

Fiscalização a serviço da sociedade

REVISTA do TCU

Federal Court of Accounts Journal • Brazil • year 47 • Issue nº 132 • January/April 2015 • English version





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Mission Statement

Improving the Public Administration for the benefit of society through external oversight

Vision Statement

To be a reference in promoting an effective, ethical, agile and responsible Public Administration

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Letter to the Reader

Dear reader,

This issue of the **TCU Journal** covers different topics that go from sustainable use of soil to the quality of a performance audit. This diversity of articles is a consequence of the evolution that the Courts of Accounts are going through. In this context, in addition to overseeing public expenditure, the Courts of Accounts are attempting to induce development. This is why our institution is in tune with different topics, which to a greater or lesser degree, play an important role in the growth of the country.

For example, the issue of soil is directly related to the Global Development Agenda of the United Nations that will be examined by the heads of State and Government in September, during a meeting at the UN headquarters. Here, in our Court, we held the “Soil Governance Conference” last March, which result in the **Brasília Charter**, a document that records the measures to be prioritized in face of the urgency of preserving this essential natural resource, which is a great asset of all Brazilians.

In addition to the highlights of the first four months, this issue presents seven articles that promote the discussion of significant issues. The issues are not only of interest to the government oversight community since their relevance ensures them considerable space in the academic and social debates.

We would like to highlight three of the articles: “Audit methodology focused on process and risk”, which deals with modern concepts of public governance. In “Accountability to the Federal Court of Accounts within the Open Government Partnership”, the author talks about paths that lead to better transparency and accountability, resulting in the improvement of Brazilian democracy. The article “External Control and Internal Control of Defense: trust and partnership for management improvement” suggests that the alliance between organizations, methodologies and, especially, institutional mentalities can produce a defense system that is both agile and efficient.

Finally, but not less important, the issue carries an interview by Minister Weder de Oliveira who talks about his 32 years of service in Public Administration and about the relevance of innovation to oversight processes.

Have a good read!

Bruno Spada



Aroldo Cedraz de Oliveira

is Minister of the Federal Court of Accounts and Editorial Council Supervisor.

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Interview

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Highlights

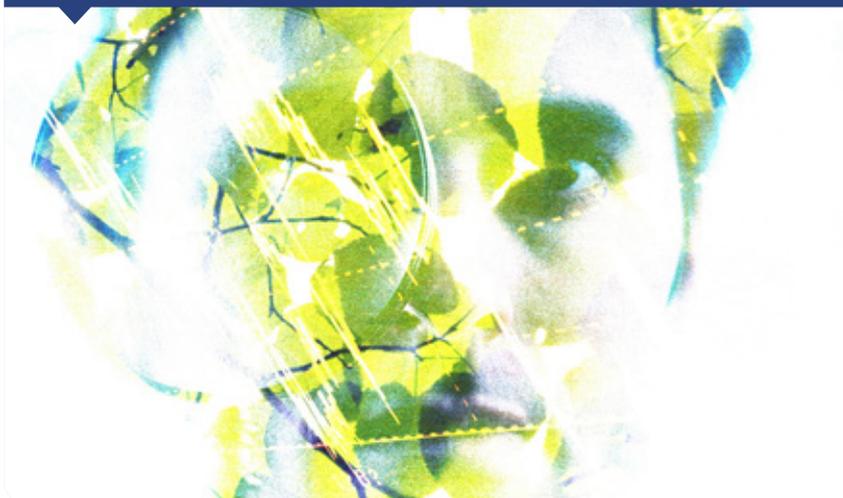
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Minister supports promotion of “intelligence of the external control”

Weder de Oliveira

Federal Court of Accounts' Substitute Minister

Weder de Oliveira completed 32 years of service in public administration in 2015. He started his career at Bank of Brazil (Banco do Brasil), and worked at Petrobras, the Federal Revenue Service (Receita Federal), the House of Representatives and the Federal Senate, since 2009 he has held the position of Substitute Minister at the Federal Court of Accounts of Brazil (TCU). In addition to being a civil and oil production engineer, Weder de Oliveira holds a degree in law from the Federal University of Brasilia, and a post-graduate degree in Economics from George Washington University. At the moment he is finishing his Master's degree in Law at the University of São Paulo (USP). The Substitute Minister, who is married to Gabriela and father of Natalia (19) and Julia (16), met with the TCU Journal staff (Revista do TCU) in his office in the beginning of this winter for an interview. In the interview, he talked about important moments of his career and told us about some major works in which he acted as rapporteur, at TCU. During the conversation, he highlighted the benefits of staff specialization for the institution, in addition to talking about the importance of innovating the supervision processes.

1. Minister Weder, what would you highlight in your professional career during these 32 years in public administration?

I can say that I have had an eclectic experience and the opportunity to work in institutions where I learned a lot. I believe I have also been lucky to enjoy doing what I did everywhere I worked, and to be recognized, to be able to leave my contribution in all those places and now, also here at TCU.

When I was 19 I started working at Banco do Brasil, which was a real world school. The managers and supervisors were very

strict. Punctuality, dedication and accuracy in the correspondence we wrote were required. We had manuals for all the processes and they were very well written. It was inspiring to see that all the senior executives, the department heads, were experienced career employees with a post-graduate degree.

At Petrobras, the highlight was a strong policy that encouraged engineers and geologists to engage in post-graduate, master's degree and PhD programs both in Brazil and abroad. Before leaving the company, I was following that professional path. Such policy and its highly qualified research centers have turned Petrobras into a recognized institution and a world leader in deep water oil exploration, and it has not occurred by chance. It was the result of a long-term strategic vision with a view to forming highly qualified human resources.

At Receita Federal I worked as a tax auditor. It was then that I began my training in law and in oversight and auditing. I worked in the coordination of fiscal intelligence, which carried out research, investigated and conducted operations, in conjunction with the Federal Police Department, with a view to unveiling tax evasion and corruption schemes. Such experience, together with the training I took part in at the United States Federal Revenue Service helped me, afterwards, advise several parliamentary investigation Committees (CPIs) at the National Congress. I have no doubt that TCU should develop a culture of "intelligence of the external control" to detect and fight frauds, undue payments, and sources of waste of public resources as soon

as possible. We have conducted several works along those lines, such as the Fiscobras (annual oversight plan aiming at verifying the implementation of projects funded by Government resources) audits.

2. Your arrival at the National Congress coincided with the beginning of the drawing up of the Fiscal Responsibility draft bill. The Court of Accounts celebrated the 15th anniversary of the act in a seminar held in March. What was your participation in the work that led to the emergence of the Fiscal Responsibility Act (LRF)?

At the House, I worked as budget and financial supervision consultant. I had one of the best experiences of my career. As soon as I took up my post, probably for ranking first place in the selection process, I was allocated to the group of budget consultants who advised the Committee responsible for discussing the most important draft bill at the National Congress at the time, and which stirred up the country: the Fiscal Responsibility draft bill. I was involved in the writing of all the versions of the draft and all the discussion meetings. Those were six intense months and the beginning of a series of other very important experiences, such as the technical coordination of the Investigative Committees of Prescription Drugs and Banespa (Bank of the State of São Paulo), and advising the rapporteur of the Investigative Committee of Irregular Occupation of Public Lands in the Amazon region.

Five years later, in 2004, I took over as budget advisor at the Federal Senate, also through competitive examination. Shortly after, I was invited to coordinate the technical team of the

rapporteur of the Investigative Joint Committee of Ambulances (also known as Sanguessugas - Leeches), one of the longest and most shocking cases of fraud and corruption of our history, involving dozens of congressmen and hundreds of municipalities. That Investigative Committee had a hugely surprising outcome, although it fell short of what might have been expected by some: 69 of the 72 congressmen investigated in the first report, in August 2006, were not reelected.

3. What was your first contact with the Federal Court of Accounts like?

During the time I worked at the Congress Budget Office, sometimes we held meetings with auditors from TCU. However, it was at the Senate, when I coordinated the technical team of the Investigative Committee of Nongovernmental Organizations, that I could really interact with TCU. I used many of TCU's decisions in the coordination and preparation of the final report of that CPI. Still at the Senate, I was involved in the Mensalão, the Bingos and the Correios (Post office) Investigative Committees. I also advised the president of the Budget Reform Committee, a memorable work that changed considerably the legislative process of budget evaluation by the Congress.

In 2008, I was invited to advise the Presidency of the Federal Senate, at the Modernization and Strategic Planning Consultancy. As a member of the group discussing the House modernization, I drafted a proposal of amendment to the rules of procedure, to institutionalize the relationship between the Senate Committees and TCU. The Committees would discuss

the main audits at public hearings and would obtain from the Court the necessary analyses for the job of discussing and legislating. At the time, we believed that if the Congress acted through specialized Committees, and then if, in a way, the Court's actions reflected the Committees, the interaction could be improved.

4. So do you agree that the specialization of the TCU technical units represented an improvement for the Court?

Undoubtedly. When I arrived at the Court of Accounts, I continued supporting such institutional convergence. Specialization constitutes a need, especially as we advance in the operational audits, as can be observed at GAO – U.S Government Accountability Office (The American Supreme Audit Institution). GAO hires professionals who are specifically qualified for diagnosing and evaluating programs. Specialization has been improving our ability to understand and interact with the diverse government areas.

The Court of Accounts is an active promoter of improvements in public administration. Its characteristic is being multi-thematic and specialization is unavoidable, especially when society expects a proactive External Control for results.

The systemic reports, the FISC, constitute another relevant improvement. They can offer a systemic understanding on the themes of our specialization. They also tend to be one of our most important instruments of communication with society, the National Congress and the Government. In addition, equally relevant, FISC acts as a tool to induce our self-

knowledge. It is an opportunity our technical units can use to reflect upon what they know and what they can do in their area of expertise. It should be permanently improved, with a view to establishing a better interaction with the specialized Committees of the National Congress – the highest democratic representation body –, which could reverberate, highlight and increase the audience of our works.

5. At the Federal Court of Accounts, you have reported matters that have had a broad impact, such as the regional Labor Courts case, throughout Brazil, which represented an economy of approximately R\$ 1.2 billion to the public coffers. How was that audit conducted?

The work conducted at the Regional Labor Courts (TRTs) represented valuable learning and constituted a huge project characterized by joint and coordinated action. It is an example of how inherent “curiosity” to audit activity can lead to the examination of small evidence and reveal something of huge dimensions, previously unimagined. When evaluating the annual accounts of the 3rd Region Regional Labor Court in Minas Gerais, for the financial year 2009, we took an interest in the information about the recognition of “liabilities resulting from insufficient credits or resources, in the amount of R\$ 575,961,889.00”. As described in the document itself “the recognized liabilities corresponded to 53.99% of the authoritative allocation of values for 2009”. We determined that the Secretariat of Foreign Trade (Secex-MG) looked into the matter. Secex diligently found that the liabilities corre-

sponded to staff liabilities and that the indexation rates and applicable interests on the amounts due were not correct. The adoption of undue indexes generated an undue liability of R\$ 250 million at the Regional Labor Court of Minas Gerais (TRT-MG). We issued a provisional remedy to prevent payments from being made and, then, defined the necessary corrections, which were carried out by the TRT.

We found out that what had occurred in Minas Gerais also occurred in other states. As a result, the work took other proportions. After a year and a half accomplishing several coordinated actions, which involved my office, the Department of Personnel Audit (Sefip), our departments in the states, the Superior Council of Labor Court and the Serzedêlo Correa Institute (TCU corporate education unit for the auditors’

DOCUMENTARY

**THE AMAZON REGION,
FROM IMPERTINENCE TO
CONCILIATION**

The Amazon region. Get to know the protected territories created to preserve the forest, the conservation units. How they operate, the benefits they provide and the difficulties faced to accomplish the mission of keeping the Amazon region intact. Also, get to know some activities carried out by the locals to generate sustainable income. Based on an audit coordinated by TCU. Watch the Federal Court of Accounts official channel on Youtube: www.youtube.com/tcuoficial

training), the liabilities of all the TRTs were reevaluated. The Court's action resulted in blocking undue payments estimated in R\$ 1.25 billion (one billion, two hundred and fifty million Brazilian reais). This was one of the greatest procedures ever undertaken in the history of TCU.

6. Regarding the interaction between the rapporteur's office and the technical unit, could you say a few words about the partnership concerning the audits carried out in the environmental conservation units in the Amazon region?

That work is a great example of the good results we can expect from the harmonious interaction between the minister's office and the technical unit, within a constructive perspective, while respecting their autonomy. I was the rapporteur of the audits in the environmental conservation units, carried out by the Department for Agriculture and Environmental Audit (SecexAmbiental).

From the very beginning, my office met several times with the technical unit to understand the proposed work proceedings, and eventually, based on our experience, discuss the improvements. The audit sought to evaluate whether the protected areas in the Amazon region met the necessary conditions to reach the objectives they had been created for; whether they were being well run and whether the system that interconnected them was being properly coordinated. SecexAmbiental, taking into account international standards and adapting them to our goals, created an index to evaluate the situation numerically.

One of the goals we should permanently try to achieve is to report

our findings consistently, clearly and interestingly. As a result, we proposed the development of a map of the Amazon region that could represent, in three colors (green, yellow and red), the situation of each protected area, according to the value obtained from the calculated index. SecexAmbiental, whose work in that audit was remarkable, developed the idea and designed Indimapa, which created quite a stir then and was presented at the International Intosai Congress in China.

7. Having in mind that the mentioned audit works stand out because they add new experiences to TCU, and because they can be adopted and implemented in other audits, what common features and gains need to be sought in other audits?

This is a very good question. I have to go back in time in order to answer it. In 2009, as a substitute minister and having a better knowledge of the proceedings of TCU, I estimated that the Court should adopt a long-term strategy to develop its financial audits. First, because this kind of performance underlined our historical background, and then, because it is an essential part of the legitimate exercise of our most sensitive political function, which is to issue a prior opinion on the President's accounts. The opinion is based on the analysis of the accounting and financial statements and the budgetary execution. After the structural analysis is conducted, we could advance towards the sector analysis of the economic policy. As I see it, we have a long way to go to enhance the Court's ability to further scrutinize the budgetary execution and the accounting of the government operations.

Since 2009, the financial audits at the Court have gained more space and attention. Besides being inherent to a supreme audit institution, this kind of audit provides insights to better conduct other audits and investigations. It is essential to obtain clues, signs, evidence of possible flaws either in the direct application of resources, or in the management, the execution or in the design of a certain government action. We have seen this happen with the setting up aid policy for land reform settlers, a program carried out by the National Institute for Colonization and Agrarian Reform (Incra), which was modified after the successive and continuing notes the Court made concerning the balance sheets of the superintendencies, since they did not reflect the essence of the program: funding.

I am convinced that, in addition to the typical work of operational audits and, now, governance, we should invest more of our energy in developing strategic models and research work processes, in investigation and timely detection of frauds and wastes in public administration, by means of more active actions. Moreover, not always this kind of action fits one of the three classic types of audit (compliance, financial or operational). This involves External Control Intelligence, a concept that belongs only to us and that should be developed. The Court has already been working on such actions. We have to create methodologies and promote, in the work environment, the culture to detect and fight, as soon as possible, events that can harm the public treasury and the public management efficiency.

8. How could public administration be improved, for the benefit of society, by means of external control?

It is important not to lose sight of the notion that the control over the sound and regular use of resources provided to the states by taxpayers is still one of our first objectives. We can combine, in a more intelligent and articulate way, our different forms of external control. For example, by conducting audits that use methods from financial, compliance and performance audits, in combination with other forms of intelligent information research. We have to clearly define what we are seeking and only then choose the tools we will be working with: a particular external control modality or a combination of them all.

Another important path is the accountability processes. They can be more deeply examined. They have become more comprehensive and full of information demanded by the Court itself. The management reports, prepared according to what has been determined by us, can and should be better used, and should be largely and actively disseminated.

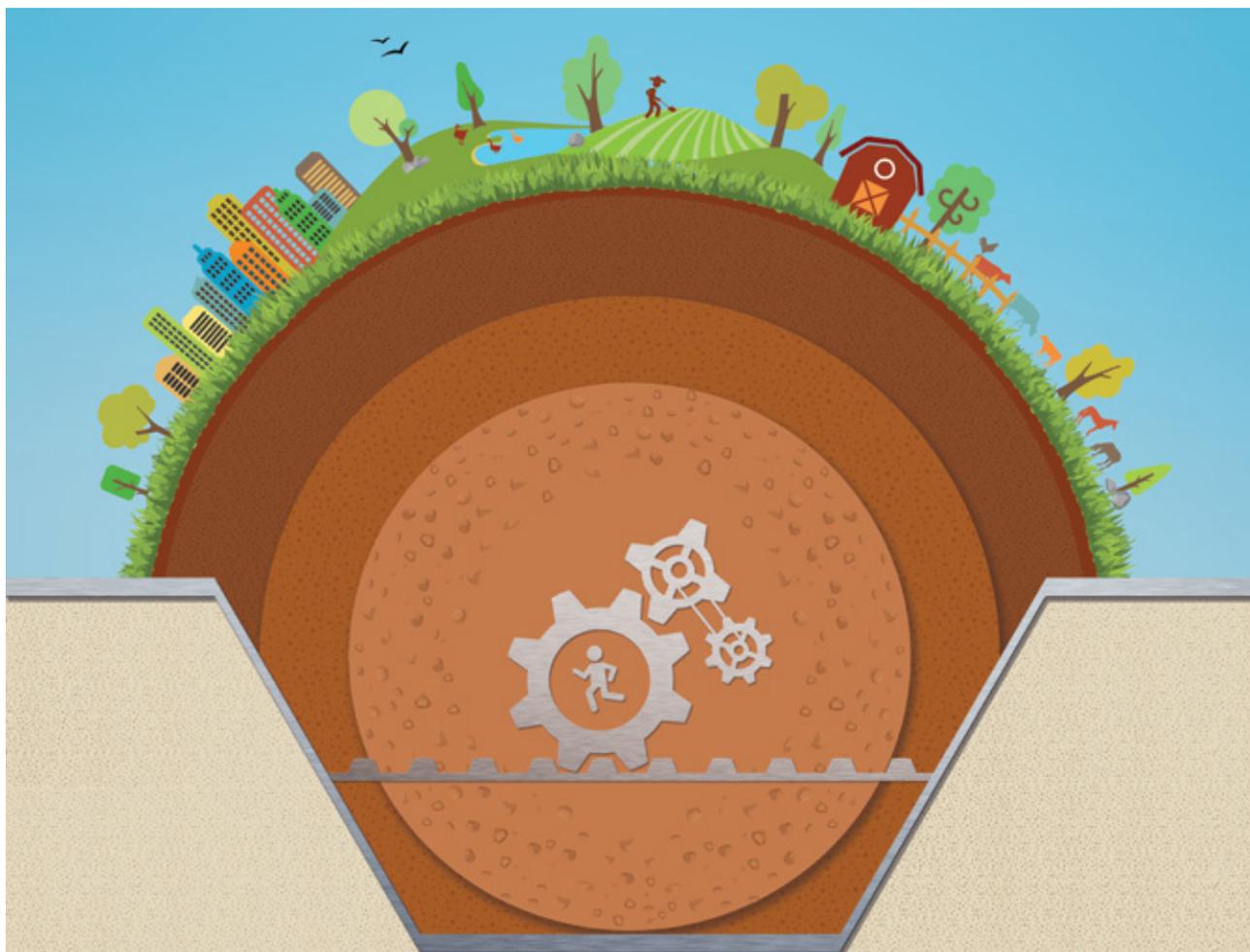
The Federal Court of Accounts is an extraordinary institution with a great ability to prevent misuse of public resources, to induce efficiency gains in public management and enhance the exercise of citizenship. Some of the paths we can follow lie ahead such as improving institutional relationship with the National Congress; communicating more effectively with society, providing and receiving information and knowledge; harmoniously developing our broad spectrum of duties, from the investiga-

tion of complaints to governance evaluations. Other paths also include financial audits; improving coordination of our actions to avoid dispersion of efforts; seeking synergy in our actions related to decentralized use of federal resources, particularly with the courts of accounts of the states; and, maybe the most important one, being consistently guided by the value adding culture.

We are an increasingly well-known, observed and recognized institution. The expectations regarding the Court have grown. Fortunately, we can count on qualified people, with extraordinary will and talent, who will lead us to respond well to new challenges imposed to us by ourselves, because of the good results we have reached, and want to achieve.

“The Federal Court of Accounts is an extraordinary institution with a great ability to prevent misuse of public resources, to induce efficiency gains in public management and enhance the exercise of citizenship.”





TCU hosts Soil Governance Conference

With the purpose of raising awareness of society regarding the importance of soil conservation and its sustainable use, the Federal Court of Accounts of Brazil hosted, from March 25 to 27, the Soil Governance Conference, that took place in Brasilia. Aiming at discussing relevant topics such as the importance of soil, the risks of degradation, conflicts regarding its use, successful initiatives related to soil management, among others. The event was organized by TCU, with the support of Itaipu Binacional, Bank of Brazil and the Federal External Control Auditors Union (Auditar) and other partnerships.

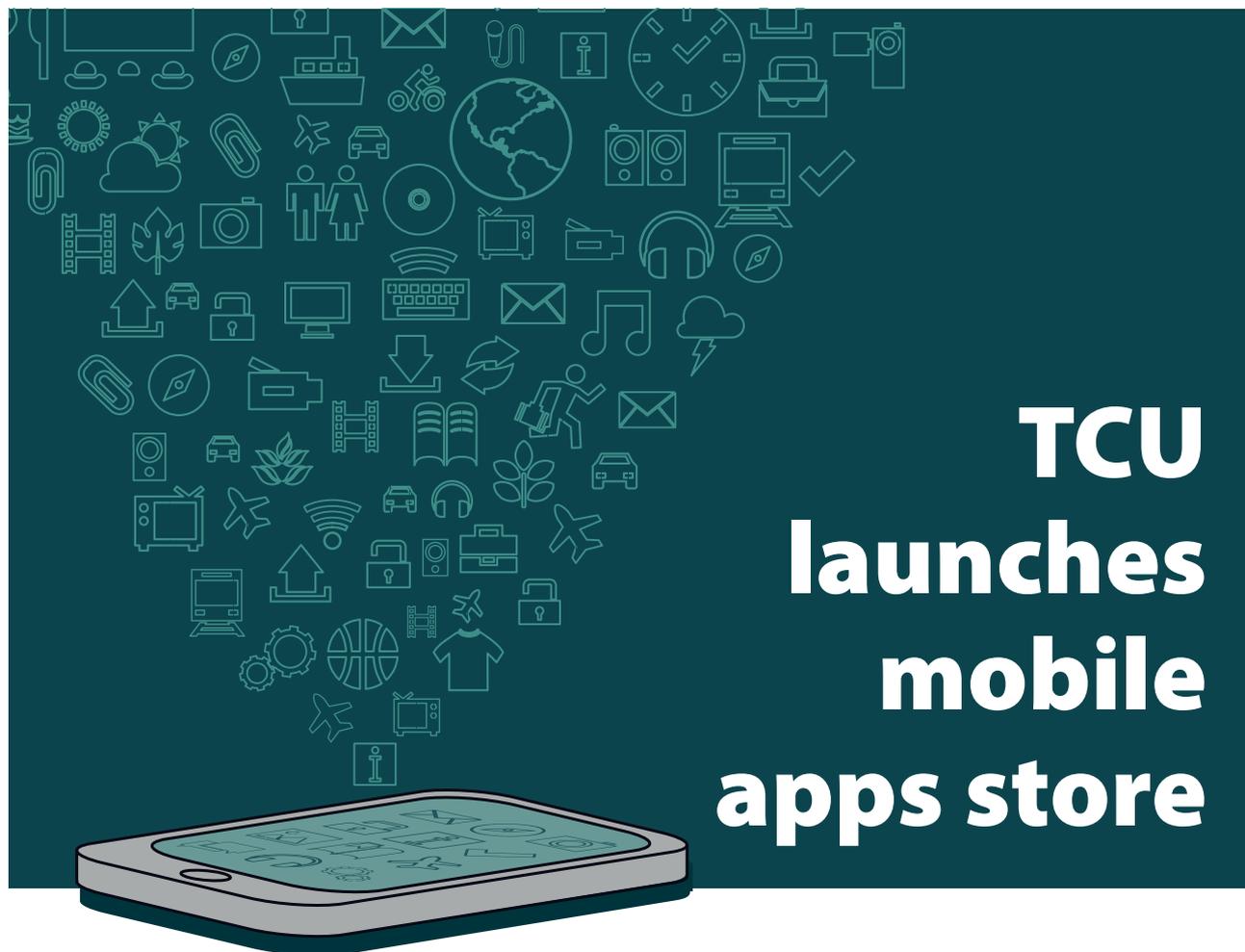
At the end of the Conference, the Brasilia Letter was presented. The document recorded the main contributions of the event to the topic of soils. The letter is based on the considerations brought up during the technical sessions, with structured conclusions involving the theme of the conference. The Brasilia Letter makes one statement: "There is no more room for procrastination or mitigating measures. There is a need for quick and effective actions in order to conserve a natural resource that is essential for the survival of all forms of life on this planet."

