

Risk Analysis for Audit Planning



Strategic Paper by



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RISK ANALYSIS IN AUDIT PLANNING: A PROJECT TO IMPROVE THE SELECTION OF VFM AUDIT PRIORITIES

Strategic Paper by Horácio Sabóia Vieira, CCAF International Fellow

1. Introduction

The objective of this paper is to propose a risk-based methodology for selecting VFM audit themes to be implemented in the Brazilian Federal Court of Accounts (*Tribunal de Contas da União* - TCU).

2. Expected Benefits

If successfully implemented, this methodology could bring about the following benefits:

- a) a better selection of entities/areas for VFM audits
- b) avoiding repetitive planning work
- c) improving TCU's capability to respond to change, challenge or criticism
- d) more value is added to the auditee
- e) strengthened links between strategic planning and audits
- f) a common vocabulary between auditor and auditee

3. Why Change?

TCU recently made major changes in its organizational structure (Resolução n. 140/2000, effective since 1st of January 2001). One of the most significant innovations was the creation of the *Secretaria Adjunta de Fiscalização – ADFIS*, unit with, among other duties, the responsibility to:

- ⇒ coordinate the overall fiscalization plan (including audits) – at least 32 other TCU's units are involved in this plan
- ⇒ manage and update database related to its duties
- ⇒ carry on studies and research in its area
- ⇒ develop methodologies to be used in fiscalization actions (audits included) and in the assessment of government programmes

It should be added that ADFIS also oversees four specialized audit units, each of them in charge of specific audit areas (personnel, public works and real property, privatization, and government programs).

The development of the methodology proposed in this paper will provide ADFIS with an integrated, modern and logical framework to carry on all planning processes under its responsibility. Considering that ADFIS was only recently created and is still working on the methodologies to be used, the timing seems favourable for implementing this paper.

4. Value For Money (VFM) Audits in the Office of the Auditor General of Canada (OAG)

4.1 Key concepts

The OAG's VFM Audit Manual defines a VFM audit as "a systematic, purposeful, organized and objective examination of government activities" aimed at providing Parliament "with an assessment on the performance of these activities", and encouraging "accountability and best practices" (VFM Audit Manual, paragraph 1.1).

It is also important to stress that a VFM audit is part of the Comprehensive Audit approach used by the OAG, together with Annual (attest) Audits and Special Examinations (Figure 1, pg 3, VFM Audit Manual).

The key concepts of VFM audits used by the OAG derive from Section 7 of its mandate, the Auditor General Act of 1977. Although the term VFM is not found in its wording, the following transcription of the Act helps to highlight the essential concepts:

"7(1) The Auditor General shall report annually to the House of Commons and may make, in addition to any special report made under subsection 8(1) or 19(2) and the Commissioner's report under subsection 23(2), not more than three additional reports in any year to the House of Commons

- a) on the work of his office; and
- b) whether, in carrying on the work of his office, he received all the information and explanations he required.

(2) Each report of the Auditor General under subsection (1) shall call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, including any cases in which he has observed that:

- a) accounts have not been faithfully and properly maintained or public money has not been fully accounted for or paid, where so required by law, into the Consolidated Revenue Fund;
- b) essential records have not been maintained or the rules and procedures applied have been insufficient to safeguard and control public property, to secure an effective check on the assessment, collection and proper allocation of the revenue and to ensure that expenditures have been made only as authorized;

- c) money has been expended other than for purposes for which it was appropriated by Parliament;
- d) money has been expended without due regard to **economy or efficiency**;
- e) satisfactory procedures have not been established to measure and report the **effectiveness** of programs, where such procedures could appropriately and reasonably be implemented; or
- f) money has been expended without due regard to the **environmental effects** of those expenditures in the context of sustainable development". (emphasis added)

It is clear that the VFM audits conducted by the OAG are not restricted to the so called four Es, economy, efficiency, effectiveness and environment. Compliance with authorities and controls are also included. This point can be confirmed in a study commissioned by the Methodology Development Committee (Research Paper n. 5, "Setting the Scope of Value-for-money Audits in Departments and Agencies", 1991), where the term VFM is linked to the "Section 7(2) of the Act, which refers to **controls and authority**, and to the concepts of economy, efficiency and effectiveness rooted in the tradition of operational auditing" (pg 16). Since this study was carried out before 1995 when the Auditor General Act was amended, the fourth "E" (environment) had not yet been included.

The mandate for the Brazilian Federal Court of Accounts derives from the Brazilian Constitution and from Law n. 8 443/1992, known as the Organic Law of the Federal Court of Accounts. The following transcription shows that the basic concepts of VFM audits described above are included in its mandate.

