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**Benchmarking Tax Administrations in  
Developing Countries: A Systemic  
Approach**

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# *Benchmarking Tax Administrations in Developing Countries: A Systemic Approach<sup>1,2</sup>*

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**Abstract:** Benchmarking as a way of establishing standards for evaluating the performance of tax administrations has become increasingly popular in recent years. Two common approaches to benchmarking are ‘benchmarking by numbers’ – the quantitative approach and ‘benchmarking by (presumed) good institutional practice’ – the qualitative approach. Both these approaches consider each component or aspect of the tax administration separately. This paper suggests a contrasting approach to benchmarking, the purpose of which is less to allow others to assess the performance of a tax administration than it is to permit an administration to understand and improve its own performance. This systemic approach is more conceptually and operationally difficult because it requires considering how all aspects of the administrative system function as a whole in the context of the environment within which that system is embedded and operates. On the other hand, it is also more directly aimed at understanding and improving the key operational strategies that define good, better and best tax administrations.

**JEL classification:** D23, H29, H83, K34, O57

**Keywords:** tax administration, benchmarking, developing countries

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<sup>1</sup> The authors are, respectively, an economic consultant in Bogotá, Colombia, and Professor Emeritus of Economics, University of Toronto, Canada. They are grateful to Raul Junquera-Varela and Jackie Coolidge for helpful comments on an earlier version of this paper, which was originally presented at the 9th International Conference on Tax Administration, Sydney, April 2010.

<sup>2</sup> The basic framework of the core argument in this paper was developed in a few years ago by Vázquez-Caro in an unpublished consultation study. More fundamentally, however, the paper represents the (partial) fruition of collaborative work on tax policy and tax administration by the two authors, starting from their different backgrounds in business administration and public economics, that now extends over several decades and a number of countries, including Colombia, Argentina, and Ukraine.

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Benchmarking as a way of establishing standards for evaluating the performance of tax systems has become increasingly popular in recent years.<sup>3</sup> The concept of benchmarking, which emerged from management literature, can be thought of as a systematic process for identifying and measuring ‘performance gaps’ between one’s own outputs and processes and those of others, usually those recognized as leaders in the field. Alternatively, in some instances the gap assessed is that between actual performance and some hypothetical ‘ideal’ performance. In either case, the motivation underlying such studies is presumably that by identifying such gaps one can perhaps first begin to understand why they exist and then to understand how the gaps might be closed in the country being studied.

### **1. Why Benchmark?**

To illustrate the need for some kind of benchmarking, consider a possibly apocryphal story. Some years ago the director of railways in India, a country in which railways traditionally constitute the core of the transport system, was asked “Why do you bother to have a timetable when the trains are always late?” His reply was both simple, and accurate: “How would you know they were late if we did not have a timetable?”<sup>4</sup>

As this story suggests, from one perspective benchmarking is in effect a way of establishing a ‘timetable’ -- a set of clear and ideally measurable objectives against which to measure performance. These objectives may be an idealized vision of what should be. They may be a more or less well-based estimate of what should happen if the system worked well. Or they may simply be based on past experience or on the average outcomes suggested by experience elsewhere. However such benchmarks are established, once they exist not only has a standard against which to judge reality been set, but, more importantly, we know what information needs to be collected -- how late are the trains? -- in order to determine the extent to which the goals established are actually met. Although there are almost always elements of judgment in making such measurements, the basic framework for analysis is nonetheless established by the timetable (the benchmark, or standard).

Even when there is not only a timetable but also information on the extent to which it is not met, however, we are only at the beginning of analysis. To continue with the railroad story, we may know how many trains are late and by how much. But the real

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<sup>3</sup> See Gallagher (2005) as well as the database and discussion to be found on the website <http://www.fiscalreform.net/>. For examples of benchmarking in developed countries, see Australian Tax Office (2001) (an example of international benchmarking with respect to a major administrative change), and Canada Revenue Agency (2008) (an example of benchmarking performance against established service standards over time). For an overview of comparative tax administration practices in (mainly) developed countries, see OECD (2009); similar data for a number of African countries may be found in International Tax Dialogue (2010). Robinson and Slemrod (2009) is a first attempt to incorporate some of the useful information collected by the OECD into a more systematic cross-country study. The OECD data, though very valuable, must be used very carefully for such purposes owing to the many comparability problems that remain to be sorted out.

<sup>4</sup> We owe this story to Arindam Das-Gupta, whose pioneering paper on tax benchmarking in India (Das-Gupta (2002) is well worth consulting. For another early study, on eastern Europe and central Asia, see Bird and Banta (2000).

questions are: why are they late, and what can be done to improve matters? Trains may be late for many reasons: system design failures (inappropriate signal configurations), environmental factors (landslides, floods), operating problems (breakdowns), human error (crew asleep or poorly trained). At best, all that benchmarking exercises can do is to tell us that there is something that should probably be looked at more closely. They cannot and do not tell us exactly what happened, why it happened, or how it can be fixed.

Most benchmarking exercises understandably emphasize quantitative measures of success. However, what can be measured and what matters are not always the same. An additional problem with some benchmarking of tax administrations, especially in developing countries, is that many such exercises have been carried out more by outsiders, such as those who pay (donor agencies) or those who criticize (NGOs), than by tax administrations themselves. If those who must generate most of the critical data needed for a benchmarking exercise are aware that they will be judged by it and they see no direct benefits for themselves from accurate reporting, accurate reporting is unlikely to ensue.<sup>5</sup>

Performance is usually defined as the relationship between what an institution does – its outputs – and what it uses to do it with – its inputs. What most benchmarking exercises do is essentially to consider (some) inputs --for example, money, people and the extent and nature of IT (information technology) -- and (some) outputs -- for example, revenue collection, arrears and evasion detected – with respect to a particular set of activities packaged within a particular organizational structure. In addition, benchmarking exercises may sometimes also consider a few aspects of the rather dark box within which policy design (architecture), implementation systems (engineering), and operations (management) combine to turn inputs into outputs. Even the most extensive benchmarking study, however, can neither tell the whole story nor permit direct inferences about causality.

As noted earlier, the information obtained from such exercises is more likely to be useful if it is in the interest of those provide the information to do so accurately. It is also more likely to result in meaningful change if it is in sufficient detail (for example, setting out clearly the relative importance of non-reporting, underreporting and non-payment as components of the tax gap by economic sector) to help managers identify risks and deal with them. To put this point another way, as we develop in more detail later, the objectives that are benchmarked must be congruent with the real strategic objectives of the organisation. In addition, in principle input from clients (taxpayers) with respect to the level and quality of service and compliance costs should also be included in

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<sup>5</sup>If those responsible for providing data know that what they report will be used to assess their performance, they are unlikely to be totally uninterested and objective reporters: in the words of the original formulation of ‘Goodhart’s law’ “any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes” (Goodhart 1975).

benchmarking exercises.<sup>6</sup> Finally, international benchmarking comparisons must take into account at least the key relevant aspects of the different environments (income level and distribution, growth rate, inflation rate, degree of ‘informality,’ etc.) within which the activities being compared take place.<sup>7</sup>

Much real-world benchmarking of tax administrations is deficient in one (or sometimes all) of the respects just mentioned. Nonetheless, the basic logic of benchmarking is sound and should in principle be both attractive and useful even to those who are being benchmarked: if other organizations deliver similar services better than you do, why not learn from them? Modifying and adapting the successful practices of others has always been an important way in which individuals and organizations improve their performance. Indeed, tax administrations around the world are currently increasing the extent to which they share information with other administrations in an effort to improve both their own performance and to control tax evasion and avoidance practices that have become increasingly ‘globalized’ in recent decades. Such information exchanges are obviously useful and are likely to become even more important in the future.<sup>8</sup>

One common aim of benchmarking tax administrations is of course to improve their operation, for instance, by allowing consultants and international agencies to provide somewhat more objective ‘grading’ or ‘ranking’ appraisals of tax administrations in developing countries than they might otherwise be able to do.<sup>9</sup> However, if, as is often

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<sup>6</sup> An important question that is not explored here is the extent and manner in which surveys with respect to how the public perceives the revenue administration should be explicitly factored into the discussion. For example, in an interesting early Indian study of public sector agencies such as hospitals and electricity distributors, perceptions with respect to staff behaviour (eg, with respect to corruption) and the amount and reliability of the information provided to the public were found to overlap strongly with perceptions of the quality of the service provided (Paul 1995). See also Reinikka (1999) for an overview of possible uses of surveys and especially Kelly and Hopkins-Burn (2010) on the interesting New Zealand Inland Revenue experience with customer service surveys.

<sup>7</sup> This important ‘environmental’ issue is not discussed further here: for reviews of the importance of understanding in detail the setting within which revenue administrations must function, see Gill (2000) as well as Vazquez-Caro, Reid and Bird (1992).

<sup>8</sup> See Keen and Ligthart (2006) for a careful discussion of the uses and limitations of information exchange in tax administration and OECD at <http://www.oecd.org/dataoecd/15/43/2082215.pdf> for a model tax information exchange agreement (TIEA); a list of existing TIEAs may be found at [http://www.oecd.org/document/7/0,3343,en\\_2649\\_33767\\_38312839\\_1\\_1\\_1\\_1.00.html](http://www.oecd.org/document/7/0,3343,en_2649_33767_38312839_1_1_1_1.00.html). For different perspectives on current and prospective future trends along these lines, see Pinto and Sawyer (2010) and Eccleston (2010). It should perhaps be noted that, like all good things, international information exchange carries some risk. For instance, excessive attention to interactions with other national administrations may sometimes result in the entrenchment of what turn out to be systematic errors. To illustrate, it may perhaps be argued that in the past discussions in such international organizations as the Inter-American Centre of Tax Administrators (commonly known by its Spanish acronym, CIAT) may at times -- for example by emphasizing the importance in the early stages of adopting IT of focusing on such ‘best practices’ as taxpayer identification numbers to ‘automate’ taxpayer accounts -- have inadvertently diverted attention from more important and much broader issues such as how best to use the new technology to improve the control of evasion and the services provided to taxpayers. For other examples of the misuse of technology in tax administration, see Bird and Zolt (2008).

<sup>9</sup> The search for a clear and simple numerical answer to inherently complex questions appears to be never-ending: for a critical evaluation of earlier attempts to establish ‘tax effort’ targets for developing countries,

the case in developing countries, the intended objective at least in principle is ultimately to provide some useful guidelines for restructuring a particular tax administration – as it were, to lay the basis for a ‘re-engineering’ strategy so objectives may be achieved more efficiently and effectively -- most benchmarking exercises fall far short.<sup>10</sup>

Benchmarking may sometimes be useful to identify areas of weakness – symptoms. As already mentioned, however, it seldom provides either clear explanations of the underlying problems or insights that are helpful in resolving those problems. Nonetheless, even incomplete and partial benchmarking may sometimes further such important (though usually implicit) objectives as encouraging administrations to collect and analyse data that they need to collect and analyse if they want to know what they are doing. If a benchmarking exercise also serves to establish a potentially useful ‘best practice’ standard of behaviour to which they should aspire, that is another bonus. Unfortunately, most existing examples of benchmarking are too narrowly conceived to serve such purposes.

In the next section, we discuss briefly three alternative approaches to benchmarking tax administrations and make the case for what we label the ‘systemic’ approach. In the balance of the paper, we then set out a basic framework for systemic benchmarking. We conclude with a brief consideration of why this approach has not, to date, been widely accepted.