TCU presents External Control plan to society

Aiming at providing more transparency to its actions, on May 19 the Federal Court of Accounts of Brazil hosted an event to present its External Control Plan for the period of April 2015 to March 2017. This was the first 2015 edition of the Public Dialogue, a project developed by the court whose topic this year is “more effective control, more benefits for citizens.” This was the first time the court disseminated the control plan to society.

The agenda included presentations regarding how the control plan is linked to TCU’s strategic plan and regarding the challenges and lines of control actions in the following areas: social, infrastructure, development, and services that are essential to the State. “The State has to be more and more transparent. Only in this way will we be able to fight corruption, embezzlement and frauds. It is our duty to lead the cause of transparency by example. Show that we know – through our technical foundation, collegiate decisions, manner of work, functional structure – the good paths to be followed.” This was the speech of TCU president, Minister Aroldo Cedraz, during the opening ceremony of the event.





TCU launches mobile apps store

On June 16, the Federal Court of Accounts of Brazil (TCU) launched the official TCU mobile applications store where all applications produced by TCU will be concentrated. Through this channel, public servants, lawyers, stakeholders, journalists, and citizens in general will be able to install the apps on their mobile devices and search for information and services in a quick and dynamic way. During the launching event, the TCU president, Minister Aroldo Cedraz, stated that “this is an important milestone of the presence of the Court of Accounts in the digital mobility scenario. Whenever I have a chance, I show

my conviction that digital transformation of the government is the shortest and most effective way to reduce the dysfunctions of bureaucracy and to enable the engagement of citizens in building a country that is fairer and more developed,” he concluded.

Four relevant apps are already available in the store: Sessions, Publications of Precedents, search of files and Control Plan. The Sessions app discloses agendas, minutes and videos of the court sessions and allows the user to configure it in order to receive notifications of updates on these contents. The Publications of Precedents app makes available the following publications: Precedents Bulletin, Personnel Bulletin, Public

Tender and Contracts Newsletter, in addition to text research for these contents. The Files search app allows a duly authorized user to have access to the case files that are of interest to him/her. As for the Control Plan app, it allows access to the document.

Soon, other apps of interest to the Court and to society will be launched. By accessing Google Play or the Apple Store, the user will be able to search for the word “TCU” and look for apps whose publisher is the Federal Court of Accounts. There is also the option to search for “Tribunal de Contas da União” (the court’s official name in Portuguese). The result is directed more to the apps produced by TCU.



TCU and federal government promote International Seminar Brazil 100% Digital

From April 23 to 25, the Federal Court of Accounts of Brazil (TCU) hosted the International Seminar Brazil 100% Digital – integration and transparency at the service of society. Promoted in partnership with the federal government, through the Executive Chief of Staff Cabinet and the Ministry of Science, Technology and Innovation. For the debates, we invited representatives from the countries that are the most advanced in the area of digital governmental, such as the United States, United Kingdom, France, The Netherlands, Australia, Singapore, Estonia, Turkey, and South Korea.

For three days, national and international experts exchanged experiences related to building digital services and to the use of open data as an instrument of transparency and social control, focused on evaluation and improvement of public services and policies. The technical workshops were held at the headquarters of the Federal Court of Accounts of Brazil and the debates were held at the Royal Tulip Hotel, in Brasília.



Seminar celebrates the 15th anniversary of the Fiscal Responsibility Act

To celebrate the 15th anniversary of the Fiscal Responsibility Act (LRF), the Federal Court of Accounts of Brazil (TCU) promoted, last May, a broad debate on the fiscal policy of the country and its challenges. The Seminar on Fiscal Policy: 15 years of the Fiscal Responsibility Act was held at the TCU auditorium and gathered officials from the Executive and Legislative powers, international representatives and employees from the public administration. The TCU president Aroldo Cedraz spoke of the importance of the Fiscal Responsibility Act for the evolution of the Brazilian democracy and improvement of financial management in the country. “The LRF brought an effective framework to control public finances in Brazil. Since its creation, the law has been founded on the principles of planning and, above all, transparency,” he said. Cedraz also highlighted how much the law has proved to be an effective and fundamental measure for the sustainability of the Brazilian fiscal policy. It has brought several advancements, such as improvement of mechanisms to allow the population to exercise their role of control of the state’s resources, by managing the information made available by the governments based on the LRF. “The law sought to bring the state closer to the citizens and vice-versa. The advances mean



more than defending fiscal sustainability. They represent the foundations for the constitutional rights of citizens to be accomplished in several areas. We have at our disposal a significant instrument for citizenship,” he emphasized.

Following the event program, a talk show was held with the participation of the president of TCU, Minister Aroldo Cedraz, of the Minister of Finance, Joaquim Levy, the IDP professor and researcher of Ibre/FGV, José Roberto Afonso, in addition to Ribamar de Oliveira, journalist of the Valor Econômico newspaper, who was the moderator. After that, the prosecutor general Paulo Soares Bugarin moderated the panel Control of Sovereign Public Debt. The third and last panel of the afternoon dealt with the tools of transparency of fiscal management and social control and had the participation of the

secretary of the National Treasury, Marcelo Barbosa Saintive, of the UOL investigative journalist Fernando Rodrigues and of secretary general of the Open Accounts Association, Gil Castello Branco.

The president of TCU, Minister Aroldo Cedraz, closed the event highlighting the benefits of the event. He emphasized the advances brought by the LRF. “As we could observe, the recognition of the role of LRF in improving transparency of state entities, an essential requirement for effective social control of government management, is well deserved.” Cedraz also thanked each panel participant for their contribution and concluded: “Personally, I believe that fiscal sustainability is not an end in itself, but a fundamental condition in order for constitutional social to be in fact enjoyed by the Brazilian population.”

Environmental auditing within Environmental Law. The principles of Environmental Law that inform environmental audit, the role of the SAI in the environmental area



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ABSTRACT

The origins of environmental auditing within Environmental Law are described in three words: accounting, auditing and law, in view of the relevance of environmental oversight for the companies and industries, when examining its concept and elements based on the doctrine like its normative regulation.

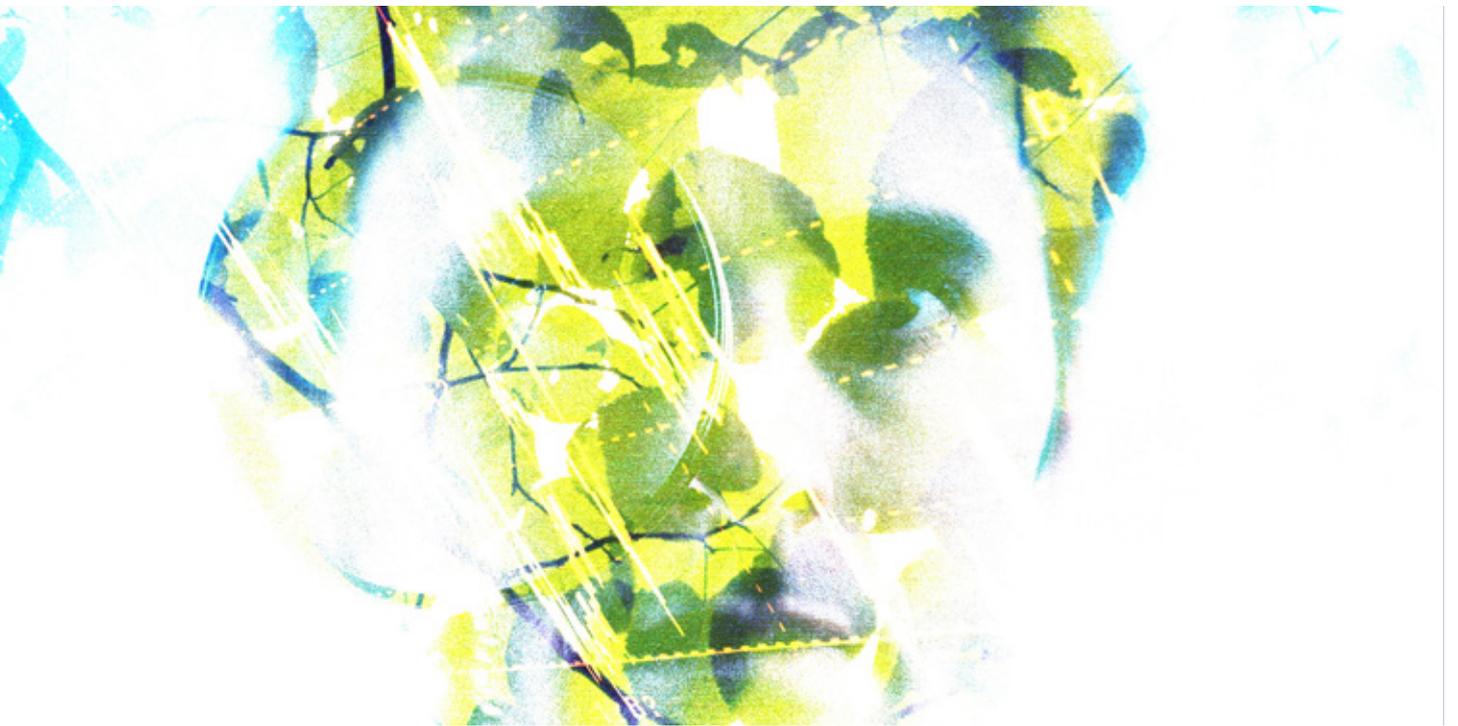
Its importance for industrial development, the added values that it contributes to forms of management, such as business ethics, the certification of its management systems, the accounting environmental certification and the environmental certification as an environment-friendly company. This typology of auditing by the Supreme Audit Institution that performs it is linked to the principles that inform it in Environmental Law and to the principles of the audit activity, as a goal to attain a sustainable development.

The methods used in the research were the following: historical-logical, analysis and synthesis, theoretic-legal, exegetic-legal, comparative law, and inductive-deductive

Key words: Environmental auditing, environment-friendly company, sustainable development

1. HISTORY OF ENVIRONMENTAL AUDITING IN ENVIRONMENTAL LAW

The global concern with environmental protection gained importance and magnitude in recent



years, converted into a topic of interest to the majority of the business community, in face of the negative consequences generated by industrial pollution that produces environmental damage. This protection manifests itself in three dimensions, economic, social and environmental¹. In this scenario, well-balanced industrial development is essential to generate resources, jobs and to promote environmental education, as the basis of social well-being and quality of life to achieve sustainable development².

Thus, technological development cannot harm the environment and, in this sense, the law becomes a means to promote environmentally friendly development. Every time the numerous risks generated by technological development are announced, together with the extraordinary scientific and technologic progress that has enabled a high standard of living in the developed societies today, there are numerous risks produced by technological development itself. Above this, despite this progress, scientific uncertainty about its effects on the environment and human health is still present. In different countries, legal structures originated from administrative law to environmental law, recognized as environmental administrative law by authors as SANZ LARRUGA, BETANCORT RODRIGUEZ and MORA RUIZ have allowed the design of guidelines and limits to the progressive phenomenon of industrial pollution³.

The regulation of the legal institution of environmental auditing as a tool of environmental man-

agement⁴ can be seen within this analyzed doctrine. It is the industrial sector, as a producer of environmental damage contrary to sustainable development, the one who has enabled the develop environmental policies, which by implementing the GHS and the use of clean technologies allow reduction of pollution within the permissible limits. Hence, the concern of businesspersons about environmental issues declared at the universal environmental conclaves, as an element to reduce pollution caused by industries. This author considers that most of the responses given so far by the state leaders have not been adequate since there is no consensus to adopt agreements to mitigate environmental pollution that affects the natural balance of the planet.

That is why analyses in this matter should assess the effects of pollution on humankind, and ecological systems and implement GHS. It would be also convenient, this author thinks, to distinguish natural and industrial pollution from the beginning of mankind, accelerated as of the industrial revolution, as the generator of serious ecological problems -ecological crisis- and improper ecological prudence, to achieve sustainable development⁵.

From this viewpoint, the analyses carried out by this author based on the accounting doctrine and on the *ius* environmentalist doctrine in Latin America and the European Union, acknowledge environmental audit as the management tool capable of adequately assessing and establishing the foundations of envi-

ronmental policies in the enterprises, It also enables analyses of environmental risks generated by activities and assessment of their impact, integrated with other tools.

Since it is practiced in a voluntary and mandatory way in the legal system that governs it, its execution merges with the main objective of the company, the obtaining of benefits, and the observance of environmental protection. This contributes to development that is compatible with environmental conservation, with a balance between both⁶.

Scientific literature shows us the work of PACCIOLI, published in 1494, with the theory of the "double-entry". This evidences that from the year 254 a. n. e. accounts are inspected and checked, a factor that allowed the parallel evolution of the audit activity as a result of the practice of accounting, as science and tool of specialists formed with industrial development. Further details and documents confirm to this author that, in the late 13th century and early 14th century, the operations of public officials who were in charge the State funds were audited. In 1799, there were already accredited firms of public accountants in countries like Scotland, United States of America and England. These were the first countries in which public accounting linked to the practice of government audit gained relevance⁷.



Other studies carried out based on the accounting sciences indicate that the audit practice was born in Great Britain during the first half of the 19th century and spread to other countries of Anglo-Saxon business culture. This was a way of making accounting information reliable and increasing transparency in the stock market in face of economic development and the expansion of economic relations due to the requirement of its states of accounts, linked to the trading activity, to revive confidence and competition in these relationships⁸.

In the 20th century, legal regulations were included in the audit, by the will of the public administration; thus strengthening the three terms accounting, auditing and law with regulations aimed at the protection of financial actives against possible transgressions. Thus, auditors reviewed the status of accounts of enterprises to provide reliability to budget execution. This author appreciates the transcendence of environmental legal asset protection, reflected in direct or indirect accounting, because of its influence on the development of research and the evolution of the auditing activity, as a goal towards sustainable development, by allowing assessment of the balance between progress and the environment through environmental oversight carried out by the SAI⁹.

This is why INTOSAI, from its emergence in 1953 as the public institution responsible for overseeing the regularity of the accounts and financial public management, constituted as a non-governmental organization with a special status in the United Nations Social and Economic Council; in all the geographical regions of the planet, is recognized in the legal systems such as courts of Auditors and General Comptrollers being among the most representative ones¹⁰.

The abovementioned situation leads this author to analyze the connection between environmental problems and the practice of auditing, appreciated with the origins of the *ius* environmentalism, as part of the international agenda. That is how environmental conferences from the one in Stockholm to the one in Rio de Janeiro, that have debated the planet's environmental problems and measures for their mitigation, made significant contributions in the development of the legal institution as part of the management tools, recognizing from accounting doctrine to its transit to the legal one. The scientific literature examined written by authors such as MARTÍN MATEO and CAFERRATA, reveals that the environmen-

tal audit originated in the decade of the 70s of the last century in the United States of America.

It is also highlighted that in the decade of the 80's of the last century, it spread to the European Union as a result of the interests of the U.S. subsidiaries located in that continent. In the Netherlands, the year 1984 is marked and Holland is pointed out as the first to join the practice of this type of oversight. Its legal requirements have been marked in its normative regulation within their internal rights¹¹.

Because of the commitment backed by the BRUNDTLAND Commission in 1987, where the proposal was formulated ("...a sustainable development that meets the needs of present generations without compromising the possibility of future generations to meet theirs"...) ¹².

However, from all the above statements, one can consider that SAIs in the year 1995 of the last century recognize it as a tool of environmental management, although other accounting studies consider their genesis linked to accounting and social auditing, related to the implementation of CSR in the management forms¹³.

The emergence of environmental audit as a management tool for SAIs, linked to the principles and legal norms of environmental law, regulated by the States in special legal rules aiming at their uniformity, in issues such as environmental responsibility, quantification of environmental damage and corporate social-environmental-responsibility are elements that, in this author's view, have allowed evolution over time. This, in relation to the country that applies them and to the industrial technological development of the country because of its relevance in the political, social and economic level. The addition of the new technological items, linked to world trade, makes environmental audits more complex, comprehensive and dynamic on the part of the subjects that implement it. Therefore, techniques, methods and objectives of the audit as an oversight activity have been increasing, in order to be meet the new demands of the market of goods and services, where environment friendly companies¹⁴ appear as a viable solution to achieve balance between progress and environmental protection. The company thus classified, acquires intrinsic added value within the business ethics, this will allow them to incorporate it as a requirement to achieve the binomial culture and social responsibility¹⁵, position supported by FERNÁNDEZ DE GATTA SÁNCHEZ, DIEZ, MUÑOZ-MARTIN and VEGA CENTENO.

Similarly, the practice of this type of audit is seen as an oversight activity and, at the same time, as a technical management tool. , It is widely used by the SAIs. All this evolution in audit, materialized in correspondence to the geographic areas where it is applied, relates to the level of technological development of each enterprise and industry. This author agrees with this position, considering the link appreciated from the social and the technical sciences, because of their crosscutting and interdisciplinary nature. These audits, promoted by various agents ranging from governments to international organizations, related to this type of environmental oversight and which directly or indirectly have been triggered as of the publication of ISO 14000, 19011 voluntary standards and the EMAS¹⁶.

With regard to what was pointed out so far, the modern expression of environmental audit, linked to its history and evolution analyzed by this author is considered the evaluation tool of the environmental management system. It is the key mechanism for obtaining information on the effectiveness of management of the companies, it identifies the problems associated with work related to safety and work environment, in order to determine the new environmental challenges, it proposes at the same time measures of prevention and mitigation, complemented with environmental accounting review, elements with which the author agrees.

It is clear that the 21st century environmental problems could not be analyzed or understood without taking into account the global perspective that explains its roots because of multiple factors such as the effects of the ecological world crisis. Among them: the rising temperatures, the hole in the ozone layer, desertification, the accumulation of radioactive waste, the spread of diseases as cancer and malaria, the insalubrity of freshwater, food insecurity, urban pollution and depletion of renewable and non-renewable resources. These issues are considered by this author, linked directly or indirectly with the legal institution investigated because they are related to environmental problems occurring today and this environmental oversight activity is not being applied in their majority of the SAIs¹⁷.

The SAI, as an international controller of this environmental oversight activity, establishes guidelines to identify it: ... such as the technical management tool for the systematic, documented, periodic and objective evaluation of the effectiveness of the audited organization; for the management and envi-

ronmental teams in order to protect the environment with better control of environmental practices and their assessment. To accomplish the environmental policies and the legal regulations established by the company, as of the institutionalization of its environmental protection...¹⁸

ISO 14001 and 19011 standards define it as: "...a systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled..."¹⁹ Regarding that, this author acknowledges similar names supported by authors, based on the *ius* environmentalist doctrine, such as: eco-audit, environmental review, environmental control, environmental assessment and environmental monitoring. All of them have the same meaning and purpose: to know the levels of contamination of a company when using clean technologies, to obtain environmental certification, concepts which this author agrees with, by pursuing the same aim²⁰.

In this area, all the doctrinal criteria, concepts and legal regulations consulted by this author, characterize this type of audit as: ...generalized by encompassing the EMS, of environmental review, punctual, of compliance, of claims, of risks, of acquisition, of safety and health, of compliance with the law and resources. These criteria take into account the scenario to be audited where it is going to be practiced, classified as: interior environment and external environment.

Its goal, to assess the environmental impact of business management on the environment and to propose corrective actions to mitigate the negative effects identified. It is concluded with the delivery of the environmental certification of non-polluting – environment-friendly to the company or industry -.²¹ In this regard, it will allow businessmen to obtain benefits in terms of competition in the trade, with added value by getting the environmental label, after applying environmental conduct codes with the good environmental practices as environment-friendly companies, by gaining a proper business ethics, position defended by authors such as MARTÍN MATEO, LORENZETTI and LOZANO CUTANDA.²²

As a tool of business management, in the countries of the European Union, Latin America and the Caribbean, it has been determined that the environmental audit is capable of evaluating and laying the foundation for an environmental policy aimed at businessmen in the forms of State and non-State management. Its purpose is to analyze environmental risks that could arise

when performing its activity and to assess environmental impacts. Among other characteristics analyzed, it is agreed that this type of audit is compulsory according to how it is regulated by the legislation, with the implementation of ISO 14000, 19011 and the EMAS, as well as agreements and conventions of the SAIs who develop this assessment at global level. At the same time, there are those requested on a voluntary basis, the most required one being majority the non-State management in other geographical environments.

In its execution, it combines the main objective of the company: to obtain economic benefits attached to environmental protection in order to tax economic development in a way that is compatible with environmental conservation, thereby achieving a balance between both (the SAI, the American Accounting Association and the UNEP).²³ In this regard,, the link between this environmental oversight activity and the economic and environmental accounting concepts established by the UNEP²⁴ is analyzed. This is needed so that an audit team may perform it through an audit program, which enables evaluation of the financial budget for environmental protection and its certification. That is why in the legal systems its tutelage is established in environment organic laws, in oversight laws and special environmental audit laws in relation to the Ibero-American countries contrasted in this research. It is linked in its practice to other environmental management tools already established, such as corporate social responsibility, environmental responsibility and other economic and technological instruments that are applied in its execution, with the reengineering of processes, making it more complex and complete.

2. THE PRINCIPLES OF ENVIRONMENTAL LAW THAT INFORM ENVIRONMENTAL AUDIT

As an environmental management tool, this author agrees with the view that links it to the principles of environmental law whenever, with the passing of time, other elements are incorporated to this type of audit, making its application and practice by the audit team that runs it more complex. With regard to this statement, the set of legal principles that are related to environmental audit are:

The public auditing function continues being a preventive action -being systematically used by the company. It facilitates compliance with environmental

legislation and the elimination or reduction of damage. It is compatible with the principle of prevention every time it operates with the known or the actual risk.

With the precautionary principle, the implementation of ISO 26000, allows businesspersons to execute actions to conform an environment-friendly company, in face of possible occurrence of future or uncertain damages, operating on the risk of development, as a goal towards sustainable development facing possible risks to the company or industry, when new technologies are introduced.

The link with the principle of cooperation is important -any time the SAIs cooperate with each other in the implementation of environmental audits and other types of audits, as is the case of cooperated management audits, performed to oversee the use of water, water basins and rivers.

Another link that stands out is with the principle that determines that polluters pay. This contribution is made by environmental taxation by companies and industries, aimed at repairing the environmental damage that occurred.

With the principle of environmental responsibility, -obedience to environmental legislation as part of the policies drawn up by the public administration-, with the due observance by the audited subjects, which is required in its three angles.

It is also linked with the principle of citizen participation every time it urges citizens to comply with environmental regulations aimed at environmental protection, as a public good for generations today and in the future.

Other principles are those of intergenerational equity and environmental sustainability, where the three dimensions (social, economic and environmental) are combined through a formula that allows having a suitable environment for future generations.

With the principle of irreversibility and progressivity. In view of the importance that the protection of the environment has, enriching the legal principles enshrined in environmental summits, which enables the audited organization to recognize its status regarding actions to protect the environment and the principle of progressivity, which is translated as the evolution maintained on environmental protection by the audited organization.

All these principles play a role of interpretation, application of the rules, integration. They cover legislative gaps and, at the same time, they serve to renew the legislation, accredited as the basis for environmen-

tal law, pointed out by authors such as CAFERRATA, LORENZETTI, BELLOTTI and MARTÍN MATEO²⁵.

