data-gathering exercise, round 1 data are not fully complete and suffer from a number of shortcomings in terms of quality. However, the analysis of these preliminary data has helped identify trends, draw broad conclusions (albeit cautious ones), and identify areas for further research. The paper also begins the process of making cross-country information available to developing economies in order for them to improve their revenue administration performance.

Some initial results are summarized here.

**Value-added tax (VAT):** VAT's relative importance, as a share of total revenue, has increased over the past decade for all income groupings but particularly for low-income countries (LICs). However, from RA-FIT data, it is evident that LICs have a much higher number of credit VAT returns (essentially refund requests) on average than the other income groupings—42 percent of total returns received. Yet of all the income groupings, LICs make the least refunds as a percentage of total gross VAT—7 percent as opposed to a 36-country mean of 18 percent.

**Tax and customs organization:** Tax and customs administrations have traditionally been organized as separate administrations within the structures of the Ministry of Finance (MoF). Forty percent of surveyed respondents have now adopted an institutional arrangement outside of the Ministry, mainly as semi-autonomous bodies. This model predominates in Anglophone Africa, where 85 percent (17/20) of surveyed respondents indicated they have a revenue authority, with tax and customs administrations combined into a single organization.

**Tax and social security contribution collections:** The similarities of the processes to administer taxes on labor income—namely the personal income tax (PIT) and social security contribution (SSC), which are important revenue bases in more advanced economies—may have been the catalyst for choosing to combine tax and social security collection functions in some of these countries. Indeed, most tax administrations collecting SSCs (11/15) are found in upper-middle-income countries (9) and high-income countries (2).

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<sup>1</sup> See Box 1 for brief overview of the RA-FIT.

**Large taxpayer administration:** On average, 77 percent (62/81) of the RA-FIT respondents reported having a large taxpayer office (LTO). Average revenue under LTO management as a percentage of total domestic revenue was lower than expected, at around 48 percent. Ratios of LTO staff to LTO taxpayers are also lower than expected.

**Small taxpayer administration:** Slightly more than half of the RA-FIT respondents have implemented a simplified regime for small taxpayers. These regimes are more common in LICs, where 85 percent of the administrations have special simplified small taxpayer regimes. This policy choice may be related to the profile of these economies (for example, higher informality, cash economies, and large numbers of the working population seeking to earn an income in an environment with limited employment opportunities) and the overall weaker capacity of the tax administrations.

**Taxpayer register profile:** More than two-thirds of taxpayer registers in LICs contain PIT payers for salaried employees, and universal filing is often a prerequisite. This is despite the fact that most of this tax is withheld by the employer and paid over directly to the tax administration.

**Return filing:** On-time filing rates for corporate income tax (CIT) and PIT returns across all income groups were much lower than expected. The average on-time filing rate for CIT was 49 percent and for PIT 45 percent. The average on-time filing rate for VAT was much higher, 69 percent, which may be attributable to a greater frequency of return filing, the self-enforcing nature of VAT through the input tax credit mechanism, and possibly more modern systems and processes given that VAT is a much more recently introduced tax in many countries.

**Arrears:** Corporate income tax arrears as a percentage of total CIT annual collections are much greater than for other taxes such as PIT and VAT. While the overall sample size for all income groupings was much smaller than for other aspects examined, total tax arrears as a percentage of total domestic revenue was lower for LICs than for low middle-income countries (LMICs) and upper middle-income countries (UMICs). This finding may be linked to poor overall return filing rates, meaning that taxes due and payable have not yet been recorded by the administration as outstanding, and as such have also not been subjected to any recovery action. Further, many administrations were unable to answer all questions in RA-FIT relating to arrears, particularly with respect to their age. Many administrations need to ensure more accurate reporting on this important category.

**Release times for imported goods:** Release times for imported goods subjected to physical inspection tended to decrease with income level, from LICs to high-income countries (HICs). By contrast, release times for goods not undergoing physical inspection in LICs (via air, land, and sea modes of arrival) were lower than their LMIC counterparts.

**Customs traffic by channel:** Although physical inspection of goods is necessary, it is often used too intensively, especially in the developing world. RA-FIT data suggest that on average LICs inspect 52 percent of imported goods (red channel), compared with 34 percent for LMICs, 26 percent for UMICs, and 20 percent for HICs. Such a trend suggests weak risk management and control selectivity for developing economies, with a potential increase in trading costs and reduction in trade competitiveness.

**Box 1. Brief Overview of the RA-FIT**

The Fiscal Affairs Department (FAD) provides extensive technical assistance (TA) to its member countries to modernize their tax and customs administrations. As part of this service, data collection, validation, and analysis underpin the guidance FAD gives to the respective countries. In the area of revenue administration, detailed questionnaires soliciting data are sent in advance of all diagnostic missions to the respective revenue administrations. FAD analyzes the responses, identifies key issues, and—based on a combination of the analysis of data and relevant documents and meetings with country officials—proposes recommendations to address the critical areas in both tax and customs.

This approach, which has served its purpose well, does have limitations. For example, some revenue administrations have considered such reporting to be onerous, as a one-off exercise for purposes of the TA mission. Further, the data are not standardized and consolidated into a central and reusable database—this requires future technical teams to search for the original responses, request the same information again, and leave the acquired data in repositories that are not widely accessible.

RA-FIT started off as a response to the need for standard data to help revenue administrations, particularly LICs, to better assess and track their performance. The RA-FIT can also be the common platform that other international organizations involved in gathering revenue administration data will use.

The RA-FIT aims to:

- Gather and analyze core tax and customs administration data annually.
- Make data and analysis available to member countries to enable them to monitor their performance and benchmark themselves vis-à-vis other countries.
- Establish baseline measures (key performance indicators) for TA programs of all providers, and provide a more detailed data source for a Results Based Management framework.
- Help target TA strategies and improve the quality of TA.



# 1

## Introduction

RA-FIT is a data-gathering initiative designed to collect tax and customs information. The data gathered include both quantitative and qualitative information and encompass a mixture of tax-administration baseline and profile data, inputs, and performance-related data. Information is provided directly by IMF member countries. These data have multiple purposes and multiple users, including the countries themselves.

The first round of RA-FIT was piloted in 2012 with a survey questionnaire (Excel Workbook™) sent to some 120 IMF member countries with which the IMF has active engagement in the area of revenue administration. Round 1 was the beginning of an iterative process designed to continuously improve the RA-FIT product over time. As a result of the Round 1 experience, many improvements have been incorporated into Round 2, which commenced in May 2014, but this time as a web-based platform.

One key use of RA-FIT data is to analyze trends and revenue administration performance generally. This report analyses the results of the Round 1 RA-FIT survey in an aggregated manner, for the most part by income group, but on occasion also by IMF region.





# 2

## RA-FIT and Performance Measurement

The RA-FIT country data were consolidated and formatted so as to extract data tables that can be used to analyze and understand emerging challenges and trends in revenue administration, and eventually, over time, to establish baselines to monitor and assess performance. This is an essential aspect of strategic management. Modern revenue administrations use strategic management as a systematic process to (1) set their long-term goals, (2) design and implement business plans to achieve these goals, and (3) regularly monitor their performance against targets to assess whether the organization is moving in the desired direction—and to adjust their plans, if needed.

Performance measurement lies at the core of the strategic management process. Nevertheless, in many developing countries systematic performance measurement is not a common practice. Indeed, revenue administrations generally lack comprehensive and transparent performance indicator systems—which limits their level of effectiveness. RA-FIT is intended to help close this gap by providing a standard platform that allows revenue administrations to report on and measure performance, and benchmark themselves against peer countries.

### The Round 1 Survey

The Round 1 survey consisted of four key parts: revenue statistics (revenue), institutional arrangements (general), tax operations, and customs operations.

There were seven questions in the Revenue Statistics part, requiring the values for GDP and revenue by tax type for a three-year period. These data are used only as the basis for some indicators, such as taxpayer stratification and segmentation.

The Institutional Arrangement part contained 19 questions, divided into various functional administration categories that are mostly qualitative in nature, designed to provide classifications and descriptions of the design and structure of the revenue administration.

Responses to these questions were used to analyze if there were any strong correlations among certain structural choices, the degree of administrative autonomy, and the use of information technology.

The Tax Operations part contained 26 main questions, many with multi-part answers, broken into various categories, generally designed to focus on particular baseline indicators:

- The **Overview** section covered questions relating to expenditures and staffing levels, providing data used in collection efficiency baseline indicators.
- The **Tax Office Activity** questions relate to staffing and revenue collections at specific offices, and are again used in the estimation of office specific collection efficiency baseline indicators.
- The **Large Taxpayer Office (LTO)** section relates to the structural design of the LTO, and its revenue and staffing levels. These data were used in designing baseline indicators comparing the effectiveness and efficiency of large taxpayer administration vis-à-vis general operations, and also in identifying common international LTO trends.
- The **Taxpayer Registration** questions relate to the breakdown and numbers of taxpayers by taxpayer type for baseline indicators related to filing rates and the yield per taxpayer.
- The **Income Tax Filing** questions relate to establishing on-time and late filing rate baseline indicators.
- The **VAT Threshold and Taxpayer Stratification** questions are to analyze the distribution of revenue across the various groups of VAT taxpayers used in assessing whether there are trends, locally and internationally, that can be used in the construction of a related baseline indicator.
- The **VAT Filing** questions are for establishing baseline indicators related to on-time and late VAT return filing as well as the composition of VAT returns filed (for example, credit, debit, and nil).
- The **VAT Refund** questions regarding claims made and refunds authorized per period is for establishing baseline indicators related to VAT refund process efficacy.
- The **Arrears, Audit, and Objections and Appeals** categories of questions pertain to the stock and flow in each of these areas, for a range of associated baseline indicators.
- The **Customs Operations** part contained 19 questions divided into six categories. Again, the categorization of the questions is based on the baseline indicators to which they may contribute:

- The **Overview** section covers questions relating to expenditures and staffing levels, providing data used in collection efficiency baseline indicators.
- The **Border Post Activities** questions relate to staffing and revenue collections at specific customs posts, and are again used in the estimation of post specific collection efficiency baseline indicators.
- The **Importers/Exporters** category of questions are designed to assess the distribution of revenue across the various sizes of traders, which is used in assessing whether there are trends, locally and internationally, which can be used in the construction of a related baseline indicator.
- The **Processing and Inspection** questions are designed to gather information around processing and inspection, and to assess baseline indicators of the efficiency of these operations.
- The **Arrears, Audits, and Appeals** questions pertain to the stock and flow in each of these areas, and are used in assessing a range of associated baseline indicators.
- The **Transactions** questions pertain to the breakdown of the various customs activities by the nature of the transaction (for example, import versus export) and by their tax treatment (fully taxable versus exemptions). These data are used in establishing baseline indicators related to the effective level of collections.

## Response Rates and Sample for Round 1

Eighty-six countries (of the 119 targeted) provided responses in time to be included in this analysis, an overall response rate of 72 percent. These responses had an average completion rate of 70 percent. High completion rates were achieved for the relatively easy to complete questions on institutional arrangements (general) and revenue statistics (86 and 87 percent, respectively). The worksheets proving more difficult to complete were those on tax operations, where on average the completion rate was 62 percent, and customs operations, where on average the completion rate was 58 percent. These operational parts contain the quantitative data that is most useful for undertaking an in-depth analysis of revenue administration performance.

The survey sample (86 respondents) is largely comprised of low-income and lower middle-income countries (around 59 percent of the total), mainly from Africa, Central America, and the

Caribbean. Table 1 analyzes the responses by income group.<sup>2</sup> The results reflect the fact that the first round of RA-FIT targeted countries covered by the IMF's Regional Technical Assistance Centers (RTACs). The intention was to start the exercise by focusing on developing countries to understand their needs with a view to support their strategic management function and to improve the FAD's technical assistance (TA) in these countries. An additional goal was to create a database on revenue administration performance information that covered countries generally not having been the focus of other international comparative studies.<sup>3</sup> In this sense, RA-FIT was testing uncharted waters.

Given this was the first attempt to systematically gather information on revenue administration in a large group of developing countries, the response and completion rates exceeded expectations. However, considerable time and effort was required to achieve this response. Indeed, many of the targeted administrations: (1) are comprised of less-mature administrations; (2) have poor management information systems; and (3) have significant capacity constraints. The RA-FIT initiative highlighted the urgent need for further TA in the development of performance measurement and management frameworks required by many administrations. It also focused attention on performance measurement and management across a large revenue administration population, perhaps for the first time on such a large scale, with many acknowledging that their inability to quickly locate data was a sobering, if not disconcerting experience. A number of administrations are also using RA-FIT as a starting point for the development of their own internal performance measurement frameworks.

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<sup>2</sup> Economies are divided according to 2012 Gross National Income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: Low Income Countries (LICs), US\$1,035 or less; Lower Middle Income Countries (LMICs), US\$1,036 to US\$4,085; Upper Middle Income Countries (UMICs), US\$4,086 to US\$12,615; and High Income Countries (HICs), US\$12,616 or more.

<sup>3</sup> Other cross-country data gathering initiatives include: the Organization for Economic Co-operation and Development's (OECD's) *Comparative Information Series* (biennially published and now called the *Tax Administration Series*), covering their member countries and a selected group of emerging market economies; the Inter-American Center of Tax Administration's (CIAT's) *State of the Tax Administration in Latin America: 2006–2010* covering Latin American countries (first publication, and in collaboration with the Inter-American Development Bank [IDB] and the IMF), and the work being carried out by the Intra-European Organization of Tax Administration's (IOTA) for the exclusive use of its members.

**Table 1. Analysis of Responses by Income Group**

Income Group	General		Revenue		Tax Operations		Customs Operations		Overall	
	Completion Rate (percent)	Respondents (number)	Completion Rate (percent)	Respondents (number)	Completion Rate (percent)	Respondents (number)	Completion Rate (percent)	Respondents (number)	Completion Rate (percent)	Respondents (number)
Low-Income Countries (LICs)	89	20	92	21	59	21	52	16	68	21
Lower Middle-Income Countries (LMICs)	85	30	85	30	62	29	60	20	70	30
Upper Middle-Income Countries (UMICs)	84	28	91	28	62	28	61	21	71	28
High-Income Countries (HICs)	88	7	69	7	67	7	60	6	70	7
<b>Average</b>	<b>86</b>	<b>85</b>	<b>87</b>	<b>86</b>	<b>62</b>	<b>85</b>	<b>58</b>	<b>63</b>	<b>70</b>	<b>86</b>

Source: RA-FIT Database, 2010.

Figure 1 shows the geographic distribution of RA-FIT responses across IMF membership. RTACs played an important role in supporting countries in the completion of RA-FIT in their regions, and it is also around their regions that most responses are clustered. The IMF has nine RTACs, one in the Caribbean (CARTAC), one in Central America, including the Dominican Republic (CAPTAC-DR), five in Africa (AFRITAC Central, East, South, West, and West2), one in the Middle East (METAC), and one in the Pacific (PFTAC). In addition, the IMF had two resident regional advisors in southeastern Europe at the time of the first round of RA-FIT, which accounts for the cluster of responses in this region.

**Figure 1. Distribution of the RA-FIT Respondent Universe**



Sources: Google map and RA-FIT Round 1 respondent countries.