## 2. Approaches to Benchmarking

Three broad approaches to benchmarking may be found in practice and in the literature. The first, and by far the most popular, is ‘benchmarking by numbers’ – the quantitative approach. The second, also popular, is ‘benchmarking by (presumed) good institutional practice’ – the qualitative approach. In practice, mixed varieties of these two approaches are also commonly found. It is easy to mix them because both approaches share an important common characteristic: they consider each component or aspect of the tax administration separately. In contrast, the third approach -- the systemic approach set out later in this paper -- requires considering how all aspects of the administrative system function as a whole in the context of the environment within which that system is embedded and operates.

### 2.1 Benchmarking by numbers

As a simple example of (prescriptive) benchmarking by numbers, a recent World Bank study (Le, Pham and De Wulf 2007) suggested that the following quantitative benchmarks might be used (along with other indicators) to measure ‘success’ in revenue administration reform projects such as those that have been financed by the Bank<sup>11</sup>: (1)

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see Bird (1976). Of course, one complaint does not an avalanche stop, so recently one of the authors gave in and contributed to the continuing flood of international tax ratio comparisons in Bird, Martinez-Vazquez, and Torgler (2008).

<sup>10</sup> For an excellent discussion of the kind of basic re-engineering that is inevitably required when a major administrative restructuring is taken seriously, see the case of Singapore discussed in Sia and Neo (1997).

<sup>11</sup> For an earlier review of some of the extensive World Bank assistance in this area, see Barbone et al. (1999).

administrative cost should decline by 30% over project period and (2) compliance cost should be reduced by 2% of tax revenue over project period. These numbers were based largely on a number of different and not always directly comparable studies carried out in a disparate set of countries and circumstances by a variety of scholars and institutions. OECD (2009), for example, found that administrative costs varied from a low of 0.45% of revenue collected in the U.S. to a high of 2.41% in the Slovak Republic, while the similar range in a group of non-OECD countries was from 0.60% in Chile to 5.8% in Cyprus. While less easily obtainable, similar variations may be found in compliance costs: for example, Evans (2008) reports that the costs of complying with such broad-based taxes as income taxes and VATs range between 2 and 10% of the revenue collected.

None of these numbers has any clear interpretation, however. For example, as OECD (2009) notes, the administrative cost ratio is a poor indicator of the effectiveness of any tax administration for the obvious reason that it takes no account of the extent to which the actual revenue base captured by the system differs from the potential revenue base that should, according to law, be captured. It tells you how much it costs per dollar to collect revenue, not how effectively the administration collects the revenue it should collect. It may thus be a partial measure of administrative *efficiency*, but it is definitely not a useful measure of administrative *effectiveness*. Indeed, it is not even a very useful indicator of comparative efficiency both because many different factors may affect such ratios and because countries measure these data in very different ways. Compliance costs are usually even trickier to measure, let alone to interpret.

## **2.2. Benchmarking by good institutional practices**

Much the same can be said about using such descriptive features as the existence of a tax code or of a large taxpayer unit as indicating good practice and its absence as demonstrating the opposite. For example, in a study some years ago one of us included the existence of a fiscal analysis unit as an example of good practice on the assumption – subjective, but based on considerable cross-country experience -- that the non-existence of such a unit made it less likely that there was either a sustained high-level commitment to change or a coherent strategy for change (Bird and Banta 2000). A somewhat similar approach is carried to an extreme by the European Commission (2007) in a document that lays out the ‘fiscal blueprint’ against which the tax administration in countries applying for admission to the European Union (EU) is to be assessed.

The EU example is particularly noteworthy because point-values are established for several different components of each of 14 different aspects of tax administration with pass marks (‘desired scores’) set for each. In other words, not only are a large number of presumably desirable characteristics such as ‘clear rules and procedures that require the prompt and accurate recording of all tax audits undertaken’ given a numerical score compared to the maximum score of 100, but each of these many characteristics is assigned a certain weight in deriving the overall score, and a ‘pass’ level is set for each. Despite all the numbers, however, the evaluation of most of the features singled out in European Commission (2007) depends entirely on subjective judgment in several key

respects – to determine how any country's administration scores in any particular category, to determine what would constitute a perfect score, to set the pass score in each category, and to weight the results for different categories. Qualitative benchmarking in its most (superficially) scientific guise!

Whether using real numbers, estimated numbers, or completely subjective numbers, such exercises in benchmarking by the numbers dodge some large and uncomfortable questions. In practice, the operational practices in any administration necessarily respond to strategic realities and practices.<sup>12</sup> How tax administrations perform in practice largely reflects several underlying determinant factors such as the context or environment of tax administration within the public sector as well as, more broadly, the economic environment (e.g. the size of the informal sector), the political environment (e.g. the degree of support for effective enforcement), the legal and regulatory framework, and the managerial system of the tax administration. The point, of course, is that simply measuring the performance of those activities that can be measured or subjectively assessing performance in specified institutional activities and then comparing that performance either to countries considered to have superior performance or to some subjectively established goal (or to a regional or other average) does not help provide a meaningful basis for diagnosing the ills of any particular administration unless one also considers closely the environment in which it functions.

### ***2.3. The need for systemic benchmarking***

In order to establish the underlying causes of the problems that a benchmarking analysis may uncover, at least the most important among the many factors that can explain differences in performance among tax administrations must be taken explicitly into account.<sup>13</sup> In addition, such a study must also provide a vision of the reference system for any given administration as well as a guide on how to adapt its practices to meet a set of observed -- or perhaps ideal, or perhaps simply satisfactory -- standards.

To put this point another way, the aims of the kind of operationally focused systemic benchmarking approach sketched in this paper are, first, to uncover and understand the issues on which successful organizations have focused in order to improve their performance and, second, to assess the extent to which, and how, the administration under study deals with these issues given the context in which it works. From this perspective, the key point in using benchmarking as a guide to restructuring tax administration becomes not so much to define a particular set of benchmark indicators but instead to identify the management practices -- good, better, and best -- that underlie and explain a set of good indicators. With this approach, the 'gaps' that need to be

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<sup>12</sup> We emphasized many of these points in our earliest joint work on this subject (Vazquez-Caro, Reid and Bird 1992). Although much of our subsequent work along these lines was done in specific country contexts and has not been published, some aspects are developed to some extent in the following papers: Bird (1989, 2004); Bird and Casanegra (1992); Bagchi, Bird and Das-Gupta (1995); Bird and Banta (2000); Vazquez-Caro (1992); and Vazquez-Caro and Ospina (2006).

<sup>13</sup> This point is discussed and illustrated in such earlier studies as Vazquez-Caro, Reid and Bird (1992) and Gill (2000). In the present paper, however, we focus more specifically on the legal and regulatory framework and especially on managerial practices.

focused on and the steps that need to be taken to improve tax administration in any particular case are set out in a way that is operationally more meaningful for tax administration management —albeit perhaps in a form that is less obviously quantifiable or directly comparable across countries than may be to the taste of benchmarking aficionados looking for a quick and quantifiable checklist against which to ‘grade’ different tax administrations.

The next section outlines the basic analytical approach suggested. We then turn to the problem of defining an appropriate reference system to implement this approach. Finally, to illustrate how this approach may be applied we outline the major factors determining successful tax administration and some basic benchmarks that may be used to measure those factors. To some extent, this discussion draws on work done for a large developing country that wished to benchmark its practices in controlling tax evasion and avoidance by large taxpayers against similar practices in several developed countries – Australia, Canada, France, New Zealand and the United States -- that were chosen as comparators because their tax administrations were considered to exemplify superior performance in terms of collection and compliance as well as general management processes.<sup>14</sup>

### **3. Systemic Benchmarking**

As in the case of the railway timetable example with which this paper began, to identify appropriate benchmarks one must first ask why, exactly, one wants to benchmark in the first place. Suppose, for instance, that the main objective is – as it was in the study mentioned above -- to reduce evasion and avoidance by large taxpayers—the main direct channel through which most revenue is collected in most countries.<sup>15</sup> If this is the goal, then an appropriate benchmark might be, for example, the best practices applied in countries like those just mentioned that have demonstrably high compliance levels and appear on the whole to control evasion and avoidance strategies by large taxpayers fairly well.<sup>16</sup> Assuming that this rather vague ‘standard’ is taken as a starting point, two questions then need to be answered: (1) What constitutes best practice in tax administration? (2) What is the optimal international standard? Both questions are complex.

Often, international practice – as set, for instance, by what ‘good’ administrations are doing -- is proposed for implementation in a particular country on the assumption that

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<sup>14</sup> Information restrictions prevent us from going into detail on this study, which was undertaken by Jaime Vázquez-Caro in association with several colleagues, including Agélic Leguizamó, Álvaro Herrera and José Ospina. In addition to the documents from ATO, CRA, and the OECD specifically referenced in this paper, the discussion also draws on annual reports and other documents found on the websites of the national tax administrations of France, New Zealand, and the United States.

<sup>15</sup> As Bird (2002) emphasizes, large taxpayers (mainly corporations, of course) are much more important to revenue administration than is measured by the taxes they themselves pay: they are also critical ‘tax agents’ withholding and collecting personal income taxes and payroll from employees as well as value-added and excise taxes.

<sup>16</sup> Though of course even the ‘best’ remains far from perfect, as discussed recently for Canada by Larin and Duong (2009).

the selected practice fits all situations. However, although segregated large taxpayers units (LTUs) and integrated management systems as well as such features as voluntary compliance, bank collection and returns processing, withholding, and the like are common in ‘good’ tax administrations, they are not always or necessarily good prescriptions for developing countries.

For such practices to become integral parts of ongoing tax administration systems in particular developing countries they often need careful and sometimes substantial development and context modification. As an example, the implementation in Uruguay of a model of large taxpayers’ administration originally designed to cope with the Bolivian crisis of the mid-eighties has been viewed by many as a good example of ‘technology transfer’ (Silvani and Radano 1992). On the other hand, both the staff of tax administration and many small and medium taxpayers in Uruguay at the time complained that while the large taxpayers unit (LTU) may have resulted in better services for large taxpayers, it created chaos for the rest. Since presumably, tax administrations should be equitable in satisfying their legal mandate, providing excellent service to those with money and no service (or bad service) to those that are poorer hardly seems an appropriate outcome. This does not mean that the LTU approach is wrong per se or even that it was the wrong thing to do in Uruguay at the time.<sup>17</sup> But it does suggest that a good revenue administration also needs to consider how to improve services to ‘non-large’ taxpayers as well -- or perhaps in some instances even to exclude them from being expected to meet all the legally required formal tax obligations.<sup>18</sup>

Three distinctions may help identify ‘best’ practices more precisely: between strategic and operational practices; between explicit and implicit practices; and, finally, between good, better and best practices. We discuss each in turn.

### ***3.1. Strategic and operational practices***

What constitutes a complete, congruent and modernized tax administration system?<sup>19</sup> A framework that captures both levels and processes is needed to identify specific country gaps in tax administration strategy and managerial practices against any reference base. We use the concepts of *strategic* and *operational* practices to differentiate two related but quite different levels of practices determining tax administration performance.

Most important are strategic practices that shape tax administration and that are themselves shaped both by those who design administrative structures (legislatures and top executives) and by those who execute them – for example, the top management of the Australian Tax Office (ATO) or Canada Revenue Agency (CRA). The broad rules of the

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<sup>17</sup> As Baer, Benon and Toro (2002) argue, LTUs have proven to be useful in a number of countries.

<sup>18</sup> The two points mentioned in the text, for example, are suggested by the emerging literatures on the ‘state-capacity building’ importance of good tax administration (Brautigam, Fjeldstad and Moore 2007) and on the appropriate tax treatment of small and micro enterprises (International Finance Corporation 2007) – literatures that, it should be noted, are by no means always in agreement.