Since the SAI has its tutelage, its practice is linked to other management tools and environmental corporate social responsibility. It has been evolving with the application of other instruments that have been incorporated to it since the last century, such as regulations and tools among which the financial environmental insurance coverage, the application of tax incentives, environmental taxation, the clean technologies and the objective responsibility in relation to the principles of environmental law and auditing function stand out.²⁶

From the legal plane, this author analyses the criteria of legal experts dedicated to the study of this branch of the law, such as LOZANO CUTANDA, FERNANDEZ DE GATTA SÁNCHEZ and SANZ LARRUGA,²⁷. They all agree that environmental law as a new creation law in doctrinal and policy matters, is dynamic and variable, related to other branches of law and other fields of knowledge because of its cross-cutting nature,. This author adopts this point of view because it is present in the practice of the auditing activity²⁸.



In this regard, other authors from the legal sciences field in Latin America and the Caribbean²⁹, such as BOTASSI and DE BESA ANTUNES, consider that this branch of environmental law has come to resolve the issue of contamination by demanding environmental responsibility. It was regulated in laws such as environmental crime, environmental responsibility, forest protection, environmental pollution and environmental auditing, related to environmental damage and its accounting quantification; with tax incentives, environmental taxation and financial coverage by the environmental insurance. They recognize their bond with other branches of legal sciences and other sciences such as ecology, accounting, sociology, psychology, history and economy.

In this type of oversight, the ones that have advantages in its application are those, which are founded on the environmental law principles of precaution and prevention, with proper self-control in the audited organization. This allows them to promote proper environmental internal management within the forms of management, to address strategically the productive activity aiming at more efficient and competitive forms. It also allows them to implement the EMS, the use of non-polluting clean technologies, the use of environmental accounting to control the use of the budget, obedience to the law. All of this together allows them to access financial coverage with the environmental insurance with an environment company responsible for actions that present risks to the environment and thus mend the damage caused. Its limitations are identified with technological obsolescence, the high costs of clean technologies, industrial heterogeneity and the fact that this action of environmental oversight is not compulsory to non-State management forms.

The following are considered negative causes to companies that pollute the environment, the costs of the audit contract, and high values of clean technologies, which will not allow employers to get the environmental certification incompatible with sustainable development for not being appropriately aware of environmental issues and how to promote positive actions to solve and mitigate them. The rationale for carrying out this activity of environment oversight, in this author's opinion, will lie on the importance of being the activity being practiced by the businesspersons in their companies, having adequate systematic internal control, in response to environmental issues as part of the environmental policy. One should also

consider corporate responsibility in environmental matters in order to provide appropriate responses to the conventions and agreements established by the SAI on accounting, auditing and environmental auditing, introduced in the internal rights. This is, linked to environmental agreements of the commercial blocks UNASUR, MERCOSUR, ALBA-TCP, CELAC, EU and environmental treaties such as the Agenda 21, the Montreal Protocol -ozone layer- and the Convention on biological diversity. Its effects, to achieve environment-friendly companies. This author believes that businessmen will have to implement strategies to reduce levels of pollution, save energy, use clean technologies, save raw materials, recycle, apply business reengineering techniques and form strategic alliances; where environmental auditing plays a privileged role, not used by most of these.

3. THE ROLE OF THE SAIS IN ENVIRONMENTAL OVERSIGHT

This type of audit is performed depending on the conditions that frame it, the specific objectives that motivate it and the level of development that the business organization to be audited possess. It shares a common goal: to deliver documented and validated information about different aspects of the environmental situation of the audited entity by identifying the associated risks and impacts, the examination and assessment of existing practices to improve environmental performance. It allows verification of obedience to legislation and environmental standards of relevance.³⁰

Energy and natural resources reforms carried out in Latin America and the Caribbean in sectors of economy, health, citizenship and environment contribute to the implementation of sustainable policies. They will allow the auditor to know the degree of economy, efficiency and effectiveness as well as the quality and impact on planning, the control and the use of natural resources, the level of environmental conservation and protection, as fundamental characteristics in the whole process of planning and practicing environmental control, allowing financial coverage by the environmental insurance, in the words of authors such as VIGURI PEREA, CABEZA ARES and LORENZETTI.³¹

In this public sector, other types of audits are practiced such as financial audit, management audit and compliance audit, carried out by the SAI. They address in their programs issues related to environmental protection, natural resources and sustainable

development, related to the public control that public administration executes.

The multidimensionality of environmental audit, being integrated as a systemic process, procedure, management tool and administrative activity, allows a combination of efforts of professionals in the role of auditors, lawyers, engineers, or scientists. In all this legal scenario, it is confirmed that to achieve environment-friendly companies, it will be necessary to accomplish the policies, principles and regulations that from environmental law and other disciplines, knowledge and science relate to the practice of environmental auditing; essentially regulated by the INTOSAI, in regional and internal systems combined with public policies on environmental matters.

In this regard, scientific papers on law by FERNÁNDEZ DE GATTA SÁNCHEZ, SANZ RUBIALS, LOZANO CUTANDA and MARTÍN MATEO address how this type of audit has been treated within the legal systems of Latin America, recognized as a tool of environmental management.³² The treatment in macro environmental laws and in environmental public audit laws, agree to regulate it among the modes of action of the public administration, as an oversight activity, limitation, management or police, providing public service and development, strict liability is required through prosecutor's offices specialized in environmental issues.

Due to the very effects of this legal instrument, it is considered that support is given by promoting the development of environmental economy through more competitive industries in more demanding environmental markets, such as designed in the European Union, when applying the EMAS standards to the industry, identified by authors like BETANCORT RODRÍGUEZ, FERNÁNDEZ DE GATTA SÁNCHEZ and MORA RUIZ.³³ However, it means that the essence of all these administrative activities analyzed converges to permanent environmental oversight and environmental. However, they cannot be separated from the economic dynamics and the formula I+D+C. This due to sustainable development, which is contextualized in the international market of goods and services, where audit institutions represented at the global and regional level by INTOSAI through environmental oversight play a significant role in achieving the balance between progress and environmental protection for future generations.

The normative regulation coincides. The same part of the protection of the environmental legal right

in the constitutional text regulates the internal rights in general laws of environmental management, of comptroller and special laws governing exclusively the practice of environmental auditing; all contribute to achieve sustainable development, by acknowledgment in the *ius* administrative and the *ius* environmentalist doctrine and norms. They show the situation of participatory democracy, from the new constitutionalism of the region of Latin America and the Caribbean, with exponents in the constitutional texts of countries like Ecuador, Venezuela and Bolivia, who deal with the environmental issue more rigorously in their articulations.

In the European Union, the 7th assessment of the development of environmental law carried out by Martín Mateo, Fernández de Gatta Sánchez and Nogueira López, includes in its results the practice of this type of audit.³⁴ They agree that protection of the environmental legal right materializes itself based on the constitutional text, in environmental framework laws, public auditing laws, and environmental codes. As a whole, they provide a stable core at the normative level, they provide strength and support for further development of environmental public policies, and incorporate the concepts of economics and environmental accounting, evaluated with the environmental audit by the EUROSAL.

The main current and future challenges for environmental audit are pointed out in the report from the 14th International Congress of the INTOSAI.³⁵ The current challenges are creating an environmental database at every level - local, regional and international - every time there are new environmental problems and political affairs; sustainability as a central dimension, which is difficult to deal with by subjects; environmental problems and their reduction evolve with time; it is a challenge to materially link environmental issues and State finances; the cost-benefit analysis of the long-term benefits of the environmental commitments - crucial element and difficult for businessmen to cater to; environmental issues - multinational and interdisciplinary; field work requires skills and specific knowledge to carry out environmental audit.

Thus, in the future, environmental audit will address more complex, global environmental issues, to the extent that the effects of climate change become more evident. Therefore, it will be necessary to increase the number of environmental auditors and train them. It will also be necessary to plan audits and choose the topics and approaches with a

wide range of options. There will be the need to raise awareness among the public and politicians regarding environmental audit and its relevance that allows this type of audit to adapt itself to fluctuations in the environmental policy decisions of the public administration. There will be a need to determine to what extent the environmental issues are treated and their level of relevance. This will allow maintaining the integrity and professionalism in the fight against the politicization of environmental problems that currently affect the planet and that have not been given a proper solution for the most polluting nations in this 21st century.

In this regard, the era of globalization and green economy and taking into account the future role environmental audit will have as value-added in the field of environmental protection; it will be appropriate to resort to the definitions agreed on at the meetings from Stockholm to Rio de Janeiro, related to sustainable development and climate change. Green economy, globalization, energy reform - fuels and electricity-, mitigation and adaptability to climate change, plans, programs and projects of public works, represent the actions of mankind in the built environment; its execution must be sustainable, certifiable, verifiable, recognized with the implementation of environmental audit as key evaluation. The most important thing is that the social sector (the academy, the government and the society) cares, monitors, and protects the legal framework - local and international - with environment-friendly companies, enabling the use of the formula I+D+I, by saying that green sells.

4. CONCLUSIONS

Environmental audit emerged due to corporate pollution and its confrontation by the State. Its genesis was social audit. Subsequently, it consolidated itself as an oversight action carried out by Supreme Audit Institutions and Mercantile Societies. It acquired a legal structure as of its recognition in international conventions and agreements and is introduced into the internal rights by constitutional texts, comptroller and environmental laws. These provide strength and support for the development of environmental policies as a tool of environmental management. Environmental audit can be voluntary or mandatory and it can manifest itself as a police activity, a public service or a promotion activity according to its execution and consequences.

Environmental audit has a multidimensional, comprehensive and transdisciplinary character. Its purpose is the evaluation of the environmental management of the company and the certification of clean productions. In order to perform them, the audited entities have to implement environmental accounting and the treatment of the wastewater from the production of the company. It is a process composed by phases (preparation-execution-conclusion) whose fundamental procedure is regulated in the ISO and the EMAS standards.

The fundamental inadequacies detected regarding the legal regulation of environmental audit in Cuba, focus on the lack of scientific legal treatment. There is no program for this type of audit. Environmental accounting is not applied and there is incoherence by the norm that regulates State audit, lack of recognition in the Environment Act and in the regulations of corporate law, technological obsolescence, industrial heterogeneity and deficiencies in the regulation of environmental responsibility.

Regarding its execution, environmental audit is related to the principles of environmental law. This allows it to be informed in its execution as a process and procedure, to assess the environmental management of the audited subjects in the State and non-State management forms.

REFERENCES

ANTUNEZ SANCHEZ, Alcides Francisco, *"La praxis de la auditoría como función pública, dirigida a la protección del bien público ambiental para la empresa ecológica"* en, Revista electrónica Actualidad Jurídica Ambiental, España, 2014, <http://www.actualidadjuridicaambiental.com>

ANTUNEZ SANCHEZ, Alcides Francisco, *"Disquisiciones teóricas, doctrinales y exegéticas sobre la praxis de la auditoría como función pública, dirigida a la protección del bien público ambiental para la empresa ecológica"* en, Revista Dos Tribunais Thomsonreuters, número 951, Brasil, 2015, <http://www.thomsonreuters.com>

ARROYO JIMÉNEZ, Luis, *Libre empresa y títulos habilitantes*, Centro de Estudios Políticos y Constitucionales, Madrid, España, 2004.

AUDIVERTII ARAU, Ramón, *Régimen jurídico de la etiqueta ecológica*, Editorial Cedecs, España, 1997.

BELLOTTI, María, *El principio de precaución ambiental*, Editorial Lerner S.R.L., Argentina, 2006.

BELLORIO CLABOT, Dino, "El nuevo paradigma ambiental y jurídico" en, *Revista Iberoamericana de Derecho Ambiental y Recursos Naturales*, España, 2013.

CAFERRATA, Néstor Alfredo, "Teoría de los principios del Derecho Ambiental" en, *Revista Abeledo Perrot S.A.*, Argentina, 2009.

DEMALDÉ, Cristina, *El principio de precaución en el daño ambiental*, Universidad Nacional Autónoma de México, México D.F., 2011.

DRNAS DE CLÉMENT, Zlata, "Elementos esenciales del principio de precaución ambiental" en, *Anuario del CIJS*, Argentina, 2007.

JAQUENOD DE ZÖGÖN, Silvia, *El Derecho Ambiental y sus principios rectores*, Editorial Dikinson, España, 1991.

LORENZETTI, Ricardo, *Teoría del Derecho Ambiental*, 1era edición, Editorial Porrúa, México, 2008.

LOZANO CUTANDA, Blanca, *Manual de Derecho Ambiental Administrativo*, 3era edición, Editorial Dykinson, España, 2003.

MARTÍN MATEO, Ramón, *Tratado de Derecho Ambiental*, volumen I, 1ra edición, Editorial Trivium S.A., España, 1991.

MARTÍN MATEO, Ramón, "La ecoauditoría" en, *Boletín de Estudios Económicos*, número 150, España, 1993.

MORA RUIZ, Manuela, "Tendencias del Derecho Administrativo. El Derecho Administrativo Ambiental: transformaciones en el Derecho Administrativo general" en, *Revista Derecho y Conocimiento*, España, 2012.

SANZ LARRUGA, Francisco, *El concepto de responsabilidad compartida y el principio de subsidiariedad en el Derecho Ambiental*, Editorial Instituto de Estudios de la Administración Local, España, 2009.

NOTES

1 LORENZETTI, Ricardo, *Teoría del Derecho Ambiental*, responsabilidad de la Administración y el ciudadano en la

protección ambiental con la auditoría, 1era edición, Editorial Porrúa S.A., México D.F., 2008, pp.1-37.

2 RODRÍGUEZ CÓRDOVA, Roberto, "Manual de gestión ambiental de las empresas" en, *Revista Economía Agrícola*, Nicaragua, 2008, pp.1-177.

3 SANZ LARRUGA, Francisco, *Sostenibilidad ambiental y Derecho Administrativo: ¿nuevo remedio ante la crisis económica o una exigencia constitucional? A propósito de la nueva Ley de Economía Sostenible*, VI Congreso de la Asociación de profesores de Derecho Administrativo, Palma de Mallorca, España, 2011.

4 LOZANO CUTANDA, Blanca, *Manual de Derecho Administrativo Ambiental*, antecedentes del *Ius ambientus*, reconocido en el *Ius commune*; ante los problemas de salubridad ambiental y los agentes contaminadores industriales, permitió crear normas de control ambiental y dictar límites a las actividades insalubres, 3era edición, Editorial Dykinson, España, 2003, pp.2934.

5 MENDEZ GUTIERREZ DEL VALLE, Ricardo, "Teoría de las revoluciones industriales", tres son revoluciones, la primera en la industria metalúrgica y textil, la segunda con el motor de explosión-explosivos químicos, la industria del automóvil, la industria siderúrgica y la producción de aparatos eléctricos, la tercera con la biotecnología, la microelectrónica y la informática -1800-2007- en, *Revista del Ministerio de Fomento*, España, 2009, pp.7-29.

6 PNUMA-ONU, *Plataforma para una industria ecológica a nivel mundial*, políticas y prácticas, eficiencia en el uso de recursos naturales, energéticos y las energías renovables, facilidades financieras en la industria amigable con el ambiente, la transferencia de tecnologías y el fomento de industrias no contaminadoras, Estados Unidos de América, 2012, pp.17-45.

7 ELSTEIN, Steven, "El alcance global como órgano público de las EFS", enfoque local de los gobiernos en la protección ambiental en 192 países, por Contralorías, Tribunales de Cuentas, Oficinas de auditoría y Oficinas de gobierno contables para controlar los recursos públicos, mutando desde finales del siglo XX al control ambiental en, *Revista de Auditoría Gubernamental*, INTOSAI-ECOSOC-ONU, Estados Unidos de América, 2012, p.15.

8 BASURTO GONZÁLEZ, Daniel, "Responsabilidad social y ambiental en las empresas", gestión de calidad, medio ambiente, prevención de los riesgos laborales, competitividad

- empresarial y certificación ambiental en, Revista Política y Gestión Empresarial, México D.F., 2012, pp.33-39.
- 9 PNUMA-SEMARNAT, Economía ambiental: lecciones de América Latina, México D.F., 2010, pp.7-303.
 - 10 LÓPEZ HERNÁNDEZ, Antonio, "Normas profesionales de la INTOSAI: directrices de auditoría" en, Revista Auditoría Pública, número 61, Granada, España, 2013, pp.6-19
 - 11 MURAD ROBLES, Pedro, La auditoría ambiental voluntaria, concepto, antecedentes, fundamentación jurídica y evaluación, ejecutada a solicitud del empresariado de manera voluntaria, Editorial Porrúa, México D.F., 2009, pp.263-303.
 - 12 HARLEM BURLAND, Gro, recibió el encargo de presentar el informe nuestro futuro común por las Naciones Unidas, ONU, Estados Unidos de América, 1984, pp.1-33.
 - 13 PAEZ SANDUBETE, José, Contabilidad, auditoría y medio ambiente, II Reunión sobre contabilidad, auditoría social y medio ambiente, Valencia, España, 1999.
 - 14 Norma ISO 26000:2010. Guía sobre responsabilidad social, provee a la empresa, al gobierno y la sociedad de herramientas en tres dimensiones del desarrollo sostenible: económica, ambiental y social, Suiza, pp.1-8, <http://www.iso.org>.
 - 15 FERNÁNDEZ DE GATTA, Dionisio, "La responsabilidad social corporativa en materia ambiental. Estado de la cuestión", instrumento de protección ambiental voluntario en la Unión Europea en, Boletín Económico, número 2824, España, 2011, pp.-18.
 - 16 Norma ISO 14001:1998, Sistemas de gestión ambiental. Especificación y directrices para su uso, patrones de calidad voluntarios, certifican a la empresa el sector comercial, industrial y tecnológico, Suiza, 1998.
 - 17 ARNER GUERRE, Ángel, Responsabilización voluntaria de la industria en la protección medio ambiental, implementa el sistema de gestión para mitigar la contaminación en, Libro Verde, Editorial Lex S.A., España, 2013, pp.123-342.
 - 18 ANTÚNEZ SÁNCHEZ, Alcides Francisco, "La auditoría ecológica, un instrumento en la gestión ambiental", herramienta evaluadora de la contaminación empresarial en, Revista electrónica de Derecho Ambiental Medio Ambiente&Derecho, número 21, España, 2011, <http://huespedes.cica.es/gimadus>.
 - 19 Normas ISO 19011, La auditoría ambiental y los sistemas de gestión, Suiza, 1998.
 - 20 BELMONTE MARTIN, Ismael, "La ecoauditoría: instrumento para la defensa del medio ambiente" en, Revista electrónica de la Facultad de Ciencias Jurídicas y Sociales de Elche, España, 2010.
 - 21 VIÑA VIZCAÍNO, Gustavo, "Bases conceptuales de la auditoría ambiental como un instrumento en la prevención de la contaminación", contabilidad ambiental en, Revista de Contabilidad, Colombia, 2003, pp.47-67.
 - 22 MARTÍN MATEO, Ramón, El etiquetado ecológico, nuevo instrumento para la tutela ambiental, Editorial Trivium, España, 1994, pp.19-57; LOZANO CUTANDA, Blanca, "La nueva etiqueta ecológica de la Unión Europea" en, Revista de Gestión Ambiental, número 7, España, 2001, p.5.
 - 23 INZUNZA, Georgina, Hacia la empresa ecológica. Afrontamos el próximo gran reto del siglo XXI, La industria ecológica y el desarrollo sostenible, Editorial PEMEX, México D.F., 2009, pp.17-46.
 - 24 NAESS, Arne, "Los movimientos de la ecología superficial y la ecología profunda: un resumen", caracteriza los síntomas y las causas culturales de la crisis ambiental, crítica los supuestos metafísicos, sistemas políticos, estilos de vida y valores éticos de la sociedad industrial en, Revista Ambiente y Desarrollo, Chile, 2007, pp.98-101.
 - 25 CAFERRATA, Néstor Alfredo, Principios del Derecho Ambiental, elementos claves en el control ambiental a través de la auditoría, Editorial Abeledo Perrot S.A., Argentina, 2010, pp.7-69.
 - 26 PÁEZ SANDUBETE, José María, "La auditoría medio ambiental en la Unión Europea, una perspectiva contable", desde las ciencias contables, señalan sus beneficios, limitantes y consecuencias negativas en, Revista Contable, España, 2008, p.9.
 - 27 LOZANO CUTANDA, Blanca, "Actualidad del Derecho Ambiental comunitario", la auditoría ambiental, nexos con el Derecho Ambiental en, Revista de Derecho Administrativo Económico, número 20, Brasil, 2009, pp.1-20.
 - 28 OJEDA MESTRE, Ramón, "El nuevo Derecho Ambiental", caro, complejo, moderno, cientificista, multidisciplinario, de expertos, preventivo y correctivo, indexado al desarrollo

económico, trasversal en, Revista de la Universidad de Cuauhtémoc, número 8, México D.F., 2012, pp.1-20.

- 29 TAS, Joycemara, "Auditoría externa ambiental como instrumento en la defensa del medio ambiente", desde las ciencias jurídicas son reconocidos los aportes para la protección ambiental en, Revista de Jure, número 20, Brasil, 2013, pp.293-309.
- 30 PADIN, María, "La auditoría ambiental y las normas ISO 14000", responsabilidad ambiental empresarial en, Revista Foro de Contabilidad Ambiental y Social, número 5, Argentina, 2011, p.37.
- 31 VIGURI PEREA Alberto, "La responsabilidad en materia medio ambiental", seguro ambiental y auditoría ambiental en, Revista Española de Seguros, número 5, España, 2010, p.53.
- 32 CARMONA LARA, María, "Derecho Ambiental", posiciones jurídicas permiten conocer el método aplicado a la auditoría ambiental, tutelada en los ordenamientos jurídicos desde el Derecho Administrativo hacia el Derecho Administrativo Ambiental en, Revista de Derecho UNAM, México D.F., p.12.
- 33 FERNÁNDEZ DE GATTA SÁNCHEZ, Dionisio, "El séptimo programa ambiental de la Unión Europea", 2013-2020, la observancia de las herramientas de gestión y el cumplimiento de las políticas ambientales de la Unión por su repercusión global en, Revista Aragonesa de Administración Pública, número 41-42, España, 2013, pp.71-121.
- 34 FERNÁNDEZ DE GATTA SÁNCHEZ, Dionisio, consenso desde posiciones jurídicas en la Unión Europea para aplicar las herramientas de gestión y en especial la auditoría ambiental para construir empresas amigables con el ambiente en, Documento TOL 1.436.850, España, 2010, pp.1-58.
- 35 INTOSAI-ONU, "Los retos presentes y futuros de la auditoría ambiental en el mundo" en, Revista Internacional de Auditoría Gubernamental, Viena, Austria, 2012, pp.22-23; LUSTOSA DA COSTA, Carlos, "Las auditorías coordinadas y sus contribuciones para los Estados Federales: la experiencia de la auditoría en la Amazonia" en, Revista OLACEFS, número 15, Brasil, 2014, pp.43-46.

