A Performance Measurement Framework for the Brazilian Office of the Comptroller General (CGU) Based on International Frameworks

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The Minerva Program – Fall/2012
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WASHINGTON, D.C.
December, 2012
Keywords:

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1. Introduction: CGU and its Internal Control function

The Brazilian Office of the Comptroller General, Controladoria-Geral da União (CGU), has been improving public policies, preventing financial losses and fighting against corruption for several years. However, CGU has not been using a single accountability standard to keep track of its results. Until September 2012, there was not a standard methodology to assure a systematic way to evaluate its audit outcomes. This paper aims at presenting such a methodology for the internal control system based on frameworks and indicators already being used by distinguished audit institutions. The presented framework was officially adopted by CGU in October 2012.

This paper is organized into the following chapters:

a. In this Introduction, the structure of the Office of the Comptroller General, its mission, vision and strategic objectives are presented. CGU’s Internal Control function, the area for which the performance indicators will be addressed, is discussed deeper. This chapter also introduces performance audit concepts and briefly shows how CGU conducts such audits.

b. In Chapter 2, frameworks for measuring results of some audit institutions are covered. The chapter’s purpose is to clarify how institutions, which perform similar audits, cope with performance measurement. Analyzed audit institutions have been chosen because of the international relevance of their works and because their performance reports are made public.

c. Based on the experiences discussed in Chapter 2, Chapter 3 presents a Performance Measurement Framework designed for CGU’s context (discussed in Chapter 1). Although many of the concepts come from the U.S. Government Accountability Office’s methodology, it will be clear at the end of this chapter that the proposed framework is strongly based on the U.K. National Audit Office’s philosophy of measuring impacts of their works.

d. Finally, Chapter 4 concludes and suggests the next steps to be taken to put in practice effective performance measurement at the Office of the Comptroller General. Furthermore, the chapter poses future perspectives.
1.1. The Office of the Comptroller General – CGU

The Office of the Comptroller General (CGU) is the Brazilian agency in charge of assisting the President of the Republic in matters which are related to:

1. Internal Control
2. Prevention of Corruption
3. Disciplinary Action
4. Ombudsman’s Offices

In order to carry out these activities, CGU is comprised of the following units (CGU, 2012):

1. Federal Internal Control Secretariat – SFC
2. Corruption Prevention and Strategic Information Secretariat – SPCI
3. National Disciplinary Board – CRG

The National Ombudsman's Office is in charge of technical coordination of the Ombudsman's Offices of the Federal Executive Branch. This Office is also responsible for organizing and interpreting complaints, praises and suggestions received regarding the Federal Executive Branch.

The National Disciplinary Board (CRG) is the central department of the “Disciplinary System of the Federal Executive Branch”, which is responsible for carrying out disciplinary activities, such as investigation of possible irregularities committed by civil servants and the enforcement of penalties.

The Corruption Prevention and Strategic Information Secretariat (SPCI) is responsible for developing mechanisms to prevent corruption. Besides prevention, SPCI is also in charge of providing CGU’s other units with intelligence information to fight corruption.

The CGU’s major unit is the Federal Internal Control Secretariat (SFC), which is in charge for the internal control of Federal Executive Government. Among other tasks, the SFC carries out audits and inspections in order to check the execution of Federal Executive Government budgets. This duty is performed mainly through evaluating the implementation of government programs and auditing the federal public funds management. These funds may be used by federal, state and municipal public entities, private agencies and non-governmental organizations.
The Federal Internal Control Secretariat’s responsibilities have been established in Article 74 of the Constitution of the Federative Republic of Brazil (BRASIL, 1988, pp.68-69) and in Article 22 of the Federal Law no. 10.180/2001 which set up Federal Internal Control Secretariat as the central unit of the Internal Control System of the Federal Executive Branch. The SFC’s main statutory duties are (1) to evaluate the implementation of government programs and the attainment of the goals established in the pluriannual plan and (2) to verify the lawfulness and to evaluate “the results, as to effectiveness and efficiency, of the budgetary, financial and property management in the agencies and entities of the federal administration, as well as the use of public funds by private legal entities”.

1.1.1. Mission, vision and strategic objectives

In 2011 several discussions took place, involving all CGU’s units, to develop CGU’s strategic framework, which was approved in 2012. This document defines CGU’s mission, vision and strategic objectives until 2014, as follows:

**Mission**: Preventing and fighting against corruption and to improving public management through strengthening internal control mechanisms and enhancing transparency, ethics and social control.

**Vision**: To be nationally and internationally recognized as a reference institution in prevention and fighting corruption and in improving the public management, supported by highly qualified and motivated staff.

**Strategic Objectives**:

Fifteen strategic objectives have been defined in the following four perspectives: Results, Internal Processes, People and Infrastructure. Considering the scope of this paper, only the strategic objectives in the Results Perspective will be presented, which are the following:

1. Fostering continuous improvement of delivering public services
2. Strengthening internal controls and the capacity to manage risks
3. Enhancing public transparency and social control mechanisms
4. Intensifying investigatory auditing
5. Improving administrative disciplinary mechanisms
6. Improving the CGU’s legal framework
7. Increasing the role of CGU in International Forums in its areas of expertise
Strategic objectives number 1, 2, 3 and 4 are intrinsically related to internal control activities, which are primarily run by the Federal Internal Control Secretariat (SFC).

1.1.2. Internal Control function and SFC

The most widely used internal control framework in the United States has been developed by the Committee on Sponsoring Organizations of the Treadway Commission (COSO). The COSO’s framework *Internal Control – Integrated Framework* (1994, p.13) defines internal control as a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of the following objectives: (1) effectiveness and efficiency of operations; (2) reliability of financial reporting; and (3) compliance with applicable laws and regulations. This concept of internal control is suitable for profit, non-profit and government organizations.

The Guidelines for Internal Control Standards for the Public Sector (INTOSAI, 2004b, p.6), issued by the International Organization of Supreme Audit Institutions (INTOSAI), is based on COSO’s framework and defines internal control as “an integral process that is designed to address risks and to provide reasonable assurance that in pursuit of the entity’s mission, the following general objectives are being achieved: (1) executing orderly, ethical, economical, efficient and effective operations; (2) fulfilling accountability obligations; (3) complying with applicable laws and regulations; and (4) safeguarding resources against loss, misuse and damage.”

The entity’s objectives cited by COSO fall into three categories (COSO, 1994, p.16):

a. Operations – relating to effective and efficient use of entity’s resource;
b. Financial reporting – relating to preparation of reliable published financial statements;
c. Compliance – relating to the entity’s compliance with applicable laws and regulations.

Carmichael, *et al.* (1996, p.23) highlight two kinds of audits carried out by government auditors that are related to the three kinds of objectives cited by COSO:
financial audit and performance audit. Table 1 summarizes how the entity’s objectives cited by COSO and INTOSAI are related to these two kinds of audits. Given that performance audit plays the major role in the internal control process, this kind of audit will be detailed in section 1.2.

<table>
<thead>
<tr>
<th>Entity’s objective</th>
<th>Category</th>
<th>Type of audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSO (1)</td>
<td>Operations</td>
<td>Performance</td>
</tr>
<tr>
<td>COSO (2)</td>
<td>Financial reporting</td>
<td>Financial</td>
</tr>
<tr>
<td>COSO (3)</td>
<td>Compliance</td>
<td>Performance</td>
</tr>
<tr>
<td>INTOSAI (1)</td>
<td>Operations</td>
<td>Performance</td>
</tr>
<tr>
<td>INTOSAI (2)</td>
<td>Accountability¹</td>
<td>Financial / Performance</td>
</tr>
<tr>
<td>INTOSAI (3)</td>
<td>Compliance</td>
<td>Performance</td>
</tr>
<tr>
<td>INTOSAI (4)</td>
<td>Operations</td>
<td>Performance</td>
</tr>
</tbody>
</table>


According to the Guidelines for Internal Control Standards for the Public Sector (INTOSAI, 2004b, p.6), internal control is a series of actions that permeate an entity’s activities, which are pervasive and inherent in the way management runs the organization. Therefore, internal control should not be seen as a “necessary burden” to be added on to an entity’s activities. The internal control system is most effective when it is built into the entity’s infrastructure and is an integral part of the essence of the organization. The bottom line is: “internal control should be built in rather than built on” (INTOSAI, 2004b, p.6).

According to the INTOSAI (2004b, p.43-44) and COSO (1994, pp.6-7), everyone in the organization has some responsibility for internal control. Managers are responsible for designing, implementing, supervising, maintaining and documenting the internal control system. Internal auditors should examine and contribute to the effectiveness of the internal control system through their evaluations and recommendations. Supreme Audit Institutions (SAI) should encourage and support the establishment of effective internal control in the government, communicating their

¹ Accountability is defined as “the process whereby public service organisations and individuals within them are held responsible for their decisions and actions” and it will be realized by making available reliable and relevant financial and performance information to stakeholders (INTOSAI, 2004b, p.10).
findings and recommendations (from compliance, financial and performance audits) to interested stakeholders. External auditors should provide advice and recommendations on internal control. Finally, legislators and regulators establish rules and directives regarding internal control. The INTOSAI (2004b, p.19) asserts that if top management believes that internal control is important, others in the organization will sense that and will respond by conscientiously observing the controls established. As an example, the creation of an internal audit unit as part of the internal control system would be a strong signal by management that internal control is important.

In 2010, the Brazilian federal government requested from Organisation for Economic Co-operation and Development (OECD) a comprehensive review of its public sector integrity. The review (OECD, 2011, p.184) asserts that the Office of the Comptroller General fulfils many of the functions of a central internal control authority, including: (1) identifying and assessing management-related issues to determine if a government-wide approach is necessary; (2) formulating, reviewing and adjusting policy instruments; and (3) overseeing, interpreting and providing advice to public organizations on the application of policy instruments.

In this review of the Public Sector Integrity in Brazil, OECD (2011, p.201) pointed out countries like Brazil, Portugal and Spain as having a high level of centralization of internal audit within the direct public administration. Other countries like Australia, Canada, the United Kingdom and the United States have a high level of decentralization, according to the same study. In the United States, for example, there are 69 federal Offices of Inspector General who share information and co-ordinate through the Council of Inspectors General on Integrity and Efficiency. On the other hand, in Portugal, the General Inspectorate of Finance is responsible for value for money audits. This Inspectorate is also in charge of reviewing performance evaluation over all central departments and agencies, state- and municipal-owned enterprises and all private organizations financed by national or European Union funds.

In Brazil, the Federal Internal Control Secretariat covers all ministries and agencies of the Executive Branch, except for three ministries of the Cabinet which have their own Internal Control Secretariats. The first one is the Office of the President of the Republic, whose Internal Control Secretariat also audits the Office of the Comptroller General. The other two are the Ministry of Foreign Affairs and the Ministry of Defense (OECD, 2011, p.204).
Since 2001, Federal Law no. 10.180/2001 requires all organizations of the indirect public administration (i.e. agencies, foundations, state-owned and mixed-capital enterprises) to establish their own internal audit units. The Federal Internal Control Secretariat provides guidance on standards and rules for these internal audit units within organizations.