"Article 70. Control of accounts, finances, budget, operations and property of the Union and of the agencies of the direct and indirect administration, as to lawfulness, legitimacy, **economy, efficiency**, application of subsidies and waiver of revenues, shall be exercised by the National Congress, **by means of external control** and of the internal control system of each Power.

.....

Article 71. **External control**, incumbent on the National Congress, **shall be exercised with the aid of the Federal Court of Accounts**, which shall:

I - ...

.....

IV – carry out, on its own initiative or that of the Chamber of Deputies, of the Federal Senate, or of a technical or inquiry committee, inspections and **audits** of an accounting , financial, budgetary, **operational** or property nature in the administrative units of the Legislative, Executive and Judicial Powers and other entities referred to in item II;" (Brazilian Constitution, 1988, emphasis added.)

The above excerpt shows beyond doubt that the Brazilian Federal Court of Accounts (TCU) holds legal power to carry out audits focussing on operational issues. It is widely known in the specialized literature that operational audits cover the traditional three Es, including effectiveness under the TCU mandate.

We can conclude that both the Office of the Auditor General of Canada and the Brazilian Federal Court of Accounts share some important common areas in their mandates, making it possible to apply methodologies used in the OAG to TCU audits, provided that suitable adjustments are made.

Other common features are worth pointing out:

- ⇒ both organizations have product lines other than VFM audits;
- ⇒ some of those other product lines are mandatory;
- ⇒ all VFM audits are chosen on a discretionary basis.

Consequently, resources allocated for VFM audits are always limited to some extent, which makes selecting entities or areas to be audited a key issue. The main message of this paper is that risk analysis methods offer what may be the best approach to address the problem of deciding what areas, entities or themes should be chosen for VFM audits.

Risk analysis methodologies begin with a clear description of the entity's objectives. It moves on to the identification of possible outcomes that could negatively affect (some authors include positive factors) the achievement of intended results. In other words, good risk analysis (RA), followed by good risk management (RM), is essential for an entity to deliver economically and efficiently the expected results and be effective.

Thus, RA and RM touch on core concepts involved in VFM audits.

Since this paper focuses on the use of risk analysis methodologies for audit planning, it might be helpful to define the basic concepts related to this area, as used in this document:

Risk – is the expression of the **likelihood** and **impact** of uncertain future events with potential to influence the achievement of an organization's objectives.

Risk analysis (RA) - the systematic use of information to identify the probability that something will occur and to assess the impact such events will have on the achievement of an organization's objectives.

Risk management (RM) – is a systematic method of identifying, analysing, assessing, treating, monitoring and communicating risk, in order to keep the organization's exposure to risk at acceptable levels.

4.2 Selection of Audit Areas in the OAG: Moving Towards an Integrated Risk-Based Planning

In this section, we describe briefly the new planning approach being developed by the OAG to improve the process of identifying audit priorities.

At present, the OAG has four product lines:

- I) annual audits of the financial statements of the Government of Canada, Crown corporations and other entities (federal, territorial, Canadian and international)
- II) special examinations of Crown Corporations
- III) value-for-money (VFM) audits and studies of departments and agencies
- IV) environment and sustainable development audits and studies

In the OAG, the process of selecting specific areas or programs to be audited includes the following major steps:

- a) annual environmental scan – based on a survey of knowledgeable people who are invited to speak to the Office, long term challenges and risks to the Office are identified
- b) long range entity planning (LREP) prepared by the entity leader - audit priorities are identified at this point
- c) resource assessment – to determine what resources are available for the next 18 months
- d) annual planning – long term, balancing priorities with allocation of resources, referred to as the “Merrickville” exercise in the OAG

The OAG is committed to continuous improvement and responds to significant changes, such as the implementation of the Government’s Financial Information Strategy (FIS), the comptrollership agenda and the addition of the environment audits to its mandate. To meet these challenges the OAG launched a project to develop a proposal for a “stronger integration of attest, compliance and VFM auditing by implementing a more comprehensive risk-based planning that focuses on departmental management frameworks and controls” (Project Charter: Modernizing Financial, Control and Compliance with Authorities Auditing within the OAG, pg 2).

A draft of a new methodology for LREP is one of the results of that project. The key characteristics of this methodology are:

- 1) a focus on the entity level
- 2) a comprehensive risk analysis based on a thorough knowledge of the entity’s business and encompassing the risks to the entity, external and internal

- 3) clear links between areas of risk and audit product lines
- 4) documentation for the rationale that supports the decisions on what audits will be done.