Of the surveys received, 63 included the customs operations part. The reason for fewer customs returns is that RTACs are not always engaged with the customs administration, particularly where it is not combined with the tax administration.

## Limitations and Caveats Regarding Round 1 Data

The RA-FIT first round should be seen as the start of many further efforts to gather comprehensive tax and customs data on a wide range of topics from a large number of countries. The first round data, while certainly not perfect, provide a fresh insight into the current status of revenue administration, particularly in the developing world, and form a starting point for future rounds of RA-FIT. As such the first round is the start of a process that will evolve and improve over time.

When reporting the first round results of the RA-FIT there are two main areas that need to be considered regarding data quality, namely responder bias and structural data issues.

With the first area of responder-related bias in the survey responses, there are a number of issues that need to be borne in mind when interpreting the RA-FIT results. Firstly, not all countries that were asked to participate actually responded to the survey. Of the original 119 countries, 72 percent (86/119) responded, within which there was an average completion rate for the survey of 70 percent. The point being made is that the sample is not necessarily representative of the full population (all IMF member countries), but sufficiently large to make comparisons between the respondents and draw some useful conclusions, which can be built on over time with future rounds of RA-FIT. This is most acute for HICs, of which only seven respondents participated, mainly in the Caribbean, Latin America, and southeastern Europe—the only HICs supported by RTACs or resident regional advisors.

The lack of responses to some sections of RA-FIT was often the result of an absence of available information in the case of the countries' tax and customs administrations; some of them even lack basic IT systems. If tax and customs administrations were separate entities in a country, this often led to a survey response that lacked the customs elements, which were only completed in 73 percent (63/86) of cases for which RA-FIT returns were received.

Some countries were unable to provide data for all of the relevant years requested. There were some issues with how the questions were interpreted by respondents, often caused by uncertainty regarding definitions of key concepts such as what constitutes an audit, what constitutes tax arrears (including taxes in dispute, or just undisputed arrears), what constitutes an active taxpayer, categories of staff functions, and the scale that should be used when replying to questions requiring numeric values (for example, thousands versus millions). Many of these issues have been addressed in the second round of RA-FIT through clearer instructions to respondents, the new online interface, and greater engagement with partner organizations such as Inter-American Center of Tax Administrations (CIAT) and the World Customs

Organization (WCO). Nevertheless, issues will no doubt continue to surface, and over time will need to be addressed and resolved.

The second area to consider is the structural nature of the data and the participants themselves. By their nature, the respondents are diverse. This fact will have an effect on the distribution of numeric values such as staff numbers, audit yield, GDP, population of taxpayers, and many ratios relating to these, such as tax revenue as a proportion of GDP and tax staff ratios, especially when reporting results summarized at an overall level (as opposed to income group or regional levels). The RA-FIT analysis did identify outliers in the response data and in some cases these were adjusted or transformed to mitigate their effect on the summary statistics used in the report. For example, where the data supplied were obviously erroneous—for example, expected annual returns for a specific tax type exceeded the number of registered taxpayers for the tax—these errors were addressed in consultation with country officials. On a related matter, many numeric values are highly skewed, with some extreme values, but the majority of values are at the lower end of the scale. Again, this has an effect on averages and totals that are reported in this paper.

In addition to issues of data quality, comparability of data among countries may also be challenging given the differences in fiscal year-ends. For example, comparing the VAT return filing rate for an administration with a March 31 fiscal year-end to an administration with a December 31 fiscal year-end will in essence be comparing two different 12-month periods, that is, assuming the data are for 2010, the former administration will supply data covering the period April 1, 2009, to March 31, 2010, while the latter administration will supply data covering the period January 1, 2010, to December 31, 2010. There is no easy solution to ensuring that all data are perfectly aligned, and the cost of gathering and adjusting data to coincide outweighs the benefits. Accordingly, future analysis of later RA-FIT rounds will not attempt to adjust data to a single and matching point in any year.

To recap, while the data gathered from the first round has much value and use, readers should note that it has been affected by the issues outlined above, among others, and that the first round is the first step of an ongoing and evolving process.

An analysis of responses for each question in each of the four RA-FIT worksheets has been useful in identifying areas in which administrations had difficulties and were unable to adequately respond.

As already stated, a relatively high average completion rate of 86 percent was attained for the General worksheet. Most of the information sought was readily available with the exception of



staff distributions by function, where 16 percent of respondents were unable to supply the required information.

The completion rate for the Tax Operations worksheet was lower than the two previously mentioned worksheets, at 62 percent. The five most challenging aspects for tax administrations were (1) determining the age of tax arrears—53 percent of respondents were unable to supply any information; (2) objection and appeal stock and flow information—45 and 43 percent of respondents respectively were unable to supply the requested information; (3) basic VAT stratification information—37 percent of respondents were unable to supply any information; (4) VAT returns by type, that is, debit, credit or nil returns—35 percent of respondents were unable to supply the requested information; and (5) stock and flow of tax arrears by tax type—30 percent of respondents were unable to supply the requested information.

The Customs Operations worksheet also proved more difficult for those administrations responding where the average completion rate was 58 percent. The five most challenging aspects for customs administrations were the following: (1) providing details of other agencies involved in the import and export processes alongside customs—52 percent of respondents failed to furnish any information; (2) information pertaining to customs appeals—36 percent were unable to supply the information requested; (3) information in respect of post clearance activity—23 percent of respondents were unable to supply the requested information; (4) violation and penalty information—23 percent of respondents were unable to supply the required information; and (5) details of revenue foregone as a result of relief granted—21 percent of respondents were unable to supply the requested information.

# 3

## Revenue Administration Institutional Frameworks

To excel in their operational performance, tax and customs administrations need an efficient and well-defined institutional framework. Many different institutional frameworks exist around the world, and no single model can be identified as superior. Nevertheless, some key characteristics of an effective revenue administration are generally recognized to be (1) sufficient legal authority to exercise its mandate in full; (2) a well-defined and lean organizational structure; (3) clear separation between the HQ-policy/planning level and the local offices/operational level; (4) adequate administrative autonomy to implement its mandate effectively and without unwarranted political influence; (5) skilled work force receiving appropriate remuneration and benefiting from stable career paths; (6) adequate budget to finance its operational and capital needs; and (7) investment in integrated, modern, and secure information technology (IT) systems. Accordingly, these are the building blocks that allow tax and customs administrations to operate effectively and efficiently, and to fully exercise their mandates. RA-FIT survey-forms are designed to obtain information in these areas in order to identify appropriate international baselines by income grouping.

### **Institutional Arrangements**

Revenue administration institutional arrangements reflect policy decisions on different organizational models, revenue responsibilities, and administrative powers. RA-FIT has surveyed countries on these arrangements. They can be very different across the globe and difficult to classify into specific groupings. The discussion that follows is based on a snapshot of particular arrangements as reported by respondent countries.

#### **Organizational Models**

Tax and customs administrations have traditionally been organized within the structures of the Ministry of Finance. This organizational approach has been adopted by many administrations that fully exercise their mandates under this model. However, in the last two decades or so, some administrations have moved toward a different organizational model—establishing

revenue authorities outside the regular civil service structure—with a view to minimizing unwarranted political influence and allowing a greater degree of operational independence from the constraints of standard civil service rules (in terms of legal form and status, funding, and human resources). Whether this latter model (which itself has many variations) has achieved its desired objectives and whether it has led to more effective revenue administration is still debatable, and not within the scope of this paper.

Sixty percent of the surveyed respondents (53/85) reported that tax and customs administration is conducted by either single or multiple directorates of the MoF. In the vast majority of cases this model was implemented through multiple directorates (43 countries—81 percent) with a minority of cases implemented through a single directorate (10 countries—19 percent). In the case of multiple directorates, support functions such as information technology and human resource management are often shared with other directorates in the MoF.

The balance—or 40 percent—of surveyed respondents (32/85) have adopted an institutional arrangement outside the structure of the MoF. The types of organization vary significantly and include:

- A unified<sup>4</sup> semi-autonomous body where revenue administration functions, along with the necessary support functions (for example, IT and human resource management) are carried out with the head of the administration reporting to a government minister (6 countries—7 percent)
- A unified semi-autonomous body for which revenue administration functions, along with the necessary support functions (for example, IT and human resource management) are carried out with the head of the administration reporting to a government minister and oversight body/board of management including external representatives largely from outside the revenue administration (21 countries—25 percent)
- Other separate autonomous bodies not fitting the categories already mentioned (5 countries—6 percent).

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<sup>4</sup> The term “unified” broadly means that the revenue administration is responsible for administering all core national taxes, both direct and indirect, and performs all functions essential for efficient and effective administration of the tax laws. In other words, not separate administrations, that is, one administering direct taxes, and one administering indirect taxes.

Unified semi-autonomous revenue bodies predominate in Anglophone Africa, where 85 percent (17/20) surveyed respondents have adopted this institutional arrangement. Semi-autonomous institutions (and other separate autonomous bodies) have also been established in southeastern Europe (4/8 surveyed respondents) and Latin America (3/10 surveyed respondents). On the other hand, arrangements within Ministry directorates are the norm in Francophone Africa (11/12 surveyed respondents), Asia and Pacific (9/10), Middle East and Central Asia (all 6 surveyed respondents), and the Caribbean (14/16). Table 1 in Appendix I reflects the status of institutional arrangements for revenue administration by region for 2010.

From an income group perspective, the adoption of institutional frameworks outside the MoF is tilted toward LICs. Half of the surveyed LIC respondents (10/21) have moved in this direction. Most LMICs (18/30) and UMICs (17/27) favor governance models within Ministry directorates, as do all seven surveyed HIC respondents. One explanation for this result: in more advanced economies, regular government departments already benefit from significantly increased administrative autonomy within the civil service compared to 10 or 20 years ago, especially with respect to managing human resources. Most of these administrations have professional careers, stable human resource policies and budget appropriations, as well as technical management. Table 2 in Appendix I reflects the status of institutional arrangements for revenue administration by income group in 2010.

### **Functional Responsibilities**

Administrations often have different functional responsibilities, which leads to different organizational approaches. Different countries have chosen to organize their administrations following different models, and the RA-FIT database provides information to map out some of the models chosen by different countries (Figure 2).

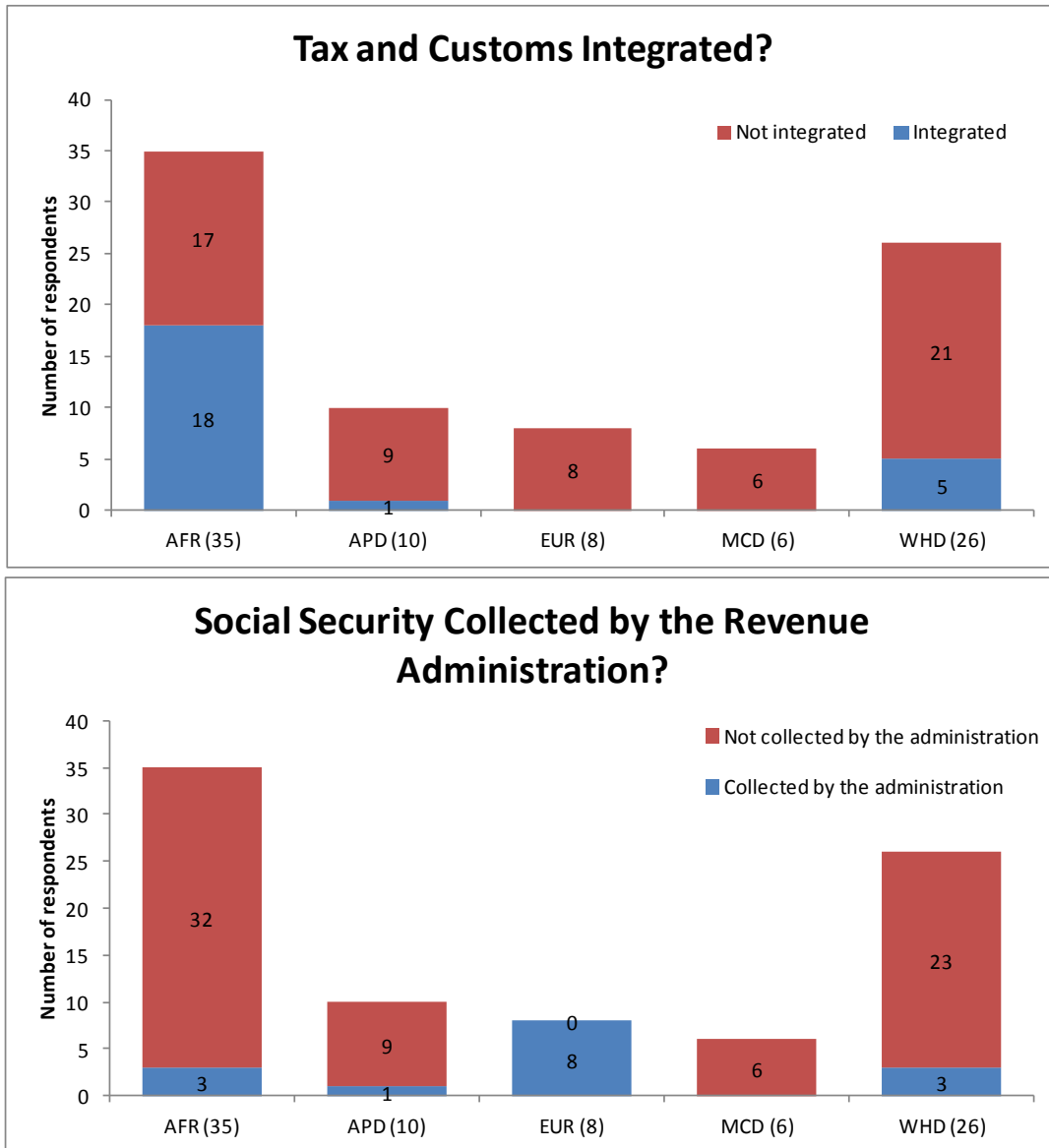
The majority of surveyed respondents do not have tax and customs combined into a single revenue administration (see Figure 2). Seventy-two percent of the surveyed respondents have separate tax and customs administrations, while 82 percent of surveyed tax administrations have no social security contribution collection responsibility. Therefore, separate tax and customs entities seem to be the most common model adopted by RA-FIT respondent countries. Combining tax and customs is more common in Africa (21 percent of all surveyed respondents), which is closely connected to the region's choice of adopting revenue authorities (autonomous bodies), as previously described. The combined tax and customs model is also present, although to a lesser degree, in surveyed Latin American respondents (30 percent of all surveyed

respondents).<sup>5</sup> At the same time, the model of combining tax and social security collection is more common in Eastern Europe. It is noteworthy that this model seems to predominate more precisely in countries where SSC revenues are an important source of revenue (PIT and SSC are significant tax sources in Europe). The similarities of the processes to administer taxes on labor income—namely the PIT and SSC, which are important revenue bases in advanced economies—may have been the catalyst for some of these countries to have chosen to combine tax and social security collection functions. Indeed, most tax administrations collecting SSCs (11/15) are in UMICs (9) and HICs (2). Assessing whether this model has been successful and efficient in collecting taxes on labor income is an interesting subject for further investigation, beyond the scope of this paper.