OECD (2011, p.221) concluded that Brazil’s internal control system of the federal public administration has been advancing with the introduction of risk based control and shifting the emphasis from compliance to management. The study asserts that in 2001, the focus of internal control was enhanced, by (1) adding the evaluation of programs performance and outcomes to inspection of compliance in administrative decision making, and (2) expanding its role to investigate acts and events considered illegal or irregular by private actors, and not just public officials, in the use of federal public funds (p. 183). However, OECD highlighted in the final report of Integrity Review of Brazil: Managing Risks for a Cleaner Public Service (2011, p.219) that performance indicators do not exist for internal audit in Brazil.

In order to conduct its internal control duties and meet the first four strategic objectives mentioned in the beginning of this section, the Federal Internal Control Secretariat works in five main lines of action:

1. Evaluation of Public Programs Implementation (AEPG)
2. Investigative Audits (External Requests)
3. Audit of Special Taking of Accounts
4. Audits on Control of Personnel Spending in the Federal Government level
5. Annual Audits of Rendering of Accounts

Evaluation of Public Programs Implementation (AEPG – Avaliação da Execução de Programas de Governo) is carried out through so called performance audits, which are concerned with the audit of economy, efficiency and effectiveness, and aim at leading to improvements in the public policy (INTOSAI, 2004a, p.11). The other lines of action are strongly based on this one therefore it will be more explored in the next section.

The Office of the President of the Republic, Federal and State Prosecutors, the Federal Police Department, members of the Congress, among others, can request CGU to carry out specific inspections in case of alleged fraud, corruption or any other misspending of public funds. In this second line of action, CGU analyzes each request
and takes the decision either to use the allegation to support future audits or to perform immediate investigative audits in order to meet the external request. The main criteria to make that decision are the requester’s qualification, the alleged elements of evidence and the CGU’s knowhow regarding the public policy related to the allegation. As an example of the first criterion, a request from the President of the Republic will be met as soon as possible, given CGU’s constitutional mandate to assist him/her. Regarding the second one, an example would be a request just reporting a fraud in a program without specifying where it happened and who is involved will hardly be met. Finally, to illustrate the latter criterion, if the public program related to the allegation has already been object of a performance audit, there will be plenty of information to proceed with a brief inspection and promptly meet the request.

CGU also takes part in integrated actions with Federal Prosecutors and the Federal Police Department in order to obtain proofs of suspected crimes related to misappropriation of public funds. According to the Internal Control Preventing and Fighting Corruption document (CGU, 2007, p.13), which reports the CGU Actions in 2007, by these joint operations, about 6,000 people were arrested, including almost 1,000 public agents, from 2003 to 2007. CGU helps to analyze relevant documentation before and after investigations, to check data collected in legally intercepted phone calls, and to identify corporate connections. CGU also takes part directly in operations to search and seize documents and computers.

Another line of action regards to Special Taking of Accounts, which is an administrative procedure carried out by the agencies to recover misspent public funds from public officials or non-governmental organizations. CGU is in charge of supervising this process and issuing an Audit Report and Certificate giving its opinion on whether the investigation concerning the facts was appropriate or not and indicating which rules or regulations might have been disregarded (CGU, 2012). According to the OECD (OECD, 2011, p.211), between 2001 and 2010, these special investigations of accounts identified losses to the state of approximately USD 2.8 billion.

Audits on Control of Personnel Spending in the Federal Government level are aimed at checking the legality of payments made to federal civil servants within the Executive Branch of the Federal Government, which amounts to approximately USD 25 billion a year (CGU, 2012).

Finally, annual audits of rendering of accounts, the last line of action, are annual financial audits to verify information provided by federal public organizations as input
into the external rendering of accounts (OECD, 2011, p.207). They are concerned with the audit of the budgetary, financial and property management in each agency which will have its accounts judged by the Brazilian Court of Audit – TCU. In order to have a well-informed opinion, it is important that smaller audits are carried out during the year to support the final one (annual audit of rendering of accounts). Besides that, as an internal control unit, CGU is concerned with promoting solutions for any possible irregularity during the fiscal year. That means not just pointing it out to the Brazilian Court of Audit without having the chance to help out the agency with the continuous improvement of their internal controls. Although this kind of auditing aims at ensuring the regularity of accounts and verifying financial reporting of federal budgetary funds and asset management (OCDE, 2011, p. 207), CGU always tries to report performance evaluation whenever it is available. Therefore, the more evaluated programs by performance audits, the better be the CGU’s annual audit report will be – as well as the agencies’ reported performance in implementing their public policies.

1.2. Performance Audit

1.2.1. What is Performance Audit?

Evaluation of public programs implementation, CGU’s major line of action, is based on performance audits which are concerned with the audit of economy, efficiency and effectiveness, and aim at leading to improvements in the public policy, according to the International Standards of Supreme Audit Institutions – ISSAI 3000-3100 (INTOSAI, 2004a, 11), issued by the International Organization of Supreme Audit Institutions – INTOSAI. ISSAI 100 (INTOSAI, 2002, pp.6-7) also states that the full scope of government auditing includes regularity and performance audit. The latter embraces:

a. audit of the economy of administrative activities in accordance with sound administrative principles and practices, and management policies;

b. audit of the efficiency of utilization of human, financial and other resources, including examination of information systems, performance measures and monitoring arrangements, and procedures followed by audited entities for remedying identified deficiencies;
c. Audit of the effectiveness of performance in relation to the achievement of the objectives of the audited entity, and audit of the actual impact of activities compared with the intended impact.

Carmichael, et al. (1996, p.23) divide performance audit in two categories:

a. **Economy and efficiency audit** – which includes determining (1) whether the entity is acquiring, protecting and using its resources (such as personnel and property) economically and efficiently; (2) the causes of inefficiencies or uneconomical practices; and (3) whether the entity has complied with laws and regulations concerning matter of economy and efficiency.

b. **Program audit** – which includes determining (1) the extend to which the desired results or benefits established by the legislature or other authorized body are being achieved; (2) the effectiveness of organizations, programs, activities, or functions; and (3) whether the entity has complied with laws and regulations applicable to the government program.

The Government Auditing Standards (GAO, 2011a, pp.17-18), known as Yellow Book, issued by the United States Government Accountability Office, contains general accepted government auditing standards (GAGAS), which consider performance audits as audits that provide objective analysis to assist management and those in charged of governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision-making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability. According to GAGAS, performance audit objectives vary widely and include assessments of:

a. **Program effectiveness and results audit objectives** – are frequently interrelated with economy and efficiency objectives. This kind of audit typically measures the extent to which a program is achieving its goals and objectives and may address the costs and resources used to achieve results.

b. **Internal control audit objectives** – are related to an assessment of one or more components of organizations’ systems of internal control.
c. **Compliance audit objectives** – are related to assessment of compliance with criteria established by provisions of laws, regulations, contracts, or other requirements.

d. **Prospective analysis** – are related to providing analysis or conclusions about information that is based on assumptions about events that may occur in the future, along with possible actions that the entity may take in response to the future events.

Pollitt, et al. (1999, 12) state there seems to be a quite clear professional consensus about a broad meaning of performance audit: a form of audit that is focused on the efficiency and effectiveness, or value-for-money aspects of public activities. Value-for-money is a term used by the U.K. National Audit Office (2012, p.14) for their audits that intend to evaluate the efficiency and effectiveness of government departments and other bodies and of projects and programs that they operate. NAO’s value-for-money audits intend to help government to identify how to improve its management of selected areas of expenditure. Thus, their reports aims at providing independent assurance to Parliament and to taxpayers on whether value for money is being achieved and make recommendations for improvement.
1.2.2. Performance Audit conducted by SFC/CGU

According to Pollitt and Summa (1997, pp.320-321,334), some audit institutions have specific units dedicated to performance audits, like the Swedish Riksrevisionsverket (RRV), the State Audit Office of Finland (VTV) and the U.K. National Audit Office (NAO). On the other hand, other audit institutions, e.g. the European Court of Auditors (ECA) and the French Cour des Comptes (CdC), practice performance audit without having structured internally separate units for its conduct (Pollitt and Summa, 1997, p.334).

Similar to ECA and CdC, the Federal Internal Control Secretariat of the Office of the Comptroller General (SFC/CGU) is divided into units based on the institutions and programs of the state rather than on the type of audit delivered. Thus, SFC’s internal structure is not based on the lines of action described in section 1.1.2. For instance the unit responsible for auditing the Minister of Health runs all the five lines of action.

In one way or another, the other five lines of action rely on the first one, because evaluating public programs implementations is one of the most effective ways to understand how public policies are executed and, by these means, to be able to conduct the other lines.

Evaluation of Public Programs Implementation is based on performance audit concepts and consists of (CGU, 2012):

1. **Risk assessment** in order to select the public policy whose implementation will be evaluated;
   i. **Mapping out** the public policies of each Ministry;
   ii. **Hierarchization** of the public policies;
   iii. **Prioritization** of one or more government actions to evaluation;

2. **Planning**
   i. **Study of the policy** in order to understand what the objectives and targets are, how the program is implemented, who are the agencies responsible, what are the control mechanisms and other relevant information;
   ii. **Describing** what questions will be answered at the end of the evaluation and how the team will get to the conclusions. The
start point to get to the questions is an analysis of the critical and weak points of the program that are likely to have an impact on its implementation;

3. **Execution** of the performance audit, including field work and analysis of collected data;

4. **Monitoring**
   i. **Discussion with the manager** of the public program about conclusions and looking to find a joint solution (busca conjunta de soluções);
   ii. Delivery of **monitoring reports** (Relatório de Acompanhamento da Execução de Programa de Governo) with CGU’s recommendations;
   iii. **Balance meetings** to monitor the implementation of the recommendations;

5. **Evaluation** report (Relatório de Avaliação da Execução de Programa de Governo) published on the CGU’s website.

Using NAO’s terms (2012, p.14), AEPG intends to produce value-for-money studies that examine how public funds are used and make recommendations for improvement. But instead of “value-for-money”, performance audit is named by CGU as “Evaluation of Public Programs Implementation”, better known as AEPG, which stands for its name in Portuguese, “Avaliação da Execução de Programas de Governo”. Table 2 reveals how the performance audit (AEPG) conducted by SFC/CGU fit in the conceptual models discussed in section 1.2.1.
### Table 2 – How AEPG (SFC/CGU Performance Audit) fits in the performance audit concepts.

<table>
<thead>
<tr>
<th>Source</th>
<th>Classification</th>
<th>Sub-classification</th>
<th>Does AEPG (SFC/CGU Performance Audit) fit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAO</td>
<td>Value-for-money</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>INTOSAI</td>
<td>economy of administrative activities</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>efficiency</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>effectiveness of performance</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>actual impact</td>
<td></td>
<td>No(^1)</td>
</tr>
<tr>
<td>GAO</td>
<td>program effectiveness and results</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>internal control</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>compliance with laws and regulations</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>prospective analysis</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Carmichael, et al.</td>
<td>economy and efficiency</td>
<td>use of resources</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>causes of inefficiencies or uneconomical practices</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>compliance with laws and regulations</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>program audit</td>
<td>achievement of the desired results/benefits</td>
<td>No(^1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>effectiveness programs</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>compliance with laws and regulations</td>
<td>Yes</td>
</tr>
</tbody>
</table>

\(^1\) Although impact measuring is not a main objective, sometimes it can be possible.