Audit Methodology Focused on Process and Risk



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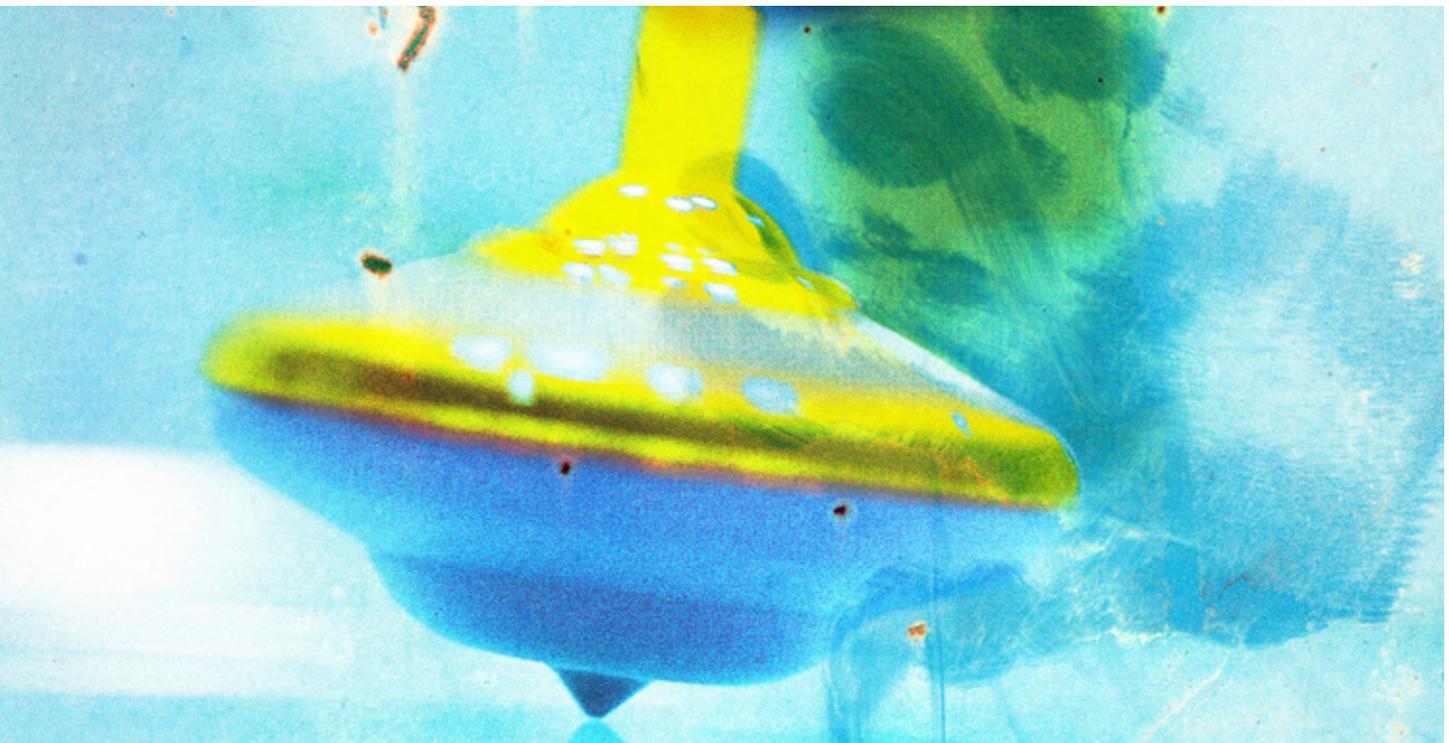
ABSTRACT

This article presents the general points of audit methodology aimed at the evaluation of risks and controls with focus on work processes, end activity or aid processes, which support the monitored object by means of the application of procedures and techniques to map out the processes involved, its objectives, risks and associated controls. The presented method possesses flexibility for the application in internal and external control audits and has the potential of contributing to the improvement of governance, regarding the component related to risk management and internal controls and, consequently, to achieve the objectives of the organization or of public policies.

Keywords: External Control. Public Governance. Audit Methodology. Risk Management. Internal Control.

1. THEORETICAL FOUNDATIONS

Risk management represents a continuing process conducted by the senior management, heads of departments and other employees, applied in establishing strategies formulated to identify, throughout the organization, events potentially capable of affecting it, and manage the risks in order to keep them compatible with the institution's appetite for risk



while providing reasonable assurance of achieving its goals (COSO, 2004).

Risk is the effect of uncertainty on the organization's objectives (ABNT, 2009). It includes positive events with the potential to add value, and negative ones, with the ability to destroy value. The challenge facing the governance of organizations from the public sector is to determine how much risk they are willing to take in the search for the best value for the citizens and other stakeholders, which means providing services of public interest in the best way possible (BRASIL, 2014). The internal controls, however, are tools of the organization's risk management process and act in the mitigation of undesirable events.

It is in this context that an objective methodology is proposed, applicable to monitoring tasks of internal and external control of the Public Administration. As it is seen below, it is also applicable in private institutions without significant alterations, given the versatility of the auditing tools, although it is not the focus of this article.

The method presupposes the creation of risk matrices to evaluate the probabilities and impacts in relation to the stages of implementation of any management process, of which can be said to be large activity groups by which the organization fulfills its mission (BRASIL, 2013).

The core business processes are of big interest to the internal and external controls, since they refer to

the essence of the organization, characterize its performance, are directly related to its strategic objectives and are supported by other internal processes, generating products and services for internal and external clients (BRASIL, 2013).

As a result of the application of techniques and procedures, we obtain a qualitative and quantitative assessment of the risk management of an organization or public policy. The differential of the methodology is the capacity of objectifying the results, as I will explain later.

In Brazil, there are few agencies or public institutions which have formally established risk management policies or practices. This gap makes the application of the methodology even more fruitful and educational, since it allows for pointing out the unconscious and informal risk management practices. Even if the institutions have not formally established risk management policies, they possess risk response elements (internal controls) that, when identified and evaluated, as proposed by the methodology, can be improved, thus contributing to the advancement of governance and the achievement of organizational objectives.

2. GENERAL AUDITING STANDARDS AND APPLIED CONCEPTS

The Auditing Standards of the Federal Court of Accounts of Brazil (TCU) – NAT (BRASIL, 2010) and the International Standards for the Professional Practice of In-

ternal Auditing (IIA, 2012) recommend the establishment of objectives for each audit work. According to these guidelines, a preliminary evaluation of objectives and relevant risks related to the audit object should be made, where the results should reflect the objectives established for the audit. In the development of the objectives one should consider, beyond the significant exposures to risk, the probability of errors, irregularities and breaches of principle, legal norms and applicable regulations.

In the planning phase, to determine the extent and scope of the audit, the auditor or audit unit should provide information on the objectives related to the subject being audited and the relevant risks associated with these objectives, as well as the reliability of controls to address the undesirable events.

When in the audit, if the information concerning the objectives, risks and controls of the audited object is not available, this information should be obtained in the planning phase of the work. The need and depth of the procedures for obtaining this data vary according to the objectives and the scope of the audit in question.

If the object and the scope of work are broad, the convenience of conducting prior and specific control action should be evaluated to obtain knowledge of the audited object, and its results should be considered in the planning and implementation of audit procedures focused on risks.

The proposed methodology enables the assessment of risks and controls and has the ERM model (Enterprise Risk Management) as a reference, from the Committee of Sponsoring Organizations of the Treadway Commission (COSO), a private organization established in the US in 1985 to avoid scams in financial statements of companies. The model considers that risk management institutions should be evaluated according to eight components (dimensions) that are intrinsic (COSO, 2004).

Along these lines, this methodology aims to evaluate the five core elements of the model, which can be translated into questions that pedagogically facilitate the understanding of the points:

- a. **Setting Objectives:** has the unit set goals for the process or for public policy?
- b. **Event Identification:** which events may present a risk to the objectives of the process or public policy?
- c. **Risk Assessment:** what is the significance of the identified risks in terms of likelihood and impact of occurrence?

d. **Addressing the Risks:** has the organization implemented controls in response to the identified risks?

e. **Control Activities:** What is the quality of the established internal controls and to what extent do they ensure that the related risks will be mitigated to an acceptable level?

The choice of only five elements of the ERM model does not take away or reduce the importance of the others (control environment, information and communication, monitoring). Possible extension of the methodology allows the auditor to easily evaluate the other components of the model.

With respect to concepts applied to the methodology, one has the following:

- **Risk:** possibility of something happening and having an impact on the objectives of organizations, programs or government activities, being measured in terms of consequences and probabilities (BRAZIL, 2012a).

The risk event, therefore, materializes the risk, a negative consequence for the achievement of the institutional goals. In practice, the terms “risk event” and “risk” can be treated as synonyms.

- **Objective:** ‘something’ that was established to be achieved, of quantitative or qualitative character (BRAZIL, 2012b).
- **Internal control:** process fulfilled by management and the entire workforce, integrated into the management process in all areas and all levels of public agencies and entities, structured to address risks and provide reasonable assurance that, in achieving the mission, the objectives and institutional goals, the constitutional principles of public administration and the general control objectives are met (BRAZIL, 2012a). In short, internal controls represent a form of treatment (response) for risks, which are adopted to ensure, reasonably, that organizational goals are achieved.

Internal controls, therefore, represent governance tools available to managers, since they converge towards achieving the goals of the institutions and their programs.

- **Risk Source:** is the element that, individually or combined, has intrinsic potential to give rise to the risk and can be tangible or intangible (ABNT, 2009).

In other words, the sources of risk are all subjects, objects or situations that may cause a negative event. They are classified into six categories: people, processes, systems, infrastructure (physical or organizational) technology or even external events.

The risks are assessed in two dimensions, one before and one after the application of controls, as follows (BRAZIL, 2009):

- **Inherent risk:** the risk of the business, process or activity, regardless of the adopted administrative internal controls.
- **Residual risk** is the risk that remains after mitigation by internal controls.

Therefore, the residual risk is the inherent risk that remains after the implementation of administrative activities to reduce the probability and/or impact of the event in order to avoid, reduce, share or even accept the risk.

3. PROCEDURES

After understanding the basic conceptual framework, follows the exposure of procedures and techniques used in the construction of the scenario on the risk management of organizations and their sub-areas. The operational part is divided into four stages for better understanding.

3.1 IDENTIFICATION AND RECORD OF GOALS AND WORK PROCESSES (OVERVIEW)

At this stage, we must gather and understand the rules applicable to the object, the bylaws of the organization, previous work of internal and external control agencies on the subject, academic or technical articles, and other available information.

One should then identify the objectives of each activity and/or public policy to be audited as well as understand and record the stages of the work process that makes up the administrative activity, developed to achieve the established objectives. As an example, in the case of the process of decentralization of Union resourc-

es to other public or private entities through voluntary transfers of resources, one could divide the process into the following steps: a) reason for the transfer; b) selection of the decentralization recipient; a) conclusion of the adjustment; b) implementation monitoring; and c) analysis of accountability.

Then, to build detailed view of the object and the risk management, it should be required of the institution (i) information on strategic planning (or similar) and/or on the insertion of the audited in the strategic planning of the agency or unit; (ii) flow charts and narratives of the work process (textual description of activities); (iii) applicable internal regulations and relationship areas responsible for managing the object.

After passing the initial understanding phase of the audit, it goes to interviews with managers and operators of the processes or activities, in order to increase knowledge about the aims and implementation of activities in each step of the work process.

Meetings should be performed by applying interview techniques. In some cases, the team can deepen their vision of the object or confirm information through the review of process documents and related administrative acts. The obtained data should be used in the preparation of the following documents, which form the general view of the object:

- Flowchart:** document that provides a graphical representation of the work process, showing the sequence of activities, deadlines and the flow of documents between the areas involved.

It is noteworthy that the flowcharts should, as far as possible, be developed and, together with the responsible managers, adjusted and validated by date-stamping and signing, to avoid future questions.

- Narrative of the work process:** document describing, textually and with rich details, the sequence of management activities, legislation related to each step, the computer systems involved and the administrative control mechanisms adopted - standardized or just work practices performed by the sectors - responsible units, quantity and structure of staff, among other pertinent details.

Taken together, these documents provide ample understanding of the operation of the audited, especially its objectives, stages of the work process and activities

developed in them, thereby allowing the progress to the identification and risk assessment phase.

3.2 IDENTIFICATION AND ASSESSMENT OF RISKS

The third step comprises the identification of events that may affect the organizational goals established, and is associated with critical sense and professional judgment of the auditors, managers and operational staff responsible for the execution of the audited activity. This step must be a collective construction of the audit team based on the contributions of the managers and operators of the processes and, if possible, corroborated by other levels of internal or external audit. For identification and recording of risk events, one should make use of the Risk Matrix per Process. The structure will be exposed ahead.

In the matrix, which should already contain the objectives and stages of the work process, each member of the inspection team should identify, individually, the list of possible events that could negatively impact the achievement of the objectives of the audit, specifically based on the data obtained in the previous steps. The execution of such stage individually, at first, aims to enhance the private intellection of each member on any possibility of risk without interference or bias that may be generated by other team members.

After an individual survey, the team should meet to discuss the inventoried risks and especially possible others, by consolidating the results in a single matrix, moving then to the impact assessment (magnitude of a negative effect) and probability (estimate) of occurrence of each risk according to the variables of the following risk matrix. Whenever possible,

there must be consensus on the team as to the existence and classification of the risks.

In support of the impact assessment and the risk probability and aiming to reduce the inherent subjectivity in the evaluation process, support tables should be developed containing qualitative criteria -

And where possible, quantitative - to assess the impact and probability variables (example: very high, high, medium, low and very low).

3.3 ASSOCIATION OF INTERNAL CONTROLS OF RISK AND CONTROL ASSESSMENT

At this stage, the auditor should identify the existing control mechanisms, correlating them to already cataloged risk events. Each risk should be associated with, if cases exist, formal and informal controls available to the unit which, directly or indirectly, can help to mitigate the identified risks.

An important activity in this step is to conduct workshops and/or additional interviews with managers and operators of the processes, in order to validate the inventoried risks and inquire about the internal controls associated with each risk. One must also consider the information about internal controls obtained in the initial phase of construction of the overview of the object. These meetings are also an opportunity for process owners to inform the staff about the existence of risks hitherto unidentified.

After identification and association of controls to the risks in the RMP, the quality of internal controls according to the evaluation categories established for the job (strong, satisfactory, moderate, weak or non-existent) should be assessed both by the audit team

Table 1:
Risk Map
(probability vs. impact):

		Risk Table				
		Probability				
		Very Low	Low	Medium	High	Very High
Impact	Very High	Medium 20	Elevated 40	Extremely high 60	Extremely high 80	Extremely high 100
	High	Medium 16	Elevated 32	Elevated 48	Extremely high 64	Extremely high 80
	Medium	Medium 12	Medium 24	Elevated 36	Elevated 48	Extremely high 60
	Low	Low 8	Medium 16	Medium 24	Elevated 32	Elevated 40
	Very Low	Low 4	Low 8	Medium 16	Medium 16	Medium 20

Source: MRP – SecexDesenvolvimento

Table 2:
Effects of the inherent risk mitigation in the internal controls

Control Evaluation	Mitigation	Obtaining the numerical value of the estimated residual risk
Non-existent	Estimated risk reduction of 4.5%	Multiply inherent risk by 0,95
Weak	Estimated risk reduction of 23%	Multiply inherent risk by 0,77
Moderate	Estimated risk reduction of 50%	Multiply inherent risk by 0,50
Satisfactory	Estimated risk reduction of 77%	Multiply inherent risk by 0,23
Strong	Estimated risk reduction of 95%	Multiply inherent risk by 0,05

Source: MRP
– SecexDesenvolvimento

as well as the ones responsible for the process. In this case, questionnaires can be developed and applied to collect the views of the operational staff and management responsible for the process regarding the quality and/or control effectiveness in mitigating the risks.

At the evaluation of internal controls, qualitative scales should also be established and, if possible, quantitative, that contribute to reducing the inherent subjectivity in the evaluation process. In addition, for each category of evaluation, one should determine the effects control mechanisms will have on the inherent risks (whose valuation already considered probabilities and impacts), as follows.

Hence, the residual risk will portray the outcome of the formal or informal controls associated with each inherent risk event. The RMP, thus, displays information about the residual risk, based on the colors and values defined in the table used to assess the inherent risk (Table 1). The diagram below illustrates an example of a case study on the effect of control on the mitigation of inherent risk:

Therefore, from the application of the coefficients in the third column of Table 2 on the values associated with the risk of Table 1, it is possible to obtain an estimated numerical measure of the residual risk associated with each inherent risk, as the table below.

The estimated residual risk represents what is left of the inherent risk after the application of controls, or the portion of the risk that lacks internal

controls to be mitigated fully. It is considered estimated because the effects of the controls have not been assessed at this stage of the work, in the case of estimation based on predominantly qualitative criteria (Table 2).

At the end of this step, you can define the extent and depth of the audit, based on the understanding of the objectives and implementation of the activity being monitored. The inherent and control risks are known and the design and quality of internal controls have been evaluated, obtaining as a result the residual risks of the process being audited. These references can be used to direct enforcement efforts in the evaluation of the key controls put in place to mitigate the significant risks (of higher probability and impact) to which the goal of the audited process is exposed.

3.4 SCOPING AND EXECUTION OF AUDIT FOCUSING ON RISK

From the understanding of the risks, the scope of the work should be set with a focus on process steps susceptible to events that may affect more severely in achieving the established objectives. The scope of the work can be limited to a particular step of the process, where the collective of risks of the selected step and monitoring resources warrant.

In the case of performance audit or survey - where the controls are not tested by procedures and

Figure 1:
Example of calculating the estimated effect of mitigation of the inherent risk by internal controls



Table 3:
Table of Residual Risk
(inherent risk vs. control
effectiveness):

		Control Gap Table				
		Control Efficiency				
		Strong	Satisfactory	Medium	Weak	Non-existent
Risk Ranking	Extremely Elevated	Low 5	Medium 23	Elevated 50	Extremely Elevated 77	Extremely Elevated 96
	Extremely Elevated	Low 4	Medium 18	Elevated 40	Extremely Elevated 62	Extremely Elevated 76
	Extremely Elevated	Low 3	Medium 15	Elevated 32	Elevated 49	Extremely Elevated 64
	Extremely Elevated	Low 3	Medium 14	Elevated 30	Elevated 46	Extremely Elevated 60
	Elevated	Low 2	Medium 11	Medium 24	Elevated 37	Elevated 46
	Elevated	Low 2	Low 9	Medium 24	Elevated 31	Elevated 38

Source: MRP
– SecexDesenvolvimento

auditing techniques – it is recommended to estimate the residual risks through workshops with process operators before the process. These meetings should provide for discussions with managers and/or the work process operators (crowded employees in units that deal daily with the management processes and are responsible for running them), in order to collect subsidies for the improvement of the assessments of risk events contained in the matrices, especially with respect to the probability, impact and procedures of internal control.

The meetings with the process operators, whenever possible, should be held without the participation of managers and no personal identification of those present, in order to allow greater freedom of expression. After closing the step of validation / contribution of the managers / operators of processes, the adjustments and reviews in the risk and control assessments should be made and the RMP completed in the final version.

The workshops are especially useful for the confirmation of the risk events pointed out at the RMP, through validation by the manager, of the possibility of materialization/occurrence of the negative event. Also serve to assess the existence and conformation of internal controls in response to risk events, or even the absence of these and the identification of new risks not yet detected by the inspection team.

On the other hand, when the risk assessment is a preliminary stage of a compliance audit (performed in planning), audit procedures should be modeled, during implementation, to assess the ef-

fectiveness of the controls associated with the risks included in the scope, making references to these procedures and their working papers in the specific field of RMP.

The definition of the scope of supervision should consider the situations of a lack or insufficiency of controls for significant risks as well as cases of unnecessary controls which result in an operating loss (inefficiency) for the process. It can also be proposed recommendations for the adoption of enhancement measures of internal controls.

After applying the procedures and auditing techniques to assess the effectiveness of internal controls (tests of controls) and having significant distortions regarding the risk assessment and/or controls initially recorded in the RMP, a review of this document should be performed.

3.5 SYSTEMATIZATION OF ANALYSIS RISK MATRIX FOR PROCESS (RMP)

The recording of qualitative and quantitative assessments should occur sequenced and associated with each risk event. Throughout each step of the identification process and evaluation of risk events, as well as evaluating the design of the controls, new information should be incorporated into the RMPs, an organized document that allows for integrated viewing and summary of the risk management elements catalogued throughout the work, based on the suggested following structure:

Each column must have the following information:

- a. purpose of the agency / organization / program / activity audited;
- b. stages of the audited process: teaching subdivision phases of administrative proceedings;
- c. risks: inherent risks by process step, characterized by: risk event category (examples: operational, compliance, financial, information, image, etc.), classification of probability, classification of impact, assessment of the likelihood and impact assessment;
- d. the result of inherent risk: numerical result of the inherent risk (multiply the probability by the impact, on a scale of 1 to 100, as shown in Table 2 as an example);
- e. controls: description and classification (Strong, Satisfactory, Moderate, Weak or Non-existent) of the internal controls associated with each risk;
- f. evaluation of the internal control;
- g. result of the residual risk: numeric result of the estimated residual risk, in other words, the risk mitigated after the application of internal controls (ref Table 3, estimate);
- h. reference to the internal control tests: reference to the audit procedures to evaluate the effectiveness of internal controls.

4. RESULT

At the end of the procedures, you get a structured view of the quality of risk management and internal controls of the audited object - one of the public governance components - with information on goals, work process steps and activities developed within it to achieve the goals, inherent risks associated with each step, adopted internal controls and its quality, as well as estimated residual risk in order to allow routing and optimization of audit efforts.

In addition, collaborative work of discussion with managers about the goals of the process under audit, risk and controls possess a high educational characteristic because it allows a deep reflection on the modus operandi of the units and of the activities developed, especially regarding ways to improve administrative internal controls.

5. APPLICATION IN TCU AUDITS

Regarding the audit types within the Federal Court of Accounts, the methodology can be used in surveys and audits. In the first case, you can cover a larger object, performing the first step in the planning phase and the next three in the implementation phase. The result perfectly converges for the purpose of the instrument, as stated in the TCU Survey Standards (BRAZIL, 2011), since it allows for the construction of the overview of the object and the risk assessment. In this case, the risk assessment extends to the evaluation of the estimated residual risk.

In compliance audits, it is possible to fully apply the same technique in the planning stage of the audit, as long as the scope is smaller. In this case, the result of the general risk assessment will elect the

Table 4:
Risk Matrix Structure
by Processes (RMP)

		Risk	RI Evaluation	Controls	CI Evaluation	Residual risk:	CI Test Reference
Goal	step 1						PA - 1
							PA - 2
	step 2						PA - N
							PA - N
							PA - N
	step 3						PA - N
							PA - N
							PA - N
							PA - N

Source: MRP
- SecexDesenvolvimento

main audit points and the feasibility of undertaking monitoring efforts on the subject. Once the scope is chosen and the object determined, control tests should be applied (procedures and audit techniques) to measure the actual residual risk.

6. CONCLUSION

Carrying out risk assessments and internal controls cannot achieve maximum effectiveness if objective techniques are not adopted and organized for this purpose. In order to meet this need is why this audit methodology focused on process and risk was developed.

In line with modern concepts of governance in the public sector, and meeting international standards of internal audit, as well as the audit standards of the Federal Court of Accounts of Brazil, the methodology consists of applying procedures in a systematic and organized way in order to map work processes by means of associating risks and control mechanisms.

In general, the construction of the scenario on risk management organizations is divided into four main steps: (i) identification and recording goals of the process to be audited (Overview): involves detailed knowledge of the object to be monitored and pieces are produced such as flow charts and narratives of the stages of monitored process; (ii) identification and risk assessment, addresses the identification, recognition and/or intellection of the possible events that could affect the objectives of the audit object, and is associated with critical sense and professional judgment of the auditors, managers and operators of the process under examination; (iii) Association of internal controls to the risks and evaluation of internal control: correlates control mechanisms to risk events; and (iv) Definition of the audit scope focused on risk: stage in which, from the knowledge built in the previous steps, you can set the scope of the audit to focus on significant risks, i.e. those whose materialization may cause greater impact to the detriment of achieving the objectives established for the audit.

The guidelines presented in this article serve as a guide for the auditor to, depending on his needs, deepen in the subject and start to apply the concepts herein in audit works, in order to contribute to the improvement of governance and hence for achievement of organizational objectives or policies.

REFERENCES

ABNT. Brazilian Association of Technical Standards. NBR ISO 31000: Risk management - Principles and guidelines, 2009. Available at: <<http://www.abntcatalogo.com.br/norma.aspx?ID=57311>>. Accessed: June 25, 2014.

BRASIL. Brazilian Federal Court of Accounts. Public Governance: Basic Governance Reference applicable to organs and entities of the Public Administration and Inducing Action Improvement. Brasilia: TCU, Secretary of Planning, Governance and Management, 2014.

_____. Brazilian Federal Court of Accounts. Decree No. 175/2013. It offers guidance to the jurisdictional units of the Court as to the development of content management reports for the year 2013. Brasilia, July 9, 2013.

_____. Brazilian Federal Court of Accounts. Glossary of Terms of External Control -. SEGECEX / Adsup / Adplan. Brasilia: TCU, September 2012a.

_____. Brazilian Federal Court of Accounts. Assessment Course of internal controls / Court of Audit.; Authors: Antonio Alves de Carvalho Neto, Bruno Medeiros Papariello. 2nd ed. - Brasilia: TCU, Serzedello Corrêa Institute, 2012b.

_____. Brazilian Federal Court of Accounts. Ordinance-SEGECEX-TCU No. 15/2011. Discipline on surveying and approving on a preliminary basis, the document Survey Standards. Brasilia, May 9, 2011.

_____. Brazilian Federal Court of Accounts. Annex to Executive Order No. 280/2010-TCU. Auditing Standards of the Federal Audit Court. Brasília, December 8, 2010.