<sup>19</sup> For a full discussion of the notion of “congruence” in this context, see Gill (2000).

tax game are set by legal mandates in the form of specific substantive laws as well as by procedural law and administrative law in general. Management interprets these rules by creating institutional, technological and operational ways to secure compliance. The strategic practices that tax administration management adopts in addressing particular issues ultimately become operational practices.

To put this point another way, underlying any operational practice in principle there is presumably either some element of the legal mandate or an identifiable responses to specific environmental conditions. If the results observed in any particular operational area are unsatisfactory, this approach to benchmarking suggests that the root cause may be either the absence of appropriate laws and regulations or an inappropriate managerial approach addressing the specific issue. It is obviously important to know which of these problems exist.

In practice, many benchmarking efforts even in developed countries focus on such *operational practices* as audit and taxpayer service. For example, the Canada Revenue Agency (CRA) reports that in 2006–07 only 36% of actuarial valuation reports met its ‘service standard’ of being completed within nine months, compared to the expected target of 80% (Canada Revenue Agency 2008). If this ‘target’ makes sense, then presumably what this suggests is that CRA is not doing a terribly good job in this area. However, neither the target nor the reported performance can be meaningfully interpreted except in the context of the underlying strategic practices. This point emerged clearly in an early benchmarking exercise in Colombia in the 1970s, when area directors were directed to create performance tables for their respective areas and comparative tables were then constructed to compare the performance of administrative units of similar size and complexity with respect to such factors as the percentage increase of taxes generated by audit interventions, efforts to control tax arrears, and the number of appeals. This exercise proved useful in making regional tax administrators aware that their results were being assessed and compared, and has remained a regular part of tax management in Colombia. However, it soon became clear that any given result could almost always be explained not only by managerial performance but also by such ‘exogenous’ factors as legal loopholes or changes, budgetary problems, and commodity booms or busts.<sup>20</sup> Even within the context of one country with a uniform legal system many of the questions that emerged from benchmarking often need to be answered in strategic rather than simply operational terms.

On the international level, even more factors come into play. In some countries, for instance, the person responsible for VAT is considered an agent (like a withholding agent) whereas in others—like most Latin American countries—the person responsible for VAT is considered to be a taxpayer. The first definition is much more stringent because it assumes that if the money is not deposited, the person responsible for VAT is

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<sup>20</sup> For an interesting and much more systematic quantitative attempt to compare the ‘productive efficiency’ of tax offices (in Belgium), see Moesen and Persoon (2002); other relevant country studies of aspects of this issue, with varying degrees of sophistication, include Hunter and Nelson (1996) on the United States, Klun (2004) on Slovenia, Serra (2005) on Chile, Forsund et al. (2006) on Norway, von Soest (2007) on Zambia, and HMRC (2010) on the United Kingdom.

stealing the money. He is committing a criminal offense. Obviously, these two approaches may generate completely different attitudes toward delinquent VAT taxpayers.

Similarly, the statute of limitations differs from country to country in terms of time limits and consequences. For example, in most developed countries there is no time limit in evasion cases where there is fraud. Even when there is no fraud, taxpayers may sometimes be audited up to 10 years later. In contrast, many developing countries impose much more rigid time limits on administrative action. In Colombia, for example, returns, even if fraudulent, may only be audited within two years of filing. To counter the obvious adverse effects on revenue of such limits on 'normal' good tax administration practice, Colombia has introduced substantial withholding on all types of income and sales combined with a complex and slow system of tax rebates. The initially bad strategic practice of legally overly restrictive limits on auditing thus resulted in the introduction of still more 'bad' operational practices in the form of deliberate over-withholding and an inadequate refund system.

Each country has its own complex legal apparatus of thresholds, taxpayer definitions, base definitions, standard deductions, inflation adjustments, exclusions, exemptions, statutes of limitations, penalties, amnesties, tax return forms, audit methods, and collection strategies. Each thus has a unique country-specific system that establishes and defines different risk conditions and attitudes for both administration and taxpayers. One cannot interpret simple international comparative 'benchmarking by numbers' exercises without clearly understanding all these factors.<sup>21</sup>

### ***3.2. Explicit and implicit practices***

Even when a particular operational practice is perceived as a success, that success may rest on some embedded practices that are simply taken for granted. For example, an important *implicit practice* guiding the Canada Revenue Agency is the concept of the 'protection of the base' that CRA labels as the underlying value defining its strategic vision. Such implicit values may be reflected in many different ways in different aspects of the administrative system and may also influence legal developments. In Canada, for example, the design of tax forms -- the instruments through which the administration filters the legal framework at the individual level at the moment of compliance -- is not usually identified as a good practice. However, it clearly *is* good practice in the sense that it is an operational reflection of CRA's strategic position regarding the information it requires in order to protect the tax base. Indeed, in most developed countries, return forms reflect a conscious information gathering strategy. They are set up to provide

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<sup>21</sup> Of course, earlier writers recognized many of the problems with benchmarking and performance measurement and have proposed different approaches and solutions: for some interesting examples, see Behn (2003), Nordegraaf and Abma (2003), Propper and Wilson (2003), Pollitt (2005), Hood (2007), Aberbach and Christensen (2007), van Stolk and Wegrich (2008). However, no previous paper of which we are aware has taken the same 'management' focus as the present paper.

detailed information on the determination of the tax base, often with annexes to further explain individual base situations based on qualitative profiling of the taxpayer.<sup>22</sup>

In contrast, in most developing countries little or no effort is made to capture detailed base information as part of the sworn return. The emphasis is on the payment part, not the tax base part, of the form. Indeed, in practice tax administrations in many developing countries are happy to accept payments even when mandatory forms are not submitted or when most required fields on forms have not been completed.

Such implicit, accepted but largely invisible practices as how forms are designed (and distributed, and dealt with once received) may be more important than more *explicit practices* (such as audit frequency) in explaining success or failure. If a tax administration has no reliable information on the reported tax base -- let alone meaningful estimates of the potential tax base -- it has no real basis for assessing its performance. Unless such practices are clearly recognized, comparison between administrations, let alone the transfer of knowledge from one tax administration to another is unlikely to be very useful.

For example, many low-income developing countries seem unlikely to be able to pursue the ‘no return’ policies currently in place, or advocated, in a number of developed countries.<sup>23</sup> The latter can follow this path – as, to a limited extent, have a few medium-income countries like Chile and Singapore (Bird and Oldman 2000) – largely because they have both developed financial structures and good tax administrations. When countries are not so fortunate as to be able to ‘ride’ on a basically well-developed financial system that encompasses most of the potential tax base (Gordon and Li 2009), however, they must work much harder to gather the information needed to improve their tax systems – and of course they have fewer resources with which to do so. Close attention to the nature, quantity and quality of the information flowing into the tax administration is especially crucial in poor countries. Equally, however, it is especially difficult for such countries to deal with this issue. Before one can ‘protect’ the revenue base, one must have a good idea of what that base consists and where it is located.

### ***3.3. Good practices and best practices***

To identify the *best* strategic (implicit or explicit) practices that may provide a useful standard for assessing operational practices in any country is at least a four-stage process. First, one must identify the relevant strategic practices. Second, in each country selected as a comparator one has to select *good* practices. Performance of any activity

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<sup>22</sup> For similar reasons, scholars such as Oldman (1965) have recommended that penalty structures should be designed to take into account not only the direct tax escaped by an offender but also the ‘indirect cost’ imposed as a result of his failure to provide information required to monitor the transactions of others. Interestingly, as Arendse (2010) reports for South Africa, taxpayers often do not perceive – or are not persuaded by – this rationale and hence tend to think that automatic penalties for such ‘information gap-causing’ activities as failing to file on time are excessively high.

<sup>23</sup> A good example is the Danish system called TASTSELV—the automated tax process or ‘no touch strategy’ as described in <http://www.itdweb.org/documents/public/denmark.TASTSELV%20-%20the%20automated%20tax%20administration.pdf>.

may be considered good when the result is both *effective* (what is done is what should have been done in the specific conditions) and *efficient* in terms of costs, resources and time. Third, one must determine the *best* practices at the country level. To do so, one has to compare good practices and establish that there is a qualitative or quantitative relative advance (beyond ‘normal’ improvement or the past average of the tax administration). Finally, one has to compare best country practices within a holistic view of the tax system in the country being benchmarked in order to establish a target that is appropriate for that country, given its capacities and the problems it faces.

To do all this requires the collection and analysis of information on each process being benchmarked in its specific context in order to be able to compare them both quantitatively (if data are available) and qualitatively, while at the same time trying to understand the logic behind the practices in each environment. In particular, one needs to consider what factors appear to determine the success of any good (let alone best) practice. To do so, one needs a clear view with respect to three distinct aspects of the practice being benchmarked: first, *reality* in the sense of how the practice is adjusted to the specific circumstances of the case in hand as well as how it might be customized; second, *capacity* in the sense of the available operational implementation capacities in terms of resources such as staff; and third, the environmental (legislative, cultural) *setting*. The flavour of what needs to be done is nicely captured in CRA’s statement that “performance targets are established by our management teams through analysis of affordability constraints, historical performance, the complexity of the work involved, and the expectations of Canadians” (Canada Revenue Agency (2009, p.15).

Summing up, in the approach suggested here, best practice benchmarks should reflect the application of the most advanced knowledge of the state of the art in the sector, the response to specific pressures that may have forced creative solutions which respond to a systemic view, and, not least from a dynamic perspective, the capacity to alter paradigms through innovation and risk taking. This is obviously both a demanding and to some extent an inherently ‘fuzzy’ task. In the remainder of the paper we describe how such systemic benchmarking might work.

#### 4. Finding the Polar Star

For centuries, navigators have used the polar star for guidance.<sup>24</sup> Is there an equivalent ‘pole star’ that may be used as a reference point for reforming tax administration management? An appropriate starting point for developing countries that wish to improve (modernize) their revenue administration may perhaps be found in a set of underlying values that are found in ‘good’ tax administrations in developed countries such as Canada and Australia. These values, which unfold as strategic practices that in turn structure operational practices arguably include the following:

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<sup>24</sup> Potentially, there are both north and south polar (or pole) stars, depending on the stellar configuration, but most attention was historically paid to the north star in celestial navigation. While stars' positions change throughout the night, the pole star's position in the sky does not, so it is a dependable indicator of the direction north.