When it comes to performance audit aiming at evaluating actual impacts, it is not possible to assert that SFC/CGU’s methodology is suitable. In order to evaluate impacts, other methods would have to be used by CGU like random control trials (treatment and control groups) or other non-experimental designs, such as propensity score matching, regression adjustments and regression discontinuity designs. (Newcomer, 2012). The reason is that in order to assert that specific impacts are really due to a specific policy, all other factors must be somehow isolated. Although impact
evaluation is not an objective of AEPG, sometimes when the program’s effectiveness is being evaluated it might be possible to estimate indirectly the policy’s results, mainly when the effectiveness level is very low or zero.

Another way to describe the scope of CGU’s performance audits (AEPG) is based on literature regarding public policy evaluation. Pollitt, et al. (1999, 13) assert that auditors may “borrow methodological devices from evaluation” to identify how to improve public management. Indeed, Barzeley (1996, p.19) has been quite extreme saying that “performance auditing” should not even be considered a kind of auditing, because performance auditors exercise judgment about whether or not means are aligned with goals and constraints. The traditional auditor’s role, according to the author, is to verify information submitted by clients and detect discrepancies, which would be verification not evaluation. In another article, Barzeley (1997, pp.235-237) insists on the concept that performance auditing is a misnomer for a class of mainly evaluative review activities and asserts that: “performance audits are not a type of audit; they are evaluations”.

Taking Barzeley’s line of argument further, AEPG can be seen as a (1) **formal evaluation**, (2) **formative evaluation**, (3) **evaluation focused on policy implementation** and (4) **mixed evaluation**, whose (5) **recommendations should be pursued to be implemented**. Each one of these concepts will be discussed next.

**Formal Evaluation**

AEPG is a **formal evaluation**, which is characterized by systematic procedures and formally collected evidence. Day after day everybody makes personal or professional evaluations. A school principal observes a teacher in the classroom and forms some judgments about the teacher’s effectiveness. However, this kind of judgment is based on informal and unsystematic evaluations, which, according to Fitzpatrick, Sanders and Worthen (2011, p.5), “are characterized by an absence of breadth and depth because they lack systematic procedures and formally collected evidence”. The authors also highlight that informal evaluations are subjected to the evaluator’s experience and to the lack of opportunity to observe many different settings. On the other hand, a systematic set of procedures to evaluate teacher’s performance based on formally collected evidences would be considered a formal evaluation.

**Formative Evaluation**

According to Wholey, Hatry and Newcomer (2010, p.8), **formative evaluation** uses evaluation methods to improve the way a program is delivered. Typically
Formative evaluation focuses on determining whether a program is running as planned, identifying midcourse corrections that will increase the likelihood of the program’s success and providing program staff with feedback to improve the implementation of the program (Mathison, 2005, p.161). On the other end, summative evaluation is one that is done at the end of a program, typically for the purpose of assisting decision making regarding program continuation (Mathison, 2005, p.403; Fitzpatrick, Sanders and Worthen, 2011, p.21). AEPG is a kind of formative evaluation because intends to improve the public policy during its implementation through providing staff with feedback and recommendations to increase the program’s success.

Focused on Policy Implementation Evaluation

Jann and Wegrich (2007, pp.45-55) cite several references in the literature regarding different public policy models adopted since the 1950’s and discuss some stages which are common to many models: “Agenda-Setting”, “Policy Formulation”, “Policy Implementation” and “Policy Evaluation”. These stages shape a simplified policy cycle framework. Agenda-Setting is when the government acknowledges a social problem is serious enough to require public action. The next stage, policy formulation, consists in deciding on a specific course of action among different solutions to cope with the recognized social problem. The policy implementation is the stage of execution or enforcement of a policy by the responsible institutions that are often part of the public sector. According to Jann and Wegrich (2007, p.51), “this stage is critical as political and administrative action at the frontline are hardly ever perfectly controllable by objectives, programs, laws, and the like”. When an evaluation is focused on policy implementation, the main goal is to assess whether the policy is being implemented in the way it was idealized and according to its objectives. This stage is directly addressed by Article 74 of the Constitution of the Federative Republic of Brazil (BRASIL, 2010, pp.68), which establishes that program evaluations carried out by CGU must focus on “implementation of government programs”. The last stage, policy evaluation, aims at assessing whether the original policy problem has been solved, in order to make the decision to maintain or terminate the policy.

Mixed Evaluation

Another way to classify evaluations is presented by Fitzpatrick, Sanders and Worthen (2011, pp.27-28) based on the characteristics of the team responsible for the evaluation: internal evaluations are carried out by program staff and external ones by outsiders. The main advantage of external evaluations is that they are perceived as more
credible by the public and, often, by policymakers, because typically external evaluators have greater administrative and financial independence. On the other hand, an important advantage of internal evaluations is that they are carried out by people who, according to the authors, “are familiar with the kinds of information and arguments that are persuasive, and know who is likely to take action and who is likely to be persuasive to others”. A **mixed evaluation** involves program staff and outsiders (Roche, 1999, p.62). AEPG can be seen as an external evaluation from the perspective of the agency responsible for the program being evaluated, because CGU’s staff are outsiders. On the other hand, AEPG can be seen as internal evaluation from the perspective of the Office of the President of the Republic, because CGU is an agency in the Federal Branch in charge of the internal control function. But from the perspective of the society, AEPG is a mixed evaluation, given that since the beginning of the evaluation planning, program staff and CGU staff are involved to discuss the most effective plan. Besides that, as it will be discussed next, the more involved the staff team is, the more effective the evaluation will be.

**Evaluation whose recommendation should be pursued to be implemented**

If the main objective of an evaluation is only to obtain a conclusion about the value, merit, worth or quality of a program (Mathison, 2005, pp. 140-141), the obtained information can either be used or not. Indeed, Scriven (1997, p.490; 1996, p.161) makes a distinction between *doing evaluation* and *doing evaluation consulting*. The latter includes other auxiliary activities, such as training, advising, clarifying and explaining. According to Scriven (1997, p.492), it should be one of the ethical principles governing professional evaluation practice that the two roles are mutually exclusive, at least for a period of some years. On the other end, Shadish (1994, pp.350) contests Scriven’s statement, asserting it is wrong to limit the evaluator’s role and it would be “akin to saying that physicians should only tell you if you are sick, but not tell you how to get better”. Finally, Shadish (1994, p.352) defines as part of the evaluation process an “use component”, which deals with possible kinds of use, relative weight to be given to each kind of use and what evaluators can do to increase use of the evaluation. Given that the most important kind of use of the CGU’s performance audits are recommendations aiming at public policy’s improvement, the AEPG’s use component is interpreted as persuading recommendations’ implementation.
2. How do Government Audit Institutions measure their results?

Like the Brazilian Office of the Comptroller General, there are other government audit institutions around the world with the power to hold public organizations accountable for the use of public funds and for their performance. Many of them have similar strategic objectives related to improvement of public policies.

These institutions are well known to be accountability promoters and are always seeking to increase audited agencies’ transparency and performance. Whereas audit institutions are also public agencies, it is expected that these entities similarly offer accounts of their own performance.

The objective of this chapter is to present how some audit institutions evaluate their performance and make their results public. In the United States, most of the activities carried out by the Federal Internal Control Secretariat (SFC/CGU) are conducted by Inspectors General (IG), each one located in a different agency. In order to understand how the IGs evaluate their work, this chapter will bring the discussion based on reports of the Council of the Inspectors General on Integrity and Efficiency (CIGIE), which has as members the 73 Offices of Inspectors General (OIG).

The other two institutions analyzed in this chapter, which are very known for conducting performance audits and use very strong quantitative methods to evaluate their performances, are the following: the U.S. Government Accountability Office and the U.K. National Audit Office.

2.1. CIGIE – Council of the Inspectors General on Integrity and Efficiency

The audit and investigative functions of federal agencies in the United States have been consolidated under their respective Inspectors General (IG) by the Inspector General Act of 1978, as amended by the Inspector General Reform Act of 2008 (IG Act). The IGs are considered independent forces for promoting economy, efficiency and effectiveness and are also responsible for preventing and detecting fraud, waste and abuse in their agencies’ programs (CIGIE, 2012, p.1).
IGs have a dual report responsibility, reporting to their respective agency and to the Congress. This relationship to the Congress is intended to give the IGs the independence and objectivity needed (CIGIE, 2012,p.1).

The Council of Inspectors General on Integrity and Efficiency (CIGIE) was created in 2008. In 2010, the Executive Council of CIGIE set four major goals to provide direction to CIGIE’s activities for 2011. Among them, the following is significant: “Contribute to improvements in program integrity, efficiency, and cost-effectiveness Governmentwide by providing cross-agency analyses of [Office of Inspectors General (OIG)] findings and recommendations in areas of vulnerability confronting multiple Government programs” (CIGIE, 2012,p.5).

The CIGIE publishes annually a Progress Report to the President, which presents the following statistics of performance accomplishments achieved by the OIGs (CIGIE, 2012, p.10):

- Total dollar value of recommendations that funds be put to better use
- Total dollar value of questioned costs
- Investigative Receivables and Recoveries
- Successful Criminal Prosecutions
- Indictments and Criminal Informations
- Successful Civil Actions
- Suspensions and Debarments
- Personnel Actions

Compiling statistics to measure the OIGs’ accomplishments has the objective to offer accounts of the results of their audits, investigations, inspections and evaluations which are aimed at helping federal agencies to strengthen program integrity and to use funds more effectively and efficiently (CIGIE, 2012, p.10).

The first three statistics are measured in dollar terms (financial statistics) and will be discussed in section 2.1.1. The other five (non-financial statistics) will be examined in section 2.1.2.

2.1.1. OIGs’ Financial Statistics

Recommendations in OIG audit reports intend to help federal agencies to enhance management practices and procedures, offering ways to better use agency funds. Agencies either agree or disagree, in whole or in part, with these
recommendations. Although many recommendations are qualitative and do not specify quantitative savings, other recommendations are quantitative and associated dollar amounts can be captured from year to year (CIGIE, 2012, p.10).

Section 5 of the IG Act defines a set of statistical categories under which OIGs must report quantitative results. IG Act establishes two kinds of financial statistics (PL 110-409, 2008, p.4):
- Total dollar value of recommendations that funds be put to better use.
- Total dollar value of questioned costs.

The term “recommendation that funds be put to better use” is defined by the IG Act (PL 110-409, 2008, p.7) as a recommendation by the OIG that funds could be used more efficiently if the management of an audited agency took actions to implement and to complete the recommendation, including:

1. Reductions in outlays.
2. De-obligation of funds from programs or operations.
3. Withdrawal of interest subsidy costs on loans or loan guarantees, insurance, or bonds.
4. Costs not incurred by implementing recommended improvements related to the operations of the establishment, a contractor or grantee.
5. Avoidance of unnecessary expenditures noted in pre-award reviews of contract or grant agreements.
6. Any other saving which are specifically identified.

It is important to underscore that the value associated to “recommendations that funds be put to better use” does not represent straightly realized benefits (impacts). The calculated amount indicates a potentially more efficiently use of funds, according to IG’s point of view, if the management of the audited agency take actions to implement the recommendations.