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<sup>5</sup> A number of Latin American countries that did not respond to Round 1 of the survey have unified revenue agencies that include the domestic tax and customs administrations, with varying degrees of autonomy. These include Argentina, Brazil, Colombia, Peru, and Venezuela. In the case of Argentina, Brazil, and Peru, the revenue agency is also responsible for collecting social security contributions.

**Figure 2. Tax and Customs/SSC Collected by Revenue Administration, 2010**



Source: RA-FIT Database, 2010.

Note: AFR=Africa; APD=Asia Pacific; MDC=Middle East and Central Asia; WHD=Western Hemisphere.

### Taxpayer Segmentation

Taxpayer segmentation has become the mainstream approach to managing compliance risk. Modern tax administrations recognize the correlation between characteristics of taxpayers and risks to compliance. The nature of risk points to the type of compliance intervention, which can range from taxpayer service to the use of a wide array of audit approaches. Many tax administrations categorize the taxpayer universe into three main segments: (1) a small number

of large taxpayers contributing up to 75 percent of revenue; (2) a moderate number of medium taxpayers with turnover often above the registration threshold of the VAT (where present); and (3) a large number of small taxpayers who contribute relatively little to overall revenue collection, but nevertheless are important for overall taxpayer compliance and good fiscal citizenship. Compliance strategies are structured around these segments, acknowledging that each has its own particular risk characteristics. This section will review approaches to managing two taxpayer segments, large and small, based on the data gathered through RA-FIT.

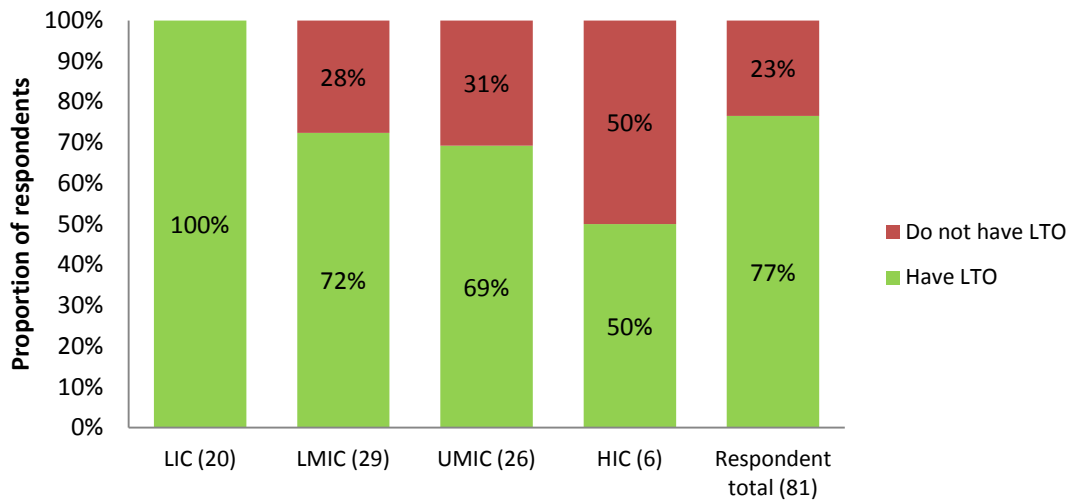
### **Managing Large Taxpayer Compliance**

Non-compliance by large taxpayers can have a significant impact on total government revenue. The scale of operations and global nature of large enterprises mean that their compliance issues tend to be more complex than those of other taxpayer segments. Compliance risks from this segment typically include aggressive tax planning and use of complex structures and intra-group transactions to shield income from tax. To manage these risks, the majority of surveyed respondents (62 countries, or slightly more than three-quarters of the respondents) have adopted special institutional arrangements by establishing a large taxpayer office (LTO). Of the 19 countries that have not set up LTOs, 11 are small island countries in the Caribbean (also HICs) and six are countries in Asia Pacific/Africa where economies of scale and other factors may not support setting up separate arrangements for large taxpayers.<sup>6</sup> Only two African countries survey respondents were without an LTO in 2010, although one of those countries subsequently introduced an LTO in 2012. Figure 3 shows the percentages of administrations with and without LTOs by income group for 2010.

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<sup>6</sup> Although economies of scale may not justify a separate LTO in very small administrations, the concept of taxpayer segmentation is still valid as criterion to apply specialized resources to sectors that account for the largest share of revenues.

**Figure 3. Large Taxpayer Offices by Income Group, 2010**



Source: RA-FIT Database, 2010.

Note: LTO=large taxpayer office.

The concentration of revenue from large taxpayers (as currently defined in the surveyed respondents) is somewhat lower than expected in many countries. Generally speaking, it has been recommended that LTOs be responsible for administering an important proportion of total domestic tax revenue. Table 2 indicates that this is the case in many countries. LTOs in LICs, LMICs, and UMICs in 2010 accounted for about 50 percent of domestic tax revenue. In contrast, LTOs in HICs manage about 65 percent of tax revenue, although the small sample size warrants some caution and no similar OECD data are available. It does appear that in many developing economies with LTOs, there is scope to review the overall LTO qualifying criteria with ensure that the largest taxpayers are clearly under the management of the LTO.

Ratios of LTO staff to LTO taxpayers seem to be low. The number of staff and competencies required for the LTO will differ from other segments, involving more experienced and highly skilled staff. The functions, responsibilities, and structure of the LTO will also determine how it should be staffed. On average, tax administrations allocate five percent of total staff to manage large taxpayers, and HICs allocate an even smaller share (two percent). Given the complexity of large taxpayers' operations and the need to keep a tight control of their tax obligations (given the high risks to revenue), it may be that LTO staff is insufficient to administer the number of large taxpayers (an average ratio of 13 taxpayers to one staff), even in technology-intensive environments.



**Table 2. Selected Large Office Taxpayer Statistics, 2010**

Income Group	LTO Taxpayers as % of Total Taxpayers	Tax Revenue Contribution of the LTO (%)	LTO Staff as % of Total Staff	Taxpayers to Staff Ratio
Low-Income Countries (20)	12	50	5	8:1
Lower Middle-Income Countries (29)	4	45	6	13:1
Upper Middle-Income Countries (26)	4	48	4	13:1
High-Income Countries (6)	15	65	2	40:1
Respondent TOTAL (81)	9	48	5	13:1

Source: RA-FIT Database, 2010.

Note: LTO = large taxpayer office.

### Managing Small Taxpayer Compliance

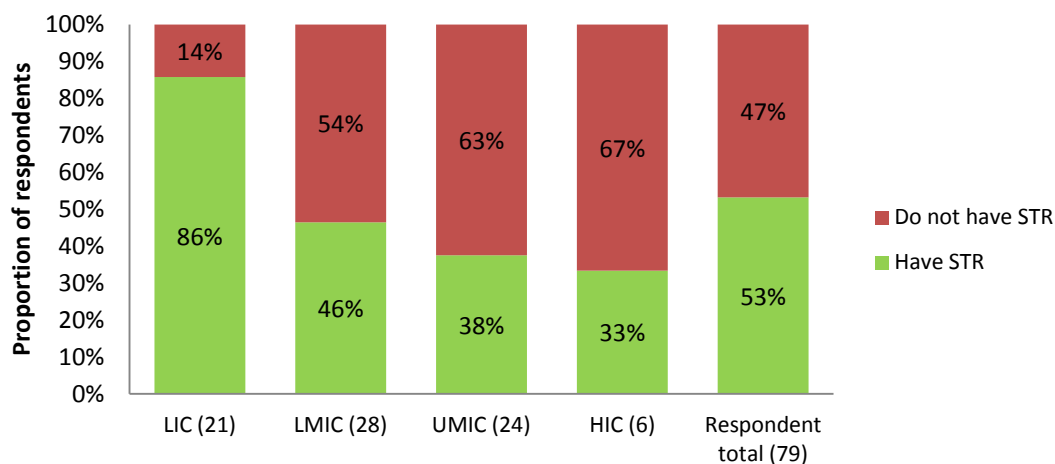
Small enterprises also tend to present special tax-compliance issues. They are relatively large in number and often deal exclusively in cash, typically keeping no or few records. Many operate outside the tax system, and for those that are registered, attention to filing and payment obligations is often poor. Revenue potential from this segment is low. Nevertheless, a growing trend to bring businesses into the tax net, increase tax fairness, and to generate revenue across all taxpayer categories, has led many countries to reconsider how to tax small taxpayers in a cost effective way.

Slightly more than half of the RA-FIT respondents (42 out of 79) have implemented a simplified regime for small taxpayers. These regimes are more common in LICs, in which 85 percent of the administrations have special simplified small taxpayer regimes. This policy choice may be related to the profile of these economies and the overall weaker capacity of the tax administrations. Ensuring the implementation of a simple, yet easy to administer tax for small taxpayers that reduces both the cost of compliance and that of administration remains an ongoing challenge, particularly for administrations with weak capacity.<sup>7</sup> Figure 4 shows the percentages of administrations with and without small taxpayer regimes by income group for 2010.

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<sup>7</sup> A more detailed discussion of special tax policy regimes that different countries have established for small enterprises, as well as administrative considerations for this segment of taxpayers, can be found in International Tax Dialogue (2007).

**Figure 4. Small Taxpayer Regimes by Income Group, 2010**



Source: RA-FIT Database, 2010.

Note: STR=small taxpayer regime.

### Adoption of a Tax Procedures Code

A growing trend over the past several years has been to consolidate powers, authorities, and regulations that are common to the tax administration of different taxes into a single tax procedures code (TPC). This approach allows for a consistent and equitable treatment of taxpayers, increases the overall transparency of revenue administrations' operational procedures, reduces administrative and compliance costs, and harmonizes procedures across different taxes as far as possible. Examples of provisions included in a TPC are those relating to fines and penalties, withholding at source, interest calculations, collection enforcement, audit, access to books and records, and delegation of authorities.

Slightly more than half of the surveyed respondents reported that they have a TPC (45/83). It seems that this practice is more common in advanced economies than for LICs. The large majority of surveyed respondents in southeastern Europe reported having a TPC (87 percent). Countries in the Middle East and Central Asia reported a similar result (although the sample size is very small). Approximately 60 percent of surveyed Western Hemisphere respondents have a TPC. About 40 percent of surveyed African countries respondents also have this type of law: half the countries in Anglophone Africa respondents have adopted this practice, while 30 percent have done so in Francophone Africa.

### Administrative Powers to Fully Exercise the Mandate

The range of administrative powers given to revenue administrations varies across countries. Such range is influenced by factors such as the institutional establishment, system of government, and public sector policies and practices. The survey asked questions related to the

degree of autonomy in areas of design of internal organizational structures, staff remuneration, hiring and firing, staffing levels, and operational and capital spending. Once again, caution needs to be exercised in interpreting these results. Even though a relatively greater degree of institutional autonomy in executing these policies is generally desirable, some revenue administrations may fully and effectively exercise their mandates without such autonomy, in particular where the civil service general rules and overall administrative framework are appropriate and functional.

For tax administrations (Table 3, Appendix I), 80 survey responses indicate:

- A relatively high level of autonomy in relation to designing internal structures and exercising discretion over operational spending.
- Far less autonomy in setting staff remuneration levels; 66 percent (53/80) of surveyed respondents do not give this power to their tax administration.
- An even split of results in relation to whether they have discretion over capital expenditure, setting of staffing levels, and hiring and firing of staff.
- Predictably, tax administrations in Anglophone Africa—where semi-autonomous bodies dominate—reported the highest levels of autonomy across the specific areas surveyed.

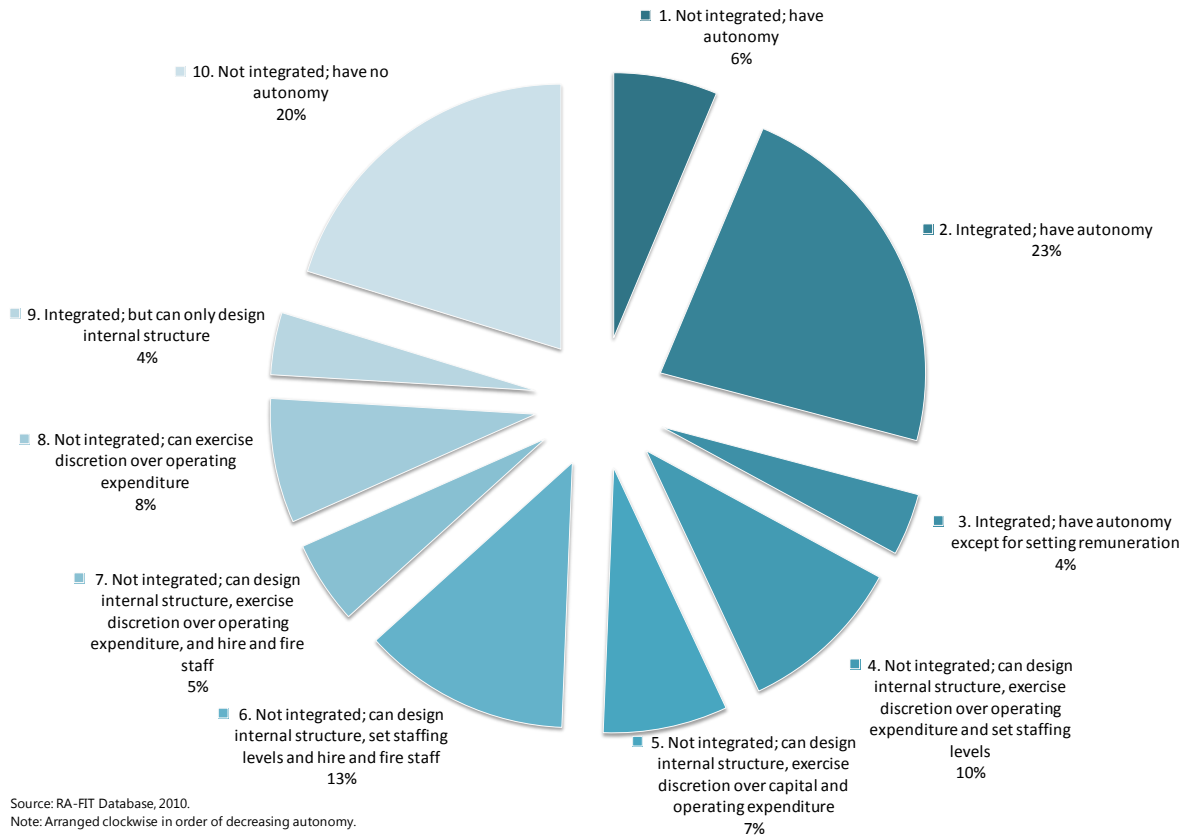
Figure 5 shows the percentage of respondents in order of decreasing autonomy for tax administration (clockwise) and whether tax and customs are combined into a single administration, or whether they are separate entities. Figure 5 demonstrates the use of multivariate statistical techniques to group similar countries based on all of the tax administration autonomy attributes simultaneously. Instead of considering autonomy attributes in isolation, the analysis provides a multivariate view of the data in a fashion not easily achievable by other means.<sup>8</sup> Moving around the chart clockwise from the top, autonomy in administrative matters decreases from full, through partial, to none. Each of the clusters can be described in terms of the modal value for each attribute in each cluster. For example, the cases in cluster 2 are mainly autonomous across all attributes, and have tax and customs combined, comprising mainly Anglophone African countries, while cases in cluster 10 have no autonomy;

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<sup>8</sup> The method involved creating “dummy” binary variables and data for each attribute for each country, and then running these data, including whether the administration of tax and customs was integrated, through a cluster analysis procedure. The method used was hierarchical agglomerative clustering, with Ward’s method, which suggested 10 clusters with the characteristics outlined in Figure 5.

tax and customs administrations are separate, comprising mainly Caribbean and Pacific Island countries.