_____. Brazilian Federal Court of Accounts. Eeneral criteria for internal control in the Public Administration: A study of the models and the disciplinary standards in different countries. Brasília, 2009. Available at: <<http://portal2.tcu.gov.br/portal/pls/portal/docs/2056688.PDF>>. Accessed: June 25, 2014.

COSO. Committee of Sponsoring Organizations of the Treadway Commission. Corporate Risk Management - Executive Summary, Framework and Risk Management in the Enterprise - Integrated Framework: Application Techniques, 2004. Portuguese version available at: <http://www.coso.org/documents/COSO_ERM_ExecutiveSummary_Portuguese.pdf>. Accessed: June 25, 2014.

IIA, The Institute of Internal Auditor. International Standards for the Professional Practice of Internal Auditing. São Paulo, 2012. Portuguese version available at: <http://www.iiabrasil.org.br/new/2013/downs/IPPF/standards2013_portuguese.pdf>. Accessed: June 25, 2014.

External Control and Internal Control of Defense: trust and partnership for management improvement



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ABSTRACT

The external and internal controls have been intensively cooperating for the improvement of the Defense Sector. Overcoming obstacles of institutional and organizational nature, the control agencies are now focusing largely on the issues of the sector performance, while upholding the law. Positive results can be seen in the organizational development of the Defense internal controls and in the supervision of strategic projects of the Brazilian armed forces, including the relative development of nuclear propulsion submarines. The cooperation among control agencies contributes to the creation of an institutional environment suitable for achieving results more efficiently.

Key words: Defense, Control, improvement, cooperation, performance, efficiency.

1. INTRODUCTION

The Federal Court of Accounts of Brazil (TCU) and the internal controls have been cooperating intensively towards the improvement of the Defense Sector. Attentive to the foundations and requirements of control, in particular independence and reliability, the external and internal control agencies have been working together to ward off the risks of reckless or poor management, as well as to increase the achievement of



results ever more efficiently. The cooperation regarding the supervision of strategic programs and the measures for improving the Defense control institutions themselves point towards significant institutional gains resulting from supervision activities.

The present article, based on bibliographical and documental review, seeks to present the cooperative development of external and internal control agencies in the supervision of Defense and to identify relevant results. It starts by defining the foundations and requirements for exercising government control, moving to the discussion of the institutional aspects concerning the improvement of public administration, and to the fulfillment of the internal control mission to support the external control. It is also concerned about the organizational complexity of the Defense internal control in Brazil and with the importance of establishing mutual cooperation. Relevant results as to the improvement of the sector performance, the organizational restructuring of the Defense internal controls and the cooperation on the supervision of Navy and Air Force strategic projects have also been identified. We conclude that the cooperation is being adequately developed and that the obstacles encountered are being overcome.

2. CONTROL FOUNDATIONS AND REQUIREMENTS

Humberto Petrei identifies three pillars he names “control foundations”, over which the control

action should be supported. The first corresponds to the mechanisms design used to ensure the slightest deviation between citizens choices and government actions. The second refers to the dominant democratic concept in the western political-economic thinking, according to which the Legislative Power should permanently watch the acts of the Executive. The third, a result from the implementation of administrative and organizational sciences, refers to enabling those responsible for any organization to rely on an independent information system. These are the grounds, which consolidated, generate instances and mechanisms able to ensure the effectiveness of the control (PETREI, 1997, P.17).

With a view to establishing such foundations, two requirements should be associated. The first regards the independence of the control agencies and their teams. The second refers to the reliability of the information provided by those agencies.

3. INDEPENDENCE

Independence is an essential requirement for preserving the control agencies’ and auditors’ impartiality. The auditor should take the utmost care and diligence when carrying out the work and reporting his findings, and should be absolutely impartial regarding his statements According to Robert Mautz, from Illinois University, the process which an auditor

goes through before forming an opinion can be described as a result from the following considerations (MAUTZ, 1987):

- a. adequate information identification to be used in assignments within his jurisdiction;
- b. evaluation of the relative importance of the information collected during audit work;
- c. collection of necessary information or evidence to support positioning.
- d. deliberation of the information or evidence collected regarding validity, adequacy and sufficiency; and
- e. opinion formation, properly authoritative, as to the accuracy of the information.

4. RELIABILITY

Reliability is an essential requirement for the control agencies, both external and internal, to make their work a supporting basis for the administration actions. It is a central feature of the documents made available by the oversight agencies. It can be divided into three parts:

- **Oversight agency technical capability:** It is essential for perceiving the reports as tools for the promotion of better management results. This does not mean that only professionals with determined backgrounds or experiences should carry out the audit, but that the control agency should be competent enough to evaluate management in joint work. The multidisciplinary approach of the control agency teams is an important feature of qualification¹
- **Access to real data:** The information collected and used by the control agency should not be detached from legitimacy of the management acts and facts. This is an issue that can turn the analysis of Defense into a delicate situation when analyzing the Defense Sector. An adequate balance between transparency and confidentiality becomes necessary. Transparency is not supposed to impair typical confidentiality of certain information; however it should not be

acceptable that confidentiality in excess compromises the trustworthiness of the information on Defense management.

- **Public image of the control agency:** Decisive for establishing credibility of the information made available by the control. It is important to point out that there is a concrete relationship between public image and how independently the control agency acts towards performing its competencies.

5. EXTERNAL CONTROL AND PUBLIC ADMINISTRATION IMPROVEMENT

The external control of public administration in Brazil is exercised by the National Congress and assisted by the Federal Court of Accounts of Brazil (TCU). It is TCU's job, a Brazilian Supreme Audit Institution (SAI) and a technical branch of such control exerted by the Legislative Power, to establish a closer and long lasting relationship with the reality of the agencies and public entities. Aiming at ensuring transparency in public administration, TCU makes the results, produced by the use of public resources, visible to citizens. Such transparency contributes to its permanent improvement. More than any other organization in the political and administrative system of Brazil, TCU is able to address issues comprehensively, taking advantage of its privileged look at the public administration, assuming a truly institutional character.

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

(...)

Art. 71. The external control, incumbent on the National Congress, shall be exercised with the aid of the Federal Court of Accounts (BRAZIL, 1998).

The mission of the Court, established as to control public administration to contribute to its improve-

ment for the benefit of society (TCU, 2011), reveals a modern notion regarding the modus operandi of the external control and its expected outcomes. The current definition replaces the previous, to ensure effective and regular management of public resources, changing the perception of a control agency dedicated to the correction of flaws, in favor of a notion dedicated to prevention. In particular, the mission description implies that the organization regards the contribution to administration improvement the best practice to implement good use of public resources. The agency's performance can be classified into eight different functions:

- **Inspecting:** It refers to TCU's actions related to audits, inspections, follow-ups and monitoring. Here, the court relies heavily on the support of the internal control.
 - **Consultative:** When TCU issues opinions about the accounts of the government, providing the National Congress with subsidies for its adjudication of such accounts.
 - **Information:** It concerns the provision of the information requested by the National Congress, its Houses and Committees. The exchange of information with the internal control is intense.
 - **Judicative:** When TCU pronounces judgment of the managers' and other responsible parties' accounts. This function is one of the most concrete aspects of the operations and for which the contribution of internal control is essential.
 - **Sanctioning:** When TCU imposes sanctions, provided by Law 8.443/92 (BRAZIL, 1992), which in conjunction with the judicative function, entails quite a visible dimension of the external control performance.
 - **Corrective:** It refers to the setting of deadlines for correction in case of irregularities, a dimension to which internal control cooperation plays a decisive role.
 - **Normative:** It concerns issuing normative instructions and acts, which end up guiding the performance of the internal control and the public resources management agencies themselves.
- **Ombudsman:** It is carried out upon receiving denunciations and petitions. Here, the internal control provides valuable support to the investigation process.

Supported by the internal control, the external control should act as guardian of the public interests, regarding the actions taken using public resources, to carry out these different functions. Particularly, concerning Defense, a theme not as close to the citizen as Education or Health, the control agencies tend to fully take the supervisory role. Such situation makes their responsibility to society even more critical. The TCU, so as to better perform its duties, favors preventive measures, emphasizing the pedagogical action, without giving up its sanctioning power. It has been increasingly seeking an institutional convergence, and greater presence among those under jurisdiction, always by means of the internal controls, sharing information and guiding the administrator's management actions.

6. INTERNAL CONTROL AND SUPPORT TO EXTERNAL CONTROL

The internal control is exercised based upon workshops of their own administration. It ensures, just as the external control does, transparency in public resources use; its performance is geared towards compliance with the law and regulations, as well as the organizational issue, and, has as its main distinguishing feature, a prevailing prevention action. Such action is accomplished by means of direct advice to the top manager of the administration and to its different sectors. Adopting the guidelines of the American Institute of Certified Public Accountants (AICPA) as well as customizing them, one can say that the internal controls of an organization should meet the following requirements:

- a. act preventively in the first place, given the absolute necessity for the public good to be provided and the narrow margin of error allowed;
- b. turn, constantly, to correct deviations related to pre-defined goals, to ensure adherence of the sector action to national planning;
- c. directly advise the president, and at the same time, be present in all levels of the

administration, to guide the matters concerning procedures correction; and

- d. prevail as a forum to management support to assist both the administration itself and the external control in performing its duties.

According to the Federal Constitution (BRASIL, 1988), the internal control should support the external control when exercising its institutional competency. The internal control units should act proactively to guide the managers they advise and keep TCU informed about the actions developed. This cooperation is inspired by trust and partnership between the two levels of control, which should always work together, with a focus on good use of public funds. The institutional positioning reflects the certainty that the internal control will support the external control and will assert itself as a privileged communication channel between external control and managers. There must be mutual information availability and complementarity of the actions developed in both instances of control.

7. ORGANIZATIONAL COMPLEXITY AND DYNAMISM OF THE DEFENSE CONTROL

The composition of the Defense internal control, in Brazil, is particularly complex. Such complexity stems from its multi-organizational structure. This feature demands an interagency coordination that is distinct from the one seen in other government areas. Four units make up the structure of the Defense internal control. One of them is linked to the Ministry of Defense (MD). As for the others, there is one linked to each of the three armed forces: the Secretariat of Internal Control of the Ministry of Defense (CISSET), the Brazilian Navy Internal Control Center (CCIMar), the Brazilian Army Internal Control Center (CCIEEx), and the Brazilian Air Force Internal Control Center (CENCIAR). Under the terms of the National Defense White Book (LBDN):

CISSET is responsible for exercising control and supervision of the financial programming, as well as recording the budgetary, financial and property management transactions. It controls and monitors the actions related to meeting the targets set by the Multi Annual Plan, the implementation of the budgetary government programs, the administrators' management and credit operations. (BRASIL, 2012, p.62)

The centers of internal control of the armed forces, while working under the CISSET coordination, can also directly report to TCU, the Federal Government external control institution. CISSET has functional prerogatives over the three armed forces internal control, without hierarchical subordination. This compromise between subordination and independence generates a matrix organization, which increases systemic complexity, but allows for shortcuts in inter-organizational relationship, which, properly used, can narrow the distance between the auditor and manager.

Besides matrix organization, another feature of the Defense internal control complexity is the high level of capillarity. Internal control agents radiate from the central structure, in the armed forces headquarters, to the farthest management units. The Army Command, in particular, maintains regional control units, which are intermediately positioned between the central structure of the control and the several management units – the so called Army's Control and Monitoring Agencies (ICFEx). Such capillarity is especially relevant for the control implementation among all public resource managers in the Defense Sector.

TCU, the Brazilian Supreme Audit Institution, recognizes that the environment for Defense control is both complex and dynamic. Such recognition includes an understanding that there is a differentiated need for organizational coordination concerning Defense, when compared to other government sectors. Likewise, the Court of Accounts recognizes the relevance and materiality of investment and cost expenses incurred by the MD and the Navy, Army and Air Force Commands. Finally, TCU is attentive to the sensitive complexity of the expenditure incurred in the Defense sector.

Emphasis is given to the high level of materiality of expenses. In 2013, the MD had the fifth largest budget among the country's entities, behind only the Ministries of Finance, Social Security, Education and Health. With a cost of R\$71.1 billion, the expenditure of the MD corresponded to 3.7% of the country's total expenses (TCU, 2014b, p.131). Those are very high costs and they involve resources sought by other government sectors, consequently the management should occur under strict legality and efficiency standards. Defense funding cannot be neglected, as it is a function of the State. The non-existence or expectation of war cannot lead to overlooking this issue.

The specificity of the expenses incurred in the Defense Sector also deserves attention. They consist of expenses of differentiated nature and, many times,

are difficult for society to understand. Such specificity is characterized by its high specialty, its low visibility and by its justification requirement.

- **High specialty:** Defense expenditure is not easily understood, and the understanding is almost always restricted to specialized departments. For a long time, the Defense Sector was kept away from the national policy main discussions, and it was characterized by a mistaken association between Defense, essential public service to be provided to society, and militarism, an inappropriate distortion in the social political relationship between the military and civilians. As a result of repeated mistaken interpretations, many people would accept that it is an unnecessary and unproductive cost to be avoided.
- **Low visibility:** Costs with Defense don't have the same visibility as those from other sectors, such as Education and Health, given the absence of direct impact over social well-being. The intensity of Brazilian social problems makes it difficult for more specific issues, such as Defense, to reach the same importance level in the political agenda. The effort to raise awareness of how important Defense is should be permanent.
- **Justification requirement:** The Defense Sector should be committed to the justification of its costs in a more intense way than other government sectors. The justification requirement – a feature that is closely associated to high specificity and low visibility – addresses the importance of showing society how crucial Defense is. Certainly, all government expenses need to be justified, but such requirement is particularly relevant with regard to highly specific costs, such as those of Defense.

8. FOCUS ON THE DEFENSE SECTOR PERFORMANCE

Due to the complexity and specificity concerning Defense expenditure, it is of utmost importance that the control structure take care of the sector performance issue. It is not, in any way, a question of neglecting the legality issue, which remains essential as far as management evaluation is concerned. How-

ever, it is a matter of raising the importance of a more efficient Defense spending to a higher level. Given the growing demand for more visible social spending by the government, it is unlikely that a significant increase in the MD budget should occur in the short term. Consequently, the available resources should be used in such a way as to obtain the best results. The Defense Sector legitimacy itself is closely related to the demonstration of sound management performance.

Nowadays, the control units are differently perceived by the managers. The reports are no longer seen as undue interference, but rather as tools to help improve the management. Waste reduction, task simplification, management support and information providing are requirements that have resulted from the introduction of the performance issue into management and control (SANTOS, 2007, p. 9; SUCHMAN, 1995, p. 567-569; HOCK, 1999, p. 42-45).

In Defense, as in other government action sectors, the expectation regarding control action has considerably changed. The control agencies should be aware that reflecting upon and satisfying the demands



of the economic and social structures of the country constitute crucial requirements for the organizations to acquire legitimacy. The Defense Sector legitimacy, just as in other sectors, is clearly related to meeting social expectations. In this sense, performance has become a key element. Managers and auditors should be aware of the need to build a new legitimacy, based on the effective delivery of goods and services to society (performance), since the simple addition of the procedures to the existing rules is not enough (compliance). The development of an active and efficient Defense system should be part of the external and internal control priorities.

Restructuring the Defense internal control system

The TCU guidelines regarding the restructuring of the Defense internal control system constituted an important cooperation measure. Based on Appellate Decision n° 1074/2009-TCU-Plenário, recommendations were sent to the agencies and their internal control units with a view to improving their action, as well as to bringing them closer to the agency's top authority, who should be directly advised. In summary, the structuring guidelines issued by the Court of Accounts recommended (TCU, 2009a):

- The development of the monitoring program for internal audit work quality.
- The detailed standardization of the internal control agencies audit activity.
- The hierarchical repositioning of the internal control agency so that it became directly subordinated to the Force Commander.

One of the results of such guidelines was the creation of the Navy, Army and Air Force Commands internal control centers and their organizational repositioning, which linked them directly to the commander of each Armed Force. In the Air Force Command, for example, the CenCIAR (Air Force Internal Control Center), which reports directly to the Air Force Commander, has replaced the previous Audit Under-Secretariat (Suaud), which was linked to the Air Force Finance and Economy Secretariat (SEFA). Similar changes have occurred in the Navy and in the Army, bringing the internal control closer to the agencies' top authorities, as well as leveling the Defense internal control organization chart – which has become more similar

to the ones in force in the other federal public administration agencies.

9. COOPERATION FOR SUPERVISING PROSUB AND PNM

Intense cooperation has been developed between TCU and the military internal controls with a view to supervising the main re-equipment programs. As far as the Brazilian Navy is concerned, it is the case of the permanent supervision of the important Submarine Development Program (Prosub) and the strategic Navy Nuclear Program (PNM). Those are large-scale programs, both in terms of budgetary-financial resources involved and the crucial importance for the Brazilian naval power.

The development of a submarine power, which is appropriately scaled to the dimensions of the Brazilian waters, and that constitutes suitable quality means, is at the heart of denying the use of the sea to the enemy. In order to fulfill this strategic naval power function, the Navy has been developing conventional and nuclear propulsion submarines, in addition to the necessary infrastructure for their operation. It is one of the most important national efforts for transferring technology. Prosub has been developing within the framework of a cooperation agreement between Brazil and France, with a schedule of resource release established up to 2024 (PODER NAVAL, 2011).

The amounts involved constitute a high level of materiality. Prosub alone should spend over €6.7 billion through to the conclusion of the program, and it is estimated that the individual construction cost of each conventional submarine should be €415 million. On the other hand, the construction of the nuclear propulsion submarine is almost three times higher. This, without taking into account the cost of the reactor: approximately €1.25 billion. The magnitude of Prosub led the MD and the Navy Command to invite TCU to follow all the steps of the program, with the purpose of making the process transparent (JOBIM, 2009). Important findings, recommendations and changes in actions and priorities have resulted from such supervision, which depends, essentially, on cooperation between the internal and external controls.

TCU has opened investigation procedures with a view to supervising, specifically, Prosub and PNM. Such procedures aim at knowing the program and analyzing its budgetary-financial dynamics. As far as Prosub is concerned, TCU has observed that the circumstances

under which the program was implemented did not allow for the involved agencies to count with adequate deadline conditions, access to information and preparation for negotiating the contracts, as well as for evaluating the risks and opportunities concerning the investments. As a result, a recommendation was issued to the Navy Command to establish indicators to measure the evolution of the technology transfer processes, as well as to evaluate the cost-benefit ratio. In special, the issue of encumbering the acquisition of equipment on the grounds of national industry capacity building has been highlighted by TCU (TCU, 2014a).

Another relevant issue addressed by TCU, with permanent support from CCIMar, referred to contractual risks resultant from delay in implementation. This is because Prosub is governed by an agreement with a national counterpart that provides for heavy fines in case the agreed deadlines are not met. Thus, the court of accounts has warned the agencies that carry out the program that delays can endanger the government initiative, and they may result in unacceptable loss to the Treasury and the Brazilian society (TCU, 2010). As a consequence, the Navy has been allowed to adopt measures to avoid the identified risks.

10. COOPERATION FOR SUPERVISING AIR FORCE PROGRAMS

As far as the Air Force is concerned, the cooperation between external and internal control has also resulted in important management guidelines. Such guidelines addressed issues related to airport infrastructure, air defense, air traffic control and safety, and to inter organizational coordination needed for the management of airspace policy. The focus on performance is evident from the series of decisions rendered which relate to the Program EMAer-32, regarding airports for military use and involving taxes that directly affect the citizen:

- a. Decision 036/2003-TCU-Plenário turned its attention to air transport users. It handled the relationship between Ataero and air ticket prices, and defined the need to elaborate clear indicators, capable of measuring and showing results (TCU, 2003).
- b. Appellate Decision 1255/2004-TCU-Plenário determined that the Air Force Command identify the above mentioned indicators in a

regionalized way, whenever possible, as an addendum to the nationally consolidated figures, with the purpose of making the program more transparent (TCU, 2004).

- c. Appellate Decision 162/2009-TCU-Plenário recommended that the MD acted in conjunction with the Air Force Command in order to demonstrate to the Federal Legislative Branch the benefits achieved with Ataero (TCU, 2009b).

Other Air Force programs and activities were audited by TCU, such as the Control System of the Brazilian Air Space (Sisceab); the F-X program, for acquisition of interception supersonic aircraft, and the H-XBR program, for producing helicopters for military use. In all cases, the cooperation between external and internal control has resulted in important recommendations with a view to a better organizational performance and to the improvement of efficient management. In the case of the H-XBR program, the court of accounts recommended that the Air Force acted more effectively in the industrial cooperation projects, so as to make sure that the Brazilian industry can hold the intellectual property rights of the absorbed technologies (TCU, 2014a).

11. CONCLUSION

TCU and the internal controls of the MD and the military have been intensively collaborating with a view to improving the Brazilian Defense. For the internal and external control of the Defense to occur, the work of the responsible agencies must develop an independent and reliable environment. Such requirements, as far as Defense is concerned, are highly critical in nature, due to the specificity of the sector. Independence should result in impartial positions, capable of contributing positively to the improvement of Defense. Reliability should turn the control into an effective support basis for the administration actions, by breaking down into three elements: technical capacity of the control agency, access to real data and public image of the control agency.

In Brazil, the Defense internal control is particularly complex. Such complexity results from the adoption of a multi organizational structure characterized by high capillarity, and which requires high standards of interagency coordination. The Ciset of the MD and the internal control centers of the military commands

are linked by matrix relationship, a middle ground between subordination and independence. Such matrix framework increases the systemic complexity, allowing for, at the same time, efficiency gains regarding inter organizational relationships. As for capillarity, different control agents relate to each other in order to reach the management units that are most distant from the administration center. TCU recognizes the need of differentiated organizational coordination in Defense, when compared to other areas of government action.

The materiality and specificity of the expenses incurred also contribute to the complexity of the Defense control. Bearing the fifth largest budget among the country's agencies and being responsible for 3.7% of the federal expenses, the MD incurs high expenditure, which requires strict legality and efficiency standards. Even though the country does not face imminent external war, neglecting its own Defense would mean overlooking public policy which is essential to the development of the other national activities. The State function character of Defense requires that the issue be addressed with due regard. As far as specificity is concerned, it is important to remember that the Defense sector expenditure is considerably differentiated in nature due to its high specialty, its low visibility and its permanent requirement for justification.

Finally, it is essential that the internal and external control cooperate with a view to improving the sector performance, by always merging the issues of performance and compliance when supervising the Defense Sector. Such alliance of organizations, methodologies and, most of all, institutional frameworks could contribute for the creation of an agile and efficient Defense system. The very institutional legitimacy of the Defense Sector depends on its ability to deliver to society the public good it is responsible for, in the most efficient way.

REFERENCES

BRASIL. *Constituição da República Federativa do Brasil*. Promulgada em 05 de outubro de 1988. Brasília: Presidência da República, 1988. Retrieved from: <<http://www2.planalto.gov.br/presidencia/a-constituicao-federal>>. (Accessed 06.28.2014).

_____. *Estratégia Nacional de Defesa*. Brasília: Ministério da Defesa, 2008. Retrieved from: <https://www.defesa.gov.br/eventos_temporarios/2009/estrategia/arquivos/estrategia_defesa_nacional_portugues.pdf>. (Accessed 06.24.2014).

_____. *Lei nº 8.443, de 16 de julho de 1992*. Dispõe sobre a Lei Orgânica do Tribunal de Contas da União e dá outras providências. Brasília: Presidência da República, 1992. Retrieved from: <http://www.planalto.gov.br/ccivil_03/Leis/L8443.htm>. (Accessed 06.28.2014).

_____. *Livro Branco de Defesa Nacional*. Brasília: Ministério da Defesa, 2012. Retrieved from: <<http://www.defesa.gov.br/projetosweb/livrobranco/lbdndigital/#/0>>. (Accessed 06.28.2014).

_____. *Política Nacional de Defesa*. Aprovada pelo Decreto 5484, de 30.06.2005. Atualizada em 2012. Brasília: Ministério da Defesa, 2005. Retrieved from: <http://eblog.eb.mil.br/wpcontent/uploads/2013/09/politica_nacional_defesa.pdf>. (Accessed 28.06.2014).

EUA. General Accountability Office. *Normas de Auditoria Gubernamental*. Translated by Controladoria Geral da República do Peru. Washington, DC: GAO, 1994.