- A high level of commitment to protect the tax base
- A cooperative (or collaborative) compliance model
- Concern for equity above maximization of collection
- Rationalization of transaction costs related to tax compliance
- Strategic management development within the changing role of tax administration as the country changes
- The ‘internationalization’ of tax administration as a response to limitations in the coverage of national tax systems
- Standardization of tax processes based on automation and the formalization of processes and deeper use of the internet
- Major focus on the development and satisfaction of human resources

The sharp differences between most developed countries and most developing countries with respect to most of these factors explain many of the observed differences in their tax administration performance once one adjusts for the very different environments that (on average) these two (very heterogeneous) classes of countries provide for tax administration. Most strikingly, practices in most good developed country administrations have steadily moved towards redefining the relationship between taxpayers and tax administration from the long-standing ‘adversarial’ legal approach—taxpayers try to cheat and tax officials try to catch them—to a new model of cooperative compliance, in which the central role of the revenue administration is to foster and encourage tax compliance rather than simply to seek out those who fail to comply and punish them appropriately.<sup>25</sup>

#### ***4.1 The adversarial approach***

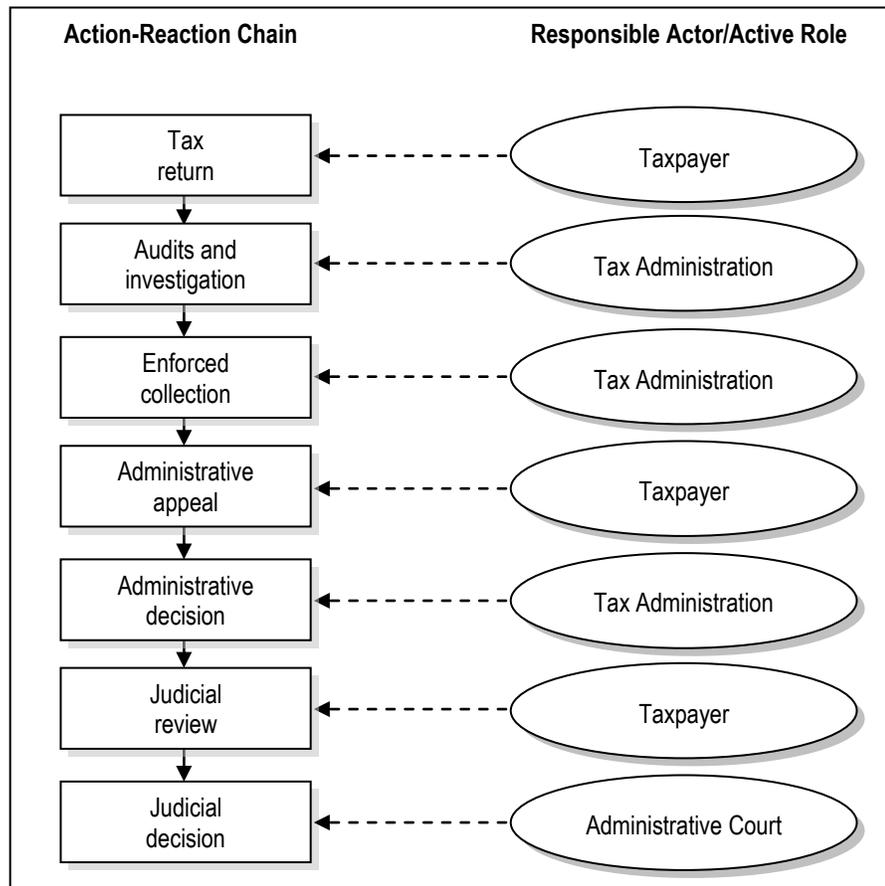
“Catch Me if You Can!”<sup>26</sup> Models of hunter and hunted, predator and prey, thief-catcher and thief, have at times been used to explain the relation between revenue administrations and taxpayers. Such an inherently adversarial approach may be depicted as a sequence of actions in which each party acts individually and without communication with the other party, who then reacts. This adversarial sequence of ‘action’ and ‘reaction’ begins with the assumption that there is an initial risk of cheating by the taxpayer. It further assumes that the main task of the revenue administration is to detect such cheating through the audit process and then to punish it appropriately. At each stage of this approach, taxpayers are almost always allowed to defend themselves through a variety of administrative and judicial measures. The working process is sequential: (1a) You declare, (1b) I verify; (2a) you appeal and stop paying, (2b) I analyze and resolve the appeal; (3a) you open judicial review...and so on (Figure 1).

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<sup>25</sup> The ‘cooperative compliance’ model set out in Braithwaite (2003), among other places, is most explicitly applied in Australia (see ATO, 2000 and 2009). An even broader ‘fiscal exchange’ perspective is suggested in Whait (2010)

<sup>26</sup> This is the title of a chapter (on audit and assessment) in Radian (1980).

**FIGURE 1**  
Adversarial model of  
administration-taxpayer  
interactions



As tax systems become more complex, however, this sequential model becomes increasingly limited. For example, when different jurisdictions are claimants for a multinational tax base, or there is general hostility against taxes, it becomes difficult (for both sides) to manage tax obligations and may be quite costly for whoever loses out in the process. All too often, the adversarial approach results in a relatively unproductive tax administration and substantial tax evasion.

#### ***4.2. The cooperative approach***

For these reasons, most developed country tax administrations have largely rejected the adversarial approach and moved towards cooperative compliance as a new way to relate with taxpayers, particularly with large taxpayers and those with international operations. This evolution towards cooperative schemes, especially but not exclusively with respect to large taxpayers, is evident in Canada and Australia, for example. Payroll taxes, personal income tax withholding, corporate taxes, sales taxes, excise taxes – in every instance a relatively small number of organizations are directly responsible for channeling most taxes to governments.

The distinguishing characteristic of this model is that, instead of being sequential like the adversarial approach, there is now some degree of conscious interaction between administration and taxpayer at each step of the taxing process in an attempt to find agreement and closure, within legal parameters. The party primarily responsible for each

step of the tax compliance process remains the same, but the other party is now expected to assist and participate in achieving a satisfactory resolution. For example, compliance with tax declaration and return requirements is facilitated by attempting to obtain consensus on the interpretation of the tax law; audit cases are selected primarily through risk analysis carried out according to risk factors made known to the taxpayer; and audits are carried out according to a plan agreed with the taxpayer to lessen the transaction costs on both sides.<sup>27</sup> The idea is to reduce the probability of conflict at every step and to increase the likelihood of reaching satisfactory closure. The administrative objective is to engage in the least costly combination of enforcement and dispute resolution activities (fewer audits, fewer judicial reviews) while improving compliance (immediate and future). For the taxpayer, the main gain is to reduce compliance costs (including psychic and uncertainty) costs.

Clearly, whether such an approach is successful or not depends largely on the extent to which both sides perceive the possibility—and the potential gains to them—of developing a larger ‘trust’ space, for example as a result of more interaction in the relationships at different stages of the process, pre-agreed higher compliance levels, lower transaction costs, higher voluntary compliance and lower levels of uncertainty. Of course, when these conditions are not met—when some taxpayers simply refuse to play the new cooperative game—the traditional process always remains as an option to be used by exception. However, when more ‘trust-based’ relations with taxpayers can be developed, both the tax administration and the tax system in general can become more effective and less costly by reducing uncertainty (and thus risk and costs) in both the tax process and its outcomes for both taxpayer and administration. Moreover, although adopting a more cooperative approach to revenue administration requires at least some initial degree of trust to operate successfully, over time this approach may also in itself prove to be one important way in which more such trust (social capital) may be built.<sup>28</sup>

An additional important potential gain from moving to the cooperative approach is that it facilitates a better and more permanent system of monitoring compliance, particularly with respect to the larger entities that collect most revenues. Since the cooperative system works more in ‘real time’ there is less need than under the adversarial system to figure out what happened in the often non-traceable past and more opportunity to focus on what is going on in the present (and might go on in the future). In lieu of the action-reaction system of the adversarial approach, under the cooperative compliance concept rather than waiting for interpretation errors to happen -- with the result often being often complex audits and large tax values under discussion -- to the extent possible

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<sup>27</sup> Of course, most tax administrations are reluctant to reveal such ‘trade secrets’ for fear of making life too easy for would-be evaders, just as the police do not publicize their patrol routes. Such secrecy may make life a little more difficult for stupid criminals, but it is often equally sensible to make it clear that certain buildings and activities are strongly guarded. Striking the right balance between the two strategies is always a tricky matter. For further discussion of audit design and execution, see e.g. European Commission (2010), Khwaja, Awasthi, and Loeprick (2010), and Biber (2010, 2010a).

<sup>28</sup> As Brautigam, Moore and Fjeldstad (2007) emphasize, good (cooperative compliance) tax administration not only requires some degree of trust; it is also in itself an important way in which such trust may be built.

taxpayers and tax administration try to reach an agreement on the interpretative determinants of the information to be included in tax returns.<sup>29</sup>

When this system works well, each party has both increased knowledge of the other party's attitudes and expectations and greater clarity in the rules of the tax game. With continuous interaction, taxpayer and tax administration get to know each other better. The tax administration maintains protection of the tax base via a sort of regulated consensus between the tax administration and the taxpayer throughout the different steps of the tax process.<sup>30</sup> For example, the administration develops credible evasion and avoidance risk analysis to back up and guide the discussion as well as the necessary built-in transparency to deal with corruption risks.<sup>31</sup> For taxpayers certainty is increased by greater clarity in the rules and procedures of the tax relation, as the tax administration's specific positions on the application of the tax law are extensively discussed and conveyed through various mechanisms.

### **5. Implementing Cooperative Compliance**

Viewed from this cooperative perspective, the universe of relations and operational practices in the taxing process in countries with good administrations is quite different from that which still exists in many developing countries.<sup>32</sup> Broadly interpreted, cooperative compliance is a concept that cuts transversely across the contents of all substantive processes of tax administration. If improperly or inappropriately implemented, however, this approach carries with it possibly enormous risks to the revenue. It is therefore critical to look closely at how the managerial and operational practices through which this strategic focus is implemented have to be structured in order to attain positive results in terms of increased compliance and reduced administrative costs for tax agencies as well as reduced compliance costs for taxpayers, while simultaneously increasing the overall equity and efficiency of the tax system and reducing the risks of evasion, avoidance and corruption.

At least six major factors seem critical to a successful transition to the cooperative compliance model: structured risk management, viewing the taxpayer as a customer, the

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<sup>29</sup> For example, the spread in recent years of advance pricing agreements (APAs) is an attempt to deal 'up front' with some of the complex problems arising from international transfer pricing arrangements rather than trying to deal with such problems long after the fact in what usually turns into an extremely long, costly, and ultimately not very satisfactory dispute resolution process (Altman, 2006). Of course, the simple existence of an APA does not mean that similar disputes and delays may not ensue; but sometimes it helps.

<sup>30</sup> For obvious reasons, tax officials do not like to call such discussions 'negotiations.' Indeed, provided the process follows a clear set of principles -- for example, with respect to the range of discretion available to officials at different levels and the internal review system -- and is as fully transparent as consistent with taxpayer confidentiality, it is the antithesis of the sort of exercise of unaccountable discretion by officials that often underlies corruption.

<sup>31</sup> For an interesting discussion of how some Brazilian state tax administrations have, by building up their detailed knowledge of industry supply chains, strengthened both their risk analysis and their credibility in the eyes of taxpayers, see Pinhanez (2008).

<sup>32</sup> For an early view, of the traditional approach to tax administration, unfortunately still relevant in some developing countries, see Radian (1980).

quality of the tax laws, appropriate international networking, a wide range of consultative arrangements, and generalized use of internet-based technology. In the balance of this section we discuss each of these points in turn.<sup>33</sup>

### 5.1. Risk analysis

Risk analysis is how modern organizations commonly conceptualize and define managerial actions. How tax administrations manage tax evasion risks, for instance, obviously depends in part on the accuracy of accounting records. As the world has just learned with respect to the financial sector, however, even the best accounting records do not provide a complete picture of risk, so tax administrations have developed other techniques to control risks such as risk-based auditing.<sup>34</sup>

If the cooperative compliance approach is to be effective, a new operational setting with central units focusing on different compliance risks is needed. In effect, with this approach the headquarters function becomes a complex (and usually heavily automated) ‘back office’ intended to improve and support audit delivery at the operational ‘front end’ of the tax system.

Risk analysis starts with the segmentation of clients and the identification of the type of risks each client or group of clients poses. In some countries such risk analysis is developed jointly with taxpayers, as in some Brazilian states (Pinhanez 2008). More often, risk analysis is developed internally but shared to some extent with taxpayers.<sup>35</sup> When this level of risk analysis is carried out appropriately, and the riskier points are identified and closely monitored, tax administrations obviously increase their ability to protect the revenue base.

From the perspective of the tax administration, risks may be classified as relatively *controllable* or *non-controllable*. Non-controllable risks may or may not be *insurable*. Risks arising from the basic design and vulnerability of the law and its interpretation fall into the uninsurable non-controllable category from the perspective of the tax administration: these are the cards they are given to play in the ‘game’ of tax evasion.