**Figure 5. Degree of Autonomy for Tax Administration, 2010**



Potential uses for these cluster groups can include better understanding the RA-FIT responses at a summary level, providing countries with information on their most similar peers, correlating cluster groups with other attributes to determine whether there is a relationship of interest (for example, the relationship between the integration of tax and customs and degree of autonomy with on-time filing rates, audit yield as a percentage of total tax revenue, and tax type composition) and measuring changes in the profiles of countries over time. Arguably it is not possible to fully understand the RA-FIT data without a multivariate approach; it is intended that with subsequent iterations of RA-FIT further work in this area will be conducted.

For customs administrations (Table 4, Appendix I), 63 survey responses show a similar pattern to that found for tax administrations:

- Approximately 70 percent of customs administrations have powers to design their internal structures, and 60 percent are able to exercise discretion over administrative spending.

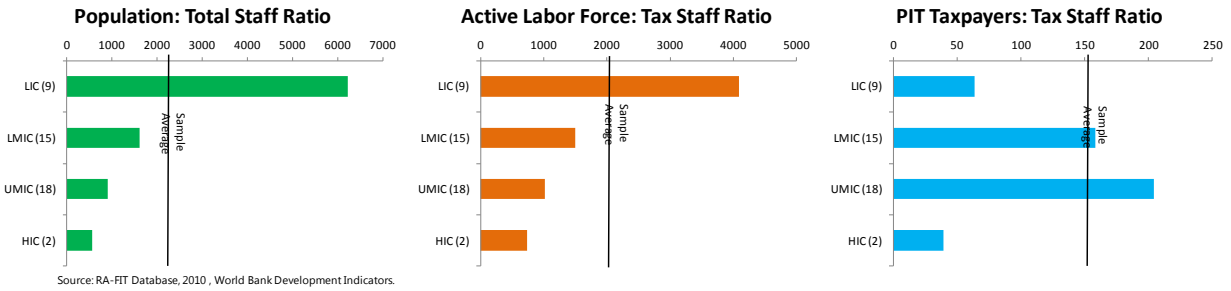
- Most (64 percent) have no authority in setting staff remuneration levels.
- Results are evenly split in relation to discretion over capital expenditure, setting of staffing levels, and hiring and firing.

## Human Resources

High-performance revenue administrations possess an adequate number of well-trained and motivated human resources (HR). Naturally, the “optimal” workforce size depends on a series of country-specific factors, such as the organizational model, the types of revenue administered, complexity of the legislation, size of territory and population, and the level of automation of the administration. Quantity may also not be enough if the workforce is comprised of staff with a low standard of education, or they are not well trained. Having appropriate numbers of competent staff is a challenge for all revenue administrations.

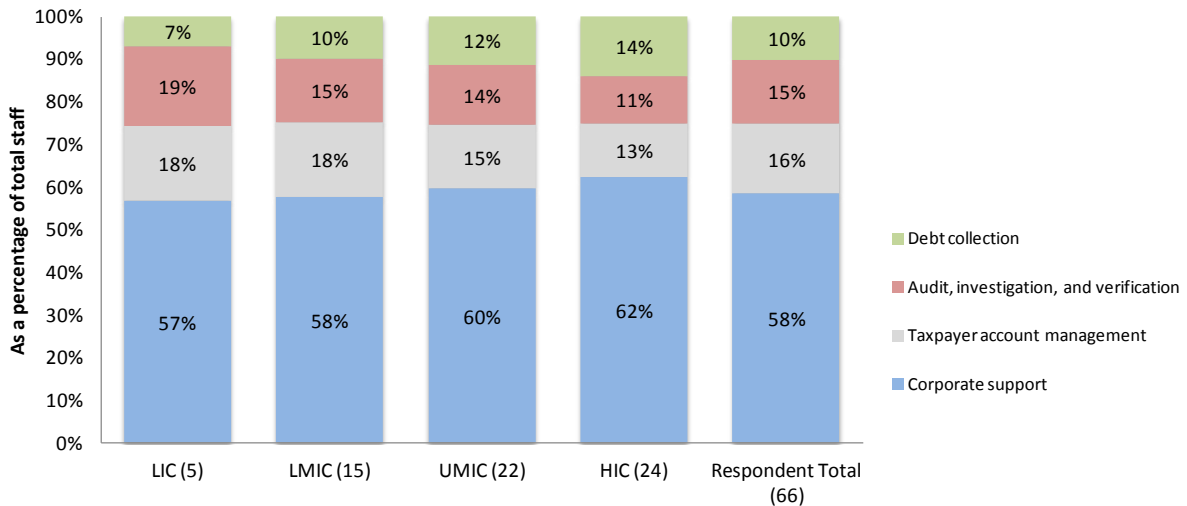
The RA-FIT survey requested information about the (1) number of employees, (2) distribution of employees by core function, and (3) budget allocated to staff costs across tax and customs administrations. Regarding staffing numbers, Figure 6 normalizes the metrics using three different analyses to try to shed some light on the discussion of the appropriate size of a revenue administration workforce. Subject to the above-mentioned caveats, the analysis compares the country’s total population to total tax and customs administrations’ staff; the active labor force (to exclude those who are not taxpayers, such as infants, students, and the unemployed) to tax staff; and the universe of registered PIT taxpayers to tax staff (as a measure of “actual” workload). On average, a single member of staff “covers” about 2,200 citizens; 2,000 employees who are in the active labor force; and 150 registered PIT taxpayers. Against this measure, African countries seem, in particular, to be understaffed in comparison to other regions if the metrics of total population and active labor force are used. While one African staff member covers about 3,100 active employees on average, a European staff member is responsible for about 600 employees. However, the picture changes completely if only the PIT-registered universe is analyzed: in this case, an African staff member covers fewer than 100 registered taxpayers—the lowest number across regions. This may denote that the “actual workload” is not larger, in practice, for an African staff member. However, it may also imply that a significant part of the labor force is not registered. Caution should be exercised in placing too great a reliance on this analysis given that many factors may influence the outcomes, for example, whether universal filing exists for personal income taxpayers and whether simplified PIT regimes for small taxpayers are present.

**Figure 6. Tax Administration Staff Metrics, 2010**



In terms of composition—or staffing distribution across functions (Figure 7)—on average nearly 60 percent of the workforce work in support functions. This category includes administrative support such as HR management, finance and administration, and IT, as well as functions such as public relations and internal affairs. The other 40 percent cover core functions, such as debt collection, audit, and taxpayer account management. The number of staff dedicated to support functions seems larger than envisaged. This may be owing to countries’ own understanding and classification of support functions, which may also include cross-cutting functions such as risk management, strategic planning, and international relations.<sup>9</sup>

**Figure 7. Tax Administration Staff Distribution by Function, 2010**



Source: RA-FIT Database.

<sup>9</sup> The second round of RA-FIT defines the various functions in a way that provides a clearer depiction of staff allocation.

Finally, administrations reported that, on average, staff costs represent 65 percent of their total budget. There is a significant variation in numbers reported—from countries spending 30-40 percent of their budgets on HR costs to others that reported figures above 80 percent. Again, there may be definitional difficulties in the questions asked, and further research is needed.

## Information Technology

External rather than internally (in-house) developed IT systems are employed by most of the survey respondents. While many tax and customs administrations develop core IT systems themselves, survey results reveal that a greater number look to external suppliers to meet their IT needs. This finding is particularly pronounced for LICs (29/48 tax administrations and 28/36 customs administrations) for which government agencies often struggle to recruit and retain IT professionals. With a wider reliance on packaged IT customs solutions, dominated by ASYCUDA<sup>10</sup>, significantly more customs administrations across all income levels (44 out of 58 countries) rely on external IT systems.

Only UMICs had a majority of tax administrations that favored in-house IT capacity (15/23 countries). Of the 34 tax administrations (of which just 10 are LIC or LMIC) with in-house IT operations, 12 supported customized systems, and 19 did not state the nature of their systems (although many could reasonably be assumed to be customized), and only three countries noted that internal IT resources supported packaged systems from an external source, which typically requires a concerted “knowledge transfer” effort to achieve. Of the 42 tax administrations that use external vendors, 28 support customized systems (likely developed or integrated/implemented by the vendor), 13 support commercial off-the-shelf (COTS) solutions, and one administration did not specify. Thirteen customs administrations reported that they develop their own IT solutions; 44 indicated they use external developers.

Customized systems appear to be more favored over COTS solutions for both tax administration (40 customized versus 17 COTS) and customs administration (44 customized versus 13 COTS). However, these findings may reflect inconsistent definitions across countries

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<sup>10</sup> Automated System for Customs Data, an IT package for customs administration developed and marketed by UNCTAD.

regarding the IT solutions. For example, some countries classify solutions such as SIGTAS<sup>11</sup> and Oracle<sup>12</sup> as COTS while others consider the same solutions as a custom-developed system. This can be plausibly explained: while SIGTAS is considered by some to be COTS, the reality has been that no two implementations are identical and the system in use by each country is distinguishable from every other country in some way that is often significant. Conversely, Oracle is often the underlying database of both custom-built and COTS solutions (several countries declared use of both SIGTAS and Oracle). Similar response behaviors are observed regarding customs administrations. Slightly more than half of the respondents employ a standardized IT solution, with 39/77 countries reporting use of ASYCUDA. However, of the 39 countries reporting its usage, 17 considered their implementation to be COTS; 17 classified their use of ASYCUDA as custom-built; and 9 did not provide a classification.

Survey results show that the use of packaged IT solutions—relative to custom built solutions—is much higher in LICs. Of the 17 reported tax administration COTS implementations, 16 were in LICs, as were 17/20 customs administration COTS. The tendency toward COTS solutions in lower income environments is often a pragmatic reflection of IT capacity constraints both inside and outside government sectors. Further, budget-constrained tax administrations often look to donor support and financing of automation initiatives, and given the high risks, costs, and timelines commonly perceived to be associated with in-house solutions, development partners are rarely willing to underwrite them. A topic for further analysis, in particular for LICs, is whether different IT solutions have led to better/worse performance in core business functions, such as returns processing and payment.

## **Budget and Administration Cost**

The cost of administration is a frequently used indicator to measure the efficiency of revenue administration. The indicator is the ratio between the total budget (operating and capital) of the administration and the revenue collected. Reductions in this value, *ceteris paribus*, indicate improvements in efficiency. Ease of access to the data used in the computation may have boosted its use.

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<sup>11</sup> Standard Integrated Government Tax Administration System, an IT package for tax administration developed and marketed by CRC Sogema.

<sup>12</sup> Oracle is a large IT developer; its software/database components are often used by revenue administrations.



Of course, this indicator needs to be interpreted with extreme caution—because rarely are all things equal. Cost efficiency of a revenue administration is affected by many factors that could influence this indicator and make it risky in cross-country cost comparisons. These include, for example:

- Whether one is measuring costs for tax administration only, or also tax, customs and/or social security administration (many LICs, especially in Africa, have “integrated” tax and customs operations, meaning that apportionment of cost is more difficult, and that comparisons may inadvertently be made between “integrated” and “non-integrated” administrations).
- The number of taxes/fees that the administration is collecting and whether it is collecting revenue for sub-national governments.
- Whether the administration is in a period of expansion/modernization, and is making important investments in IT systems and/or infrastructure (in such cases, it is not necessarily a bad thing for an administration to have high costs of administration during its modernization phase).
- Whether there have been any tax policy changes that may have affected total revenue collections, either positively or negatively, that is, if tax rates have been raised and revenue collections increase as a result then the indicator would suggest that the administration has become more efficient, when in reality the denominator has increased because of tax policy changes.

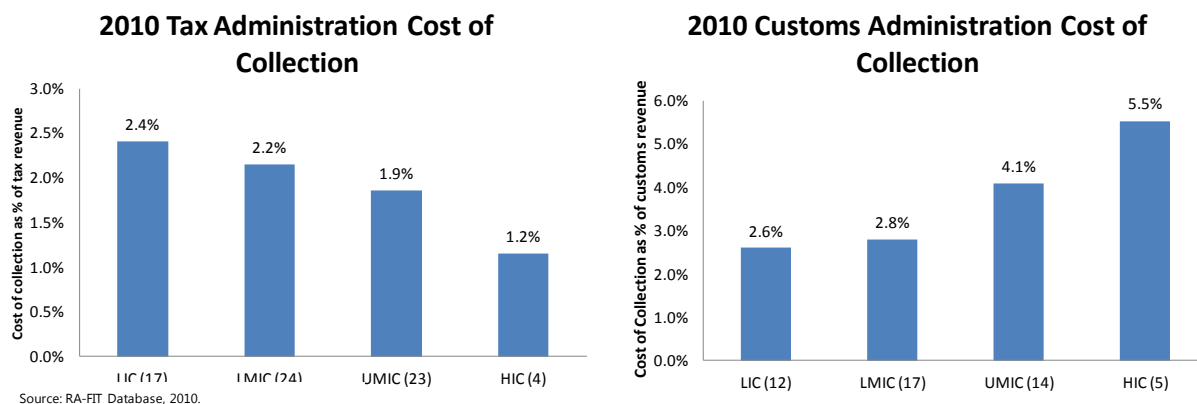
Against this backdrop, the RA-FIT survey results show that the administration cost, on average, tends to decrease for tax administrations from LICs through HICs and to increase for customs administrations from LICs through HICs. This trend is quite clear when considering Figure 8. It should be noted, however, that for cost of tax collection, the range of values for LICs and LMICs is quite wide compared to UMICs and HICs. For administrative cost of customs collection, the ranges of values are larger for LMICs, UMICs, and HICs as compared to LICs. For tax administrations, the administration cost falls from 2.4 percent (LICs) to 1.2 percent (HICs) along the income-development axis. The average for 32 OECD HICs in 2010 was 1.1 percent.<sup>13</sup> For customs administrations, it increases from 2.6 percent (LICs) to 5.5 percent (HICs). In line with the previous discussion, possible explanations are the following:

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<sup>13</sup> See Table 5.3 of OECD (2013).

- Tax as a percentage of GDP generally increases across the income groups, that is, from LICs through to HICs, with many mature revenue administrations demonstrating a higher degree of professionalism, having a larger cadre of well-trained and highly skilled staff, and being in a better position to effectively curb tax avoidance and evasion.
- The overall higher tax burden on more advanced economies, however, does not arise from taxes on international trade. These countries have a lesser dependency on trade taxation. Therefore, their customs administrations, despite having a higher-than-average investment in security and control systems and IT solutions (HICs spend on average 17 percent of their total budget on investment, while LICs spend about 5 percent), do not collect significant revenues. In other words, revenue mobilization from international trade is not a primary policy goal in HICs.

**Figure 8. Administration Cost, Tax, and Customs Administration, 2010**



## Outsourced Services

Varying degrees of outsourcing occur in tax and customs administration, but it is more common for the so-called “non-core” functions. Outsourcing in relation to support functions often includes security and cleaning services and is also fairly common for IT related services, as discussed in the previous section, most probably to compensate for the lack of in-house resources or to complement the internal capacity with highly specialized IT solutions. A common (and often recommended) outsourced service is to shift payment processing to banks. This allows revenue administrators to avoid maintaining “cash offices,” allows a more productive usage of staff, and minimizes the associated risks of handling cash.