In order to have a better notion of how much is likely to be the real future amount benefits, CIGIE’s Progress Report identifies the amount of recommendations agreed to by management out of the total value of recommendations that funds be put to better use, as can be seen in Table 3.
Table 3 - Recommendations that Funds Be Put to Better Use

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Recommendations that Funds Be Put to Better Use</th>
<th>Amount of Recommendations Agreed to by Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year 2011</td>
<td>$101,236,877,704*</td>
<td>$74,367,073,339*</td>
</tr>
<tr>
<td>Fiscal Year 2010</td>
<td>$42,014,062,365</td>
<td>$23,654,925,334</td>
</tr>
<tr>
<td>Fiscal Year 2009</td>
<td>$45,970,302,132</td>
<td>$28,798,007,411</td>
</tr>
<tr>
<td>Fiscal Year 2008</td>
<td>$23,566,673,218</td>
<td>$9,753,263,909</td>
</tr>
<tr>
<td>Fiscal Year 2007</td>
<td>$21,151,726,355</td>
<td>$7,313,756,130</td>
</tr>
</tbody>
</table>

* This amount includes nearly $60 billion reported by the U.S. Postal Service’s Office of Inspector General on its work associated with “Substantial Savings Available by Prefunding Pensions and Retirees’ Health Care at Benchmarked Levels.”


The amount of recommendations agreed to by management does not represent the actual impacts yet, but provided it is a joint point of view, it can be considered a quite good approximation.

The other financial statistical category is the “questioned costs recommendations”, defined by the Progress Report to the President (CIGIE, 2012, p.11) as recommendations that “tell agency management that the expenditures are questionable because they violated a law, regulation, contract, or grant; were not adequately documented; or were unnecessary or unreasonable.” There basically two kinds of benefits in this category. The first kind, which includes unnecessary or unreasonable expenditures, is definitely related to financial benefits (similar to funds to be put to better use). The second kind, which includes violation of law and undocumented expenditures, is closer to legal and formal issues, which can be safely assume as benefits as long as they are corrected, but can not be represented in dollar terms.

Like the first statistical category, the “questioned costs recommendations” do not represent straigly realized benefits (impacts) and are also accounted depending on the amount of recommendations agreed to by the management, as can be found in Table 4.
Table 4 - Amount of Questioned Costs

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Amount of Questioned Costs</th>
<th>Amount of Recommendations Agreed to by Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year 2011</td>
<td>$17,236,755,075</td>
<td>$10,422,761,199</td>
</tr>
<tr>
<td>Fiscal Year 2010</td>
<td>$62,173,747,225*</td>
<td>$56,577,408,559*</td>
</tr>
<tr>
<td>Fiscal Year 2009</td>
<td>$9,156,791,667</td>
<td>$6,134,700,586</td>
</tr>
<tr>
<td>Fiscal Year 2008</td>
<td>$6,308,035,525</td>
<td>$4,419,333,800</td>
</tr>
<tr>
<td>Fiscal Year 2007</td>
<td>$5,464,017,707</td>
<td>$4,087,941,919</td>
</tr>
</tbody>
</table>

* This amount includes nearly $50 billion reported by the U.S. Postal Service’s Office of Inspector General on its work associated with the “Civil Service Retirement System Overpayment by the Postal Service” and “Certification Process for Electronic Payments.”


Although it is not established in the IG Act, a third financial statistical category is used by most of OIGs. The Progress Report to the President (CIGIE, 2012, pp.11-12) refers to this category as “Investigative Receivables and Recoveries”, which are defined as the dollar amount of the “results of criminal and civil cases that were ordered plus any voluntary repayments during the fiscal year”:

- **In criminal cases**, the dollar value reflects the restitution, criminal fines, and special assessments resulting from successful criminal prosecutions.

- **In civil cases**, the dollar value reflects the amount of damages, penalties, settlements, and forfeitures resulting from successful civil actions.

- **Voluntary repayments** include the value of government property recovered before prosecutorial action is taken, or the amount paid by the subject of an investigation.

The amounts shown in Table 5 are the results of investigation that often involves several law enforcement agencies working on the same case. Cases may be conducted by more than one OIG, with other Federal law enforcement agencies, and State or local law enforcement entities (CIGIE, 2012, p.11).

Unlike the other two statistical categories, investigative receivables and recoveries represent doubtless impacts that were already realized.
Table 5 - Investigative Receivables and Recoveries

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year 2011</td>
<td>$9,121,791,498</td>
</tr>
<tr>
<td>Fiscal Year 2010</td>
<td>$6,971,759,873</td>
</tr>
<tr>
<td>Fiscal Year 2009</td>
<td>$8,895,965,056</td>
</tr>
<tr>
<td>Fiscal Year 2008</td>
<td>$4,444,654,455</td>
</tr>
<tr>
<td>Fiscal Year 2007</td>
<td>$5,122,754,721</td>
</tr>
</tbody>
</table>


2.1.2. OIGs’ Non-financial Statistics

The Progress Report to the President (CIGIE, 2012, pp.11-13) points out five categories of accomplishments which are quantitatively presented but, given that they are related to qualitative recommendations that do not specify quantitative savings, they are not quantified in dollar terms. These categories are presented in Table 6.

Table 6 - OIGs’ Non-financial Statistics (2007-2011)

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Criminal Prosecutions</th>
<th>Indictments and Criminal Informations</th>
<th>Civil Actions</th>
<th>Suspensions and Debarments</th>
<th>Personnel Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year 2011</td>
<td>6,031</td>
<td>6,525</td>
<td>963</td>
<td>5,637</td>
<td>3,933</td>
</tr>
<tr>
<td>Fiscal Year 2010</td>
<td>5,593</td>
<td>5,610</td>
<td>973</td>
<td>5,114</td>
<td>4,249</td>
</tr>
<tr>
<td>Fiscal Year 2009</td>
<td>5,964</td>
<td>6,201</td>
<td>1,102</td>
<td>4,485</td>
<td>3,825</td>
</tr>
<tr>
<td>Fiscal Year 2008</td>
<td>6,866</td>
<td>6,647</td>
<td>1,206</td>
<td>4,986</td>
<td>5,712</td>
</tr>
<tr>
<td>Fiscal Year 2007</td>
<td>8,961</td>
<td>6,805</td>
<td>1,277</td>
<td>4,296</td>
<td>5,807</td>
</tr>
</tbody>
</table>


In order for an OIG to count an accomplishment of **Criminal Prosecution**, the subject has to be convicted in Federal, State, local or foreign courts or under the Uniform Code of Military Justice, or has to be accepted for pretrial diversion agreements by the Department of Justice.

**Indictments and Criminal Informations** include those filed in Federal, State, local or foreign courts or under Uniform Code of Military Justice.
Civil Actions, resolved through actions other than criminal prosecution, include civil judgments, settlements, agreements, or other agency-specific civil litigation authority, including civil money penalties.

OIGs can consider as accomplished Suspensions and Debarment actions when proceedings are conducted by Federal agencies to suspend, debar, or exclude parties from contracts, grants, loans, and other forms of financial or non-financial transactions with the Government.

Finally, examples of Personnel Actions are reprimands, suspensions, demotions, or terminations of Federal, State, or local government employees, or Federal contractors and grantees.

2.2. GAO – U.S. Government Accountability Office

The United States Government Accountability Office (GAO) has as a mission to support Congress in meeting its constitutional responsibilities and to help improve performance and to ensure accountability of the federal government for the benefit of the American people. According to its Performance and Accountability Report (GAO, 2011b, pp.17-18), GAO’s performance is measured annually using a balanced set quantitative performance measures that focus on four key areas: results, client, people and internal operations.

Regarding results (understood as an accomplishment of GAO’s mission), there are the following four quantitative performance measures:

- **financial benefits**: measurable financial benefits for the federal government after the agencies implement GAO’s recommendations (GAO, 2011b, p. 25).

- **non-financial benefits**: benefits that cannot be measured in dollar terms (GAO, 2011b, p. 27).

- **recommendations implemented**: Percentage of recommendations made 4 years ago that were implemented by the agencies (GAO, 2011b, p. 31).

- **percentage of new products with recommendations**: The percentage of written products is tracked to foster production of recommendations which will, when implemented by the agencies, become financial and non-financial benefits (GAO, 2011b, p. 32).
In fiscal year 2011, GAO achieved $45.7 billion in financial benefits, which represents an $81 return on every dollar the government invested in the agency. Besides that, there were 1,318 non-financial benefits recorded, 80% of the recommendations made in fiscal year 2007 were implemented and 68% of the new products had recommendations (GAO, 2011b, p. 22-23, 31, 32).

Therefore, the way GAO describes its results is based on measuring the benefits of GAO’s recommendations when implemented by the agencies. These benefits can result in better services to the public, changes to statues or regulations, or improved government business operation (GAO, 2011b, p. 126). Therefore, when a benefit is recorded, it might be a result of work carried out several years earlier. This kind of recording demands time to monitor whether or not recommendations were implemented and requires documentation of the connection between the benefits reported and the work performed by GAO. Because of that, benefits can be claimed within 2 years of when the agency took action on the GAO’s recommendation (GAO, 2011b, p. 25).

These benefits can either be estimated in dollar terms (financial benefits, which will be detailed in section 2.1.1) or not (non-financial benefits, detailed in section 2.1.2).

### 2.2.1. Financial Benefits of GAO’s recommendations

When it is possible to monetize the benefits, they are called financial benefits. Such benefits are, for example, reduction of government expenditures, increases of revenues and reallocation of funds to other areas. They are net benefits, that is, estimates of financial benefits that have been reduced by the costs associated with taking the action recommended by the GAO. All estimates involving past and future years are converted to their net present value, even when it involves benefits over multiple years based on a single agency action (GAO, 2011b, p. 126).

GAO has developed their own system to record the financial benefits, the Accomplishment Reporting System. Accomplishment reports must be filed in the system in compliance with GAO policies and procedures. Section 390 of the GAO Policy Manual: Public Reporting – Documenting Benefits from GAO’s Work (GAO, 2008, pp.382-395) provides guidance on estimating the financial benefits.
In order for financial benefits to be claimed as achieved, an accomplishment report must be filed documenting the following (GAO, 2011b, p.126-127; GAO, 2008, p.388-391):

1. The actions taken as a result of GAO’s work have been **completed or substantially completed**;
2. The actions were taken **within 2 fiscal years prior to the filing** of the accomplishment;
3. A **cause-and-effect relationship exists** between the benefits reported and GAO’s recommendation or work; and
4. Estimates of financial benefits were based on **information obtained from non-GAO sources**.

An action is considered completed or substantially completed when the associated recommendation was essentially implemented. This must be based on agency documentation, such as approved Presidential budget submissions, or agency-approved program planning or execution documents. Thus, statements solely from program or project officials that action will be taken are not sufficient (GAO, 2008, pp.386-388).

The two-year period for GAO teams to file the accomplishment report starts in the year that net benefit begin to accrue. That is the period in which GAO teams should file the accomplishment report, counting since the final fiscal year for which financial benefits are being claimed (GAO, 2008, p.389).

In order for a benefit to be claimed, it is necessary that a cause-and-effect relationship between the benefit reported and the GAO’s work be demonstrated. Thus, what should be shown is that “GAO’s work preceded the action taken and significantly contributed to it” (GAO, 2008, p.389). Even though others have contributed, benefits can be claimed provided that the accomplishment report identifies all parties who influenced the action.

Finally, GAO prefers estimates of financial benefits from non-GAO parties, such as the affected agency, congressional committees or the Congressional Budget Office. However, when non-GAO estimates are not readily available, GAO teams can develop estimates in consultation with GAO experts, such as the Chief Economist, Chief Actuary, or Chief Statistician. These estimates are corroborated with a knowledgeable program official from the executive agency audited unless the agency is unable or unwilling to corroborate the estimates. All discussions with GAO experts and agency officials should be documented (GAO, 2008, p.389; GAO, 2011b, p. 127).
According to the GAO Policy Manual (GAO, 2008, p.391), “any deviations from these four requirements are to be discussed with the Chief Quality Officer”.