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<sup>33</sup>We do not discuss here another important factor -- the attitude of tax administrations in terms of respecting, supporting and promoting the quality and welfare of their employees. Happier and more skilled tax officials may not make taxpayers any happier, but unhappy and untrained officials can definitely make them miserable. (Recall that, as mentioned earlier, we also do not discuss in this paper the many important ‘environmental’ differences between developed and developing countries, highly relevant though such factors undoubtedly are in determining just how and to what extent the approach suggested here may perhaps be implemented in any particular country.)

<sup>34</sup> See e.g. European Commission (2010) and Khwaja, Awasti and Loeprick (2010).

<sup>35</sup> The United States appears in some respects to take this to what some might consider an extreme, perhaps in an attempt to deter potential evaders. For example, the series of Audit Technique Handbooks by industry available on line (<http://www.smallbusinessnotes.com/operating/taxes/mssp.html>) presents a rather terrifying 20-40 pp. outline of the kinds of questions that an auditor – obviously a most unusual auditor, who is unconstrained by time, other work, or any interest in the size of the potential tax liability involved -- is reportedly instructed to verify in the course of an audit of, for example, a retail filling station.

Since risk analysis is done within the formal rules of the game (laws and regulations) that define what the tax administration does, these rules define the legal and regulatory risk environment. Too many base exemptions, for example, break the generality of the system and make it vulnerable to evasion and corruption. More complex systems, with more lines drawn between what is taxable and what is not, are open to more interpretation. Similarly, the shorter the period during which an administration may initiate an audit, the higher the risks that are likely to be taken by risk-taking taxpayers.

Taxpayers, like tax policy makers, may also change the rules of the game. For example, if enough people play the tax ‘lottery’ and evade in the expectation that they will escape audit, then over time this becomes the game being collectively played and the environment for tax administration has changed for the worse.

Good risk analysis requires the administration to have a deep understanding of the taxpayer population. As noted earlier, good tax administrations have developed many ways to gather and cross information by, for instance, designing tax forms to request information useful to identify avoidance risks; by requiring promoters of so-called ‘aggressive avoidance’ schemes to register<sup>36</sup>; by opening multiple access channels and services for tax advisors; and in general, by gathering any information that helps the administration understand the nature of the activities of the taxpayer and with it, its risks.

As the tax administration learns more, its improved ability to assess and manage risks should lead to a reduction of risks as taxpayers learn that they cannot play the system without being detected. In Brazil, a developing country that has both high tax levels and substantial subnational taxing powers, even some state sales tax administrations have in recent years managed to improve their performance significantly by improving their in-depth knowledge of industry supply chains and thus upgrading their understanding and analysis of evasion risk (Pinhanez 2008).<sup>37</sup> If this process goes far enough, eventually a new ‘tipping point’ may be reached -- this time, however, to the benefit of the tax administration.

## ***5.2. Service standards: valuing the taxpayer as a customer***

Customer orientation is the backbone of collaborative tax administration. Client focus is a major concern when many tasks essential to the revenue process are performed by clients themselves and the quality of the data they supply is essential to the performance of the tax administration. The best developed country tax administrations have thus shifted to essentially a ‘client-centered’ organizational structure. One aspect of customer orientation is taxpayer segmentation to define an organizational strategy, as in

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<sup>36</sup> See Larin and Duong (2009) for discussion of the problems such schemes are intended to deal with; it remains questionable, however, how effective such control efforts really are.

<sup>37</sup> Interestingly, the data generated by this new administrative focus has already led to some path-breaking analysis of the interaction between taxation and ‘informality’ in Brazil (de Paula and Scheinkman 2009, 2009a). For equally revealing studies again drawing on the newly detailed data available in other Latin American countries, see Pomeranz (2010) on Chile and Anton and Fernandez (2010) on Mexico.

the creation of Large Taxpayer Units (Baer, Benon and Toro 2001). Others have suggested that similar specialized attention is needed with respect to the other end of the business taxpayer spectrum – micro and small enterprises (IFC 2007).

But client orientation goes far beyond the organizational division of work. In France, for example, the move towards centralizing functions around clients includes the designation of high level individual staff members as the ‘access interface’ for large taxpayers with the administration. Revenue administrations more generally would seem well advised to consider adopting and extending this practice if they are really interested in getting taxpayers as much ‘on side’ as possible. It is all too easy for even compliant taxpayers with somewhat complex tax situations to be driven mad by dealing with a recalcitrant bureaucracy that sends them from place to place and person to person, continually asking for the same information. Once any issue has arisen, it would seem to be simply ‘good business’ to identify a single contact person through whom taxpayer-administration interactions are routed to reduce compliance costs and foster continued good relations with clients.

The emergence of specific, and publicly reported, service standards in good tax administrations around the world symbolizes the move to treating, and valuing, taxpayers as “customers” or “clients.” Currently, for example, the Canada Revenue Agency assesses its service performance annually against 41 explicit “service standards” (CRA 2008). It would seem a logical next step – though perhaps one unlikely to be popular with many revenue officials – to take this concern with client relations seriously and identify clear contact points for taxpayers with complex issues. Even if the revenue amounts involved may not be not ‘large’ from the administration’s perspective, they likely are for the taxpayer, and the potential for generating bad will by giving clients the ‘telephone runaround’ when they try to find out what is going on is high.

The establishment of specific services, service standards and compliance policies for taxpayers, even if not directly (or at least measurably) related to increased revenue may thus be an important step in improving administration. Once in place, service standards should guide the relationship with taxpayers and should be consistently improved. In effect, this approach creates a kind of ‘quasi-contract’ between taxpayers and management which, while defining service standards in terms of technical and operational feasibility, ideally permits deviations for the benefit of the taxpayer wherever possible. When, as is at least in principle true in the Canadian case cited earlier, compliance with these standards becomes an important component in the annual reports of the tax administration, this approach may provide an endogenous stimulus for permanent improvement.<sup>38</sup>

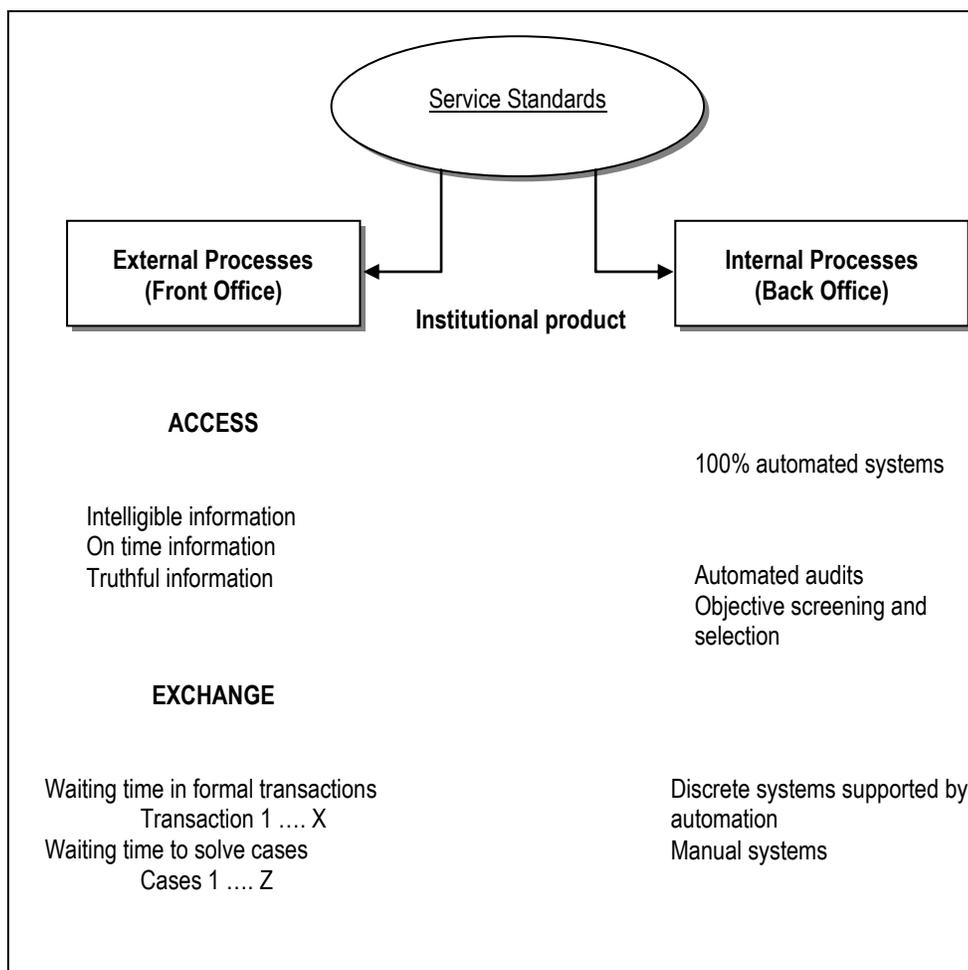
In addition, as illustrated in Figure 2, service standards may affect the internal organization of tax entities. Although service standards are almost entirely related to

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<sup>38</sup> Crandall (2010) provides a useful recent review drawing in part on Canadian experience as well as some useful general discussion of the uses of internal performance measurement systems in developing countries. In addition to distinguishing the strategic and operational uses of such systems, this paper also briefly discusses performance measurement at the level of the individual official, an issue not discussed here.

external processes dealt with by the front desk (interface with taxpayers) of the tax administration, if they are to be effectively delivered substantial realignment of the internal processes of the back office is also usually required. When taxpayers are placed at the center of the process such investment in administrative design should both provide benefits to citizens and increased efficiency as taxpayers are better able to influence the quality of service they receive.<sup>39</sup>

FIGURE 2



### 5.3. The quality of tax law

Other aspects of revenue administration may also benefit from incorporating more ‘client-focused’ policies. In many developing countries, for example, the administration has to cope with poorly conceived laws that generate major risks to the integrity of the tax system. Tax law in a changing world is inevitably open-ended and never a complete, coherent and simple set of rules. The problems arising from the quality (complexity, inadequacy, incoherence) of tax law have become a political issue in many countries and

<sup>39</sup> A good example is the Danish system called TASTSELV cited earlier (in note 22). See also the discussion of the Singapore experience in Bird and Oldman (2000).

have resulted both in ‘bills of taxpayer rights’ in some countries (e.g. Canada) and in others to major efforts – in the case of Britain in part with the aid of a private ‘think tank’ (the Institute for Fiscal Studies) -- at ‘simplifying’ tax law in various ways.<sup>40</sup> Seldom, however, have the damaging effects bad laws have on the quality of administration been adequately taken into account.

In all too many countries, for example, tax administration has suffered greatly from the propensity of governments to grant various tax incentives and ‘tax expenditures’ without much care about their implications for either revenue collection or avoidance and evasion practices. At the level of interpreting tax law, the possibilities are even more open-ended. Exemptions and explicit and implicit loopholes embedded in tax laws invariably generate a complex system that requires considerable interpretation by tax officials in order to be applied to the almost infinitely varied real life situations of taxpayers.

#### ***5.4. Consultation***

Considerable specialized human capital on both the public and private sides of the tax relation may be required to deal with such issues. For example, at the OECD as well as in the United States, Canada, Australia, and elsewhere extensive and sometimes prolonged discussions carried out in various internal and external ‘knowledge groups’ have at times driven developments in dealing with tax avoidance, particularly international tax avoidance. Australia and New Zealand in particular have made major efforts to engage ‘stakeholders’ in the tax system in discussions of a wide range of issues including tax policy and assessments of administrative performance.<sup>41</sup>

#### ***5.5. The international dimension***

In recent years, a key aspect in protecting the tax base at the country level has increasingly been the establishment of a complex and increasing international network of more or less formal arrangements intended to cross check and/or monitor increasing volumes of international trade and financial transactions. Many such arrangements have taken place under the aegis of the OECD (Eccleston 2010). The internationalization of the tax base has thus increasingly resulted in the ‘internationalization’ in many ways of both tax policy and tax administration. In particular, tracing financial transactions (e-financial transactions) has become a major strategic concern of tax administrations

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<sup>40</sup> For an extensive treatment of taxpayers’ rights, see Bentley (2007). On the simplification project in the UK, see, for example, Institute of Fiscal Studies (1998).