Sixty tax administrations responded to RA-FIT questions on outsourcing. The responses reveal that slightly more than 40 percent (25 tax administrations) outsource (1) collection and processing of tax payments to banks<sup>14</sup> and (2) IT support. Outsourcing of tax collection to the banks is more common in Middle Eastern countries and less common in Asian and European countries. On the other hand, European countries rely mostly on outsourced IT services. Only eight percent of countries reported outsourcing debt collection (Middle Eastern countries, in particular) and outsourcing of audit functions was only reported by one African country. Tables 5 and 6 in Appendix I provide further detail in this regard.

It is noteworthy that a very similar picture emerges for customs administration. Of the 44 customs respondents to outsourcing questions, 18 countries (also slightly more than 40 percent) outsource collection and processing of payments to banks and IT support. Interestingly, when income groupings are considered, outsourced cash/banking services decline from 77 percent in LICs through to zero percent for HICs. Three countries outsource debt collection tasks (one in Africa, and two in the Caribbean). Similar to the tax administration results, outsourcing of audits was only reported by two African countries. Tables 7 and 8 in Appendix I provide further detail.

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<sup>14</sup> In other words, banks charge the government a fee for receiving taxpayers' payments, accounting for these payments, transferring the funds to government accounts, and transferring the payment accounting information to government entities such as the tax administration, the national treasury and the central bank.

# 4

## Tax Administration Operations

### Taxpayer Registration

Taxpayer registration is a fundamental function of any tax administration—it is through this process that individuals (natural persons) and business entities (legal persons) are brought into the tax net. Non registration of taxpayers who should be paying tax can be a significant factor contributing to the overall compliance gap.<sup>15</sup> There are important characteristics for building an effective taxpayer register, including the following: (1) a clear legislative requirement to register for tax purposes; (2) an identifiable taxpayer population for each tax type; (3) the use of a unique identification number that is the backbone of all tax administration systems; and (4) clear procedures to update and maintain the integrity and completeness of the register.

A total of 59 countries responded to questions on taxpayer registration, identifying their registries' tax composition. Figure 9 shows the active taxpayer register profile by income group for 2010. It is interesting to note the relative importance of personal income tax (PIT—salaried) taxpayers across income groups, but especially for LICs (67 percent of their registries) for which universal filing is often a prerequisite. This is despite the fact that most of this tax is withheld by the employer and paid directly over to the tax administration. In contrast, VAT and CIT taxpayers account for a small proportion of the register in LICs (12 percent) but gain importance for HICs<sup>16</sup> (53 percent of the register). The percentage of other PIT (non-salaried)

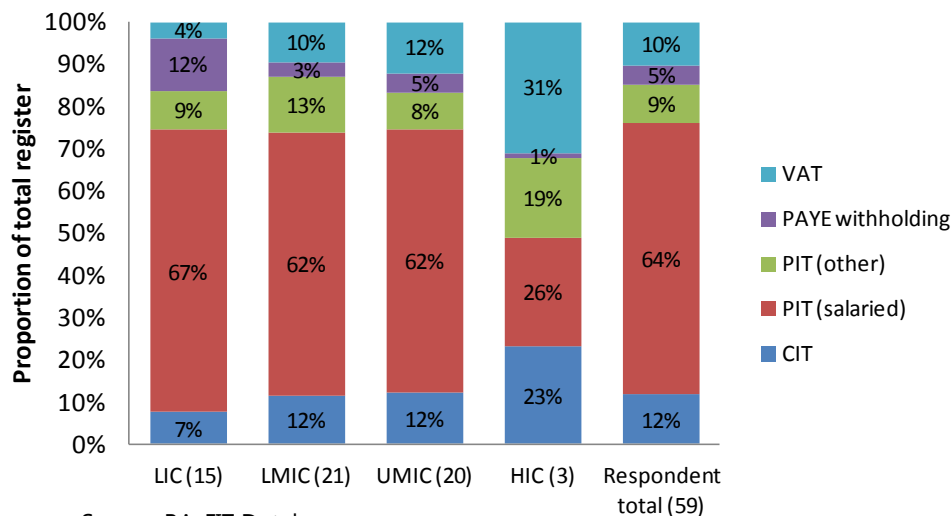
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<sup>15</sup> IMF (2015) discusses what is known about the drivers of compliance and core instruments that revenue administrations can use to control it. The paper also considers emerging issues in some hard-to-tax segments.

<sup>16</sup> Only three HIC countries responded to this section of the RA-FIT questionnaire—with such a small sample, one should exercise caution when drawing conclusions.

taxpayers also appears to increase by economic level with the exception of UMICs in respect of the RA-FIT respondents. This finding may very well provide some insight into the economic profile of countries as they develop: the existence of more registered business entities (VAT and CIT taxpayers) and self-employed individuals in a thriving developed formal economy. However, it may also show that tax administrations in LICs may be missing some of their potential taxpayers, who may choose to remain outside of the tax net. This may also support the discussion presented in Section 3 (Human Resources) showing a large gap between the active labor force versus the number of registered PIT taxpayers. Moreover, given that the bulk of the salaried PIT taxpayers have their taxes withheld at source, these tax administrations may be focusing attention on a category of taxpayers who pose little risk to revenue.

**Figure 9. Active Taxpayer Register Profile by Income Group, 2010**



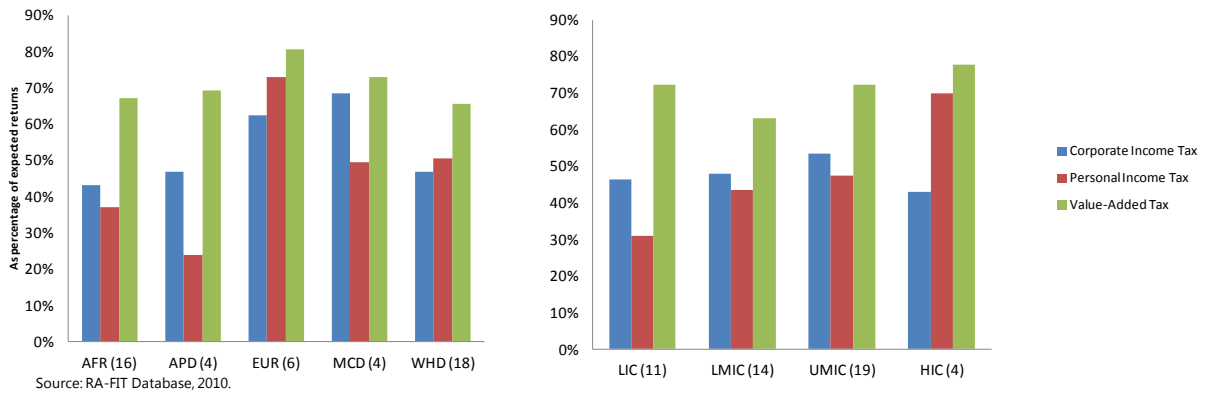
Source: RA-FIT Database.

Note: CIT=corporate income tax; PAYE=pay as you earn; PIT=personal income tax; VAT=value-added tax.

## Return Filing

Because filing is a mandatory obligation for many taxable persons, it is a relevant indicator of compliance—and a critical aspect in a self-assessment system. In taxpayer-segmented tax administrations, filing rates vary significantly across taxpayer categories, with large taxpayers usually demonstrating better filing compliance than other segments of the taxpaying population. Survey responses show that filing rates also vary according to the type of tax (income tax versus VAT) (Figure 10), and the frequency of tax returns (annual versus more frequently filed returns, for example, monthly).

**Figure 10. On-time Filing Rates by Region and Income Group, 2010  
(Percentage of Expected Returns)**

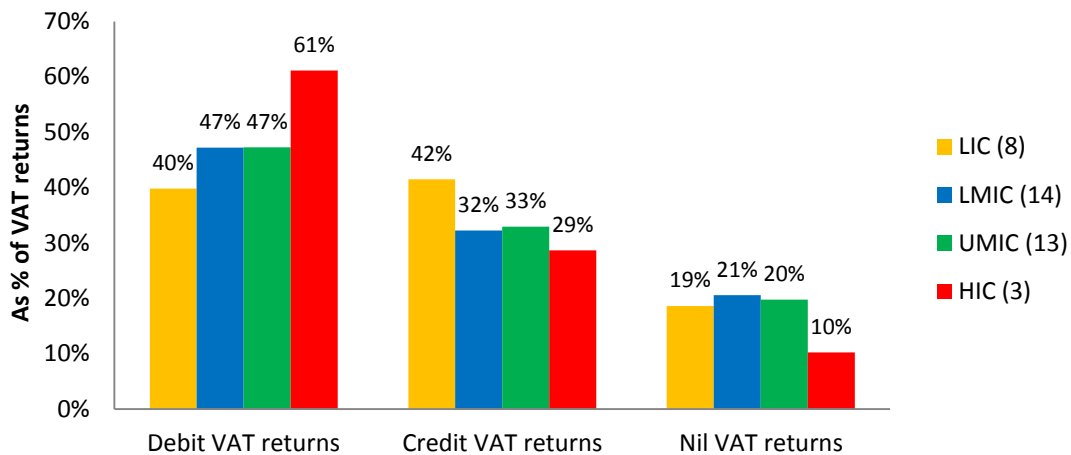


On-time filing rates seem to have ample scope to improve in most RA-FIT respondent countries, especially for income taxes. Reported VAT filing rates (69 percent of total, on average) are consistently higher than income taxes (averages of 45 percent for PIT and 49 percent for CIT, respectively), with some significant differences between VAT and PIT filing compliance in Africa and Asia. The difference between VAT and PIT on-time filing rates may emerge for a number of reasons, including: (1) filing frequency (for example, monthly for VAT versus annual for PIT); (2) the self-enforcing nature of VAT through the input tax credit mechanism; (3) later introduction (VAT has been introduced more recently than PIT in many countries, and often relies on newer systems, particularly IT systems); and (4) less attention given to PIT because most of the tax is withheld and paid over by employers for salary earners. Overall CIT, PIT, and VAT on-time filing rates are mostly higher in Europe than in other regions; although Middle Eastern countries reported better on-time filing compliance for CIT filing. All in all, these filing rates, which are lower than expected, reveal that there is room to improve this basic tax administration function, ensuring that tax returns are filed on time. Many countries do not enforce penalties on late filing—a factor that may also contribute to poor filing compliance behavior.

On-time filing rates broadly improve by income group from LICs through to HICs. In line with expectations, VAT filing rates are higher in HICs (78 percent) than in other income groups, although the small sample size for HICs requires some caution. The very low level of reported PIT on-time filing rates in LICs (31 percent) suggests that further analysis and attention is required to understand the causes and also to better identify the appropriate remedial action.

Taking a closer look at VAT returns, there is a large share of credit returns (refund claims—where VAT inputs<sup>17</sup> exceed VAT outputs<sup>18</sup>) and nil returns (VAT outputs and inputs are equal; therefore taxpayers owe no VAT) in relation to total returns filed by VAT taxpayers. Even though the overall sample size is smaller (38 administrations provided return information), roughly two-thirds of respondents reported more than 50 percent of all VAT returns received in 2010 to be either credit or nil returns. Figure 11 shows that debit VAT returns represent a greater proportion of total returns in advanced economies. The LIC, LMIC, and UMIC groups all reported about 20 percent of total VAT returns as nil VAT returns. Of particular note: despite receiving a larger proportion of credit returns (about 42 percent of the total), LICs have much lower refund rates at approximately 7 percent of gross VAT. This finding is another interesting variable warranting further investigation.

**Figure 11. VAT Return Types by Income Group, 2010  
(Percentage of Total Returns Received)**



Source: RA-FIT Database, 2010.

<sup>17</sup> VAT paid on the purchases of goods and services by a VAT taxpayer for offset against the tax they charge on the sales of goods and services.

<sup>18</sup> VAT charged on sales of goods and services by a VAT taxpayer.

## Taxpayer Audit and Verification

The audit function lies at the core of the tax administration mandate. Having proper audit powers is vital to any tax administration as enforcement activities are the most common means to deter non-compliant behavior. Although audit coverage (i.e., the number of registered taxpayers that are subject to a tax audit) is never expected to be extensive—even in advanced economies (the vast majority of tax collections require little recovery effort on the part of tax administrations), modern tax administrations use risk management techniques to improve the effectiveness of audit case selection. Risk management is crucial to focus the audit work, allowing a tax administration to target its actions to the various identified risk categories, better allocating resources across different types of audit (comprehensive, issue-oriented, and desk audit<sup>19</sup>), and improving the overall effectiveness of the audit function. Therefore, despite the fact that the greatest share of tax revenue is collected through voluntary compliance, the self-assessment system only works if there is a real risk that non-compliance will be identified and addressed, primarily through the audit function.

Audit mix varies across administrations and inconsistencies are apparent.<sup>20</sup> From an income group perspective, LICs appear to rely much more heavily on comprehensive audits than more developed economies. Indeed, comprehensive audits account for around 53 percent of total audits in these countries, while less than 1 percent in HICs. By contrast, more developed economies place a greater reliance on issue-oriented audits (which on average account for

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<sup>19</sup> **Desk audits** include (1) a check that the returns filed are consistent, (2) a comparative analysis of returns for different taxes, (3) a comparative analysis of the main ratios against those for similar businesses in the same sector, and (4) a cross-check against information received from other government agencies and third parties.

**Issue-oriented audits** are generally limited to check particular aspects of the return and cover a single tax. For instance, in the case of VAT, an issue-oriented audit may deal with all of the activities reflected in a tax return, or it may focus on one particular aspect (for example, turnover, exports, invoicing, or excess credit).

**Comprehensive audits** are generally employed when significant anomalies are detected through a desk or issue-oriented audit, or identified by the risk management system. Normally cases selected for comprehensive audit cover all taxes for one or more tax years.

<sup>20</sup> Clearly classifying audit results across different audit types is no straightforward task, and some administrations may not be able to identify the specific audit categories requested in RA-FIT—or may have different definitions of what constitutes “comprehensive, issues-oriented, or desk” audits. Therefore, information gathered through RA-FIT needs to be interpreted with caution when making comparisons.



about half of total audits). This phenomenon may be related to a weaker risk management capacity within LICs (less able to use information and analytics to identify the most appropriate audit cases), or simply tradition, given that comprehensive audits have been the traditional way to undertake audits.