HOCK, D. *Birth of the chaordic age*. ISBN 1-576-75074-4. San Francisco, CA: Berrett-Koehler Publishers, Inc., 1999.

JOBIM, N. *Programa Submarino Nuclear*. Apresentação do Ministro da Defesa Nelson Jobim. Brasília: Ministério da Defesa, 2009. Retrieved from: <http://www.arqanalagoa.ufscar.br/pdf/Apresentacao_do_Ministro_Nelson_Jobim.pdf>. (Accessed 06.28.2014).

MAUTZ, R.K. *Princípios de Auditoria*. Tradução e adaptação técnica de Hilário Franco. 4a edição. São Paulo: Editora Atlas, 1987.

PETREI, H. *Presupuesto y Control: pautas de reforma para America Latina*. Washington, DC, EUA: Banco Interamericano de Desenvolvimento (BID), 1997.

PODER NAVAL. *Submarinos na Mira do TCU*. [S.l.], 2011. Retrieved from: <<http://www.naval.com.br/blog/2011/02/20/submarinos-na-mira-do-tcu/>>. (Accessed 06.28.2014).

SANTOS, M.I.C. Auditoria interna como instrumento formador da eficiência e eficácia dos resultados organizacionais. In: II CONGRESSO DE PESQUISA E INOVAÇÃO DA REDE NORTE NORDESTE DE EDUCAÇÃO TECNOLÓGICA. João Pessoa, 2007. Retrieved from: <http://www.redenet.edu.br/publicacoes/arquivos/20080922_105130_GEST-011.pdf>. (Accessed 07.21.2009).

SUCHMAN, M.C. *Managing Legitimacy: strategic and institutional approaches*. *Academy Management Review*, v.20, n.3, 560-571, jul, 1995.

TCU. Acórdão nº 036/2003-TCU-Plenário. Relatório de Auditoria Operacional. Ministério da Defesa. Comando da Aeronáutica. Programa EMAER-32. Ministro-Relator Ubiratan Aguiar. Brasília: Tribunal de Contas da União, 2003.

_____. Acórdão nº 1074/2009-TCU-Plenário. Relatório de Levantamento. Supremo Tribunal Federal; Superior Tribunal de Justiça; Senado Federal; Câmara dos Deputados; Conselho Nacional de Justiça; Ministério da Defesa; Ministério das Relações Exteriores; Ministério Público da União; Superior Tribunal Militar; Tribunal de Justiça do Distrito Federal e Territórios; Tribunal Superior Eleitoral; Tribunal Superior do Trabalho. Ministro-Relator Weder de Oliveira. Brasília: Tribunal de Contas da União, 2009 a.

_____. Acórdão nº 1255/2004-TCU-Plenário. Monitoramento. Ministério da Defesa. Ministério do Orçamento, Planejamento e Gestão. Comando da Aeronáutica. Programa EMAER-32. Ministro-Relator Ubiratan Aguiar. Brasília: Tribunal de Contas da União, 2004.

_____. Acórdão nº 162/2009-TCU-Plenário. Relatório de Monitoramento. Ministério da Defesa. Comando da Aeronáutica. Programa EMAER-32. Ministro-Relator Walton Alencar Rodrigues. Brasília: Tribunal de Contas da União, 2009b.

_____. Acórdão nº 2176/2010-TCU-Plenário. Levantamento de Auditoria. Comando da Marinha do Brasil. Programa de Desenvolvimento Submarinos. Ministro-Relator André Luís de Carvalho. Brasília: Tribunal de Contas da União, 2010.

_____. Auditoria operacional na transferência de tecnologia do programa de desenvolvimento de submarinos (Prosub) e do Projeto H-XBR. Brasília: Tribunal de Contas da União, 2014a. Retrieved from: <http://portal2.tcu.gov.br/portal/page/portal/TCU/imprensa/trabalhos_em_destaque/DEFESA_NACIONAL_ANOP%20Prosub%20e%20Projeto%20H-XBR_Web.pdf>. (Accessed 06.28.2014).

_____. Referencial estratégico. Brasília: Tribunal de Contas da União, 2011. Retrieved from:

<http://portal2.tcu.gov.br/portal/page/portal/TCU/planejamento_gestao/referencial_estrategico/Referencial_Estrat%C3%A9gico.pdf>. (Accessed 06.28.2014).

_____. *Relatório e parecer prévio sobre as contas do Governo da República: Exercício 2013*. Ministro-Relator Raimundo Carreiro. Brasília: Tribunal de Contas da União, 2014 b.

NOTA

- 1 The General Accountability Office, in dealing with their teams' responsibilities, highlights the requirement that all audits should be carried out by staff, that as a whole, is able enough to do so (EUA, 1994).

Accountability to the Federal Court of Accounts within the Open Government Partnership



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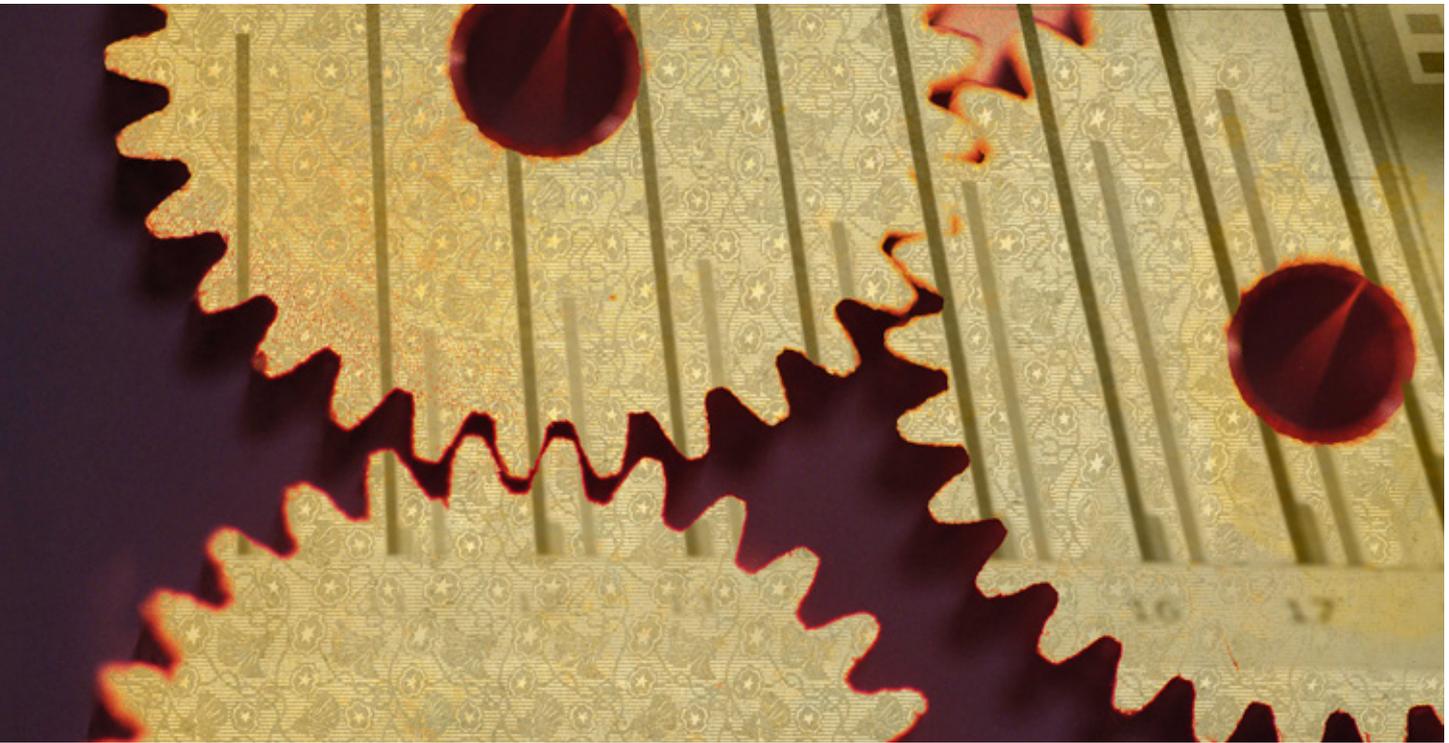


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ABSTRACT

The Federal Constitution of 1988 confers new features to the Brazilian public administration. By establishing ways and forums of participation, as well as access to public information, the Constitution broke off the insulating model of public administration in force until then. These achievements, that seek to engage more and more people in the everyday activities of the Federal Government, have become more apparent since the entry into force of the infra-constitutional norms that governed forms of participation, transparency and of obtaining information about government actions. In 2011, the Brazilian Government, aiming to be recognized as open government, joined the Open Government Partnership - OGP and committed to improve government action through the promotion of transparency, accountability and responsiveness. This task could be facilitated if the Courts of Accounts and, in particular, the Federal Court of Accounts - TCU, could contribute to the achievement of those commitments. Thus, the objective of this article is to discuss the possibility of the TCU, by means of rendering of accounts, to improve the exercise of accountability and contribute to the Executive Branch in achieving the commitments made. The analysis allowed identifying the rendering of accounts as a relevant instrument TCU has to contribute to the Executive Branch in the fulfillment of the principles outlined by the OGP.



Keywords: Open Government Partnership. Transparency. Accountability. Rendering of Accounts.

1. INTRODUCTION

The Brazilian Federal Public Administration – APF, at least until the 20th century, was marked by a vertical performance and turned inwards. It did not take into account the role of prominence that society could perform. However, the administration of public matters began to take new shapes in the country, mainly as of the Federal Constitution of 1988 – CF/1988.

This Constitution states right in its article one that all power emanates from the people, who exercise it by means of elected representatives or directly. Therefore, in a simple way, the option for a representative democracy model is renewed in Brazil. In this model, the representation comes with accountability, which assumes that the representatives are held responsible for their actions before those they have the right to represent (O'Donnell, 1994, p. 61).

CF/1988 also provided, in several of its articles, the guarantee of participation of the society in different fields of the APF, the right to access to public information and transparency of actions carried out by the State. Despite this apparent progress, only from infra-constitutional norms, such as the Fiscal Responsibility Act – LRF and the Access to Information Act - LAI, Brazil began to become more transparent and permeable to its citizens.

More recently, Brazil became part of the Open Government Partnership - OGP, an international institution created to enhance governmental action through the promotion of transparency, accountability and responsiveness. To this end, the Brazilian Government committed to principles that can lead it to be recognized as an open government.

Having seen the breadth of these principles, the commitment made by Brazil with OGP may become a difficult implementation task if only one branch remains acting alone to fulfill obligations undertaken. Such obligations will reflect not only the context of governmental actions, but also the perfection of the Brazilian democratic model.

The Courts of Accounts are institutions that can play an important role so that Brazil can be considered a country with an open government. As they are autonomous, independent institutions, and external from the Executive Branch, they may contribute to the improvement of accountability, especially when judging the accounts that the public administrators annually submit to their scrutiny.

From that assumption, the following question can be made: Can the annual accountability of agencies and entities allow TCU to contribute with the Executive Branch so that it can fulfill its commitments with the OGP.

Once the research question to be answer is established, the purpose of this article can be fixed as being

the discussion of the possibility of TCU, through the instrument of rendering of accounts, to perfect the exercise of accountability and contribute to the Executive Branch to fulfill the commitments made with the OGP.

To carry out this objective and provide an answer to the question made, this article was organized into six sections, in addition to this introduction. The second section briefly talks about the open Government in Brazil. The third seeks to establish some discussions concerning the accountability and transparency of public managers. The fourth demonstrates the evolution of accountability within the TCU. The fifth, in turn, demonstrates the interrelationship between accountability to TCU and the Open Government Partnership. Finally, the sixth and seventh sections have the final considerations and bibliographical references, respectively.

2. OPEN GOVERNMENT IN BRAZIL

The Open Government Partnership is an international initiative aimed at the improvement of government action through the promotion of transparency, accountability and responsiveness. The general assumption is that Governments are more effective and reliable if they are open to social participation. OGP1 was established in 2011, when eight founding Governments (Brazil, Indonesia, Philippines, Mexico, Norway, South Africa, United Kingdom and United States) formally adopted the Open Government Declaration and announced their first national action plans. OGP currently has 65 member countries (OGP, 2014).

The participating countries of the OGP must meet minimum requirements related to open Government principles, in addition to endorsing a declaration of principles and preparing action plans in order to put into practice a series of effective measures of transparency and access to public information and promotion of citizen participation (CGU, 2011). According to the Declaration of Principles, the commitments of OGP must be framed between five major challenges: improvement of public services; increase of public integrity; more effective management of public resources; creation of safer communities; increase of corporate responsibility. Such commitments must also follow the four principles of Open Government defined by OGP: transparency; citizen participation; accountability; and information technology (OGP-Brazil, 2011).

Therefore, to be considered as Open Government, the countries' management, actions, projects and

programs must reflect the principles of the OGP. The countries must also seek to achieve the objectives of increasing the availability of information on Government activities, supporting social participation, implementing the highest standards of professional integrity in public administration and increasing access to new technologies for purposes of openness and accountability (OGP-Brazil, 2011).

The search for accountability, transparency and social participation in Brazil started long before the entry of the country as a member of the OGP. In 1988, CF/1988 anticipated, since its promulgation, access to public information and the guarantee of social participation in various areas of public administration, as well as accountability, which, in this case, has been accepted mostly in the sense of rendering of accounts and accountability (MEDEIROS, CRANTSCHANINOV e SILVA, 2013).

The Fiscal Responsibility Act – LRF (Complementary Law No. 101/2000) enacted in order to establish rules for public finances aimed at accountability in tax management, is another important institute in the Brazilian search for the promotion of accountability and transparency. According to this law, the instruments of transparency of tax management, which shall have wide dissemination, are: the plans, budgets and budget guidelines law, accountability and its prior opinion, the summary report of the budget execution and the tax management report.

Following the same line of the LRF, the Law 12.527/2011, Access to Information Act- LAI, established a new and important milestone in the Brazilian scenario to regulate the right of access to public information provided for in CF/1988. Since its publication in 2012, there were 232,040 requests for information, nationwide, on the most varied topics were processed, and 230,024 of these requests were answered, i.e. an average of 99.13%. We can say that the LAI is the result of the National Action Plan on Open Government established by the Brazilian Government through Decree without number of September 15, 2011 for the purposes of fulfilling the requirements of OGP.

We can conclude that the CF/1988 traced wide paths for an increased permeability of the Brazilian State to citizen participation. To this end, access to information and, consequently, the transparency of the acts performed by the Government and the accountability of its agents are fundamental elements necessary for the strengthening of contemporary democracies. Such strengthening, however, cannot constitute an unique

and isolated effort of the Executive Branch as it can, as we will below, have great contribution from other branches, in particular, external control exercised by Courts of Accounts - TC.

3. ACCOUNTABILITY, TRANSPARENCY AND RENDERING OF ACCOUNTS OF PUBLIC MANAGERS

In an influential article about accountability, Campos (1990) inquires the possibility of translating such word into Portuguese. In her study, she emphasizes that the exercise of accountability is determined by the quality of the relationships between Government and citizens and between bureaucracy and clientele; and that there will only be conditions for accountability if citizens that are vigilant and aware of their rights organize themselves. (CAMPOS, 1990, p. 6). In this model, the citizen has a much broader role than the mere participation as a voter in the choice of their rulers, i.e., becoming an influential protagonist of public decisions.

In this regard, Dahl (1997, p. 25-26) highlights the quality of being responsive to all citizens as a remarkable feature of the democratic political system. Even in this scenario of democracy, Manin, Przeworski and Stokes (1999) argue that elected politicians may not act on citizens' best interest, since they have their own goals, interests and values. In these circumstances, the only "instrument" available to citizens to punish elected politicians for embezzlement, or to reward them for good service, would be the vote.

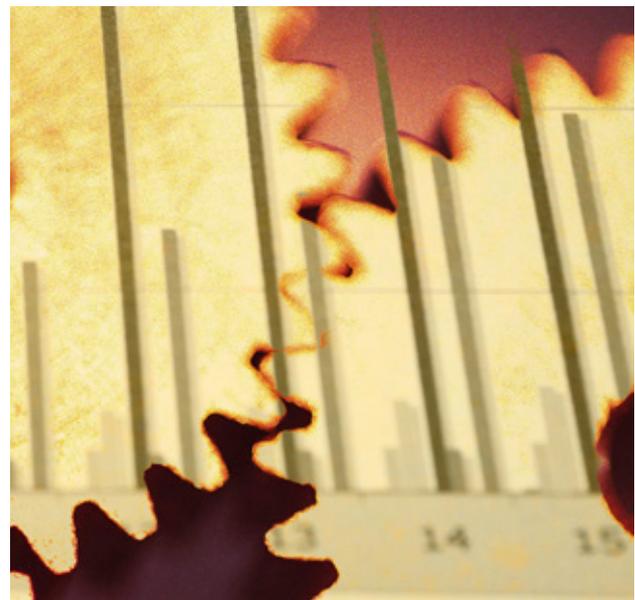
However, the vote is not enough to reward good rulers or to punish bad ones if the citizen cannot rely on independent institutions that act to encourage transparency of actions taken by the State. In the classification proposed by O'Donnell (1998), such institutions would be part of the horizontal² accountability that, to be effective, it must possess legal and actual authority, in addition to autonomy. Such institutions go beyond the classical institutions of the Executive, Legislative and Judiciary and reach arrangements as the ombudsmen, and the instances responsible for auditing the accountability (O'DONNELL, 1998, p. 43).

It is in this context that the importance of the Courts of Accounts (TCs) grows as institutions capable of promoting the reduction of informational gaps between State and society. The transparency of the acts performed by the different public actors and accountability of public managers become indispensable and

relevant mechanisms for the sponsorship of uninterrupted political accountability of the Public Government towards society.

Transparency, in this scenario, would be a preliminary search for the satisfaction of the promise unfulfilled by the democracies: the elimination of the unseen power. That is, the elimination of decisions and actions taken in secret, in the darkness, to give life to a Government whose actions should be carried out publicly, in daylight (Bobbio, 2000, p. 40). The OGP, therefore, by establishing its principles, promotes the improvement of democracy. The information analyzed by the TCs for judgment of accountability of public managers can improve, or at least, a portion of information approved by control institutions that operate independently can be placed at the disposal of citizens.

Rendering of accounts in Brazil is regulated, at the federal level, by the Federal Constitution (CF)-1988 and by the organic law of the TCU, Law No. 8443/1992 - LOTCU. At sub-national levels, by the respective State constitutions and municipal organic laws, as well as by the laws of creation of the TCs in the different States. According to the CF/1988, the Federal Court of Accounts, among other mandates, shall examine the accounts provided annually by the President of the Republic, issuing a prior legal opinion. The Court must judge the accounts of managers and other people responsible for monies, goods and public values of the direct and indirect administration, including foundations and societies instituted and maintained by the Federal Government, and the accounts of those that cause the



loss, misplacement or other irregularity resulting in loss to the Public Treasury (BRAZIL, 1988).

LOTUCU, in turn, establishes the annual rendering of accounts, as well as the form (taking or rendering of accounts), composition, decisions under such processes, in addition to the sanctions that the managers responsible for conducting public matters are subject to. Therefore, this law left the organization of processes related to accounts, conferred upon TCU, for standardization through normative instruction - IN, which obliges public institutions of the three branches to comply with. The evolution of the rendering of accounts to TCU be initiated by IN TCU 57/2008 and currently represented in IN 63/2010 is what we will discuss below.

4. EVOLUTION OF THE RENDERING OF ACCOUNTS TO TCU

We can say that the process of rendering of accounts is the gene that shapes and characterizes the Federal Court of Accounts since its creation (Decree 966-A/1890) to date, although its powers were extended over the past 120 years of existence to give other assignments that became important within the new political and social context experienced in Brazil, especially since the second half of the 80's.

Therefore, from the rendering of accounts, derives the competence of TCU to judge the accounts of



managers of public resources. In the post CF/1988 scenario, the judgment of the federal accounts reaches all those responsible for managing public resources of the three branches that, annually, are accountable to TCU. This broad range of action encompasses both direct and indirect public administration. In addition to that, the improvement process that public management has been experiencing since the model centered in paternalism to the management and, more recently, in the model and concepts of the new public management.

The diversity of institutions, their different natures and responsibilities, and the complexity that marks the public administration are factors with which the Courts of Accounts have to deal with so that accountability is made possible. Within the TCU, IN 57/2008 is the standard that shall dictate the new dynamic of accountability and breaks with the model previously adopted. In this new model, the management report – RG - became the most important part of the process of accounts. Selectivity has become heavily used, and the agencies and entities whose directors have accounts effectively judged each financial year were chosen based on a selection matrix that evaluates more than eighty criteria related to materiality, to relevance and to the risk related to management. Likewise, the rules for dealing with content, deadlines and forms of presentation of the accounts began to be regulated by two annual regulatory decisions - DN: one to deal specifically with the preparation of the RG; another to regulate the development of other parts that should compose the accounts process. The possibility of requiring information in a less than a year periodicity the position assumed by the top senior manager and his/her strategic core, as the responsible parties for the rendering of accounts, are two other relevant novelties in the current model of rendering of accounts that collaborate directly with the accountability and responsiveness of public administrators.

These changes gave more dignity to the process of accounts within TCU, since the previous model was seen by the Court's auditors as an untimely and innocuous instrument because it referred to past events, and low visibility since the auditors preferred to work in processes that brought more attention to them and, consequently, would facilitate the rise in their careers.

The challenges for implementing the new model of rendering accounts to the TCU, thus, derived not only from the diversity and complexity of the external environment, but also from the internal disbelief of the technical staff. To meet these challenges, in 2008, the TCU approved the creation of the Audit Project with the

objective of implementing the new system of rendering of the accounts by the units under the jurisdiction of TCU provided for in IN TCU 57/2008.

Among the most important results of the Audit Project include the structuring of the topics that should be included in the RG; the prediction of continuous improvement, including through the use of technological resources capable of conferring greater efficiency and effectiveness to the actions necessary for the judgment of processes of accounts, and the standardization of concepts and understandings with the approval of IN TCU 63/2010, which replaced the IN TCU 57/2008.

In this new model of rendering of accounts, the RG, prepared by the unit under TCU's jurisdiction, gained the status of most important piece to compose a process of accounts. Therefore, its contents started to be dealt with in a unique DN. This regulatory decision might be considered the one with greatest complexity among the rules governing the process of rendering of accounts. The standard, approved annually, provides guidelines for the management of those responsible for conducting public matters to be judged. To this end, it considers various aspects of management that ranges from aspects related to governance to the accuracy of financial statements. This set of features allows the TCU to decide whether the accounts presented by the managers will be considered regular, regular with exception or irregular.

In its current version, this DN has encompassed the following topics: (i) governance; (ii) relationship with society; (iii) operation environment; (iv) planning and results achieved; (v) budget and financial execution; (vi) personnel management and labor outsourcing; (vii) management of assets, (viii) management of information technology; (ix) managing the use of renewable resources and environmental sustainability; (x) information regarding the compliance with demands of control agencies; and (xi) accounting information.

We can conclude from what we've seen so far that the process of accounts is the only instrument available to TCU able to pervade the various public institutions across the board and that generates information periodically. Furthermore, the process of accounts is the only means of oversight that systematically mobilizes people from the jurisdictional units exclusively for the preparation of its content. Therefore, it is through the process of accounts that the TCU can exercise its most important prerogative: judging the managers' decisions and others responsible for money, goods and public values within the Federal government, since the ruling of

the accounts of the President is political and exclusive competence of the National Congress.

5. RENDERING OF THE ACCOUNTS TO TCU AND THE OPEN GOVERNMENT PARTNERSHIP

As discussed in section 2, the practice of accountability is one of the basic principles for a country to be defined as open government. If we use accountability as rendering of accounts and liability, it is almost natural to integrate the Courts of Accounts as important actors for the fulfillment of this principle.

To examine the accounts of public officials and hold them accountable, when applicable, the Courts of Accounts contribute to politicians and bureaucrats seek to act in the best interest of the citizen. Accountability, therefore, shall only have credibility if the ruling institution has independence and legal and actual authority (O'Donnell, 1998). These characteristics elect the Courts of Accounts as indispensable actors for the achievement of the principles provided by the OGP.