<sup>41</sup> Although Canada has done less in this respect (Arnold 2011), a particularly explicit statement on this issue was made in Canada some years ago: “We will accelerate our work with interested provinces, territories, and First Nations to create new opportunities for co-operation and partnerships. We will strengthen partnerships with other government departments and governments to provide single-window service. We will collaborate with tax professionals to promote compliance. We will work with the private sector to build links to CCRA programs and services where it is in our mutual interest (Canada Customs and Revenue Agency (CCRA) 2003). Note that CCRA became CRA, Canada Revenue Agency, in 2004.) South Africa has perhaps done more along these lines than most developing countries, as discussed by Bentley and Klue (2010) and Smulders and Naidoo (2010).

everywhere, although as yet is not clear that such activities have significant results in terms of improving outcomes.

### **5.6. New technology**

Finally, information technology (IT) is increasingly a key support of cooperative compliance strategy. In Canada, for example, initial automated audits, including source deduction and information crosschecks, are followed by subsequent reviews, verifications, examinations and audits with the objective of promoting the accurate reporting of income and trade data, with the aim of reducing problems arising from insufficient tax remittances as well as facilitating the early detection of reporting errors. The idea is to avoid unproductive audits and to focus resource-intensive efforts on higher risk segments while at the same time reducing the compliance burden for individuals and businesses.

Increasingly, a key determinant of good tax administration today is the extent to which compliance and taxpayer service can be managed and implemented through web-based technology. The appropriate design and implementation of such technology may not only improve the quality of service at all levels; it may also reduce transaction costs to taxpayers significantly. Different services ranging from simply information on laws and regulations up to e-filing are provided on the web by a number of developed countries. Importantly, in almost every case, such services were extended on a voluntary, not mandatory basis: that is, taxpayers do not have to do it this way unless they perceive sufficient benefits to themselves from doing so. However, judging from the 'market test' of high take-up rates of such services in countries such as Denmark and, among developing countries, Chile, moving towards web-based tax administrative systems seem clearly the way to go.<sup>42</sup>

## **6. Benchmarking the Cooperative Compliance Model**

Appropriate performance measures depend upon the objectives sought. With the cooperative compliance approach that is now the basic way good revenue administrations operate, the main objective is not simply to expand collections but to ensure that everyone pays his or her 'fair share.' Performance under this model cannot be improved simply by increasing the number of audits. Indeed the more successful this approach is, presumably the fewer audits, the fewer formal appeals and the fewer enforcement actions to collect taxes in arrears are needed to improve or maintain collection levels. Tax administrations pursuing an approach aimed at creating an environment through facilitating cooperative compliance so that taxpayers are less likely to cheat or delay

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<sup>42</sup> As early as 2004, the first year of Denmark's 'automated' system, less than 10% of the taxable population made any corrections to the pre-filled return. In Chile in 2005, 96% of taxpayers filed over the Internet, and 57% of the 1.2 million (out of 1.7 million) who received a pre-filled return accepted it without adjustment. Not all stories are so immediately successful, of course: in Malaysia only 20% e-filed in 2007 apparently more because most taxpayers saw no advantage in doing so than because they found it difficult to do so (Manaf, Ishak and Warif 2010).

payment thus need to measure their performance differently than when their dominant aim is to catch cheaters and penalize those who do not cooperate.

To illustrate, Table 1 provides an illustrative list of several items that seem appropriate in assessing the gaps between the performance of a particular tax administration and that of a good, better, or perhaps even ‘best practice’ administration.

**TABLE 1**  
Strategic Objectives in  
Managing a Tax  
Administration

• Establish basic internal and control systems of tax administration
• Greater concern for equity than maximization of collection
• ‘Internationalization’ of tax administration
• Formalization and standardization of cooperative compliance processes
• Migration to web-based interactive processes
• Client focus
• Deeper risk analysis
• Tax forms information strategy
• Participation in shaping of legal framework
• Knowledge networking in society: Consultative arrangements
• Development of knowledge organization (across departments)
• Human resource policies

Once a reference system identifying such objective and the strategic practices derived from them is identified, then corresponding benchmarks for each of the analytical dimensions can be established. Of course, the precise specification of such measures is always context-dependent: in Canada, for example, CRA has no formal role in preparing tax laws and its relations with the legislature are largely confined to its budgetary appropriation, its annual report and responses to questions raised in reports by the Auditor-General. In contrast, in other countries, the revenue administration may play a different and more autonomous role with respect both to legal drafting and relations with the legislature.

The set of benchmark indicators in Table 2 is intended simply to illustrate how a particular administration might be assessed in terms of achieving the objectives set out in Table 1. Clearly, many of the indicators suggested must be derived from qualitative analysis although it may be possible in some cases to quantify them to some extent – for example, on the basis of expert evaluations (as in the EU ‘fiscal blueprint’ discussed

earlier) or experience in other jurisdictions.<sup>43</sup> There is also some overlap with the sort of performance service standards currently used in Canada and other countries to assess performance. However, in line with the intent of systemic benchmarking -- namely, to evaluate the overall performance of the tax administration in achieving its strategic objectives (as set out, for example, in Table 1) -- the objectives considered in Table 2 and hence the measures suggested are on the whole considerably broader than those usually established by such 'performance standards.' It is neither useful nor meaningful to evaluate particular aspects of tax systems (such as administrative costs) or particular institutional characteristics (such as functional organization) without considering carefully how such practices relate to systemic improvements based on the best practices observed in well-functioning administrations.

Copying even the best practices of the best systems is of course not a guarantee of success when the systemic context in which the practice is embedded is fundamentally different. To be useful as a guide to systemic improvement of any particular country's revenue administration, benchmarking needs to be reformulated as a system-to-system comparative exercise. There is still much to be learned with respect to how to carry out such exercises. Consider, for example, how much one would need to know about all the systemic aspects highlighted in Table 2 in order to be able to understand or make productive use in any particular country of the valuable (but often rather baffling) comparative information on tax administration so usefully compiled in recent years by the OECD (2009). Even if one does understand, in depth, just what is being done (and why it is being done) in any particular country, one may of course still be properly skeptical of how useful it really is to think of transferring ways of doing things from one country to another, particularly when the two are very different—for example, Australia and Papua New Guinea.<sup>44</sup> An analogy might be trying to improve a bicycle by studying a Boeing 747.

Nonetheless, one conclusion seems clear from experience to date with attempts to benchmark revenue administrations in developing countries. The best way to transfer 'best practice' is to begin by being clear about the conceptual approaches to tax administration underlying different systems. Whether or not such approaches are explicitly recognized as such by those who actually run the tax administrations in question, every administration is shaped by a set of on-going strategic practices. These practices need to be singled out and assessed in order to understand both how their interdependence affects outcomes and what outcomes are relevant measures of 'success.' While we still have much to learn about how best to do this, future efforts at tax administration reform in developing countries may prove more useful and successful in the long run if they take the broader systemic approach suggested here rather than narrowly focusing on such particular institutional features as the degree of autonomy of

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<sup>43</sup> As a further example, presumably one might devise quantitative measures of such indicators as horizontal equity, compliance levels, and audit interventions, although we have not attempted to do so here.

<sup>44</sup> For an early review of the tax system in Papua New Guinea, see Bird (1989a). As discussed in Bird (1989), this example of course simply reinforces the critical importance of understanding in depth the environment within which the tax administration must function.

**TABLE 2. BENCHMARKING MANAGERIAL PRACTICE**

<b>BENCHMARKS</b>	<b>OBJECTIVES</b>	<b>RESULT INDICATORS</b>
<ul style="list-style-type: none"> <li>▪ Basic internal and control systems of tax administration</li> </ul>	<p>Assess the built-in efficiency and vulnerability of tax administration</p> <p>Is there a:</p> <ul style="list-style-type: none"> <li>○ secure and updated taxpayer account system?</li> <li>○ secure system of storing tax returns base information?</li> <li>○ secure and updated registry of taxpayers</li> </ul>	<ul style="list-style-type: none"> <li>○ efficient and accurate operation of these systems</li> <li>○ deterrence of fraud and corruption</li> </ul>
<ul style="list-style-type: none"> <li>▪ Higher concern for equity than maximization of collection</li> </ul>	<p>Assess equity as a tax administration priority.</p>	<ul style="list-style-type: none"> <li>○ Higher horizontal equity</li> <li>○ Higher compliance</li> <li>○ Proper collection levels</li> </ul>
<ul style="list-style-type: none"> <li>▪ “Internationalization” of tax administration</li> </ul>	<p>Assess the level of international tax administration activity.</p> <ul style="list-style-type: none"> <li>○ Services</li> <li>○ Audit</li> </ul>	<ul style="list-style-type: none"> <li>○ Higher horizontal equity</li> <li>○ Better compliance (collection) levels from international taxpayers</li> </ul>
<ul style="list-style-type: none"> <li>▪ Formalization and standardization of cooperative compliance processes</li> </ul>	<p>Development of operational practices to implement the cooperative compliance model</p> <p>Assessment of the instruments for achieving cooperative compliance</p>	<ul style="list-style-type: none"> <li>○ Established protocols of intervention</li> <li>○ Manuals</li> <li>○ Definition of operational practices</li> </ul>
<ul style="list-style-type: none"> <li>▪ Migration to web-based interactive processes</li> </ul>	<p>Assess the depth of web- based processes and their impact on the internal operation of tax administration</p>	<ul style="list-style-type: none"> <li>○ Number of totally automated interactive transactions</li> <li>○ Number of transactions with Internet access</li> </ul>
<ul style="list-style-type: none"> <li>▪ Client focus:</li> </ul>	<p>Assess the priority given to clients</p> <ul style="list-style-type: none"> <li>○ Self-propelled definition of service standards</li> <li>○ Segmentation of taxpayers</li> </ul>	<ul style="list-style-type: none"> <li>○ Improved services</li> <li>○ Enforceable service standards</li> <li>○ Focused audit interventions by segments</li> </ul>
<ul style="list-style-type: none"> <li>▪ Deepening of risk analysis</li> </ul>	<p>Does the administration have a system that covers all risks inherent to the operation of the tax system?</p> <ul style="list-style-type: none"> <li>○ Taxpayer risks</li> <li>○ Sectoral risks</li> <li>○ Corruption risks</li> </ul>	<ul style="list-style-type: none"> <li>○ Reduction of non-compliance due to deterrence</li> <li>○ Higher effectiveness of tax audit targeting</li> </ul>
<ul style="list-style-type: none"> <li>▪ Tax form information strategy</li> </ul>	<p>Does the tax administration rely heavily on information provided by the taxpayer?</p> <p>Is risk analysis embedded in the contents and approach of the tax forms?</p> <p>Do tax forms include qualitative information for taxpayer profiling?</p>	<ul style="list-style-type: none"> <li>○ The possibility of deep computerized audits</li> <li>○ Dissuasive effects generated by the contents of forms</li> </ul>
<ul style="list-style-type: none"> <li>▪ Participation in shaping of legal framework</li> </ul>	<p>Is tax administration an important stakeholder in the definition of tax legislation?</p>	<ul style="list-style-type: none"> <li>○ Number of legal initiatives drafted by tax administration</li> <li>○ Number of interventions of tax administration experts in Parliament</li> </ul>
<ul style="list-style-type: none"> <li>▪ Knowledge networking in society: Consultative arrangements</li> </ul>	<p>Is consensus a basis for interpreting and implementing tax legislation?</p> <p>Is private expertise embedded in regulatory developments?</p>	<ul style="list-style-type: none"> <li>○ Number of private-public institutions dealing with taxation</li> <li>○ Number of administrative general rulings conceived collectively with civil society stake holders</li> <li>○ Number of meetings with knowledge-based and/or civil society groups</li> </ul>
<ul style="list-style-type: none"> <li>▪ Development of knowledge organization</li> </ul>	<p>Is knowledge and staff development a priority in tax administration?</p>	<ul style="list-style-type: none"> <li>○ Training impact on tax administration performance</li> </ul>

the revenue administration or such quantitative but hard to interpret measures as the administrative cost per dollar collected.