It should be emphasized, however, that the methodology described in that draft, to a significant extent, formalizes and makes procedures that were implicitly or explicitly used by various audit teams more systematic.

5. The Use of Risk Analysis Methods in other Supreme Audit Institutions (SAIs)

National Audit Office (NAO) – United Kingdom

The NAO has incorporated RA into their revised audit methodology (Audit 21 document) for financial audits. The major steps in this approach to auditing are:

- **Understand the business:** external environment, framework of authorities, overall control environment, accounting and internal control systems;
- **Assess material risks:** to ensure that the audit concentrates on important issues
- **Design audit procedures:** based on risk areas and assurance on controls
- **Perform audit procedures.**

In cases where the NAO has tested controls with good results, less substantive tests will be done .

Australian National Audit Office (ANAO)

The ANAO's "Risk Management Plan" describes how that office is managing its business risks. They took the following basic steps: establish context; identify risks; analyse and assess those risks and treat them accordingly.

Risk is defined in terms of "its impact on achievement of business objectives", so the starting point to identify risks are the institution's objectives, either strategic or operational. These risks are assessed in terms of two variables, consequences and likelihood. The level of risk is the combined result of those two variables, and risks are then rated according to their level. A set of actions is proposed to treat the risks rated at high level, either by minimizing the consequences or by reducing the likelihood of occurrence.

ANAO has included risk analysis in its financial audit framework.. The main steps are:

- **Co-develop expectations:** clear articulation of what is required and expected from the relationship between the external audit and the auditee
- **Set the context:** clear understanding of strategic business objectives, enterprise-wide risks and control environment
- **Process risk analysis:** review all key business processes; linking business risk to financial statement risk; assessment of controls and other treatments by which the auditee manages risk.
- **Design residual audit procedures:** additional audit procedures to cover financial statement assertions not addressed by process analysis; general audit procedures
- **Assess results:** opinion on financial statements; conclusion on risk and control framework; assessment of ANAO and auditee performance

At present, ANAO is developing an integrated RA methodology to be used in both financial and VFM audit.

6. Improving TCU's VFM Audits Planning: Introducing Risk Analysis Methods

6.1 Current Situation

So far, the process of selecting audit priorities in TCU has been based mainly upon professional judgement, with limited use of systematic methodologies. Additionally, the recent introduction of a new organizational chart opens up the possibility that more than one technical unit will be planning audits for the same entity, even though the overall planning and coordination for the audit work as a whole has been assigned to one high level unit (ADFIS).

TCU has under its jurisdiction many extremely diversified entities, ranging from small government units to huge corporations that operate in the private sector, such as PETROBRAS (brazilian state-owned oil business). As a typical court of accounts, TCU has a broad mandate that includes not only audits but also account suits and other legal obligations.

TCU has to fulfill its broad and complex mandate with limited resources, which makes audit planning a very challenging and comprehensive process.

6.2 Improvement Proposed

The implementation of integrated long term risk-based audit planning, similar to that is being developed by the OAG, would provide TCU with a methodology suitable to its needs. It would assure the best use of available resources and bring about relevant benefits, such as:

- ⇒ an improved understanding of the business of the entities under TCU's jurisdiction
- ⇒ the systematic identification of key risk areas
- ⇒ the decision-making process and rationale behind it become clear and documented
- ⇒ the creation of a database with key information about each entity's business and risk areas, minimizing the effects of the so called brain drain;
- ⇒ potentially repetitive risk analysis efforts across TCU's technical units will be avoided
- ⇒ clear links between the entity's objectives and the managers' success in meeting them
- ⇒ audit efforts can be directed to the high risk areas that are relevant to TCU's mandate
- ⇒ audit planning will depend less on professional judgement and more on methodologies
- ⇒ possible use of electronic tools for the planning process in the future.

A systematic approach embedding the audit planning process can also provide strong defence arguments for external challenges or criticism related to TCU's performance. The combination of logical and documented framework for audit planning with the widely known constraint on the resources available for audits is the only possible response to the question (not rarely asked) of why TCU has not audited a particular entity under its jurisdiction.

Risk analysis methods can also be very useful for TCU's strategic planning (similarly to ANAO) and for specific audit work planning. Though the application of risk analysis approaches at those two levels goes beyond the scope of this paper, certainly the implementation of risk analysis procedures for entity long range audit planning will produce staff skilled in such tools, making easier the way to use RA at other levels.

7. Suggested Outline of Risk Based Audit Planning Methodology for TCU

The following methodology should be applied to all entities/programs previously identified as relevant, either for the amount of resources managed or for social or political sensitivity.