Financial benefits are classified in three categories as presented in Table 7.

**Table 7 - Financial Benefits Categories**

<table>
<thead>
<tr>
<th>Financial Benefits Category</th>
<th>Example</th>
<th>Limit for Unrealized Future Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reductions in costs due to changes in agency practices or business operations</td>
<td>E.g., if, on the basis of a GAO finding involving increased IT efficiencies, a Department decides to reduce the number of staff associated with a specific office from 100 to 75.</td>
<td>Up to 5 fiscal years (initially limited to 2 years)</td>
</tr>
<tr>
<td>Reductions in costs of multiyear projects or assets sales</td>
<td>E.g., if, on the basis of a GAO finding, a Department decides to terminate a specific research development program.</td>
<td>Up to 5 fiscal years</td>
</tr>
<tr>
<td>Reductions in the costs of entitlements or changes in taxes or user fees</td>
<td>E.g., if, on the basis of a GAO finding, the Congress changes the tax code to eliminate perceived loopholes.</td>
<td>Up to 5 fiscal years</td>
</tr>
</tbody>
</table>


As shown in Table 7, future beneficial effects (not realized yet) can be brought to their net present value (limited by the maximum of 5 years) and claimed at once.

It is important to discuss how GAO registers future benefits (not realized yet). These “unrealized future benefits” can be divided into two categories:

1. Future benefits arising from more efficient operations or cancellation of unneeded operations.
2. Futures benefits arising from termination of needed projects, contracts, programs, etc. instead of improving their operations.

GAO does not differentiate these two categories. Both are considered as funds to be put to better use. There is no analysis regarding how the original project will be redesign. Using the example in Table 7 (Reductions in costs of multiyear projects or assets sales), as soon as the research development program is terminated, a financial benefit of the amount of the program is recorded regardless whether or not there will be an improved program in the future to achieve the original goals.
Besides using non-GAO sources (or at least corroboration of the agency involved), the verification and validation process is highly concerned with getting many levels of approvals. The Managing Director signs every accomplishment report and prepares “a brief memorandum addressed to the Chief Quality Officer attesting that the proposed accomplishment meets GAO standards for accomplishment reporting” (GAO, 2008, p.391). This memorandum should explicitly address how the linkage to GAO is established and attest that the associated financial benefits are being claimed in accordance with GAO’s procedures.

When agency or congressional documents do not significantly cite GAO’s work or involvement to establish a linkage, the Director and/or Managing Director may prepare a memorandum for the record certifying their personal knowledge of the linkage. Therefore, GAO’s managers may certify for the record that the GAO’s work amounted to “de facto guidance for the agency and therefore significantly contributed to the action.” In this case, the memorandum should point out the various GAO products and their relationship to the action. It should also demonstrate that the agency was aware of the GAO’s work and responded to it. GAO’s managers also may certify for the record that their discussion with executive agency decision-makers or congressional staff contributed to the agency’s (or congressional) decision. In this case, the memorandum must clearly state that the GAO’s work influenced the decision.

Depending on the amount claimed, the accomplishment report will be reviewed differently (GAO, 2008, p.393; GAO, 2011b, p.127):
- Benefits **below $100 million** are approved by Managing Directors. Although there is no need to send the work-papers supporting the accomplishment to the Chief Quality Office, teams should provide the Office with a copy of the attestation memo as well as the approved accomplishment report.
- Accomplishments **of $100 million or more** are approved by the Chief Quality Officer. After approval of the Managing Director, the proposed accomplishment report is forwarded, along with the associated work-papers and attestation memorandum, to the Chief Quality Office who sends the report and supporting work-papers to a second reviewer. The Chief Quality Officer will review the entire documentation, including a memorandum sent by the second reviewer, stating that the proposed accomplishment report does or
does not meet GAO’s standards, and, if satisfied, will provide the final approval.

- Accomplishments of **$500 million or more** are also reviewed by independent second and third reviewers (reemployed GAO annuitants).

### 2.2.2. Non-financial Benefits of GAO’s Recommendations

When it is not possible to represent benefits of GAO’s recommendations in dollar terms, they are called non-financial benefits. Such benefits are, for example, better services to the public, changes to statues or regulations or improved government business operations (GAO, 2011b, p. 127).

In order for non-financial benefits to be claimed as achieved, an accomplishment report must be filed documenting (GAO, 2011b, p. 126) the following:

1. The actions taken as a result of GAO’s work have been completed or substantially completed;
2. The actions generally were taken within 2 fiscal years prior to the filing of the accomplishment;
3. A cause-and-effect relationship exists between the benefits reported and GAO’s recommendation or work.

The same Accomplishment Reporting System used to register financial benefits is also used to prepare, review and approve accomplishments of non-financial benefits. Teams file accomplishment reports to claim non-financial benefits resulting from GAO’s work. The documentation developed by the teams has evidence to support the accomplishments. This documentation is reviewed by supervisors, and an independent staff person checks the facts. Finally, the team forwards the report to the Chief Quality Officer, who reviews it. Team managers approve non-financial benefits accomplishments by checking on a regular basis the summary data provided by the Chief Quality Office in order to make sure that approved accomplishments from their staff have been accurately recorded (GAO, 2011b, p. 128).

The GAO Performance and Accountability Report provides examples of non-financial benefits claimed as accomplishments in 2011, such as the following:

**Small Business Administration (SBA) Decertifies Companies from Historically Underutilized Business Zone (HUBZone) Program.** In July 2008, we reported on control weaknesses and vulnerabilities in SBA’s application and monitoring process for its HUBZone Program that exposed the government to fraud and abuse. In March 2009, we also found that fraud and
Based on our investigations of HUBZone companies in Texas, Alabama, and California, we determined that several companies did not meet the program eligibility requirements and referred these companies to the SBA Inspector General for further investigation. As a result, SBA took action and decertified the companies from the HUBZone Program. (GAO-09-440)” (GAO, 2011b, p.30)

2.3. NAO – National Audit Office (UK)

The United Kingdom National Audit Office – NAO is responsible for certifying the accounts of all government departures and many other public sector bodies by examining whether they have used their resources efficiently, effectively and economically. NAO carries out studies to evaluate the value for money of public spending, nationally and locally. According to its annual report (NAO 2012, p. 2), NAO’s recommendations and reports on good practice help government to improve public services and led to audited savings of more than £1 billion in 2011.

NAO evaluates its work against their performance management framework (NAO 2012, p.22) to ensure delivery of value to their key stakeholders who are mainly the Parliament and the audited bodies. The NAO’s performance management framework provides both quantitative and qualitative measures for six different kinds of impacts as follows:

- **financial impacts**: assessable financial impact by identifying savings across government achieved as a direct result of NAO’s work.

- **positive changes**: wider impact of NAO’s work, including how NAO has influenced the way decisions are made to improve services.

- **Parliament’s confidence in the independent assurance of the NAO**: value of NAO’s work to Parliamentarians by surveying Members of Parliament.

- **clients acknowledge of the value of NAO’s work**: view of clients (senior civil servants and chairs of audit committees) regarding NAO’s work.

- **recognition of NAO as an authority in its core areas of expertise**: qualitative assessment of progress in core areas building on feedback from stakeholders.
- **Cost-effective usage of funds**: dual measure of aggregate cost savings and the proportion of resources used between front-line and back-office functions.

Like GAO, NAO also publishes its cost-benefit ratio. In 2011, based on public money saved (£1.1 billion), NAO has returned £16 on every pound invested in the agency. Regarding what extent NAO use funds cost-effectively, savings of £6.3 million were delivered in 2011, exceeding NAO’s target of reducing 15% of its budget. Concerning the other four kinds of impact, no quantitative measure has been found in the annual report, but there are some qualitative descriptions of some of NAO’s work that have led to positive change on policies, of how confident Parliament is in the independent assurance of the NAO, of how clients acknowledge the value of NAO’s work and of how the NAO is recognized as authority in its core areas of expertise. (NAO, 2012, pp.23-24).

### 2.3.1. Financial Impacts of NAO’s recommendations

First adopted in 1989, financial impact is one of NAO’s key corporate indicators. There is a financial impact every time that NAO’s work or influence results in an improvement with a financially quantifiable net benefit that meets some specific principles. These financial impacts are clearly supported by evidence and can fall under one of the four categories (NAO, 2012, pp.22-24,95):

1. **Cashable – reduced expenditure**: Impacts that release financial resources that can be diverted to other public sector services.

2. **Cashable – increased revenues**: Impacts that generate greater net income for the public sector.

3. **Non-cashable**: Public sector improvements that increase efficiency or output quality of the service delivered. Cash is not released to be used elsewhere.

4. Other **benefits to third parties**: Impacts on consumers, taxpayers, industries, among others. Costs and benefits to all parties affected should be assessed, as benefits in one sector may be offset by costs in another.
The following principles must be satisfied in order for financial impacts to be claimed as achieved (NAO 2012, p. 95)²:

1. Causation – There must be a causal link between work conducted by the NAO and the benefit.

2. Realization - Impacts must have been realized within, or before, the calendar year in which they are reported.

3. Valuation - There must be reliable evidence and/or data supporting claims and implementation costs must be acknowledged. There must also be a robust methodology to value the impact.

4. Attribution - The proportion of impact claimed should reflect the NAO’s degree of contribution to the benefit realized.

5. Validation – All impact claims must be validated by the audited body concerned (at a sufficiently senior level) and approved internally by Directors.

Causation

Usually NAO’s recommendations are used as evidence of causation between impacts reported and NAO’s work (direct link). However, even if there is no specific recommendation, if the audited agency agrees that the work in general led to change, or if the agency takes action sooner than it would have done without NAO’s intervention (indirect link), then financial impacts can be claimed.

Realization

Basically there are two criteria in order realization can be considered satisfied:

a. The action has already been taken in response to NAO’s work.

b. There is evidence of a beneficial effect.

These two elements must occur before NAO can consider realization. Therefore, if, for example, a NAO’s work led to the introduction of new regulations, a financial impact cannot be recorded until: (1) the necessary legislation has been passed, the underlying system has been setup; and (2) the beneficial effect is evidenced.

² The description of each principle is result of an interview by email with a NAO’s Audit Principal.
Unlike GAO, NAO does not define a maximum number of years prior to the benefit claim\(^3\). Financial impacts are recorded in the calendar year in which sufficient evidence become available to make a robust claim and the client agreement is received. Thus, impacts covering prior years can be recorded in one go if data available before had not been considered sufficiently robust and now is considered verified. Furthermore, when audit teams recognize recurring impact, a new claim must be submitted for each subsequent year. Besides that, recurring impacts must be agreed each year with the client in the same way as unrepeated (“one off”) impacts.

**Valuation**

Some financial impacts can be quantified straightforwardly, for instance, those that result from reducing expenditure. However, in many cases calculating impacts is much more complex. The simplest way to calculate the **valuation** of impacts is to compare the actual situation with the initial one. But this ‘initial and after’ comparison does not consider what would have happened had the recommendation not been acted on. In order to take that into account, Bechberger et al. (2011, p.366-367) state that “auditors must deal with counterfactuals” by making “ex post comparisons of what did occur (in terms of inputs, outputs, and outcomes), and what would have occurred had different decisions been made or different options been pursued.” When the data required to perform a proper counterfactual is not available, NAO internal guidance instructs that staff should use a ‘before vs. after’ comparison and consider whether these uncertainties should be reflected in the submission by taking a reduced share of the overall impact (see next principle, attribution).

