Risk-Based Audit: How to Improve Results

Eunice Heredia-Ortiz
William B. Trautman
John Yates

May 15, 2019
Introduction

Improving risk-based audit systems is a cost-effective way to:
• Raise revenue.
• Increase efficiency and fairness of the tax system.
  • Focus audit resources on less compliant taxpayers.
  • Reduce audit burden on more compliant taxpayers.

Risk-based audit systems are based on:
• Taxpayer-specific inferences about tax compliance risk.
• Allocation of audit resources based on these inferences.

Improving the accuracy of the inferences generates benefits in terms of more efficient allocation of audit resources.
Introduction (Cont.)

Technology makes improved inference possible.
• Electronic filing makes more information available sooner.
• Object-oriented programming (OOP) helps organize, and supports the analysis of, information.

Organization of presentation.
• Current approach to risk-based audit and its limitations.
• Considerations in the design of risk-based audit systems.
• Electronic filing and OOP.
• Deterministic vs. statistical approaches to risk-based audit.
• New analytic opportunities.
Current Approaches

Inferences about tax compliance often based on statistical models.
• Past audit results as function of tax return characteristics.
• Model applied to currently-filed returns to estimate tax compliance risk.
• Returns ranked and audited in terms of estimated risk.

Data and measurement issues:
• Representativeness of historical data and selection bias.
• Deterrent effects usually ignored.
• Unit of observation (tax return vs. economic enterprise).

Ranking of returns:
• Weighting issues.
• Institutional risk.
Electronic Filing and OOP

Electronic Filing
• More tax return information available sooner.
• Other information:
  • Related returns, financial statements, administrative records.
  • More precise measures of issue-specific tax compliance risk possible.
  • Data conforms more to a tree than a rectangular data structure.

OOP
• Enterprise data structure made possible by OOP.
  • All data and its structure available programmatically.
  • Abstract classes for each type of component entity.
  • Each entity instantiated when the data are parsed.
  • Enterprise data structure defined by ownership objects.
Risk Assessment and Resource Allocation

Statistical Approach
- Collapse enterprise object into rectangular table for statistical analysis.
  - Loss of information.
  - Representativeness issue still a problem.

Deterministic Approach
- Stratify returns by size and broad indicators of compliance risk.
- Select randomly from each stratum.
  - Greater weight assigned to larger, higher-risk returns.
  - Lesser (but still positive) weights assigned to other returns.
- Random component reduces institutional risk and ensures a statistically valid sample of returns.
Risk Assessment and Resource Allocation

Issue-Specific Tax Compliance Risk Measures
• Expected adjustment from auditing specific issues.
• Certainty of audit result.
• Materiality threshold.

Useful for both statistical and deterministic approaches.
• Deterministic approach enables more transparent consideration of multiple objectives.
New Analytic Possibilities

Book-Tax Income and Balance Sheet Differences.
• Differences between what taxpayers report to shareholders and what they report to tax authorities.

Tax Shelter Detection
• Tax shelters often depend on certain entity structures.
• Enterprise objects allow one to search for these structures analytically.

Economic Anomalies
• If the enterprise object represents the economic enterprise, one can analyze discrepancies between behaviors of profit-maximizing and tax-minimizing firms.
Part of a Comprehensive Strategy

**Taxpayer Segments**

- **Large Taxpayers** 300 TPs
- **Medium Taxpayers** 1000 TPs
- **Small Taxpayers** 20,000 TPs

**Revenue Contribution**

- Large Taxpayers: 90%
- Medium Taxpayers: 10%

**Risk-based Management**

- Risk-based audit & arrears mgmt
- Clean TP registrar
- MTOs in selected regions
- Improve segmentation
- Audit capacity building

**Secure TP Data**

- Data Management Center
- E-File

**Simplify Payments**

- Payment via Comm. Banks
- M-file + Simple Reconiliation

**Cross-Cutting Interventions**

- Establish baseline:
  - Benchmarking study
  - New KPIs
  - Perception surveys

- Key Interventions:
  - Business process maps
  - Excise rates and controls
  - Property tax pilot
  - Micro, Sim. Model
  - Introduction of VAT
  - Transparent tax expenditures
  - Arrears management
Cost-effective Way to Raise Revenue

Improving risk-based audit is a cost-effective way of raising revenue and improving the efficiency and fairness of the tax system.

• Consistent with good public finance and the Journey to Self-Reliance.

Risk-based audit is broader than identifying returns that can be expected to generate the most amount of audit revenue.

• Risk-based audit involves managing tax compliance in the population and changing behaviors.

Risk-based audit requires consideration of:

• Revenue in the current year AND future years, which means that the behavioral effects of the audit policy may be relevant and important.
• The economic enterprise may be broader than the entity reported on the tax return and need a more holistic view.
Risk-based Audit in Practice

The tax authority does not have complete information.
• The risk-based audit system could reduce institutional risk and identify emerging issues by adopting a random element in selection.
• There should be some monitoring, evaluation, and feedback mechanism to improve the efficacy of the process over time.
• Poor data quality hurts the effectiveness of risk-based audit.

Enterprise data structures suggest that it is possible to access all of an entity’s relevant data and its structure in real time.
• This opens up significant opportunities for alternative approaches (i.e., deterministic as opposed to statistical) to risk-based audit.
Cash Management Systems

Beyond selection of audits, cases need to be managed.
- Audit cases are assigned to auditors.
- Cases may be segregated between desk audit (issue oriented) and field audit.
- Results of audit must be tracked against appeals.

Resources spent on audit and the efficiency of audit cases must be measured.
- To measure resource usage, time of auditors spent on cases must be tracked.
The presentation highlighted issues associated with the implementation of risk-based audit systems in Guatemala and El Salvador.

- The importance of establishing institutions and policies to support risk-based audit.
- Difficulties of addressing institutional change.

Are there opportunities to apply more advanced methods in developing countries?

- While some analytic approaches may seem irrelevant to implementation of risk-based audit systems in developing countries, there is value in having a clear idea of where you are going in order to develop an implementation plan that moves one incrementally in that direction.
Shaping a more livable world.