This is not to say that the rendering of the accounts structure and internal accountability in the government branches, representing control on itself, are not important. On the contrary, the performance of the internal control agencies of powers is essential. However, the independence of performance is more evident when the institution with authority to exercise control is external to the controlled environment.

It is exactly in this role that TCU stands out. As an institution with constitutional jurisdiction to judge the accounts of administrators and those responsible for money, goods and public values of the federal government's units and indirect administration agencies, and of all those who cause loss, misplacement or other irregularity resulting in loss to the Treasury, as well as to analyze accounts rendered by the President of the Republic. As an institution that is independent and not part of the Executive Branch, the TCU can add greater value to accountability.

Given its broad jurisdiction, the TCU reaches any institution that receives federal funds. Its scope even includes sub-national public agencies when these institutions are celebrating an agreement that involves federal public resources.

Considering this broad area of influence, TCU is qualified, via analysis of accounts, to be an important partner in achieving the goals outlined by the OGP and accepted as commitments to be pursued by Brazil. Such

commitments are large, ambitious and much desired for the growth of the country and the Brazilian democracy and, therefore, should not be of concern of only one of the branches of the government.

In this context, the process of rendering of accounts can become (or at least contribute to) the solution of two major and important issues: the reduction of the information gap between the government and the society, which is the instrument that have been judged by an independent institution, and allow citizens to exercise their citizenship outside of election periods. In other words, the citizen will be important not only every four years, when politicians seek them in order to conquer their votes to remain in power.

Therefore, having reliable information, which goes through a process of analysis and assessment by an autonomous and independent institution, can have the power of transforming the citizen from a mere spectator or recipient of public policies into an important player in conducting and controlling public matters. Thus, we conclude that the rendering of accounts instrument could be an important asset for the TCU to improve accountability and Brazilian democracy.

6. FINAL CONSIDERATIONS

The purpose of this article was to discuss TCU's possibilities of improving accountability performance by using the rendering of accounts instrument, and to contribute with the Executive Branch in implementing the commitments undertaken with the OGP.

From the analysis performed, we demonstrated the important role that the Courts of Accounts can play in improving accountability. Particularly in the case of TCU, it was confirmed that the process of rendering of accounts can constitute a powerful tool for this Court of Accounts to collaborate with the Executive Branch in complying with the principles that will be recognized as an open government and, consequently, the improvement of the Brazilian democracy.

Unlike other oversight activities conducted by TCU, it is the accounts analysis that runs like a thread through public administration, in a comprehensive and regular basis; and, therefore, it is able to generate a large flow of information, on a variety of topics. By analyzing this information and by giving an opinion, the TCU, by issuing its ruling, provides an explanation to society about the performance and property of management of public resources used by politicians and bureaucrats.

When TCU judges the accounts, it sends a signal that the information is vital and authoritative, autonomous and independent to empower the citizen to express better his/her choices in election rounds and to encourage his/her participation in the control of public management during these periods. Thus, the TCU, through the rendering of accounts, can become an important and relevant player in achieving the goals defined by the OGP. Therefore, the Executive Branch will not need to fight the mills in solitary winds.

In accordance with the analysis performed, the question posed can be answered affirmatively, in the sense that the rendering of accounts instrument is a valuable tool available to TCU that can be used by citizens and by the Executive Branch as a means to achieving the commitments made to the OGP.

REFERENCES

BOBBIO, Norberto. *O Futuro da Democracia*. – uma defesa das regras do jogo. São Paulo:

Paz e Terra, 2000.

BRASIL. *Decree No. 966-A*, from November 7, 1890. Available in <http://www2.camara.leg.br/legin/fed/decret/1824-1899/decreto-966-a-7-novembro-1890-553450-publicacaooriginal-71409-pe.html>. Accessed on February 3, 2015.

_____. National Congress. Constitution (1988). *Constitution of the Federative Republic of Brazil*: October 05th, 1988.

_____. National Congress. Complementary Law No. 101, from May 4, 2000. *Fiscal Responsibility Law*, 2000.

_____. National Congress. *Law No. 8.443*, from July 16, 1992. Provides for the Organic Law of the Federal Court of Accounts among other provisions.

_____. National Congress. *Law No. 12.527*, from November 18, 2011. It governs the access to information referred to in subparagraph XXXIII of art. 5, item II of paragraph 3 of art. 37 and paragraph 2 of art. 216 of the Federal Constitution; amends Law No. 8,112, from December 11, 1990; revokes Law No. 11,111 from May 5, 2005, and provisions of Law No. 8,159, from January 8, 1991; among other provisions.

_____. Federal Accountability Office. *Open Government Declaration (2011)*. Available in <<http://governoaberto.cgu.gov.br/ogp/ogp-declaracao-de-governo-aberto.pdf>> Accessed on January 23, 2015.

_____. Federal Audit Court. Normative Instruction No. 57, from August 27, 2008. It provides standards of organization and presentation of management reports and of processes of accounts of the federal public administration.

_____. Federal Audit Court. *Normative Instruction No. 63*, from September 1, 2010. It provides standards of organization and presentation of management reports and of additional parts that constitute the processes of accounts of the federal public administration, for the judgment of the Accounts Courts, in compliance with art. 7 of Law No. 8.443, from 1992.09/01/2010.

CAMPOS, Anna Maria. *Accountability: quando poderemos traduzi-la para o português?* Revista de Administração Pública, Rio de Janeiro, v. 24, n. 2, p. 30-50, fev/abr. 1990.

DAHL, Robert A. *Poliarquia*. Trad. Celso Mauro Paciornick. São Paulo: Edusp, 1997. 234 p.

MEDEIROS, A. K. de; CRANTSCHANINOV, T. I.; SILVA, F. C. da. Estudos sobre *Accountability* no Brasil: meta-análise de periódicos brasileiros das áreas de administração, Administração pública, ciênciapolítica e ciências sociais. *Rev. Adm. Pública*, Rio de Janeiro 47(3): 745-775, maio/jun. 2013.

O'DONNELL, G. *Accountability horizontal e novas poliarquias*. Revista Lua Nova. São Paulo: Cedec, n. 44, 1998.

_____. *Delegative Democracy*. Journal of Democracy, Vol. 5, n. 1, p. 55-69, January 1994. National Endowment for Democracy and The Johns Hopkins University Press.

Open Government Partnership. *Eligibility Criteria (2014)*. Available in <<http://www.opengovpartnership.org/>> Accessed on January 22, 2015.

PRZEWORSKI, Adam; STOKES, Susan C.; MANIN, Bernard. *Democracy, Accountability, and Representation*. Cambridge studies in the theory of democracy. 1999. 351 p.

NOTES

- 1 For greater detail, see: REIS, Sérgio Roberto Guedes. A política de Governo Digital do governo federal brasileiro como práxis do paradigma de Governo Aberto: uma análise de suaviabilização a partir de um Modelo de Integração de Agendas. XIX Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública, Quito, Ecuador, 11 – 14 nov. 2014.
- 2 For O'DONNELL, horizontal accountability means the existence of State agencies that have the right and the legal power and are indeed willing and able to perform actions, ranging from the supervision of routines to legal sanctions or even the impeachment against actions or omissions by other State agencies or agents that may be classified as tortious (O'DONNELL, p. 4, 1998).

Federal union's tort liability for damages caused to mixed capital companies: an analysis of the conflict between public interest and the federal union's interest as majority shareholder



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ABSTRACT

This study aims to examine legal aspects around the tort liability of the Government for damages caused to mixed capital companies as a result of acts in the self-interest of the Government as majority shareholder that fail to meet the public interest for which the company was set up or that cause a negative financial impact on the company. The methodology that was used for this purpose is basically a comparative doctrinal study and analysis of theoretical works associated with descriptive research of legal rules applicable to the subject. Case studies can be used as a way to illustrate the analysis that was carried out. Using inductive or deductive methods, information will be analyzed to achieve the paper's objective, namely, that of clarifying whether and how the tort liability of the Government can be characterized for damages caused to mixed capital companies as a result of acts in the self-interest of the Government but not in the public interest. The research mainly addressed issues related to social role and tort liability, taking into account latent conflicts of interest in mixed capital companies, which must meet the primary public interest that justified their creation and the interests of the Government as majority shareholder, the interests of minority shareholders, and its responsibilities toward its employees and the community that it serves. It was seen that the law provides for the preponderance of primary public interest over the



self-interest of the Government as majority shareholder and over the interests of private shareholders, even if the company's profitability has to be reduced for this purpose. Nonetheless, studies have determined that it is not possible to establish criteria in advance to define conducts that may be characterized as abuse of power and that the public interest that justified the creation of a mixed capital company must be analyzed in each case and compared to the conduct adopted by the Government as majority shareholder.

Keywords: Mixed capital company; Majority shareholder's liability (Government); Abuse of power; Public interest.

1. INTRODUCTION

As the majority shareholder of private law companies, whether public or mixed economy companies, the Government uses its controlling power and influences managers to carry out management acts that, on the one hand, meet its interests as majority shareholder but, on the other, can cause damages to the company's assets.

A mixed capital company is a private law legal entity established by law to engage in economic activities as a joint stock company whose shares with voting rights are owned, in their majority, by the public entity that established it.

In the context of open mixed capital companies, directly controlled by the Government, this academic paper analyzes legal aspects concerning the tort liability of the Government for damages caused to mixed capital companies as a result of acts that meet the interests of the Government, as majority shareholder, but fail to meet the public interest, in accordance with Articles 117 and 238 of Law 6,404/1976.

2. THE TORT LIABILITY OF THE STATE AS MAJORITY SHAREHOLDER OF MIXED CAPITAL COMPANIES

As provided for in articles 186 and 187 of the Civil Code, tort liability presupposes tort, damages and a causal link between tort and damages caused by it. Objective and subjective liability are differentiated by the subjective existence, in the latter, of the element of guilt. In subjective liability, characterizing the guilt of the relevant agent is fundamental, as no one should be required to repair damages if they did not fail in their duty of caution in their actions.

For the purposes of this paper, what matters most is the liability characterized by abuse of a right, which is a sort of objective liability in accordance with articles 187 and 927 of the Civil Code.

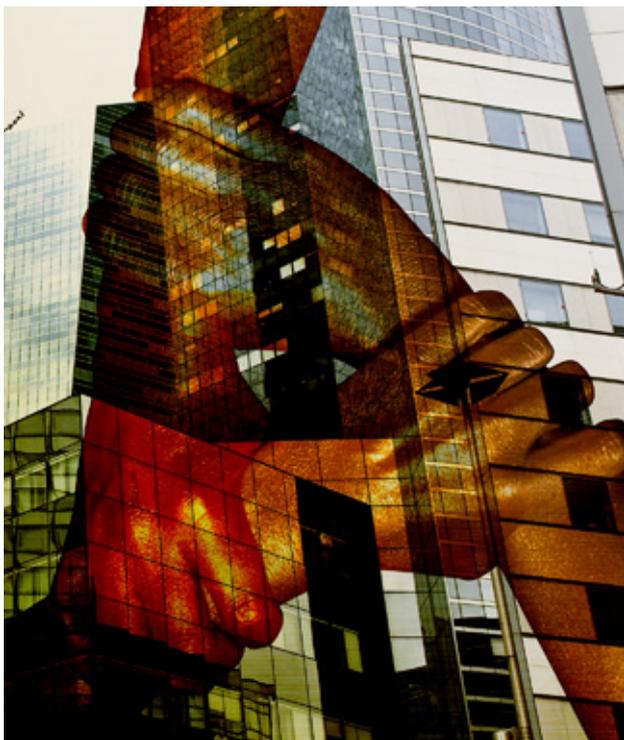
Sergio Cavalieri Filho teaches us that abusing a right boils down to exercising it unethically, failing to meet the social or economic purpose of the right. In

other words, the act might be formally legal but the holder of the right deviates from the norm, turning it substantially into tort. In this case, a right is exercised in disregard of the axiological context of the legal norm, and it is not necessary that the agent is aware of having exceeded the bounds of the law. In the abusive exercise of a right, the conduct might be backed by law while ostensibly hurting its spirit. The author also points out that an illegal act characterizing abuse of rights can be committed without the agent's behavior causing harm to others. In such cases, compensation will not always be the sanction, which may take the form of nullification of the act, the loss of a right (CAVALIERI FILHO, 2014, pp. 203-205).

In corporate law, abuse of power is a tort that can give rise to civil liability of a majority shareholder (article 117), as that shareholder has the power-duty to guide the company in fulfilling its purpose and social role.

The liability of a majority shareholder stems from its prerogative of permanently setting the company's policy by means of voting or through its managers, and its acts should always be aimed at promoting the social interest and based on its duties of loyalty, due diligence, and transparency.

The power-duty of a majority shareholder presupposes the duty of loyalty, as measured by the prin-



ciple of objective good faith (articles 113 and 422 of the Civil Code), which embeds the duty of due diligence. The majority shareholder shall not be held liable for mistakes in conducting a company's business if it can be demonstrated that it acted with due care and diligence (PINTO JUNIOR, 2009, p. 626).

Thus, the mere occurrence of financial losses is not sufficient to determine the liability of the majority shareholder or of the company's managers, provided that they fulfilled their duties of loyalty and due diligence and acted in pursuit of social interest.

The elements that characterize abusive conduct by a majority shareholder are the actual exercise of the power-duty to control; the legal impermissibility of such exercise; losses derived therefrom; and the causal relationship between a conduct and damages, which should represent the main cause of the damages, without which the damages would not have occurred (PINTO JUNIOR, 2009, pp. 688-689).

3. CONFLICT OF INTEREST IN MIXED CAPITAL COMPANIES

The shareholders of these companies have three different coexisting interests: the primary public interest, the secondary public interest, and the private interest.

First, the primary public interest is the interest of the community. This concept encompasses the notion of the company's social role and its obligation to respect the other shareholders, its staff, and the community it serves. It also includes the public interest that justified the legal establishment of the company, which can be known by analyzing its founding law and bylaws.

Second, the secondary public interest means the interest of the Government as a public law legal person that controls the company. The interest of the Government should not be confused with the interest of the community. The Government must ensure that the Constitution and other laws are duly complied with (Brazilian Constitution, article 23, item I); therefore, it should, in theory, conduct the company's business in such a way as to fulfill the public interest that justified its creation. In other words, the secondary public interest should coincide with the primary public interest. Nonetheless, in certain cases the Government conducts the company's business for purposes other than those for which it was established. This latent dichotomy between primary and secondary public interest in the context of mixed capital companies is the main object

of this study, as illustrated by case studies that will be presented below.

Third, the private interest is the interest of the other shareholders of the mixed capital company. For purposes of simplicity, we assume that the interest of these shareholders is maximizing profits.

The conflict of interest addressed in this study occurs when the Government conducts the company's business in such a way as to fulfill the secondary public interest, that is, its own interest as a shareholder, which in this case is not in tune with the primary public interest.

According to Modesto Carvalhosa, the state as majority shareholder should focus on meeting the primary public interest (the interest of the community) and not the secondary public interest (state apparatus) or the purpose of profit. In other words, the primary public interest must always prevail in the operations of mixed capital companies (CARVALHOSA, 2009, p. 409).

According to him, the profitability of mixed capital companies, as derived from their very existence, is desirable and constitutes a necessary means for achieving their purpose, namely, that of meeting the primary public interest. Profit is legitimate when it is achieved in the process of pursuing the public interest. In mixed capital companies, which combine public and private capital, pursuing the public interest is a must and, consequently, profit to remunerate their private capital. This is the fundamental equation of mixed capital companies (CARVALHOSA, 2009, pp. 410-411).

In theory, the valuation of interests that permeate mixed capital companies is accepted in doctrine; however, the interest of the Government as majority shareholder does not always coincide with the public interest that justified the establishment of a mixed capital company (article 238), and this is why the state as such can also practice abuse of power.

Mario Engler Pinto Júnior believes that the Union can practice abuse of power as majority shareholder when it leads the company to act outside the bounds of its purpose or against the social interest by exercising its voting rights or any other dominant influence. According to him, such abuse occurs when the Union uses social resources for its own benefit or for the benefit of non-legitimate third parties in pursuance of the secondary public interest only, when such measure cannot be justified as meeting the primary public interest. The Union can also practice abuse of power by

omission, when it fails to act positively according to the provisions of article 238 (PINTO JUNIOR, 2009, p. 33).

4. CASE STUDY: THE PRICING POLICY OF PETROBRAS FOR FUEL AND OIL DERIVATIVES

It is current news in the Brazilian and international press that the financial position of Petrobras in 2014 was harmed by its pricing policy for fuel and oil derivatives, as determined by its Governing Board, chaired by the Minister of Finance.

Petrobras is responsible for supplying the domestic market and it needs to import oil and oil by-products to complement its production. Although it is an objective of the company to set prices in Brazil based on international price references, it ends up importing products at market price and selling them in the domestic market according to the pricing policy determined by the Government and without taking the exchange rate into account. At certain times, as observed for months in 2014, the market prices of the products were higher than those charged in the domestic market and this was harming the company's finances. In practice, the media insisted that the Government had been using Petrobras as an economic policy instrument to control inflation by subsidizing the prices of oil and oil by-products charged in the domestic market.

This government practice is supported by those who believe that controlling inflation and monetary stability are important objectives not only for the Government, but also for the Union as a whole. Based on this belief, sacrificing the profitability of state-owned enterprises, and not only of Petrobras, would be in line with the public interest of a state enterprise. They also believe that the profits of Petrobras would not be affected because external and internal prices tend to become aligned in the long run. This means that at certain times domestic prices were higher than international prices, but not enough to force Petrobras to lower its prices. They also argue that this practice is necessary to reduce volatility in the prices of oil and oil by-products and the volatility of inflation, which is undesirable for the company and for Brazil at large.

On the other hand, this practice is criticized by those who believe that Petrobras has suffered excessive interference in its activities, as it is being prevented from passing costs on to the final selling price of its products. In a free economy, prices vary in response to

variations in factors that influence supply and demand and costs.

To address this issue, one must weigh the extent to which the purpose of guiding the business of the state enterprise is consistent with its primary public interest, i.e. the public interest that justified its creation.

The establishment of Petrobras was authorized in 1953 through Law 2,004/1953, which provided for the National Petroleum Policy. In 1997, Congress enacted Law 9,478, which provides for the National Energy Policy and activities related to the oil monopoly and revoked previous legal instruments on the matter. The law subtly changed the corporate purpose of Petrobras and provided that it was to operate under a free competition regime. In 2002, Law 10,438 authorized Petrobras to include energy-related operations in its corporate purposes.

According to Petrobras' bylaws, the purpose of the company is to carry out research on extract, refine, process, trade and transport oil from wells, shale and other rocks, oil derivatives, natural gas and other fluid hydrocarbons, in addition to carrying out energy-related activities and research, development, production, transportation, distribution and marketing of energy in all forms, as well as any other related or similar activities.

One can easily see that Petrobras was not established to play any role in policies designed to control

inflation in Brazil. Thus, there is no legal basis to support any alleged price controls that Petrobras would have to apply to its products with the sole purpose of controlling inflation.

However, it is important to check the grounds of the argument that the prices charged by the state enterprise would tend to align themselves with international market prices in the long run. Considering that international market prices were at certain times below selling prices in the domestic market and that this was not a reason for Petrobras to be advised to reduce its domestic prices, it might make sense to assume that an albeit implicit pricing policy was adopted according to which it is not advisable to adjust prices in the short term to avoid volatility in the prices of oil and oil by-products domestically.

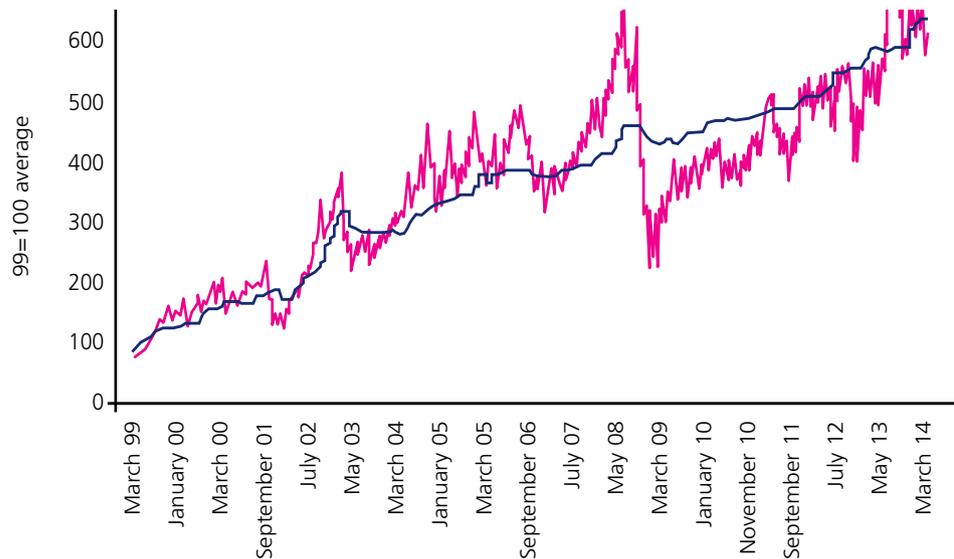
To clarify this issue, one must check the purpose for which the Government defines Petrobras' pricing policy.

Hypothetically, not passing short-term variations on to final prices with the main purpose of controlling inflation is not part of the company's corporate purpose, meaning that, in this case, the Government would be engaging in abuse of power.

Also hypothetically, not passing short-term variations on to final prices based on an actual pricing policy and not for the purpose of controlling inflation does not constitute abuse of power. Both upward and down-

Graph 1:

Prices of oil and oil by-products (until March 2014)



Sources: Bloomberg and Central Bank of Brazil

Prepared by the Central Bank of Brazil.

— International Oil Price in R\$/barrel
 — OPA-DI Oil By-products

ward short-term price volatility creates uncertainty as to future revenues expected from the company and affects its planning.

Determining the practice of abuse of power by the majority shareholder is a fundamental requirement for determining the practice of an illegal act and, thus, the tort liability of a majority shareholder. If there is no abuse of power, there are no grounds to consider any possible tort liability of the Government.

According to a Central Bank report, wholesale prices of oil by-products (gasoline and cooking gas) are periodically adjusted to preserve their equivalence with international prices in the Brazilian currency, as shown in the graph below:

Between early 2009 and mid-2013, domestic prices were higher than international price used as reference. What this means is that, in theory, Petrobras imported oil and oil products at lower prices and sold them in the domestic market at higher prices, profiting from the difference. If domestic prices had to keep up with variations in international prices, Petrobras should have reduced the prices charged in the domestic market, but that did not happen.

Therefore, there are no grounds to say that when international prices were higher than domestic prices Petrobras should have increased its prices to keep up with that short-term variation.

There is only one rule that must be applied to both cases, whether for the advantage or disadvantage of the company. We cannot say that Petrobras' profits were negatively affected in 2014 during the months in which international prices were higher, as the company enjoyed benefits in the past.

Based on the graph, we can assume that domestic prices follow market prices in the long run.

Therefore, according to the information analyzed here, we can conclude that in the analyzed cases the Government did not commit abuse of power when it set Petrobras prices of oil and oil by-products in the domestic market. The momentary loss suffered by the company was due to a pricing policy designed to ensure the predictability of Petrobras' revenues and, indirectly, to ensure the stability of the prices of oil and oil by-products in the domestic market.

5. CASE STUDY: DELAYS IN TRANSFERRING FUNDS OWED TO PUBLIC BANKS

With the deterioration of the public accounts in 2014 and the increasing threat that the government

would not be able to meet the surplus target determined in the Budget Guidelines Act, there was some information that the National Treasury had been delaying transfers due to public banks for paying off agricultural loans or financing of productive activities.

Subsidies are allowed under public policies adopted by the Government, but they are made available through public banks, which place the money in the hands of farmers. Because the subsidies are granted by the Government, the banks become its creditors regarding the funds transferred to the beneficiaries.

A public bank has the dual mission of meeting the demand of both types of accounts (deposits and credit) and it is up to them to provide the safest popular savings alternative. They also conduct businesses and assume risks that private banks are not willing to assume but which are, nonetheless, strategically important for socioeconomic development always exercising good judgment. Public banks also play the role of fostering competition by charging lower fees and interest, without, however, affecting the profitability of operations as a whole.

The media has reported that the government has been delaying transfers of funds to Banco do Brasil for paying off agricultural loans as a way of trying to increase the government surplus momentarily.