Considering that the impact recorded should be net of implementation costs, where these are difficult to identify, NAO internal guidance suggests it may be appropriate to take a reduced share of the overall impact to reflect these uncertainties (see next principle, attribution).

Unlike GAO, NAO does not consider appropriate to use net present value where they bring forward unrealized future beneficial effects. NAO advocates that ongoing realized beneficial effects should be recorded in subsequent years when they occur. If during a recurring impact’s lifetime, new data information is provided, NAO internal guidance states that this new information should be applied to the calculation of

\(^3\) There is no reference regarding a limited number of years. Thus, in theory, an impact can be claimed for NAO’s work carried out in any year before the calendar year in which it is reported. Besides that, considering that sufficient evidence of causation must be evidenced each year, it becomes harder to demonstrate this causal link as time goes on.
all submissions going forward, but not be applied retroactively to either increase or decrease previous submissions.

**Attribution**

Sometimes only a proportion of the overall impact should be claimed as NAO’s attribution to the benefit realized. Here are some cases in which it is necessary to consider a specific percentage share of the quantified financial impact that can be attributed to the NAO’s influence:

- Overlap between NAO recommendations and audited bodies’ own performance improvement work.
- Recurring impacts. Teams should consider whether the value of the NAO’s influence diminishes through time and take a decreasing attribution percentage year-on-year.

Therefore, the attribution percentage can be, for example, the following:

- Up to 100% in a scenario where NAO work is directly acted upon by the Department.
- Up to 50% in a scenario where NAO provides impetus for an action that the Department was planning to take in the future; or where the impacts are not derived from specific NAO recommendations, but NAO reports as a whole prompt change which generates financial impact.
- Up to 20% in a scenario where a NAO work provides impetus for work that the Department has already started.
- Up to 5% in a scenario where a NAO work influences change and an impact.
- To be determined bodies involved, where there is a joint piece of work between the NAO and other bodies.

**Validation**

As a general rule, the principle of validation establishes that all impact claims must be validated by the audited body at a sufficiently senior level. Evidence of the body’s agreement is needed and should be retained.
Impact claims must also be approved internally by Directors. The Director must review against the financial impact principles and approve all\(^4\) of them. Impacts over £10 million\(^5\) must be further reviewed and approved by the relevant Assistant Auditor General.

Table 8 presents each financial impact over £5 million claimed for NAO work in 2011. All of the financial impacts, except for one, are recurring (claimed yearly). The only one which is unrepeated (“one off”) is a financial impact resulted of recoveries of £20 million that was claimed in a single year.

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\(^4\) There are some exceptions. For instance, there is no need for evidence of client agreement if impacts are below £250,000 or related to a duplicate payment of any amount that has been recovered, provided that the impacts arise from financial audit reported to and agreed by the client management.

\(^5\) From 2012 NAO has now amended this amount to £5 million according to an interviewed NAO’s Audit Principal.
### Table 8 - 2011 NAO impacts valued at over £5 million

<table>
<thead>
<tr>
<th>Impact identified (£ million)</th>
<th>Nature of impact</th>
<th>Year of claim</th>
<th>Audited body with whom impact agreed</th>
<th>Year of original work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Government use of Consultants and interims</td>
<td>323</td>
<td>Recurring</td>
<td>1 of 2</td>
<td>Cabinet Office</td>
</tr>
<tr>
<td>Management of Large Business Corporation Tax</td>
<td>221</td>
<td>Recurring</td>
<td>4 of 5</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td>HMRC Section 2 Audit Tax Credits</td>
<td>179</td>
<td>Recurring</td>
<td>1 of 4</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td>Engaging with Multilaterals</td>
<td>147</td>
<td>Recurring</td>
<td>3 of 3</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>Ministry of Defence Resource Account</td>
<td>81</td>
<td>Recurring</td>
<td>1 of 3</td>
<td>Ministry of Defence</td>
</tr>
<tr>
<td>HMRC: Managing Tax Debts</td>
<td>27</td>
<td>Recurring</td>
<td>1 of 5</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td>Fraud against the Inland Revenue</td>
<td>24</td>
<td>Recurring</td>
<td>5 of 5</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td>Prescribing costs in primary care</td>
<td>23</td>
<td>Recurring</td>
<td>3 of 3</td>
<td>Department of Health</td>
</tr>
<tr>
<td>RPA – recoveries on EU payments</td>
<td>20</td>
<td>One off (unrepeated)</td>
<td>1 of 1</td>
<td>Rural Payments Agency</td>
</tr>
<tr>
<td>Inland Revenue: Inheritance Tax</td>
<td>9</td>
<td>Recurring</td>
<td>5 of 5</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td>Community Care Grants (consistency in amount awarded)</td>
<td>8</td>
<td>Recurring</td>
<td>1 of 3</td>
<td>Department for Work and Pensions</td>
</tr>
<tr>
<td>Helping individuals understand and complete their tax forms</td>
<td>6</td>
<td>Recurring</td>
<td>2 of 5</td>
<td>HM Revenue and Customs</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,068</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The prime concern of any performance measurement framework must be selecting what to measure. Performance measurement “may refer to the routine measurement of program inputs, outputs, intermediate outcomes or end outcomes” (Newcomer, 1997, p.7).

The objective of this chapter is to present a performance measurement framework to evaluate the outcomes of the Federal Internal Control Secretariat (SFC), the CGU’s unit in charge for the internal control of the Federal Executive Government (see section 1.1). Section 3.1 proposes what should be the outcomes to be measured based on the strategic framework discussed in Chapter 1. Section 3.2 presents an overview of the Performance Measurement Framework (PMF) designed for SFC/CGU, which was officially adopted by CGU in October 2012. Section 3.3 discusses PMF in comparison with the frameworks discussed in Chapter 2, which served as basis to design PMF.

3.1. CGU’s Outcomes

As discussed in Chapter 1, the CGU’s mission is “preventing and fighting against corruption and improving public management through strengthening internal control mechanisms and enhancing transparency, ethics and social control”.

CGU’s strategic framework comprises seven strategic objectives (in the result perspective) that guide towards the accomplishment of its mission. The following four strategic objectives are intrinsically related to the CGU’s internal control activities:

1. Fostering continuous improvement of delivering public services
2. Strengthening internal controls and the capacity to manage risks
3. Enhancing public transparency and social control mechanisms
4. Intensifying investigatory auditing

Figure 1 proposes a simple Logic Model for the internal control function of CGU. The model focuses on the strategic objective “fostering continuous improvement of delivering public services” and identifies two main outcomes of the processes that support the strategic objective: financial and non-financial benefits.

Benefit is a term used by Cost-Benefit Analysis (CBA) which is a “policy assessment method that quantifies in monetary terms the value of all consequences of a
policy to all members of society” (Boardman et al, 2011, p.2). CBA defines benefits, or net social benefits, as the aggregate value of a policy which is equal to the social benefits minus the social costs.

The definition of benefit as outcome of CGU’s processes is based on the principle that in order to measure to what extent CGU achieves the objective of fostering continuous improvement of delivering public services, it must be guaranteed that its work brings net social benefits, positive net impacts resulted of the implementation of solutions (recommendations) pointed out in its reports.

**Figure 1 – Proposed Logic Model for the Internal Control Function of CGU (SFC)**
3.2. Framework Overview

The Performance Measurement Framework presented in this paper, hereafter referred to as PMF, straightforwardly supports performance measurement of the first strategic objective: “fostering continuous improvement of delivering public services”.

Nonetheless, the other three strategic objectives of the internal control function can be pointed out as related to the improvement of delivering public services, widening indirectly the scope of the PMF.

The PMF defines benefits (CGU’s outcomes) as follows:

Positive realized impacts on the public management as result of implementation, by the managers, of recommendations derived from internal control activities, and therefore, benefit of a joint work between internal control and public management.

Benefits are subdivided into the following two types:

Financial benefit is a benefit that:
- can be represented in currency terms.
- is based on documentary evidence to support it, preferentially provided by the public manager and, if not, has to be validated by a manager of the audited body.
- has to be linked to a CGU’s recommendation implemented in the present year or in the last two years.
- is net of any relevant cost of actions taken to implement the recommendation.
- if recurrent, it will be limited up to five years.

Non-financial benefit is a benefit that:
- although cannot be represented in currency terms, demonstrates positive impact on the public management, such as management improvement, internal controls improvement, regulation refinement, among others.
- must be quantified in any unit but currency, whenever possible.
- has to be linked to a CGU’s recommendation implemented in the present year or in the last two years.
In order for financial benefits to be registered, they need to be approved by different internal levels in CGU depending on the value of the benefit, as demonstrated in Table 9. Non-financial benefits are registered just after Coordinator and Managing Director approvals.

**Table 9 - Levels of approvals depending on the value of the financial benefit**

<table>
<thead>
<tr>
<th>Value of the financial benefit</th>
<th>Levels of approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to R$ 5 million (USD 2.5 million)</td>
<td>Coordinator(^6) and Managing Director(^7).</td>
</tr>
<tr>
<td>From R$ 5 million (USD 2.5 million) up to R$ 500 million (USD 250 million)</td>
<td>Coordinator, Managing Director and Quality Director(^8).</td>
</tr>
<tr>
<td>Over R$ 500 million (USD 250 million)</td>
<td>Coordinator, Managing Director, Quality Director and Federal Internal Control Secretary(^9).</td>
</tr>
</tbody>
</table>

The PMF was officially established to be used by CGU’s teams in October 2012 by the Ministerial Order nº 2.379. The definitions presented thus far have been brought to the Order. However, the most part of the detailed description of PMF, which will be presented in sections 3.3 and 3.4, will be part of other documents which have not been officially published yet.

### 3.3. The Framework in Detail

This section describes the Performance Management Framework (PMF) designed for the internal control function of the Office of the Comptroller General (CGU) based on the frameworks discussed in Chapter 2, which served as basis to design PMF.

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\(^6\) In Portuguese, Coordenador-Geral da área finalística.

\(^7\) In Portuguese, Diretor da área finalística.

\(^8\) In Portuguese, Diretor de Planejamento e Coordenação das Ações de Controle.

\(^9\) In Portuguese, Secretário Federal de Controle Interno.
Table 10 - Summary of quantitative indicators to measure performance of audit institutions

<table>
<thead>
<tr>
<th></th>
<th>IGs</th>
<th>GAO</th>
<th>NAO</th>
<th>CGU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial benefits</strong></td>
<td>Yes¹</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(financial statistics)</td>
<td></td>
<td>(financial impacts)</td>
<td></td>
</tr>
<tr>
<td><strong>Non-financial benefits</strong></td>
<td>Yes²</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(non-financial statistics)</td>
<td></td>
<td>(not measured)</td>
<td></td>
</tr>
<tr>
<td><strong>Percentage of recommendations implemented</strong></td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(not measured)</td>
<td>(made 4 years earlier)</td>
<td>(not measured)</td>
<td></td>
</tr>
<tr>
<td><strong>Percentage of new products with recommendations</strong></td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(not measured)</td>
<td></td>
<td>(not measured)</td>
<td>(not measured)</td>
</tr>
<tr>
<td><strong>Cost-effective usage of funds</strong></td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(not measured)</td>
<td>(not measured)</td>
<td></td>
<td>(not measured)</td>
</tr>
</tbody>
</table>

1 Financial statistics is the term used by the author of this paper to refer to “Funds to Be Put to Better Use”, “Questioned Costs” and “Investigative Receivables and Recoveries”, which are measured in dollar terms as discussed in section 2.1.1.