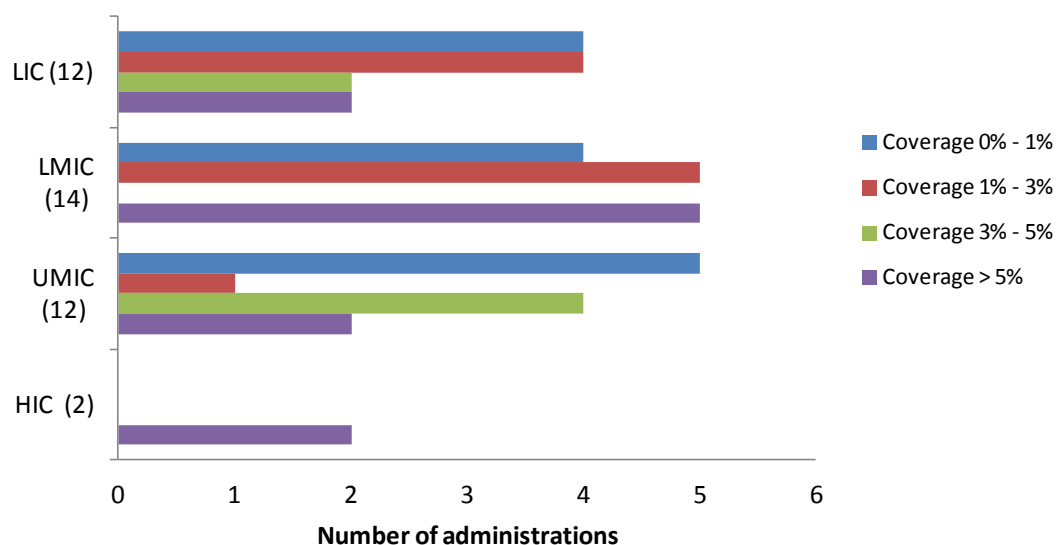
Some countries reported that they do not undertake particular types of audit at all, which may limit their ability to target different compliance risks with the most effective audit type. This result may reflect misreporting in data capture across countries, or simply different definitions of audit types. Nevertheless, further investigation is required. Eighteen percent of respondents indicated that they do not perform any comprehensive audits (considered the most appropriate audit type for complex cases). Additionally, 58 percent of respondents reported that no desk audits<sup>21</sup> were carried out while 19 percent of respondents reported performing no issue-oriented audits. The lack of different types of audits in a tax administration's audit suite may hamper the effectiveness of its compliance strategy.

Audit coverage appears to be higher in advanced economies, although the RA-FIT sample size for HICs is very small and caution should be exercised. While about one-third of LICs have audit coverage greater than 3 percent of total taxpayer population, slightly more than half of the UMICs and HICs (combined) audit more than 3 percent of their taxpayer universe. Figure 12 shows audit coverage as a percentage of taxpayer population for the 40 respondents providing the requested data. This finding may be the result of LICs opting for a greater use of comprehensive audits, which require more time, thus reducing human resource availability needed to increase coverage. RA-FIT data show that more analysis is required to better understand ongoing practices relating to audit mix and coverage. Possibly, the main reasons for the current low audit coverage include (1) poor risk management approaches; (2) insufficient audit resources (auditors); (3) low rates of productivity; and (4) a lack of appropriate audit skills, and audit methodology. If tax administrations are not operating with an adequate audit mix, this may negatively impact their goals to effectively deter non-compliance.

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<sup>21</sup> This percentage seems low particularly in Francophone African countries, where the majority of countries perform desk audits.

**Figure 12. Audit Coverage as a Percentage of Taxpayer Population, 2010**

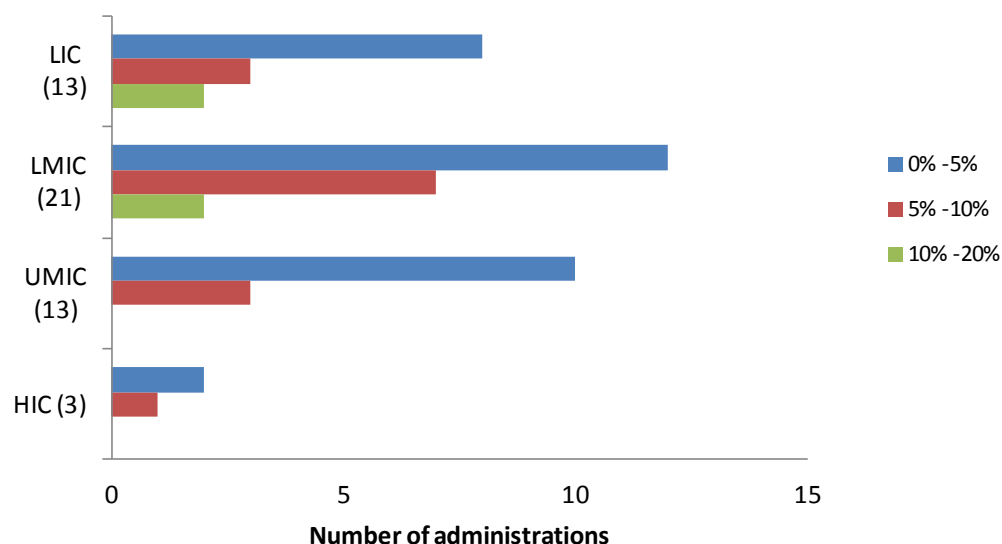


Source: RA-FIT Database, 2010.

Another interesting observation from the RA-FIT data gathered is that audit assessments (additional revenue assessed in relation to audit activity) account for less than 5 percent of total tax revenue for 63 percent of the respondents. Without sufficient data and further analysis it is difficult to assess where a reasonable level could be expected. Actual revenue collected from audit assessments is usually much less than the value of assessments originally raised, although this finding could not be adequately verified as very few such data were made available by tax administrations. Thus, it can be reasonably assumed that the direct impact of audit activity related to tax revenues derived from it in any particular year for a large majority of RA-FIT respondents is possibly no greater than 2–3 percent of total revenue collections for that year.<sup>22</sup> Figure 13 shows audit coverage as a percentage of total tax revenue for the 50 respondents providing the requested data.

<sup>22</sup> There is, of course, much discussion in the tax audit literature concerning the indirect impact of tax audit activity on tax compliance (and therefore on tax revenue collected), but this is not explored in this survey.

**Figure 13. Audit Coverage as a Percentage of Total Tax Revenue, 2010**



Source: RA-FIT Database, 2010.

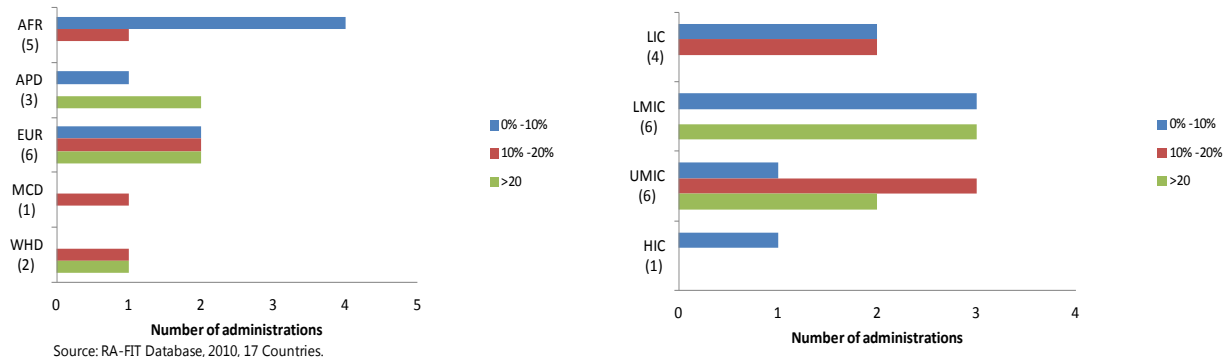
## Arrears

Managing tax arrears is crucial to ensure that all tax legally owed is duly paid. The prompt pursuit of outstanding taxes sends a strong signal that unpaid tax obligations will not be left unchecked. However, the older tax arrears become, the more difficult it is to collect them, because the taxpayer may have changed jurisdiction, died (in the case of natural persons), moved, or simply absconded. Enhancing collection of arrears requires developing strategies, including: (1) the prompt detection of delinquent taxpayers; (2) classification of arrears by size and age to prioritize and identify the recovery action required; and (3) using enforcement powers available in terms of legislation to collect the outstanding taxes (for example, seizing bank accounts and assets). The strategy adopted should aim at maximizing the timely collection of arrears and preventing the buildup of new debt. Generally, priority should be given to collecting newer debts, although the age of the debt should not automatically warrant inaction on the part of the tax administration.

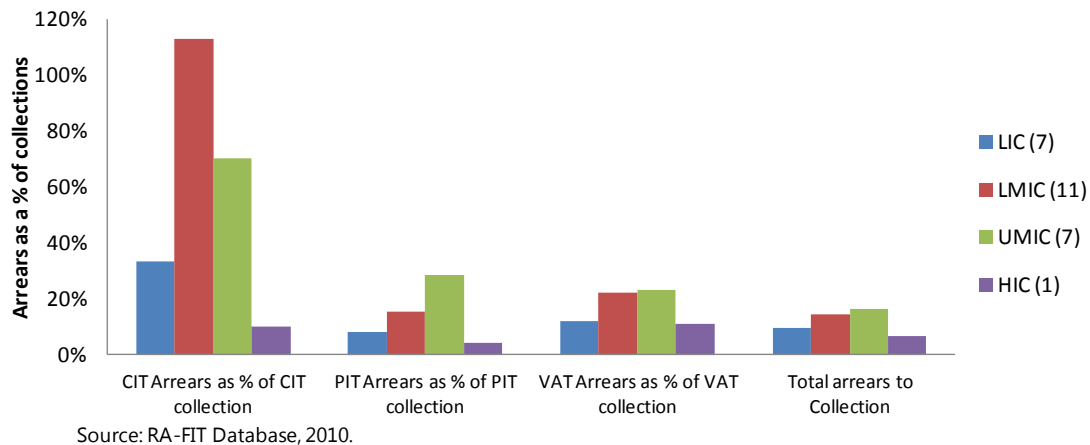
Only 17 administrations responded fully to the RA-FIT questions on tax arrears for the core taxes, for example, CIT, PIT, and VAT, which may indicate that tax administrations lack good tax arrears data. This observation is borne out in the discussion regarding the limitations and caveats of Round 1 data (Section 2), in which age of arrears and stock and flow of arrears were two of the five most poorly answered parts of RA-FIT. Out of this reduced universe, five

countries indicated having arrears that account for more than 20 percent of total annual collections (these countries being in Asia and Europe). It is noteworthy that the five African respondents reported arrears below 10 percent of total annual collections—although with low overall return filing rates (particularly for CIT and PIT) tax arrears may be unrecorded, and thus significantly understated. Figure 14 shows the distribution of arrears as a percentage of total collection by region and by income group for 2010. When tax arrears by tax type are reviewed as a percentage of that tax type’s collection for the year, an interesting observation emerges. CIT arrears as a percentage of CIT collections for the year are generally much higher than for PIT and VAT, with the average rate for 11 LMICs exceeding 100 percent and seven UMICs at about 70 percent. Figure 15 highlights this observation.

**Figure 14. Distribution of Arrears as a Percentage of Total Collections, 2010**

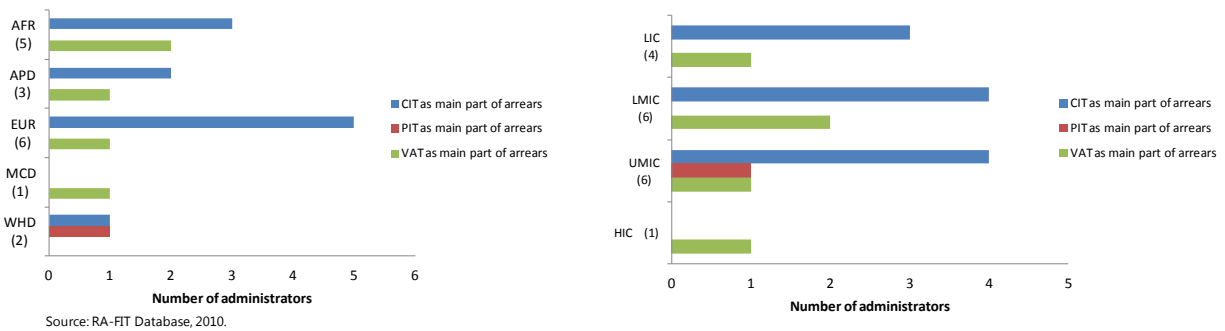


**Figure 15. Distribution of Arrears as a Percentage of Collection for Tax Types, 2010**



CIT arrears represent the largest share of total outstanding arrears for the majority of administrations (65 percent). VAT arrears seem to account for a smaller share of total arrears, representing the largest portion of tax arrears for only about 30 percent of administrations. Finally, only one administration reported PIT arrears as the most significant as a share of its total stock of tax arrears. In terms of age, almost 70 percent of the administrations supplying information have half or more of their arrears in stock for longer than one year. Figure 16 shows which tax was the most significant part of tax arrears for 2010.

**Figure 16. Importance of Tax Type in Total Arrears, 2010**



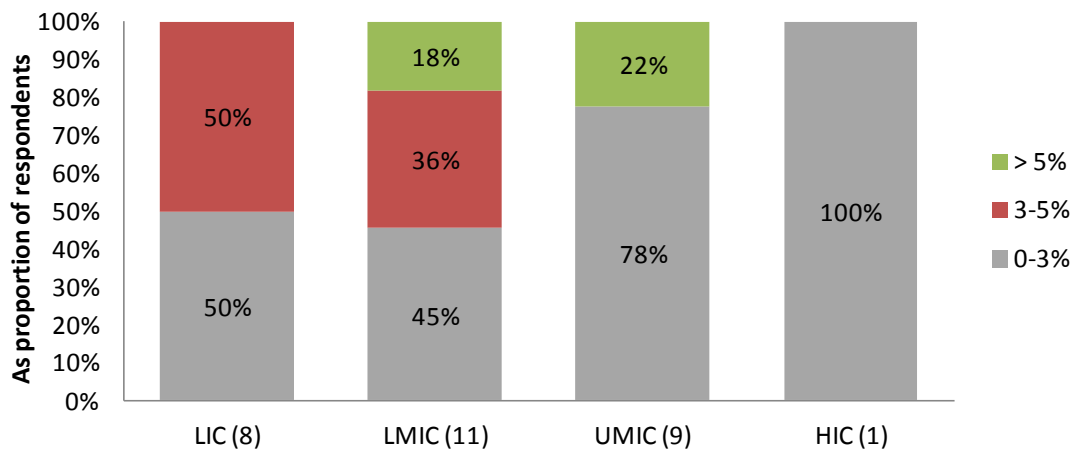
## Dispute Resolution

A fair, fast, and effective dispute resolution system is an important safeguard for taxpayers in any jurisdiction. Disputes normally emerge as a result of (1) administrative error—on the part of the administration or taxpayer or (2) as an outcome of a tax audit or investigation that has identified a discrepancy that is disputed by the taxpayer on grounds of facts or legal interpretation. Observations across countries have shown that often either the system is swamped with cases in dispute, or almost no disputed cases exist. Both extremes deserve attention. It is also not uncommon to find administrations with unresolved cases dating back many years. A non-functioning dispute resolution system can have a very negative impact on overall taxpayer compliance. Taxpayers are more willing to comply voluntarily if they know that any dispute that arises will be addressed fairly, and in a timely fashion.