## 7. Conclusion

Several key lessons for would-be tax administration reformers about benchmarking are suggested in this paper:

1. Benchmarking is not a simple process of blindly adopting the practices of others, even if they are considered by experts to be ‘best in class.’
2. Presumably the motivation for benchmarking is to spot opportunities for change and improvement. In the case of revenue administration such opportunities are often ‘soft’ (qualitative) in nature and difficult to identify. Concentrating only on gathering data on ‘hard’ (quantifiable) systems, as economists in particular seem programmed to do, is likely to result in severely incomplete information and may result in changes (such as new technology) being implemented in an unsustainable manner.<sup>45</sup>
3. It is important to gather information also on such critical ‘soft’ elements of organisational ‘culture’ as management philosophy, behaviors and style, the degree of participative management, communication and recognition, empowerment, and ‘ownership.’<sup>46</sup>
4. Even those in international agencies or elsewhere who may be unable (or unwilling) to go very far along the path suggested in the last point need to understand clearly that to be meaningful benchmarking must at a minimum be clearly linked to the overall strategic plan or strategy of the administration. As Casanegra and Bird (1992) noted some years ago, when there is no such strategy attempts to reform tax administration, with or without benchmarking exercises, are almost inevitably a waste of time.

Of course, it is also essential that those who are politically and managerially responsible for tax administration both understand and support any benchmarking exercise if it is to have any useful effects. To illustrate this point, the country study in the course of which much of the argument above was originally developed turned out to be not particularly productive. The reason is simple. The objectives of the client country’s operational team were different and focused within a different management paradigm. They did not want to hear that to be able to implement ‘best practices’ from developed countries they had first to adopt a completely different approach to tax administration. Rather than re-engineering their whole system, their focus within their existing paradigm was primarily on adopting new ‘add-on’ techniques to be measured by the achievement of detailed quantitative objectives -- without paying attention to the critically different

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<sup>45</sup> On the interplay between technology and tax administration, see Bird and Zolt (2008).

<sup>46</sup> As emphasized earlier, it is of course extremely important to understand the environment within which the administration functions: see Gill (2000). An important aspect of this environment may be what Nerre (2008) calls ‘tax culture’; for an interesting exploration of the very different ‘cultures’ in China and Australia, for example, see Huang (2010) and for an empirical look at some of the relevant factors, see Bird, Martinez-Vazquez and Torgler (2008).

meanings measures of such activities as audit and taxpayer services may have under different strategic approaches to the task of administering a tax system.

This reaction was not surprising. Most people who are overweight want to believe that there is a simple ‘magic bullet’ that can resolve the problem. They want a pill, a potion, or a machine that will make the problem go away. They do not want to hear that what they really need to do is to change their diet and exercise regime for life. Similarly, administrators understandably want to avoid such difficult, time-consuming, and often conflict-laden tasks as rethinking what they are really doing and re-engineering their whole organizational structure and processes to do it better. It always seems much easier to buy a new IT approach off the shelf or to hire additional or better qualified (and paid) staff than to change how one does business. It seems easier; but it is also on the whole seems much less likely to produce ‘good’ or ‘better’ results, let alone the ‘best’ results that are presumably the desired end goal.

As mentioned briefly earlier, an additional important aspect of systemic benchmarking that has often been unduly neglected is the need to pay close attention to the legal system, which is fundamental to the operation and hence the feasibility of any approach to revenue administration. Poor laws erode the possibility of successful administration, and if such erosion possibilities are overwhelming—as they are in some developing countries—attempts to improve fiscal outcomes by modernizing administration are unlikely to be rewarding, although they are all too likely to be costly. In addition to the quality (and quantity) of substantive tax laws, many other legal aspects need to be critically benchmarked against good practice to determine the extent to which they provide adequate underpinnings for such critical activities of a good revenue administration as risk management, service standards, web-based administration, and the implementation of cooperative compliance.

Finally, to end as we began, one must always remember that benchmarking and diagnosis are very different. Even the best benchmarks, however useful, can never replace the educated eye of an expert in providing a diagnosis of a given situation—although they can certainly help by directing that eye to problematic areas. Just as medical doctors must interpret test results (which, incidentally, are also usually ‘benchmarked’ against presumably relevant and reliable information), those who wish to improve the dark art of revenue administration must understand in depth not only exactly what is meant by specific benchmarks but also (and equally in depth) the context within they are interpreted in order to provide sound recommendations. Better diagnostic tools may improve diagnosis, but even the best tool cannot replace a good doctor. Similarly, even the best designed tax administration in any particular context is unlikely, in the end, to function well unless it has both adequate political support (including resources) from the top and a good management team in place.

In conclusion, benchmarking can be a useful tool for tax administration modernization efforts (Gallagher 2005; Crandall 2010). However, it seems more than time to reconsider the appropriate reference standard to which administrations in emerging countries are benchmarked. Over the last few decades tax administration

management in countries such as Australia and Canada has altered in important ways from the old coercive tradition still found in most developing countries towards the new cooperative compliance approach discussed above, in addition to broadening their horizons to include the international aspect and substantially advancing their use of technology. As yet, however, few emerging countries (even countries like Chile and Mexico that have made substantial modernization efforts in terms of the technology they employ) have as yet moved very far in this direction.<sup>47</sup>

No doubt countries will never be able to improve their tax administrations much in advance of the changes in the underlying political, economic, and social environment that are ultimately needed to support and sustain such improvements. Since taxation is one of the principal interfaces between state and society, however, some significant environmental factors themselves depend on how the tax system is designed and implemented.<sup>48</sup> Indeed, it may not be too much to say that the improvement of many developing countries may in the end depend to a substantial extent upon the improvement of their revenue administrations.<sup>49</sup> A more comprehensive approach to ‘systemic benchmarking’ along the lines sketched in this paper may perhaps play a critical role in facilitating that improvement.

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<sup>47</sup> Bird and Zolt (2008) survey the use of IT in developing country tax systems.

<sup>48</sup> An interesting historical example of this interdependence is the change in France’s tax system during the 18<sup>th</sup> century, and particularly in how it was administered – a change that Kwass (2000) argues was directly instrumental in bringing about the French Revolution at the end of the century.

<sup>49</sup> In addition to Brautigam, Fjeldstad and Moore (2007), see the interesting models set out in Besley and Persson (2010) and Cardenas and Tuzeman (2010).

## References

Aberbach, Joel D. and Tom Christensen (2007) "The Challenges of Modernizing Tax Administration: Putting Customers First in Coercive Public Organizations," *Public Policy and Administration*, 22 (2): 155-82.

Altman, Zvi D. (2006) *Dispute Resolution Under Tax Treaties* (Amsterdam: IBFD).

Anton, Arturo and Fausto Hernandez (2010) "VAT Collection and Social Security Contributions under Tax Evasion: Is There a Link?" CIDE (Centro de Investigacion y Docencia Economicas) Documento de Trabajo no. 480.

Arendse, Jackie (2010) "Is the Penalty System in the South African Tax Environment an Effective Deterrent to Tax Evasion?" Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Arnold, Brian (2011) "Making Tax Policy and Consultation," *The Arnold Report* (Canadian Tax Foundation), March 1  
<[https://www.ctf.ca/ctfweb/EN/Newsletters/The\\_Arnold\\_Report/2011/2011\\_BArnold\\_09.aspx](https://www.ctf.ca/ctfweb/EN/Newsletters/The_Arnold_Report/2011/2011_BArnold_09.aspx)>

Australian Tax Office (ATO) (2000) *Cooperative Compliance: Working with Large Business in the New Tax System*  
<<http://www.ato.gov.au/businesses/content.asp?doc=/content/22630.htm>>

ATO (2001) *International Benchmarking of GST Administration*. Canberra.  
<<http://www.ato.gov.au/fsmke/gstadmin.pdf>>

ATO (2009) *Compliance Program 2008-09*  
<<http://www.ato.gov.au/corporate/content.asp?doc=/content/00155156.htm>>

Baer Katharine, Olivier Benon, and Juan Toro (2002) *Improving Large Taxpayers' Compliance: A Review of Country Experience*, Occasional Paper 215 (Washington, DC: International Monetary Fund).

Bagchi, Amaresh, Richard M. Bird, and Arindam Das-Gupta (1995) *An Economic Approach to Tax Administration Reform*. Discussion Paper No. 3, International Centre for Tax Studies, University of Toronto, November.  
<<http://www.rotman.utoronto.ca/iib/icts/ICTS03.pdf>>

Barbone, Luca, Arindam, Das-Gupta, De Wulf, Luc, Hanson, Anna (1999), *Reforming Tax Systems - The World Bank Record in the 1990s*. Policy Research Working Paper WPS2237, World Bank, Washington, November.

Behn, Robert D. (2003) "Why Measure Performance? Different Purposes Require Different Measures," *Public Administration Review*, 63 (5): 586-606.

Bentley, Duncan (2007) *Taxpayers' Rights: Theory, Origin and Implementation* (Kluwer Law International).

Bentley, Duncan and Stiaan Klue (2010) "Bridging the Revenue Authority/Tax Practitioner Gap: Lessons from Best Practice and their Application to South Africa," Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Besley, Timothy and Torsten Persson (2010) "Pillars of Prosperity: Peace, Easy Taxes and the Rule of Law," Unpublished; December.

Biber, Edmund (2010) *Revenue Administration: Taxpayer Audit—Development of Effective Plans*, Technical Guidance Note, Fiscal Affairs Department, International Monetary Fund, April.

Biber, Edmund (2010a) *Revenue Administration: Taxpayer Audit—The Use of Indirect Methods*, Technical Guidance Note, Fiscal Affairs Department, International Monetary Fund, April.

Bird, Richard M. (1976) "Assessing Tax Performance in Developing Countries: A Critical Review of the Literature," *Finanzarchiv*, 34 (2): 244-65.

Bird, Richard M. (1989) "The Administrative Dimension of Tax Reform in Developing Countries", in Malcolm Gillis, ed., *Lessons from Tax Reform in Developing Countries* (Durham: Duke University Press), pp. 315-46.

Bird, Richard M. (1989a) "Taxation in Papua New Guinea: Backwards to the Future?" *World Development*, 17 (8): 1145-57.

Bird, Richard M. (2002) "Why Tax Corporations?" *Bulletin for International Fiscal Documentation*, 56 (5): 194-203.

Bird, Richard M. (2004) "Administrative Dimensions of Tax Reform," *Asia-Pacific Tax Bulletin*, 10 (3): 134-50.

Bird, Richard M. and Susan Banta (2000) "Fiscal Sustainability and Fiscal Indicators in Transitional Countries," in A. Shapleigh, F. Andic, and S. Banta, eds., *Transition Economies and Fiscal Reforms*. Proceedings of the Conference on Central and Eastern Europe and the New Independent States, Istanbul, July 1999 (Washington: USAID, 2000), pp. 13-42.