2 Non-financial statistics is the term used by the author of this paper to refer to “Successful Criminal Prosecutions”, “Indictments and Criminal Informations”, “Successful Civil Actions”, “Suspensions and Debarments” and “Personnel Actions”, which are not measured in dollar terms as discussed in section 2.1.2.

The quantitative indicators used to measure performance of each audit institution cited in Chapter 2 are summarized in Table 10. The PMF has adopted the first three indicators in Table 10 as basis to its three performance indicators, which are the following:

1. Total Amount of Financial Benefits
2. Quantity of Non-financial Benefits
3. Percentage of implementation of recommendations

Percentage of new products with recommendations (see Section 2.2), used by GAO, and Cost-effective usage of funds (see Section 2.3), used by NAO, will not be adopted for now by the PMF. However, future versions of the PMF may adopt them.

3.3.1. Financial Benefits

Although the definition of “financial benefit” presented in Section 3.1 is also a term used by GAO (see section 2.2), the meaning adopted by PMF is closer to what NAO refers to as “financial impacts” (see Section 2.3.1). This will be demonstrated based on the principles used by NAO: Causation, Realization, Valuation, Attribution and Validation. Table 11 summarizes the following discussion.
Table 11 - Characteristics of each approach for financial benefits

<table>
<thead>
<tr>
<th>Aspect</th>
<th>IGs</th>
<th>GAO</th>
<th>NAO</th>
<th>CGU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Causation</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(there must be a link between audit and impact)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation based</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(there must be a recommendation linking audit and impact)</td>
<td></td>
<td>(it is possible to record a benefit even without a specific recommendation)</td>
<td>(it is possible to record a benefit even without a specific recommendation)</td>
<td></td>
</tr>
<tr>
<td><strong>Realization</strong></td>
<td>Yes¹</td>
<td>No²</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(impact already realized)</td>
<td></td>
<td>(actual impact does not need to be demonstrated)</td>
<td></td>
<td>(except for recurrent benefits)</td>
</tr>
<tr>
<td><strong>Actions taken</strong></td>
<td>Yes¹</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(actions taken as a result of the audit have to be already completed)</td>
<td></td>
<td>(completed or substantially completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net present value</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(used to bring forward unrealized future beneficial effects)</td>
<td></td>
<td></td>
<td>(only realized benefits are registered, not future ones)</td>
<td></td>
</tr>
<tr>
<td><strong>Valuation</strong></td>
<td>Yes²</td>
<td>Yes⁴</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(robust data and methodology to value impact)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attribution</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(degree of contribution reflected as a proportion of impact claimed)</td>
<td></td>
<td>(percentage of contribution is not used)</td>
<td></td>
<td>(benefit is considered result of a joint work between internal control and public management)</td>
</tr>
<tr>
<td><strong>Validation</strong></td>
<td>Yes³</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(impacts must be validated by the audited body)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ For the statistical categories “total dollar value of recommendations that funds be put to better use” and “total dollar value of questioned costs”, actual impacts do not need to be demonstrated nor that some action was taken (recommendation implemented). It is enough that managers agree that they will implement the recommendations. For the statistical category “investigative receivables and recoveries”, impact must be shown as realized. (see section 2.1.1.)

² For the statistical category “investigative receivables and recoveries”, the methodology is to consider the dollar amount of the “results of criminal and civil cases that were ordered plus any voluntary repayments during the fiscal year”, for instance: restitutions, criminal fines, penalties, government property recovered, as discussed in section 2.1.1. For the statistical categories “total dollar value of recommendations that funds be put to better use” and “total dollar value of questioned costs”, the benefit is considered as the whole amount of money put to better use or which costs were questioned.

³ For the statistical category “investigative receivables and recoveries”, there is no need for management to agree to them, because all the claims are based on recommendations already implemented. For the statistical categories “total dollar value of recommendations that funds be put to better use” and “total dollar value of questioned costs”, the Progress Report to the President brings total estimates and the amount agreed to by management.

⁴ Estimates of GAO financial benefits are based on information obtained from non-GAO sources.

Source: elaboration of the author, based on information in the Chapter 2.
3.3.1.1. Causation

The principle defined by NAO as “causation”, which establishes that there must be a link between the impact and the work conducted by the audit institution, is adopted in the PMF just as it is by IGs and GAO.

In the PMF there is an even more restrictive concept of causation than NAO and GAO. Like IGs, CGU teams have to demonstrate that there is a specific recommendation linking CGU’s work and the impact claimed.

3.3.1.2. Realization

As discussed in Section 2.2.1, GAO considers as financial benefits even the value of needed projects which were terminated because of their problems instead of having their operations improved. Thus, under the performance measurement framework adopted by GAO, there is no need to demonstrate the actual impact of an implemented recommendation. “Financial benefits” are registered by GAO under the assumption that the associated funds were put to better use. This interpretation of benefit may be aligned to the role that GAO plays as an institution that supports Congress in meeting its constitutional responsibilities, but it seems to be a quite narrow view of helping to improve performance of the federal government.

As presented in Section 2.1.1, IGs use a set of three statistics to measure their performance in dollar terms. For two of them (“total dollar value of recommendations that funds be put to better use” and “total value of questioned costs”) there is no need to demonstrate the actual impacts and all that it is demanded is a management agreement that recommendations will be implemented. However, the third statistic is closer to the definition of “financial impact” adopted by NAO.

In order for a financial impact to be registered by NAO, it must be first demonstrated that the actual impact associated to the NAO’s work has been already realized. NAO refers to this principle as “realization”.

Although the three audit institutions demand that some action has to be taken prior to the registration of the benefit, only NAO and IGs (and even though only for the statistical category “investigative receivables and recoveries”) demand the realization of the impact prior to the registration of the benefit.

The PMF adopts the NAO’s concept regarding to realization, except for those benefits that are recurrent. In this case, a benefit will be only registered if the impact at
least in the first year was already realized, albeit up to four more years can be claimed even before the actual impact is observed. This is referred by IGs and by GAO as using the “net present value” of unrealized future benefits. Nonetheless, PMF only addresses future benefits arising from more efficient operations or cancellation of unneeded operations. PMF does not addresses “future benefits” arising from termination of needed projects as GAO does, nor “future benefits” arising from likely future implementation of recommendations as IGs do.

### 3.3.1.3. Valuation

As discussed in Section 2.3.1, “valuation” is about quantifying the monetary value of benefits. This is the most difficult principle to make a comparison among the analyzed institutions. Because, although all of them have “methods” to value the benefit, to state it is a robust method it is a matter of interpretation of the realization principle. GAO, for example, that registers all the benefits even before its realization, uses the method to estimate the future unrealized benefit by obtaining it from a non-GAO source. IGs simply value benefits as the amount related to the recommendations that were agreed to by management, thus not only before actual realization but even before implementation of recommendations.

Therefore, Table 11 shows a simplified view that all institutions use a robust method.

PMF adopts the NAO concept of valuation, except for the difference already discussed that it considers future unrealized benefits, provided that the ones from the first year have been already observed. Classes and categories of PMF financial benefits are discussed in further details in Section 3.3.1.6.

Regarding the definition of financial benefit presented in Section 3.2 ("net of any relevant cost of actions taken to implement the recommendation.")}, the meaning of relevant cost\(^{10}\) is the same adopted by NAO which is any cost that would not been run without the implementation of the recommendations. Thus, any administrative action taken without further expenditures than was already planned is not considered relevant costs.

\(^{10}\) Examples of relevant costs are hiring new staff above what was planned, contracting new services in addition to what was planned and buying air tickets in a quantity/value above what was planned.
3.3.1.4. Attribution

NAO sometimes claims only percentage share of the benefit realized depending on the “attribution” (influence) of the NAO’s work. IGs and GAO do not evaluate the degree of contribution of their works to identify the proportion of the impact claimed that should be strictly attributed to them.

As presented in Section 3.2, PMF defines benefits (CGU’s outcomes) as “positive realized impacts […] result of a joint work between internal control and public management.” Therefore, PMF does not follow this NAO principle, which might be a principle more aligned to external control functions than to internal control ones.

3.3.1.5. Validation

All the analyzed audit institutions establish internal and, in general, external approval levels. NAO’s benefit claims are validated by the audited body at a senior level. Estimates of financial benefits claimed by GAO are based on information obtained from non-GAO sources (such as the affected agency, congressional committees or the Congressional Budget Office), and when non-GAO estimates are not available, GAO develops estimates which are corroborated with a knowledgeable program official from the audited agency. Two of the statistics used by IGs are about recommendations agreed to by management (“total dollar value of recommendations that funds be put to better use” and “total dollar value of questioned costs”). For the third statistic used by IGs (“investigative receivables and recoveries”), there is an implicit agreement by the management, because it reflects actual amounts paid to the government related to recommendations already implemented. PMF levels of approval were presented in Table 9.

Like the frameworks of GAO and NAO, PMF considers that new information does not change retroactively previous claims neither to increase nor to decrease registered values11.

3.3.1.6. Classes of Financial Benefits12

IGs, GAO and NAO subdivide financial benefits into different categories, as presented in sections 2.1.1, 2.2.1 and 2.3.1. Based on these categories and also on some

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11 Regarding the framework of IGs, no reference was found to this aspect.
12 These classes are only a proposal, given that they had not been officially approved by the time of writing.
pilot studies conducted by the CGU during the first and second quarters of 2012, PMF proposes the following classes of financial benefits:

1. Restitution of undue payments
2. Interruption of undue (not recurrent) payments
3. Interruption of undue (recurrent) payments
4. Avoidance of unnecessary expenditures noted in contract (or pre-contract) agreements
   a. Reduction of the value of the contract (or pre-contract), keeping the same necessary quantity and quality of goods or service.
   b. Cancellation of unnecessary contract agreements
5. Increase of the quantity and/or quality of goods or service, keeping the same value of the contract (or pre-contract).
6. Application of penalties to honor contract’s terms
7. Increase of revenues
8. Increase of efficiency, efficacy or effectiveness of a public policy

Besides these classes, PMF also suggests each financial benefit to be classified into the following categories:

1. **Cashable**\(^{13,14}\) **Financial Benefits** – impacts that release actual financial resources (or generate greater net income) that can be diverted to other public services.
   a. Result of voluntary repayments – Value recovered before civil/criminal action is taken.
   b. Resulted of administrative/civil recovery – Value recovered by Special Taking of Accounts\(^{15}\) and other administrative and civil means\(^{16}\).
   c. Resulted of criminal cases – Value associated with the restitution, criminal fines, and special assessments resulting from successful criminal prosecutions.

\(^{13}\) “Cashable financial impact” is a term used by NAO (see Section 2.3.1).

\(^{14}\) The presented subdivisions for cashable impacts are based on the different origins of the “investigative and recoveries” financial statistic used by the IGs and discussed in Section 2.1.1.

\(^{15}\) For a more detailed description of “Special Taking of Accounts”, see Section 1.1.2.