The majority of the surveyed respondents reported a stock of cases in dispute of less than 5 percent of total collections. A total of 29 countries responded to questions on the administrative objection system. In slightly less than 90 percent of these administrations, less than 5 percent of total annual collections by value are currently under dispute (Figure 17). Regarding appeals (cases normally proceeding to litigation), a total of 25 responses were received, with nearly 70 percent of the respondents reporting having a stock of less than 5

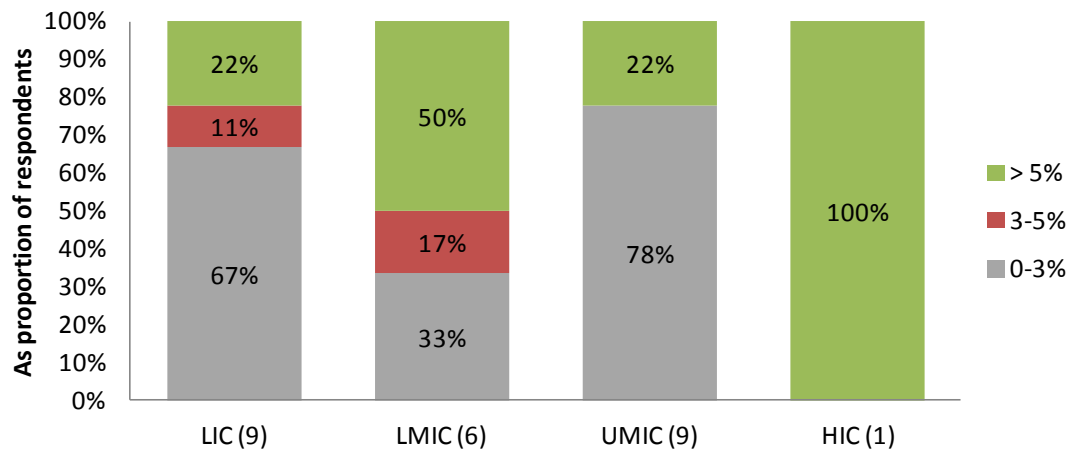
percent of total collections (Figure 18). Further analysis in the area of dispute resolution is required to establish the efficacy of administration. A limited number of disputes may indicate (1) cases not being properly recorded/processed, or (2) a weak audit function that does not generate assessments to be appealed—or even the existence of practices within audit encouraging taxpayers to “settle” disputes informally and outside of any existing official channels; see Espejo and Thuronyi (2013). A high volume of disputes (identified in a few of the surveyed respondents) could be linked to a lack of clarity in tax legislation or uncertain and inconsistent practices on the part of the tax administration. In some cases, administrations have been known to dispute high-value cases when revenue collection pressures are high, especially for which taxpayers are required to pay all, or a large part, of the taxes in dispute upfront, before the outcome of a case that may take years to resolve. A culture of aggressive tax avoidance on the part of taxpayers could also lead to a higher-than-expected level of disputes. It is important to understand the causes for disputes to apply a targeted solution to the problem, bearing in mind of course that some degree of dispute is healthy for the tax system’s efficient and effective operation.

**Figure 17. Distribution of Objections as Percentage of Collections, 2010**



Source: RA-FIT Database, 2010, 29 Countries.

**Figure 18. Distribution of Appeals as Percentage of Collections, 2010**



Source: RA-FIT Database, 2010, 25 Countries.

# 5

## Customs Administration Operations

### Release Time of Goods by Customs

Customs' role in supporting trade facilitation is crucial for the efficient conduct and growth of international trade and economic development. Customs administrations can further this goal by applying simple, predictable, and fast processes, which translate into reduced costs and clearance times, as well as greater reliability of the customs system. A common international indicator that measures trade facilitation is the release time of imported goods. The RA-FIT survey included a question on import clearance times from the moment the shipment is first received at customs to the time it is released from customs. The indicator was then divided into two categories: imports that underwent physical examination (red channel) and those that did not (yellow and green channels). Answers were also differentiated by the mode of arrival: air, sea, or land.

Regarding the release time of goods subjected to physical inspection, clearance efficiency tends to increase by income grouping from LICs through HICs (in particular for maritime traffic). Indeed, LICs in 2010 took slightly more than five days to clear sea containers subjected to physical inspection, whereas UMICs/HICs took fewer than two days to undertake the same task.

Regarding release times of goods not subject to physical inspection, UMICs and HICs again show consistently better average release times than less-developed economies. These income groups clear sea containers passing through yellow and green channels in about a day, while release times for LICs and LMICs are longer (even though reported numbers for LICs are better than those reported by LMICs).

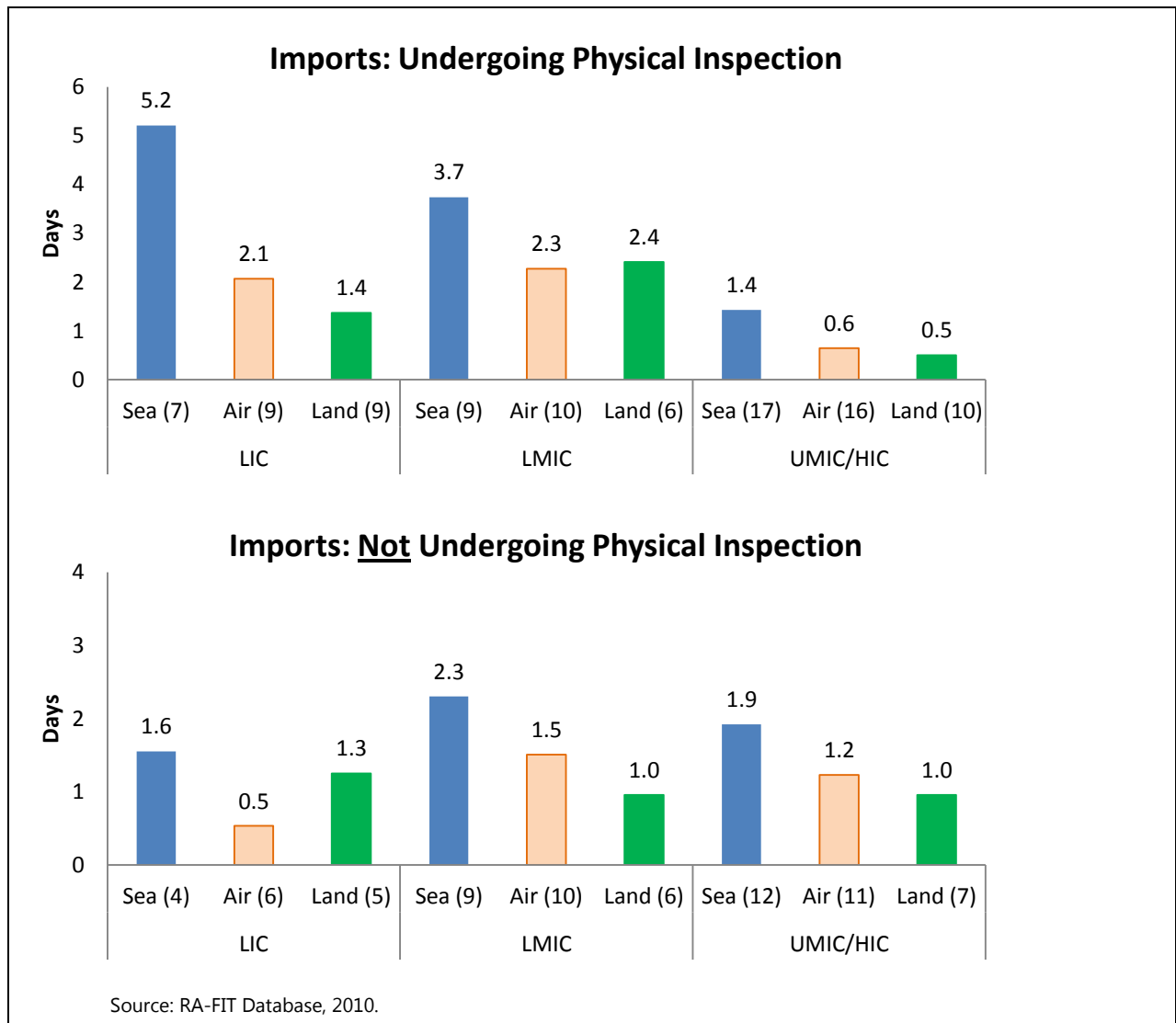
Overall, release times in many surveyed respondents could still be improved. Less-than-optimal release times may generate higher costs for their economies and act as hidden tariffs.

Therefore, it is necessary to continue making efforts to improve clearance procedures, which



requires among other things (1) provisions and agreements that allow for better coordination among all border control agencies; (2) the publication and availability of information about import and export requirements, and formats and instructions for completing customs declaration forms; (3) traceability of goods; (4) special programs for compliant operators; (5) alignment of the legal framework with the customs IT systems and field operations; and (6) the implementation of a coherent risk management system.

**Figure 19. Release Times for Imports—Sea, Air, and Land, 2010**



## Customs Control Selectivity and Inspections

Physical inspection of goods, while necessary, is often used too intensively. This practice may reflect (1) weak risk management and control selectivity; (2) insufficient use of documentary reviews (which are more effective than physical inspections to detect certain types of customs offenses); or (3) customs officers seeking face-to-face contact with traders, which increases the risk of corruption. A high rate of physical inspection of goods is often an indicator of delayed modernization of customs administration, unless it is justified by special circumstances, such as the execution of security checks. In contrast, a high percentage of customs declarations accepted without control before clearance (“green channel”) often demonstrates the effectiveness of control selectivity, customs’ capacity to focus on high-risk consignments, and a greater focus on trade facilitation.<sup>23</sup>

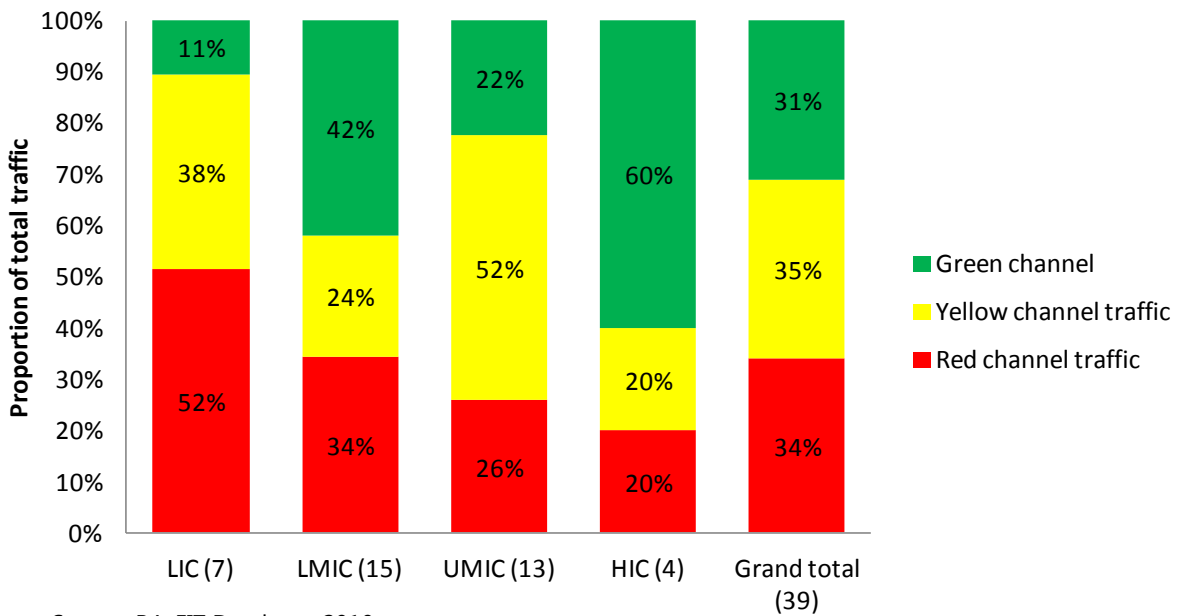
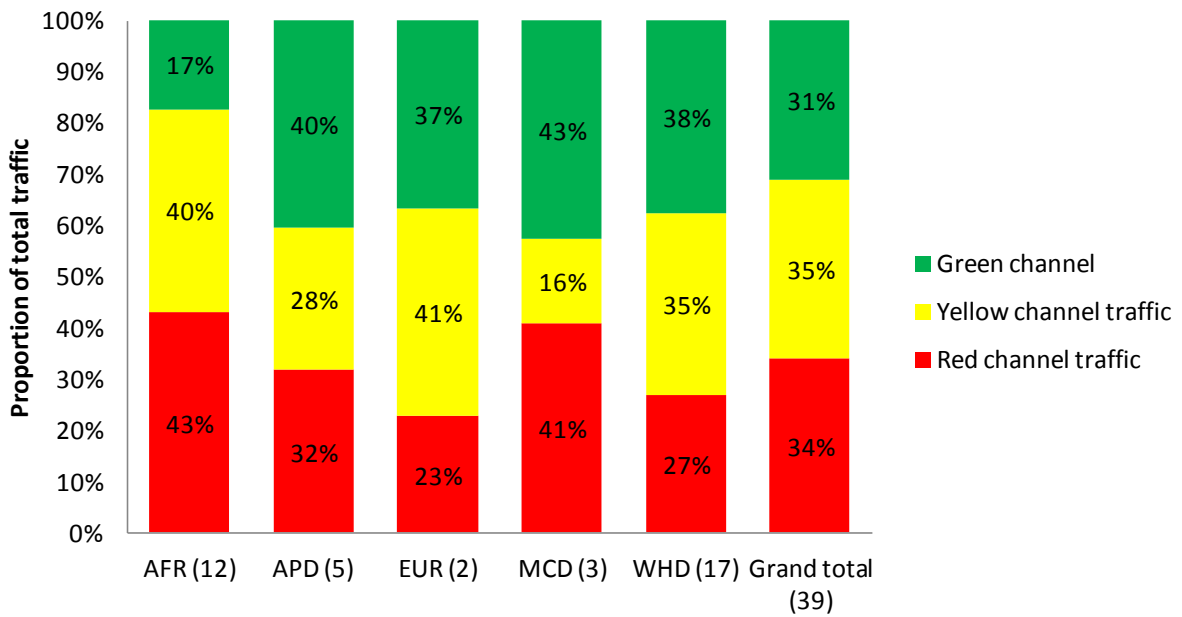
RA-FIT data suggest that the incidence of red channel checks—or physical inspections—and income level are negatively correlated (Figure 20). Indeed, LICs physically inspect about half of their customs declarations, while HICs selected only about 20 percent of the declarations for red channel control. This trend is not so clear for documentary checks (yellow channel), with UMICs reporting a greater use of this mode (51.7 percent). Geographically, the selection rate for physical and documentary control is very high in sub-Saharan Africa, with close to 40 percent for yellow channel and 43 percent for red channel. There may be an interesting connection to this practice in African countries of also undertaking comprehensive audits on the tax administration side (see discussion on audit in Section 4). This trend possibly demonstrates an engrained culture of wanting to check everything rather than being selective through the adoption of risk approaches, negatively affecting the efficiency and effectiveness of tax and customs administrations alike. In other regions (Europe, Western Hemisphere and Asia and Pacific countries), selection for physical inspection is more restricted. However, European countries’ rate of yellow channel selection is relatively high, at about 41 percent.<sup>24</sup>

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<sup>23</sup> Of course, if there is no selection system based on the noncompliance risk of a shipment, a high rate of “green channel” traffic could also indicate extreme administrative inefficiency.

<sup>24</sup> Note that this average is with reference to only two eastern European countries that participated in the first round of RA-FIT.

**Figure 20. Customs Traffic by Channel, 2010**



Source: RA-FIT Database, 2010.