PHASE 1 – Developing Knowledge of the Business

Legal Framework: objectives, stewardship responsibilities

Environment scan: stakeholders, competitors, suppliers, related entities, governance, potentially sensitive issues, media coverage, outside experts

Related government policies
Interviewing senior managers
Objectives as perceived by managers
Previous knowledge: rulings on past account suits, past audits, findings, recommendations, denunciations
Operational product lines
Key success factors
Reports to stakeholders/governance
Risk analysis performed by the entity
Entity's strategic planning

Main Result: a knowledge database or file

PHASE 2 – Identifying Risks

External environment

- identify possible relevant events
- assess likelihood and impact of those events on the achievement of objectives

Operational risks (processes or product lines)

- identify possible relevant events
- assess likelihood and impact on the achievement of objectives

Main result: a risk matrix

PHASE 3 – Assessing Controls

Control framework: to what extent risk is mitigated
Residual risks

Main Results: assessment of control framework and a list of key residual risk areas/issues

PHASE 4 – Choosing audit themes

Establish TCU's priorities: mandate, strategic planning, parliamentary interest, sensitive issues
Define materiality
Prioritize audit areas/issues, based on key residual risks, resources available and the specialized audit areas
Design audit plan for next two semesters

Main Results: a long-range entity audit plan and documentation that supports it

PHASE 5 – Decision

Submit audit plan to the entity's Rapporteur for amendments or suggestions
Submit audit plan to the board of Ministers

Main Result: overall TCU's audit plan

8. Proposed Plan of Action to Introduce Risk Analysis Methods in TCU's VFM Audit Planning Process

As TCU's organizational chart differs significantly from the OAG's, it is important to identify and describe the key players who will take part in the actions proposed:

Board of Ministers – the full Court, integrated by all ministries and deputy ministries.

President – the minister elected for that position, at present Mr. Humberto Souto.

Instituto Serzedello Corrêa (ISC) - unit in charge of training the staff.

Secretaria Geral de Controle Externo (SEGCEX) – unit in charge of overseeing all technical work in TCU, including the account suits and audits.

Secretaria Adjunta de Fiscalização (ADFIS) – unit responsible for overall audit planning.

STEP 1 – Communication

- ✓ briefing the President about this paper: a 30-minute presentation. Deadline: 15/July/2001
- ✓ briefing the Ministers about the improvements proposed: a 20-minute presentation. Deadline: 31/July/2001
- ✓ Presentation to TCU's Senior Management: 30 minutes. Deadline: 31/July/2001
- ✓ One hour presentation to all the staff. Deadline: 15/August/2001
- ✓ Publication of an Executive Summary of the paper in TCU's regular publications, the bulletin "União" and the magazine "Revista do Tribunal de Contas da União".

responsibility: all the above presentations and briefings will be done by the author of this paper

support required:

from the President: to accept the briefing and to communicate to the other ministers in order to facilitate the other briefings

from ISC: to coordinate the presentation for all the staff and submit the Executive Summary to the Commission in charge of selecting material for publications

from SEGCEX: to coordinate the presentation to senior management.

STEP 2 – Develop Methodology: a Project

Objective: develop a methodology for risk based audit planning suitable for TCU

Leadership: ADFIS (Secretaria Adjunta de Fiscalização)

Team: someone from ADFIS, representatives of two SECEX and two Secretarias de Fiscalização, the author of this paper.

Resources: methodologies developed in other SAIs, risk matrix previously developed in TCU, this paper.

Schedule: from 01/August/2001 to 30/September/2001

Key features: the project should include testing the proposed methodology by carrying on a risk analysis process for a sample of entities and establishing how the audit plan will be documented.

support required:

from the President: formal approval for the project

from SEGECEX: appoint the personnel that will be included in the team

from ADFIS: take the lead of the project

STEP 3 – Implement Methodology

The same project team will propose amendments to TCU's regulation for audit projects (*Instrução Normativa n. 09 – IN 09*)

Deadline: 15/December/2001

STEP 4 – Staff training

After the approval of the methodology, ISC will provide training for the staff involved in audit planning, using the members of the project team as key resource.

Schedule: first training course to be delivered in the second semester of 2002

9. Conclusion

TCU faces a complex challenge in planning its audits. With the number and diversity of entities under its jurisdiction and the limited resources available for audit work, the task of choosing audit priorities is very critical. Nevertheless, expectations for TCU's performance keep increasing in Parliament and among citizens. They are asking legitimate questions about what TCU has been doing and why, questions that must be answered with transparency. The development of a risk-based methodology for audit planning like the one proposed in this paper, will enable TCU to make optimal use of its resources in its audit work and provide the Brazilian society with clear responses to any questions they might have.