\(^{16}\) An additional level of classification is possible in order to identify which government agency has been responsible for most of the effective recoveries, such as the Brazilian Court of Auditors (TCU) and the Office of the Attorney General (AGU).
2. **Non-cashable** Financial Benefits – improvements that increase efficiency or output quality of the public service delivered. Although cash is not released to be used elsewhere, it is possible to monetize (using Cost-Benefit Analysis concepts, for instance) the impact of the improvement.

Although the majority of the benefits claimed may fall into the cashable classification, classes like “5. Increase of the quantity and/or quality of goods or service, keeping the same value of the contract (or pre-contract)” and “8. Increase of efficiency, efficacy or effectiveness of a public policy”, which are non-cashable financial benefits, tend to be those that will bring higher impact, not just in monetized value, but mainly in better public services offered to society.

### 3.3.2. Non-financial Benefits

Although all the analyzed audit institutions report examples of non-financial benefits, NAO is the only one that does not count them in order to use it as a performance indicator.

In order for non-financial benefits to be registered, not all of the principles presented in Section 3.3.1 must be observed, only the following: Causation, Realization and Validation.

### 3.3.2.1. Classes of Non-financial Benefits

PMF states non-financial benefits as a performance indicator, as IGs and GAO frameworks do. IGs classify these non-financial benefits in five categories, all quite related to their investigative function, fighting against corruption and bad

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17 Non-cashable financial impact is a term used by NAO (see Section 2.3.1).
18 Cost-Benefit Analysis (Boardman, 2011) is a method that can help to estimate this kind of impact, for example monetizing variables such as “the value of a statistical life” (Boardman, 2011, pp.408-4011), “the cost of crashes and the cost of injuries” (Boardman, 2011, pp.413-417), “the cost of crime” (Boardman, 2011, pp.417-419) and even the cost of time” (Boardman, 2011, pp.419-421).
19 But instead of the three levels of approval for financial benefits presented in Table 9, non-financial benefits have to be approved only by Coordinator and Managing Director.
20 These classes are only a proposal, given that they had not been officially approved by CGU by the time of writing.
management. Based on these categories and also on some pilots studies conducted by CGU during the first two quarters of 2012, PMF proposes the following classes of financial benefits:

1. Management Non-financial Benefits
   a. Measures promoting improvement of internal controls
   b. Measures promoting increase of transparency
   c. Measures promoting permanent improvement of programs/processes
   d. Measures promoting permanent capacity to manage risks
   e. Measures promoting environmental sustainability
   f. Other measures promoting improvement of delivering public services

2. Investigative Non-financial Benefits
   a. Criminal Indictments – Number of criminal cases filed in Federal and State courts.
   b. Criminal Prosecutions – Number of convicted subjects in Federal or State courts.
   c. Administrative and Civil Actions – Number of litigations other than criminal.
      i. Disreputability Declarations – Number of companies declared disreputable.
      ii. Personal Actions – Expulsions penalties enforced of “dismissal” and “pension cancellation”.

Whereas management benefits are directly related to the CGU strategic objective “fostering continuous improvement of delivering public services”, investigative benefits are more associated with the strategic objective of “intensifying investigatory auditing”.

3.3.3. Percentage of Recommendations Implemented

The last performance indicator that PMF suggests to be adopted is the percentage of implemented recommendations made four years ago. Among the analyzed audit institutions, only GAO uses this indicator.

21 This is also one of the lines of the internal control function of the CGU (“Investigative Audits”) discussed in Section 1.1.2.
22 Both CGU strategic objectives are discussed in Chapter 1.
This indicator is closer to an intermediate outcome than an end outcome, because it is about measuring a previous stage before reaching the end outcomes (financial and non-financial benefits). Thereby a low level of benefits can be better explained if analyzed together with the percentage of the recommendations implemented. Low percentages may indicate troubles in the agreement process or even a low level of management cooperation. On the other hand, low levels of benefits associated with high percentages of recommendations implemented can be a sign of poor recommendations that lead to low impact or even that the performed work was not adequately selected. For instance, this could happen in a scenario where the majority of the work does not allow much improvement because internal controls and management performance are at an adequate level\textsuperscript{23}.

The final indicator is measured only four years\textsuperscript{24} after the recommendation was made. However, partial calculations may be used to monitor the indicator over the first three years.

### 3.3.4. SFC Directorates and CGU Regional Offices

Besides the units described in Section 1.1, CGU comprises Regional Offices in charge of carrying out the internal control discussed in Section 1.1.2. The Federal Control Secretariat comprises six Directorates, one of them responsible for planning and the others are responsible for specific ministries and agencies of the Executive Branch.

PMF is a framework that includes not just measuring, but also analyzing data and taking improvement actions. Thus, PMF defines that each Directorate and each CGU Regional Office should have their performance indicators (financial benefits, non-financial benefits and percentage of recommendations implemented) assessed at least once every six months.

The benefit registration process for Directorates has been already described in Section 3.2. Financial and non-financial benefits identified by the CGU Regional Offices should be, after approval of the Head of the Regional Office, forwarded to the

\textsuperscript{23} See Section 1.2.2 for further details on how CGU conducts a risk assessment to select its works. Given that human and financial resources are scarce, the selection of the programs that will be evaluated is critical in order to maximize CGU’s outcomes.

\textsuperscript{24} Like GAO, PMF uses the period of four years to measure the indicator. GAO’s and CGU’s experiences show that recommendations that take more than four years to be implemented hardly will be implemented later.
respective Directorate which will claim following the same process described in sections 3.2.

Although this is a way to assess units based on the benefits identified by each one, it does not consider the fact that financial benefits identified by the Directorates might be result of a much wider work involving many Regional Offices. Benefits resulting from AEPG (see Section 1.2.2) are examples of that.

In order to also take into account the Regional Offices contributions, PMF defines that every time a financial benefit is linked to a recommendation related to a work in which at least one Regional Office took part, an estimated contribution will be added up to the Regional Office’s benefits.

The methodology suggested in the PMF is to distribute the claimed benefit among the Regional Offices in function of the quantities of control actions that each Regional Office conducted in the work linked to the benefit.
4. Conclusion

Developing performance indicators for the internal control function serves the dual purpose of accountability and performance management. After adoption of the Performance Measurement Framework (PMF) presented in this paper, Brazilian people will be able to assess CGU’s outcomes, reinforcing accountability. Furthermore PMF indicators will provide CGU teams and managers with a clear and unambiguous course towards the accomplishment of CGU’s mission.

An academic institution might consider its mission accomplished after having produced evaluation reports without having practical implications. After all, it is about producing knowledge. But audit institutions that have as a mission fighting corruption and improving public management, such as CGU, would not fulfill its duty unless its work brings practical benefits to society.

PMF defines two kinds of benefits as CGU’s outcomes. Financial benefits are those that can be monetized, either real cash net inflow or any improvement that can be represented in currency terms. Non-financial benefits, not represented in currency terms, indicate benefits to society either in terms of better public management or towards a less corrupted environment.

Generally it is not simple to segregate the internal control functions of (1) improving public management from the one of (2) fighting against corruption, likely because there is no clear boundary between them. However, PMF offers a way to assess to what extent each one of these two parts of CGU’s mission has been accomplished through financial and non-financial benefits, as demonstrated in Table 12.

Table 12 - PMF Indicators Measuring to What Extent CGU’s Mission Has Been Accomplished

<table>
<thead>
<tr>
<th>CGU’s Mission</th>
<th>Performance Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1: “[…]fighting against corruption”25</td>
<td>- Cashable Financial Benefits</td>
</tr>
<tr>
<td></td>
<td>- Investigative Non-financial Benefits</td>
</tr>
<tr>
<td>Part 2: “improving public management through strengthening internal control mechanisms and enhancing transparency, ethics and social control”26</td>
<td>- Non-cashable Financial Benefits</td>
</tr>
<tr>
<td></td>
<td>- Management Non-financial Benefits</td>
</tr>
</tbody>
</table>

25 Associated with the strategic objective “Fostering continuous improvement of delivering public services”.

26 Associated with the strategic objective “Intensifying investigatory auditing”.

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PMF also addresses indirectly the other two strategic objectives of the CGU internal control function. When CGU helps managers to understand better their processes, to map its risks and to mitigate them with proper internal controls, the change in the strength of the internal controls and in the capacity to manage risks may be indirectly measured by the observed improvement in delivering public services. Actually, this is just a proxy and it would not allow one to evaluate the sufficiency of the internal controls or capacity to manage risks. Rather it would present the marginal impact of having better internal controls (and a better capacity to manage risks) on the public management. Enhancement of public transparency and social control mechanisms are believed to be very effective preventive and detective control activities, provided they are well structured, because of the empowerment of beneficiaries, who are the real clients of public policies. Both of these control activities often are part of the recommendations from performance audits conducted by CGU and may be regarded as a particular subset of public services’ improvement. Again, this would be just a proxy to measure a marginal improvement in transparency and in social controls and is based on the assumption that the change is long-lasting.

The first step towards the complete implementation of PMF was taken on October 31, 2012 through the Ministerial Order nº 2.379 which defines the main concepts of the framework.

CGU teams have been trained in the methodology during the last couple months. Next steps include publishing additional guidance and organization of a workshop. Additional guidance is necessary to detail internal processes and to describe which are the classes and categories each benefit can fall into\(^{27}\). A workshop involving experts of different institutions, such as OIGs, GAO and NAO, could be organized to exchange experiences in specific issues, for instance, determining the value of claimed non-cashable financial benefits.

One of the greatest challenges of implementing PMF is regarding robust specific methodologies to estimate non-cashable financial benefits arising from improvement in efficiency of public policies. Besides interchange with partner audit institutions, future

\(^{27}\) This paper presents proposals of classes and categories in sections 3.3.1.6 and 3.3.2.1.
studies analyzing the suitability of using Cost-Benefit Analysis\textsuperscript{28} (CBA) will be useful in enriching PMF.

It is recommended that PMF be reviewed one year after its complete implementation. This review could happen together with the review of the normative documents which define concepts as performance audit.

Other future perspectives arising from this paper include studies addressing the following:

- Analysis of **suitability of using PMF** (or an adapted version of PMF) as framework to measure also performance of the other three CGU’s units (Corruption Prevention and Strategic Information Secretariat – SPCI, National Disciplinary Board – CRG and National Ombudsman's Office).
- Analysis of **suitability to contract CBA consultants** to measure improvement of policies performance.
- Improvement of PMF and AEPG\textsuperscript{29} to **plan for impacts** from the very beginning of **audit planning**.
- Analysis of the existence of any **gaming**\textsuperscript{30} or another negative impact after the presence of performance measurement brought by PMF.

A final future perspective arising from this paper is regarding technical cooperation with Brazilian audit institutions in charge of the internal control function at the state level. CGU has, therefore, the chance not only to promote accountability and better performance management of its own works, but also to help promoting them in state level.

\textsuperscript{28} See sections 3.1 and 3.1.6. For an initial reference, see Boardman et al (2011).

\textsuperscript{29} Performance audit is named by CGU as “Evaluation of Public Programs Implementation”, better known as AEPG (see Section 1.2.2).

\textsuperscript{30} In the same document that OECD (2011, p.219) points out that “performance indicators do not exist for internal audit in Brazil”, OECD (2011, p.219) also adverts the following: “While arguments for measuring government operations are very strong, there are also risks. […] their designs must consider how to prevent gaming or unintended perverse outcomes being stimulated by the presence of measurement”.

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