## Post-Clearance Audit

Post-Clearance Audit (PCA) is not yet a strongly developed function of customs in developing countries.<sup>25</sup> PCA, just like for audit case selection in tax administration, makes use of risk-based approaches. Such approaches allow customs to target resources more effectively while improving compliance levels and better facilitating trade. The key objectives of PCA<sup>26</sup> can be summarized as follows: (1) to ensure that customs declarations have been completed in compliance with customs requirements, via examination of a trader's systems, accounting records and premises; (2) to verify that the amount of revenue legally due has been identified and paid; (3) to facilitate international trade movements of the compliant trade sector; (4) to ensure goods liable to specific import/export controls are properly declared, including prohibitions and restrictions, licenses, and quota; and (5) to ensure conditions relating to specific approvals and authorizations are being observed, for example, pre-authenticated transit documents, preferential origin/movement certificates, licenses, quota arrangements, customs and excise warehouses and other simplified procedure arrangements.

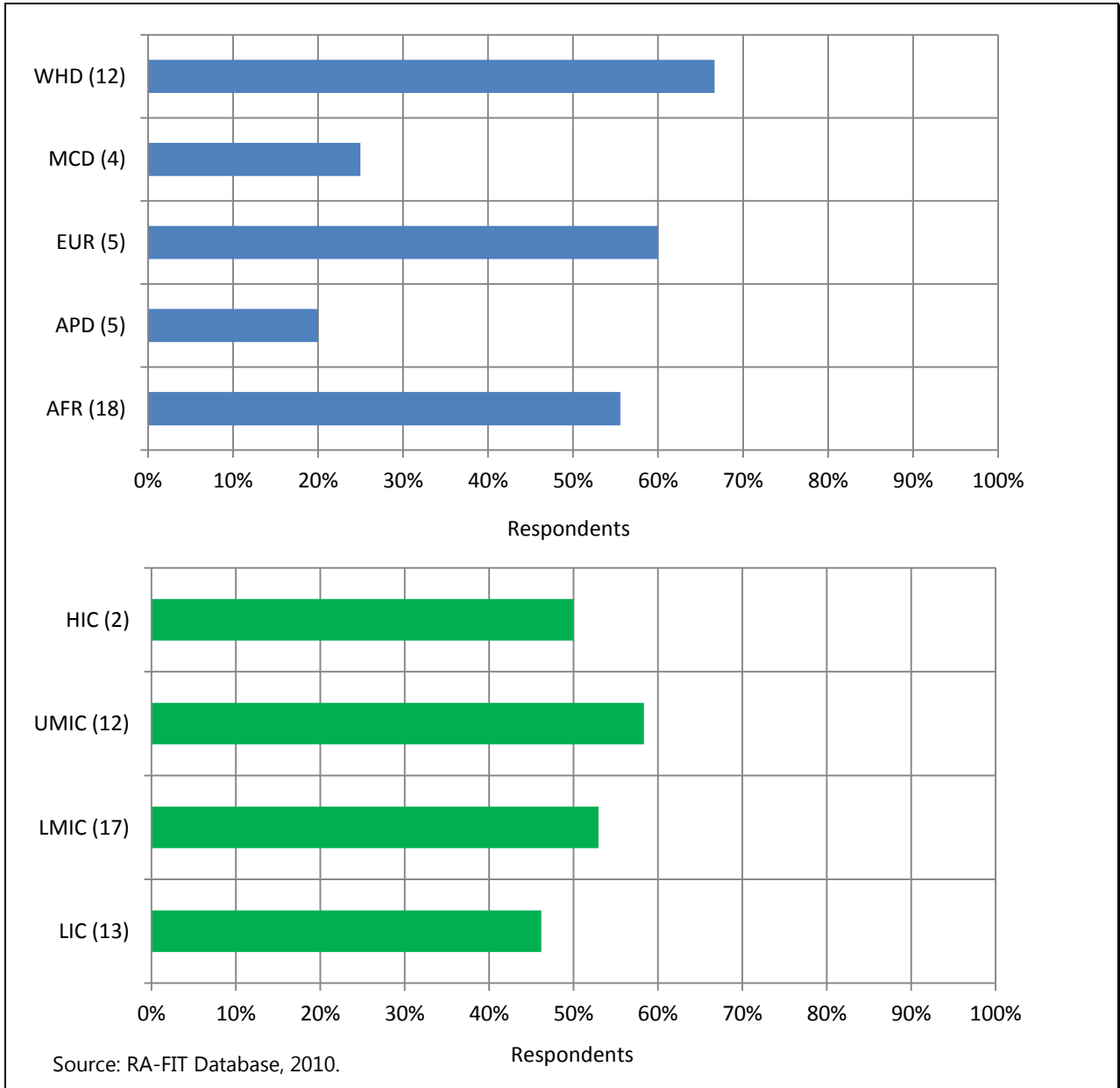
Of the 63 customs administration respondents, 44 reported that they conduct PCAs, and on average had over a three-year period (2009–11) also increased the number of PCAs conducted, which is a positive trend. Figure 21 shows the percentage increase in PCAs by region and also by income group over the period 2009–11.

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<sup>25</sup> The Post-Clearance Audit process can be defined as the structured examination of a business' relevant commercial systems, sales contracts, financial and nonfinancial records, and physical stock and other assets as a means to measure and improve compliance with a country's customs and tax laws. It is referred to as "post-clearance" because it takes place after a shipment has been cleared, and is in this regard more akin to a regular tax audit.

<sup>26</sup> As summarized by WCO (2012).

**Figure 21. Increase in Post-Clearance Audits, 2009–11  
(Percentage of Respondents)**



# Appendix Tables

**Table 1. Revenue Administration Institutional Arrangements by Region, 2010**

Region	Unified Semi-Autonomous Body	Unified Semi-Autonomous Body with Board	Single Directorate in Ministry	Multiple Directorates in Ministry	Separate Autonomous Bodies
<b>AFRICA (35)</b>	3	16	3	13	0
Anglophone (20)	3	14	2	1	0
Francophone (12)	0	1	1	10	0
Lusophone (3)	0	1	0	2	0
<b>ASIA AND PACIFIC (10)</b>	0	1	2	7	0
Asia (3)	0	0	0	3	0
Pacific (7)	0	1	2	4	0
<b>EUROPE (8)</b>	2	1	2	2	1
South East (8)	2	1	2	2	1
<b>MIDDLE EAST AND CENTRAL ASIA (6)</b>	0	0	0	6	0
Central Asia (1)	0	0	0	1	0
Middle East (3)	0	0	0	3	0
North Africa (2)	0	0	0	2	0
<b>WESTERN HEMISPHERE (26)</b>	1	3	3	15	4
Caribbean (16)	0	1	3	11	1
Central (8)	1	2	0	4	1
South (2)	0	0	0	0	2
<b>Total Respondents (85)</b>	<b>6</b>	<b>21</b>	<b>10</b>	<b>43</b>	<b>5</b>

Source: RA-FIT Database, 2010.

**Table 2. Revenue Administration Institutional Arrangements by Income Group, 2010**

Income Group	Unified Semi-Autonomous Body	Unified Semi-Autonomous Body with Board	Single Directorate in Ministry	Multiple Directorates in Ministry	Separate Autonomous Bodies
<b>LOW INCOME COUNTRIES (21)</b>	1	9	2	9	0
Africa (19)	1	9	2	7	0
Middle East and Central Asia (2)	0	0	0	2	0
<b>LOWER MIDDLE INCOME COUNTRIES (30)</b>	2	9	2	16	1
Africa (9)	0	5	0	4	0
Asia and Pacific (10)	0	1	2	7	0
Europe (2)	1	0	0	1	0
Middle East and Central Asia (2)	0	0	0	2	0
Western Hemisphere (7)	1	3	0	2	1
<b>UPPER MIDDLE INCOME COUNTRIES (27)</b>	3	3	4	13	4
Africa (7)	2	2	1	2	0
Europe (5)	1	1	2	0	1
Middle East and Central Asia (2)	0	0	0	2	0
Western Hemisphere (13)	0	0	1	9	3
<b>HIGH INCOME COUNTRIES (7)</b>	0	0	2	5	0
Europe (1)	0	0	0	1	0
Western Hemisphere (6)	0	0	2	4	0
<b>Total Respondents (85)</b>	<b>6</b>	<b>21</b>	<b>10</b>	<b>43</b>	<b>5</b>

Source: RA-FIT Database, 2010.

**Table 3. Tax Administration Administrative Powers by Region, 2010**

Region	Design Internal Structure?	Set Remuneration?	Exercise Discretion over Op Expenditure?	Exercise Discretion over Cap Ex?	Set Staffing Levels?	Hire and Fire Staff?
AFRICA	74%	44%	70%	61%	64%	58%
Anglophone	90%	65%	84%	74%	84%	84%
Francophone	55%	18%	55%	45%	36%	27%
Lusophone	33%	0%	33%	33%	33%	0%
ASIA AND PACIFIC	40%	10%	70%	30%	30%	30%
Asia	0%	33%	67%	0%	0%	0%
Pacific	57%	0%	71%	43%	43%	43%
EUROPE	63%	38%	63%	50%	38%	100%
South East	63%	38%	63%	50%	38%	100%
MIDDLE EAST AND CENTRAL ASIA	40%	40%	40%	20%	0%	20%
Central Asia	100%	0%	100%	0%	0%	100%
Middle East	33%	67%	33%	33%	0%	0%
North Africa	0%	0%	0%	0%	0%	0%
WESTERN HEMISPHERE	78%	32%	63%	46%	52%	40%
Caribbean	69%	13%	64%	50%	33%	7%
Central	88%	63%	63%	50%	88%	88%
South	100%	50%	50%	0%	50%	100%
<b>Total Respondents</b>	<b>68%</b>	<b>35%</b>	<b>65%</b>	<b>49%</b>	<b>49%</b>	<b>51%</b>
<b># of Yes/Total</b>	<b>54/80</b>	<b>29/82</b>	<b>52/80</b>	<b>39/80</b>	<b>40/81</b>	<b>41/81</b>

Source: RA-FIT Database, 2010.



**Table 4. Customs Administration Administrative Powers by Region, 2010**

Region	Design Internal Structure?	Set Remuneration Levels?	Exercise Discretion over Op Ex?	Exercise Discretion over Cap Ex?	Set Staffing Levels?	Hire and Fire Staff?
AFRICA	72%	48%	74%	65%	74%	70%
Anglophone	83%	63%	88%	81%	88%	88%
Francophone	60%	20%	60%	40%	60%	40%
Lusophone	0%	0%	0%	0%	0%	0%
ASIA AND PACIFIC	29%	14%	57%	29%	29%	29%
Asia	0%	0%	50%	0%	50%	0%
Pacific	40%	20%	60%	40%	20%	40%
EUROPE	67%	33%	100%	100%	0%	100%
South East	67%	33%	100%	100%	0%	100%
MIDDLE EAST AND CENTRAL ASIA	100%	50%	100%	100%	50%	50%
Central Asia	100%	0%	100%	100%	0%	100%
Middle East	100%	100%	100%	100%	50%	0%
North Africa	100%	0%	0%	100%	100%	100%
WESTERN HEMISPHERE	77%	38%	48%	33%	43%	48%
Caribbean	69%	17%	50%	33%	17%	8%
Central	88%	63%	38%	38%	88%	100%
South	100%	100%	100%	0%	0%	100%
<b>Total Respondents</b>	<b>70%</b>	<b>40%</b>	<b>65%</b>	<b>53%</b>	<b>52%</b>	<b>57%</b>
<b># of Yes/Total</b>	<b>43/61</b>	<b>23/58</b>	<b>37/57</b>	<b>31/58</b>	<b>30/58</b>	<b>33/58</b>

Source: RA-FIT Database, 2010.

**Table 5. Tax Administration Outsourced Functions/Services by Region, 2010**

Region	Outsourced Functions/Services					
	Security	Cleaning	Cash/Banking	IT	Debt Collection	Audit
AFRICA (28)	79%	79%	50%	32%	4%	4%
ASIA AND PACIFIC (7)	86%	71%	29%	29%	0%	0%
EUROPE (7)	86%	57%	29%	86%	14%	0%
MIDDLE EAST AND CENTRAL ASIA (3)	100%	33%	67%	67%	33%	0%
WESTERN HEMISPHERE (15)	87%	67%	33%	33%	13%	0%
<b>Total Respondents (60)</b>	<b>83%</b>	<b>70%</b>	<b>42%</b>	<b>40%</b>	<b>8%</b>	<b>2%</b>

Source: RA-FIT Database, 2010.

Note: Percentages refer to the number of "Yes" responses/the total number of administrations responding to the survey.

**Table 6. Tax Administration Outsourced Functions/Services by Income Group, 2010**

Income Group	Outsourced Functions/Services					
	Security	Cleaning	Cash/Banking	IT	Debt Collection	Audit
LOW INCOME COUNTRIES (17)	65%	71%	71%	35%	6%	0%
LOWER MIDDLE INCOME COUNTRIES (22)	91%	73%	32%	32%	9%	0%
UPPER MIDDLE INCOME COUNTRIES (19)	89%	68%	21%	47%	11%	5%
HIGH INCOME COUNTRIES (2)	100%	50%	100%	100%	0%	0%
<b>Total Respondents (60)</b>	<b>83%</b>	<b>70%</b>	<b>42%</b>	<b>40%</b>	<b>8%</b>	<b>2%</b>

Source: RA-FIT Database, 2010.

Note: Percentages refer to the number of "Yes" responses/the total number of administrations responding to the survey.

**Table 7. Customs Administration Outsourced Functions/Services by Region, 2010**

Region	Outsourced Functions/Services					
	Cleaning	Security	Cash/Banking	IT	Debt Collection	Audit
AFRICA (23)	83%	78%	57%	30%	4%	9%
ASIA AND PACIFIC (2)	50%	50%	0%	50%	0%	0%
EUROPE (3)	67%	67%	67%	100%	0%	0%
MIDDLE EAST AND CENTRAL ASIA (3)	100%	33%	0%	33%	0%	0%
WESTERN HEMISPHERE (13)	69%	77%	23%	46%	15%	0%
<b>Total Respondents (44)</b>	<b>77%</b>	<b>73%</b>	<b>41%</b>	<b>41%</b>	<b>7%</b>	<b>5%</b>

Source: RA-FIT Database, 2010.

Note: Percentages refer to the number of "Yes" responses/the total number of administrations responding to the survey.

**Table 8. Customs Administration Outsourced Functions/Services by Income Group, 2010**

Income Group	Outsourced Functions/Services					
	Cleaning	Security	Cash/Banking	IT	Debt Collection	Audit
LOW INCOME COUNTRIES (13)	77%	62%	77%	54%	8%	15%
LOWER MIDDLE INCOME COUNTRIES (14)	79%	71%	36%	21%	0%	0%
UPPER MIDDLE INCOME COUNTRIES (14)	79%	86%	21%	36%	7%	0%
HIGH INCOME COUNTRIES (3)	67%	67%	0%	100%	33%	0%
<b>Total Respondents (44)</b>	<b>77%</b>	<b>73%</b>	<b>41%</b>	<b>41%</b>	<b>7%</b>	<b>5%</b>

Source: RA-FIT Database, 2010.

Note: Percentages refer to the number of "Yes" responses/the total number of administrations responding to the survey.



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