Bird, Richard M. and Milka Casanegra de Jantscher, eds. (1992) *Improving Tax Administration in Developing Countries* (Washington: International Monetary Fund, 1992).

- Bird, Richard M. and Oliver Oldman (2000) *Improving Taxpayer Service and Facilitating Compliance in Singapore*, PREM Note Number 48, The World Bank, December 2000.
- Bird, Richard M. and Eric M. Zolt (2008) "Technology and Taxation in Developing Countries: From Hand to Mouse," *National Tax Journal*, 61 (4, Part 2): 791-821.
- Bird, Richard M., Jorge Martinez-Vazquez and Benno Torgler (2008) "Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability," *Economic Analysis & Policy*, 38 (1): 55-71.
- Braithwaite, Vivian (2003) "A New Approach to Tax Compliance," in V. Braithwaite, ed., *Taxing Democracy: Understanding Tax Avoidance and Evasion* (Aldershot UK: Ashgate).
- Brautigam Deborah, Odd-Helge Fjeldstad, and Mick Moore M, eds. (2007) *Taxation and State-Building in Developing Countries* (Cambridge: Cambridge University Press).
- Canada Customs and Revenue Agency (CCRA) (2003) "Service Improvement in the CCRA, Strengthened Partnerships and Co-operation (2003)," updated October 29 of 2003 [no longer available on-line].
- Canada Revenue Agency (CRA) (2008) *Performance Report on Sustainable Development 2007-2008* < <http://www.cra-arc.gc.ca/gncy/sstnbl/prfrmnc/menu-eng.html> >
- CRA (2009) *Annual Report to Parliament 2008-2009* < <http://www.cra-arc.gc.ca/gncy/nnnl/menu-eng.html> >
- Cardenas, Mauricio and Daniel Tuzeman (2010) "Under-Investment in State Capacity: The Role of Inequality and Political Instability," Brookings Institution, Washington, September.
- Casanegra de Jantscher, Milka and Richard M. Bird (1992) "The Reform of Tax Administration," in Richard M. Bird and Milka Casanegra de Jantscher, eds. (1992) *Improving Tax Administration in Developing Countries* (Washington: International Monetary Fund), pp. 1-15.
- Crandall, William (2010) *Revenue Administration: Performance Measurement in Tax Administration*, Technical Guidance Note, Fiscal Affairs Department, International Monetary Fund, June.
- Das Gupta, Arindam (2002) "Central Tax and Administration Reform in the 1990s: An Assessment", in M. Govinda Rao, ed. *Development, Poverty, and Fiscal Policy* (New Delhi: Oxford University Press), pp. 139-73.

De Paula, Aureo and Jose A. Scheinkman (2009) "The Informal Sector: An Equilibrium Model and Some Empirical Evidence from Brazil," PIER Working Paper 09-44, University of Pennsylvania, Philadelphia.

De Paula, Aureo and Jose A. Scheinkman (2009a) "Value Added Taxes, Chain Effects and Informality," Second Version, PIER Working Paper 09-041, University of Pennsylvania, Philadelphia.

Eccleston, Richard (2010) "Institutionalising International Cooperation in Tax Administration: The Evolution and Effectiveness of the OECD Forum on Tax Administration," Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

European Commission (2007) *Fiscal Blueprints, A path to a robust, modern and efficient tax administration* (Brussels).

European Commission (2010) *Compliance Risk Management for Tax Administration* (Brussels).

Evans, Chris (2008) "Taxation compliance and administrative costs: an overview," in Michael Lang, C. Obermair, J. Schuch, C. Staringer and P. Weninger, eds., *Tax compliance costs for companies in an enlarged European Community* (Linde Verlag, Vienna and Kluwer Law International: London), pp. 447-68.

Forsund, Finn R., Sverre A.C. Kittelsen, Frode Linseth and Dag Fjeld Edvardsen (2006) "The Tax Man Cometh – But Is He Efficient?" *National Institute Economic Review*, no. 197, 106-19.

Gallagher, Mark (2005) "Benchmarking Tax Systems," *Public Administration and Development*, 25: 125-40.

Gill, Jit B. S. (2000) *A Diagnostic Framework for Revenue Administration* World Bank Technical Papers No 472 (Washington DC: World Bank).

Goodhart, C.A.E. (1975) "Monetary Relationships: A View from Threadneedle Street," *Papers in Monetary Economics* (vol. 1, Reserve Bank of Australia)

Gordon, Roger and Wei Li (2009) "Tax Structures in Developing Countries: Many Puzzles and a Possible Explanation," *Journal of Public Economics*, 93: 855-66.

HM Revenue & Customs (HMRC) (2010) *Measuring Tax Gaps 2010*. An Official Statistics Release, September.

Huang, Eva (2010) "Should China adopt Australian Summons and Access Powers? A Comparative Study of the Access and Summons Powers of the Revenue Authorities of

Australia and China,” Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Hood, Christopher (2007) Public Service Management by Numbers: Why Does it Vary? Where Has it Come From? What Are the Gaps and the Puzzles? *Public Money and Management*, 27(2): 95-102.

Hunter, William J. and Michael A. Nelson (1996) “An IRS Production Function,” *National Tax Journal*, 49 (1): 105-15.

Institute of Fiscal Studies (1998) *Final Report on Tax Legislation* (London).

International Finance Corporation (IFC) (2007) *Designing a Tax System for Micro and Small Businesses* (Washington).

International Tax Dialogue (2010) *Revenue Administration in Sub-Saharan Africa*, ITD Comparative Information Series No. 1 <available at [www.itdweb.org](http://www.itdweb.org)>

Keen, Michael and Jenny Ligthart (2006) "Incentives and Information Exchange in International Taxation," *International Tax and Public Finance*, 13: 163-180.

Kelly, Gail and Virginia Hopkins-Burns (2010) “Building Bridges to the Community: Using Customer-Centric Measures of Satisfaction and Perceptions,” Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Klun, Maja (2004) “Performance Measurement for Tax Administrations: The Case of Slovenia,” *International Review of Administrative Sciences*, 70 (3): 567-74.

Khwaja, Munawer Sultan, Rajul Awasthi, and Jan Loeprick, eds. (2010) *Risk Based Tax Audits: Approaches and Country Experiences*, World Bank, Washington.

Kwass, Michael (2000) *Privilege and the Politics of Taxation in Eighteenth-Century France* (Cambridge: Cambridge University Press).

Larin, Gilles and Robert Duong (2009) *Effective Responses to Aggressive Tax Planning: What Canada Can Learn from Other Jurisdictions* (Toronto: Canadian Tax Foundation).

Le, Tuan Minh, Duc Minh Tham, and Luc De Wulf (2007) *Estimating Economic Benefits for Revenue Administration Programs*, World Bank PREM Note 112, March.

Manaf, Nor Aziah Abdul , Zuaini Ishak, and Suraya Abdul Warig (2010) “The Acceptance of E-filing among Individual Taxpayers,” Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Moesen, W. and A. Persoon (2002) “Measuring and Explaining the Productive Efficiency of Tax Offices: A Non-Parametric Best Practice Frontier Approach,” *Tijdschrift voor Economie en Management*, 47 (3): 399-416.

- Nerré, Birger (2008) "Tax Culture: A Basic Concept for Tax Politics," *Economic Analysis and Policy*, 38 (1): 153-67.
- Noordegraaf, Mirko and Tineke Abma (2003) "Management by Measurement? Public Management Practices amidst Ambiguity," *Public Administration*, 81 (4): 853-71.
- Oldman, Oliver (1965) "Controlling Income Tax Evasion," in Organization of American States, Joint Tax Program, *Problems of Tax Administration in Latin America* (Baltimore: Johns Hopkins Press).
- OECD (2009) *Tax Administration Comparative Information 2008* (Paris)
- Paul, Samuel (1995) *A Report Card on Public Services in Indian Cities: A View from Below* (Bangalore: Public Affairs Centre).
- Pinhanez, Monica (2008) *Reinventing VAT Collection: Industry Vertical Assessment, Revenue Increase, and Public Sector Reliability*, Ph.D. thesis, MIT.
- Pinto, Dale and Adrian Sawyer (2010) "Building Bridges between Revenue Authorities: Would a World Tax Organisation be a Key Facilitator?" Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.
- Pollitt, Christopher (2006) "Performance Management in Practice: A Comparative Study of Executive Agencies," *Journal of Public Administration Research and Theory*, 16 (1): 25-44.
- Pomeranz, Dina (2010) "No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax," Unpublished paper; November.
- Propper, Carol and Deborah Wilson (2007) "The Use and Usefulness of Performance Measures in the Public Sector," *Oxford Review of Economic Policy*, 19 (2): 250-67.
- Radian, Alex (1980) *Resource Mobilization in Poor Countries* (New Brunswick, NJ: Transaction Books).
- Reinikka, Ritva (1999) *Using Surveys for Public Sector Reform*, PREM Note Number 23, World Bank, May.
- Robinson, Leslie and Joel Slemrod (2009) "Measuring the Impact of Tax Systems on Economic Behavior Using New Cross-Country Data" available at < [http://areas.kenan-flagler.unc.edu/Accounting/TaxCenter/taxsym09/Documents/RobinsonSlemrod\\_20080102.pdf](http://areas.kenan-flagler.unc.edu/Accounting/TaxCenter/taxsym09/Documents/RobinsonSlemrod_20080102.pdf)>
- Serra, Pablo (2003) "Measuring the Performance of Chile's Tax Administration," *National Tax Journal*, 56 (2): 373-83.

Sia, Siew Kiem and Boon Seong Neo (1997) "Reengineering Effectiveness and the Redesign of Organizational Control: A Case Study of the Inland Revenue Authority of Singapore," *Journal of Management Information Services*, 14: 69-82.

Silvani, Carlos A. and Alberto H.J. Radano (1992) "Tax Administration Reform in Bolivia and Uruguay," in Richard M. Bird and Milka Casanegra de Jantscher, eds. (1992) *Improving Tax Administration in Developing Countries* (Washington: International Monetary Fund), pp. 19-59.

Smulders, Sharon and Gelishan Naidoo (2010) "Small Business Tax Compliance Burden—Is the South African Revenue Service (SARS) Building Bridges, Roads or Pathways to Alleviate this Burden?" Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.

Van Stolk, Christian and Kai Weingrich (2008) "Convergence without Diffusion? A Comparative Analysis of Performance Indicators in Tax Administration and Social Security," *International Review of Administrative Sciences*, 74 (4): 589-614.

Vázquez-Caro, Jaime (1992) "Comments," in Richard M. Bird and Milka Casanegra de Jantscher, eds. (1992) *Improving Tax Administration in Developing Countries* (Washington: International Monetary Fund), pp. 145-54.

Vázquez-Caro, Jaime and José Abelino Ospina (2006) "Evaluación sistemática de la ley impositiva colombiana," in *Bases para una Reforma Tributaria Estructural en Colombia* (Bogota: Fedesarrollo), pp. 385-507.

Vazquez-Caro, Jaime, Gary Reid, and Richard M. Bird (1992) *Tax Administration Assessment in Latin America*, Report No. 13, Regional Studies Program, Latin American and the Caribbean Technical Department, World Bank, Washington.

Von Soest, Christian (2007) "Measuring the Capability to Raise Revenue: Process and Output Dimensions and Their Application to the Zambian Revenue Authority," *Public Administration and Development*, 27: 353-65.

Whait, Robert (2010) "Tax Administration – Not Just for the Tax Administrators!" Paper presented to 9<sup>th</sup> International Tax Administration Conference, 7-9 April 2010, Sydney.