In order to check whether this practice of the Treasury is in line with legal regulations, one must consider the corporate purpose of Banco do Brasil. Article 5 of its bylaws provides that the bank and the Government must enter into contracts to make government funding available and that the Government must leave the corresponding resources at the disposal of the Bank, duly compensated with interests.

Under the Civil Law, the Government would be in overdue debt to Banco do Brasil, as they have been failing to transfer the amounts contemplated in contracts between them.

This contractual default can characterize the tort liability of the Government in this case. The assumptions of contractual liability are present: we assume the contract is valid; we assume the Government is in default, characterizing breach of contract; the damage consists in the negative impact on the cash flow of Banco do Brasil, as it is deprived of financial resources to carry out its business; and the relation to cause comes from the fact that if the Government had complied with its contractual obligations within the prescribed time, the damage would not have existed.

Under the Corporate Law, the conduct of the Government could, in theory, be characterized as abuse of power on the part of the majority shareholder, as provided for in article 117 of the Corporate Law (LSA).

With this conduct, the Government would be engaging in actual breach of fiduciary duty according to the only paragraph of article 116 of the LSA, as it would be using its power as majority shareholder to meet its own interest in increasing the government surplus momentarily, disregarding the public mission of Banco do Brasil.

Once the abuse of power by the majority shareholder is determined, the resulting damages, and the link between the conduct and the damages are characterized, the tort liability of the majority shareholder and its consequent obligation to indemnify the company can be established.

Good solutions that can mitigate the harmful effects of abuse or misuse of power in state enterprises include, in particular, the adoption of newly developed corporate governance practices.

6. CONCLUSION

The debate on government intervention in the economy has led to many discussions in academic circles. The most discussed topics include what it means

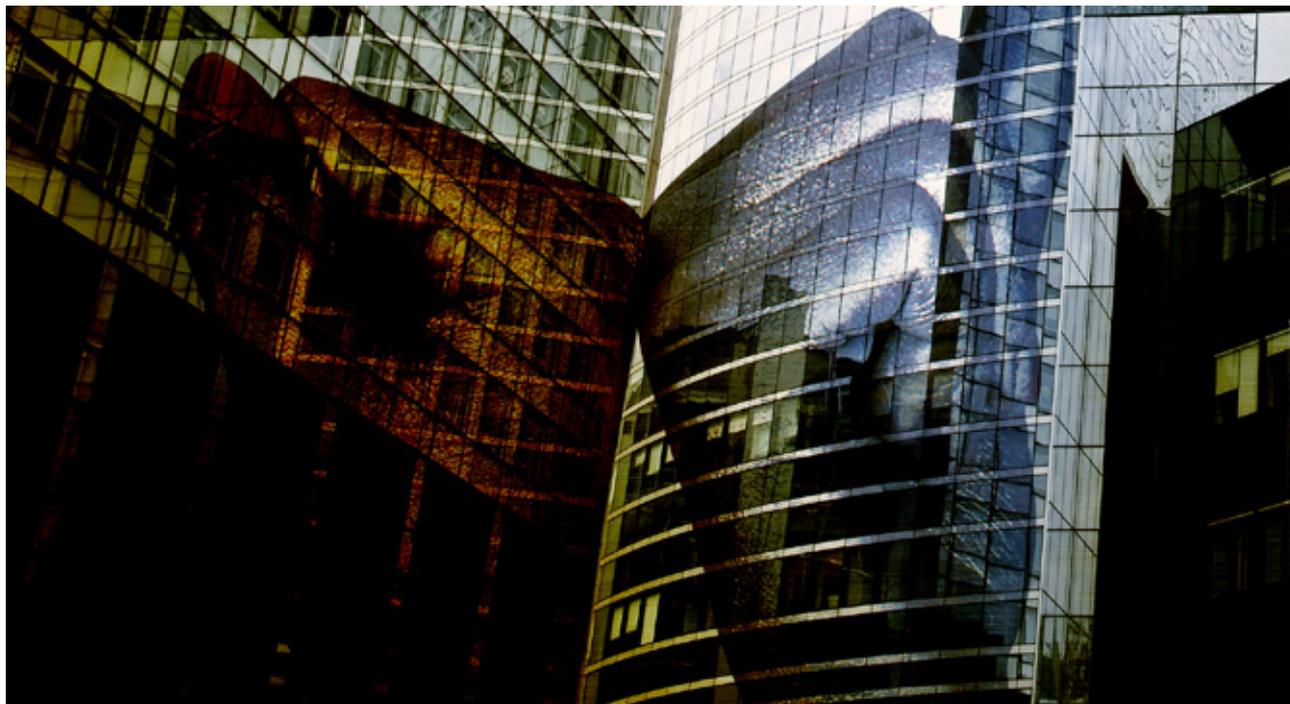
to sacrifice the profitability of state-owned enterprises as a way to guide public policies defined by the Government as majority shareholder.

The objective of this study was to make a legal analysis of the extent to which the conduct of the Government in guiding the operations of mixed capital companies can be considered as legal or illegal conduct.

The case that was selected was one related to the pricing policy adopted by Petrobras for selling oil and oil by-products in the domestic market, which according to recent media stories is not in tune with actual market prices. We found out that Petrobras has not been passing the short-term variations in market prices abroad on to domestic prices. We concluded, therefore, that the Government has not been committing abuse of power as a result of the pricing policy applied to oil and oil by-products sold by Petrobras.

We examined a case of delays in transferring funds owed by the Treasury to public banks for paying off loans to farmers and other credits. And, concluded, that the conduct of the Government in this case can be characterized as abuse of power, as it would be in default in complying with obligations agreed upon.

The study is relevant because there has been much discussion on state intervention in the economy and on the role of mixed capital companies, as well as on the increasing importance given to corporate governance practices, including in state-owned enterprises.



REFERENCES

- CENTRAL BANK OF BRAZIL. Available at: <www4.bcb.gov.br/pec/gci/port/focus/faq%205-pre%C3%A7os%20administrados.pdf>. Accessed on: November 10, 2014.
- BARROSO, Luís Roberto. Modalidades de intervenção do Estado na ordem econômica. Regime jurídico das sociedades de economia mista. Inocorrência de abuso de poder econômico. In: _____. *Temas de direito constitucional*. 2nd edition. Rio de Janeiro: Renovar publishing house, 2003. pp. 389-434.
- _____. Regime jurídico das empresas estatais. *RDA: revista de direito administrativo*, Rio de Janeiro, v. 242, pp. 85-93, October/December 2005.
- BORBA, José Edwaldo Tavares. *Direito societário*. 13th revised edition. Rio de Janeiro: Renovar publishing house, 2012.
- CARVALHOSA, Modesto. *Comentários à Lei de Sociedades Anônimas: Lei n. 6.404, de 15 de dezembro de 1976, com as modificações das Lei n. 11.638, de 28 de dezembro de 2007*. 4th edition. São Paulo: Saraiva publishing house, 2009. v.4 tome 1. 433, p. Articles 206-242.
- _____. *Comentários à Lei de Sociedades Anônimas: artigos 75 a 137*. 6th revised and updated edition. São Paulo: Saraiva publishing house, 2014. Vol. 2.
- _____. *Comentários à Lei de Sociedades Anônimas: artigos 243 a 300*. 5th revised and updated edition. São Paulo: Saraiva publishing house, 2014. Vol. 4 tome II.
- CAVALIERI FILHO, Sérgio. *Programa de responsabilidade civil*. 11th revised and updated edition. São Paulo: Atlas publishing house, 2014. xxvi, 641 p.
- COMPARATO, Fábio Konder. Estado, empresa e função social. *Revista dos Tribunais*, São Paulo, v. 85, no. 732, pp. 38-46, October 1996.
- _____; SALOMÃO FILHO, Calixto. *O poder de controle na sociedade anônima*. 5th edition. Rio de Janeiro: Forense publishing house, 2008.
- BRAZILIAN INSTITUTE FOR CORPORATE GOVERNANCE. Available at: <<http://www.ibgc.org.br>>. Accessed on: November 10, 2014.
- LOPES, Ana Frazão Azevedo. *Empresa e propriedade: função social e abuso de poder econômico*. São Paulo: Quartier Latin publishing house, 2006. 335, p.
- MUKAI, Toshio. *O direito administrativo e o regime jurídico das empresas estatais*. 2nd checked and expanded edition. Belo Horizonte, state of Minas Gerais: Fórum publishing house, 2004. 384, p.
- ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT. Available at: <<http://www.oecd.org/>>. Accessed on: November 10, 2014.
- ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT. *Diretrizes da OCDE sobre governança corporativa para empresas de controle estatal*. Available at: <<http://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/42524177.pdf>>. Accessed on: November 10, 2014.
- PETRÓLEO BRASILEIRO S.A. Available at: <<http://www.investidorpetrobras.com.br/pt/governanca/estatuto-social/>>. Accessed on: November 3, 2014.
- PINTO JUNIOR, Mario Engler. *O Estado como acionista controlador*. 2009. Doctoral Thesis (Doctorate in Business Law) - Law School, University of São Paulo, São Paulo, 2009. Available at: <http://www.teses.usp.br/teses/disponiveis/2/2132/tde-17112011-111844/>. Accessed on: 2014-3-21.
- REVISTA CAPITAL ABERTO. São Paulo: *Gigante sem destino*, year 10, no. 120, August 2013.
- SALOMÃO FILHO, Calixto. Sociedade anônima: interesse público e privado. *Revista de Direito Mercantil, Industrial, Econômico e Financeiro*, São Paulo, no. 127, pp. 7-20, 2002.

NOTES

- 1 Considering the blind peer review process, we request that the author's name is not provided. This piece of information will be provided if the paper is approved for publication, in which case the information recorded when the author registered the paper for publication will be used.

Evaluation of beta (β) by the external control in public-private partnership (PPPs) contracts



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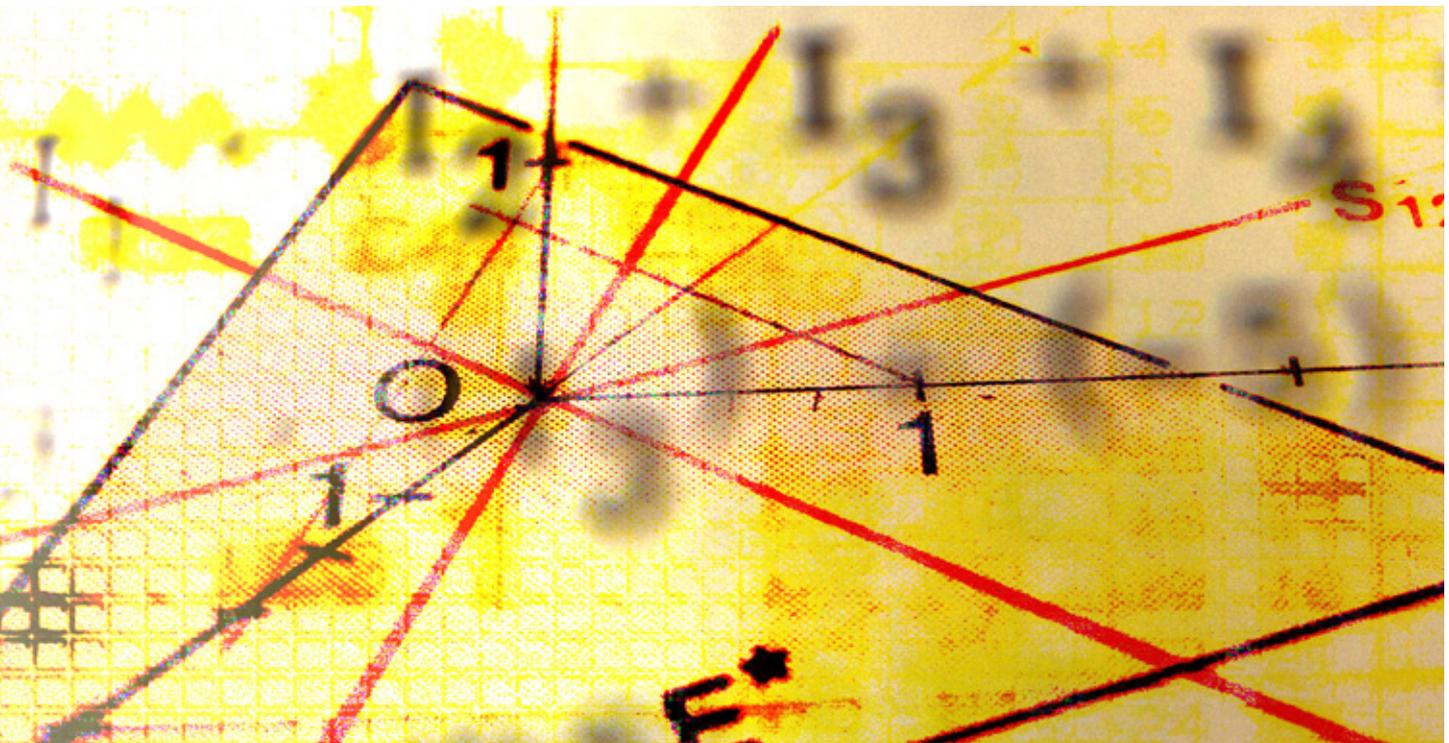
is a government auditor of the Court of Accounts of the Federal District (Brazil). He holds a Bachelor degree in Economics from Federal University of Piauí (UFPI) and a Master degree in Economics from University of Brasília (UnB).

ABSTRACT

One of the External Control's constitutional responsibilities is to appraise the financial and economic viability of Public-Private Partnership projects (PPPs). In this context, it is important to evaluate the Weighted Average Cost of Capital (WACC) – the enterprise's appropriate rate of return – according to the Federal Court of Accounts – Brazil (TCU). One of the components in the WACC calculation is beta (β), which represents the systemic risk of a firm or sector. Calculating beta in PPP contracts involves some problematic issues, because it usually includes construction, purchase of equipment and service provision, i.e., more than one economic sector. This paper aims to show that, according to the financial theory, it is more appropriate to use the weighted average of the betas of each sector involved in the project rather than using only the beta of the predominant sector. This conclusion was applied to the Health PPP analyzed by the Court of Accounts of the Federal District (TCDF).

1. 1. EXTERNAL CONTROL OF PUBLIC-PRIVATE PARTNERSHIPS (PPP)

According to Law no. 11079/04, article 2 (which establishes general rules for bidding and contracting PPPs in public administration), a public-private partnership is a concession agreement that involves two new modalities: administrative and sponsored.



These forms of concession are different from the regular ones, for the latter are ruled by Law no. 8597/95, which is subsidiarily applicable to the PPP Law.

As PPP contracts executed by public administration constitute administrative agreements that involve the disbursement of Treasury resources, they are controlled by the Courts of Accounts, according to articles 70 and 71 of the Brazilian Constitution (1988).

In this context, the Federal Court of Accounts – Brazil (TCU) edited the Normative Proceeding no. 52, from July 4, 2007, whose 1st article provided that: “The Federal Court of Accounts has the mandate to follow the processes of bidding and contracting Public-Private Partnerships, as mentioned in Law no. 11079/2004, and also to monitor the execution of established partnership agreements.” (TCU, 2014, p. 1)

The Court of Accounts of the Federal District (TCDF) published Resolution no. 189, from Sept. 9, 2008, whose content is similar to the TCU norm.

One of the basic duties of the Courts of Accounts is the financial and economic evaluation of the PPP project by means of analyzing the viability studies presented by the promoter of the bidding process. For that reason, providing electronic spreadsheets is mandatory, as mentioned in article 4, “d”- 6 of the NP 52/TCU (TCU, 2014, p. 2-3).

In this research, one of the technical elements investigated is the adequacy of the WACC (Weighted Average Cost of Capital).

2. WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The WACC is the weighted average cost of debt and equity. It is supposed to be used to discount the cash flows of projects whose risk is the same as the firm’s, and it is funded at the same percentage of the firm’s debt (ROSS, 2002, p. 270).

The formula for calculating the WACC is the following:

$$r_{WACC} = (S/(S+B))r_s + (B/(S+B)) r_B \times (1 - T_c)$$

Where: S = equity; B = debt; r_s = cost of equity; r_B = cost of debt; T_c = income and social contribution tax rates

The WACC is important for the external control because it is the discount rate to be used in the cash flow of the enterprise; therefore, it enables the verification of fee adequacy to the user and/or the public partner’s pecuniary counterpart in the PPP contract (TCU, 2015).

Thus, two analyses are important in this case:

- verification of consistency in the premises adopted in the financial and economic modeling;
- adequacy of the private partner’s financial return in comparison with the Government’s pecuniary consideration.

3. BETA (β) IN PPP CONTRACTS

Now we will comment on beta, a component of the cost of equity (r_s) in the WACC equation.

The cost of equity represents the discount rate of a project that is correspondent to a financial asset with a similar risk. It is the minimum return to invest the firm's resources instead of sharing dividends to shareholders (ROSS, 2002, p. 257). In general, the Capital Asset Pricing Model (CAPM) is used to calculate r_s , which is obtained from the following formula:

$$r_s = r_f + \beta(r_m - r_f)$$

Where: r_f = risk-free rate; β = beta; r_m = market rate of return

The CAPM indicates that the expected return on a firm's stock has a linear relation with its beta (ROSS, 2002, p. 231), which "measures the sensitivity of a security bond to the market movements." (ROSS, 2002, p. 227)

The value of beta (β) is the result of the covariance between the returns on a specific asset and the market portfolio, due to the market variance¹ (ROSS, 2002, p. 260).

Another way to find beta is by regression. In this method the monthly data of the firm's stock return, for example, is associated with a return index of the overall market. The straight line obtained presented an inclination that corresponds to beta (ROSS, 2002, p. 261-262).

It is common practice in finances to use the betas of each sector in which a firm operates, or a beta related to the enterprise analyzed: "it is frequently argued that one can better estimate a firm's beta by involving the whole firm" (ROSS, 2002, p. 262).

For that reason, many specialized websites provide such values. They facilitate the analyses because the calculation of a specific beta for a project is time-consuming and, many times, it can be even impossible due to the lack of data for a considerable time horizon.

In PPP projects, choosing the appropriate beta is not a simple task when enterprises involve activities of more than one sector. Usually they comprise construction, supply/maintenance of equipment and service provision.

This could be easily solved by selecting the beta from the predominant sector. However, from

the technical point of view, this may not be the best solution.

The beta obtained from the weighted average of the betas of each activity can be considered more adequate regarding the investments and/or services performed by the firm analyzed.

This procedure is based on financial technical manuals, such as the one developed by Tom Copeland, Tim Koller and Jack Murrin. They performed an analysis to evaluate multiple companies, i.e., companies that own more than one business unit.

According to these authors:

One of the major problems in estimating the cost of equity of business units is that good terms of comparison can be barely found, because most of companies have many business lines and different asset percentages for each of them. One way to overcome this issue is to recognize that the business risk (it means, the unlevered beta) of a company with multiple divisions is the weighted average of the risks in each business line (COPELAND, 2002, p. 316/317).

It means that, based on the percentage participation of each activity in the company's assets, betas could be estimated for two business lines, as in the following formula:

$$\text{beta}_{u1} + W_{A1}\text{beta}_{uA} + W_{B1}\text{beta}_{uB}$$

This conclusion derives from the theory of return on a portfolio of securities, as Ross affirmed:

The formula for expected return on a portfolio is very simple:

The expected return on a portfolio is simply a weighted average of the expected returns on the individual securities.

EXAMPLE:

Consider Supertech and Slowpoke. From the preceding box, we find that the expected returns on these two securities are 17.5 percent and 5.5 percent, respectively.

The expected return on a portfolio of these two securities alone can be written as:

Expected return on portfolio =

$$X_{\text{Super}} (17.5\%) + X_{\text{Slow}} (5.5\%) = R_p$$

where X_{Super} is the percentage of the portfolio in Supertech and X_{Slow} is the percentage of the portfolio in Slowpoke (ROSS, 2002, p. 210).

Eugene F. Brigham and Michael C. Ehrhardt explain the correspondence between firms with more than one business line and a portfolio of securities:

A firm itself may be regarded as a “portfolio of assets”, and since the beta of a portfolio is the weighted average of betas of its individual assets, adding the barge and distribution center divisions will change Huron’s overall beta. The exact value of the company’s new beta would depend on the size of the investments on the new divisions in comparison with the Huron’s original iron operations. (BRIGHAM, 2012, p. 356).

Thus, there are theoretical fundamentals that support the proposition that a beta for PPP contracts should be weighted according to the participation of investments and/or services in each type of business. In Brigham and Ehrhardt’s work, there is a complete example on the use of this methodology².

At this point, it is possible to affirm that services in a PPP contract assume a different nature, then, they can be treated as a separate sector from investments. However, they can be considered similar to investments if their operational cost is added to the capital expenditures when defining the participation percentage of the sector. The real case will define the best way to address this issue.

On the next topic we will show the application of this methodology to the Health PPP in the Federal District (DF), Brazil.

4. CALCULATION OF BETA IN THE HEALTH PPP AT THE FEDERAL DISTRICT (DF), BRAZIL

The Government of the Federal District, through the Regional Department of Health, promoted the Competitive Procurement Process no. 1/2013 aiming to establish a PPP to grant the administrative concession for service provision to support the operations of the regional hospital network. This provision should be preceded by infrastructure implementation, as stated on § 2nd, article 2nd, Law no. 11079/04 and § 2nd, article 2nd, District Law no. 3792/06 (as instituted by the Public-Private Partnership Program of the Federal District).

The goal of this PPP was to build two hospitals, a medical reporting center and a health examination center. It was also supposed to provide hospital and information and communication technology (ICT) equipment, as well as maintenance, security, cleaning and laundry services, among others.

As one of its competences, the Court of Accounts of the Federal District initiated the Process no. 21250/12 to audit the Health PPP.

On the other hand, the Regional Department of Health of the DF sent to the district court the documents required in the TCDF’s Resolution no. 189/08, which contained the WACC calculations of the enterprise in the Information no. 219/13, sheet 332 of the TCDF’s Process no. 21250/12 (TCDF, 2013).

The value of the project’s beta was 0.92, and it was calculated from the simple arithmetic average of healthcare service betas, which were collected from the Aswath Damodaran’s website, as shown in Table 1:

Moreover, the enterprise has substantial investments in civil works and information technology equipments (IT), which are considered in the PPP’s timeline, as shown in Table 2:

Investments in health, correspondent to **Clinical equipment and furniture**, represented only 36 percent of the total in the concession. Civil works and

Table 1

Name of the Sector	Average Beta
Healthcare Equipments	1.22
Healthcare Installations	0.60
Healthcare Products	0.93
Healthcare Services	0.94
Average	0.92

SOURCE: sheet 333 of the TCDF’s Process no. 21250/12 (TCDF, 2013).

Table 2

INVESTMENTS AND REINVESTMENTS	VALUES (IN THOUSAND REAIS – R\$)	PERCENTAGE
Civil Works	413,054	40%
Clinical Equipment and Furniture	368,833	36%
IT Equipments	236,251	23%
Nonclinical Furniture	9,219	1%
TOTAL	1,027,357	100%

SOURCE: sheet 650 of the TCDF's Process no. 21250/12 (TCDF, 2013).

IT equipments had distinguishing percentages of 40 and 23, respectively.

At last, Healthcare services were not predominant in relation to other items (Table 3).

We can see in Table 3 that 35 percent of the operating expenses are exclusively related to healthcare services. If the item **SPE corporate governance** is considered, which includes all activities, the expenses with healthcare services would reach 39 percent.

As **Stocks and logistics** may not be directly related to healthcare items, as well as Security and

Cleaning, the percentage mentioned in the previous paragraph can be considered a positive result.

Table 4 displays the total disbursements scheduled for the whole PPP timeline:

Thus, both investments and operating expenses of the future private partner would include significant percentages of civil works and information technology services. Therefore, it was considered inappropriate to characterize this PPP sector as part of the healthcare services to calculate beta.

Table 3

Operating Expenses	Values (in thousand reais – R\$)	Percentage
Diet and Nutrition Services	675,968	11%
SPE Corporate Governance	234,687	4%
Cleaning Services	653,767	11%
Reception	260,874	4%
Security	445,825	8%
Hospital Laundry and Linen	746,935	13%
Stocks and Logistics	428,376	7%
Help Desk and Telecommunication	51,527	1%
Building Maintenance	1,057,271	18%
Equipment Maintenance	215,137	4%
IT Equipments	1,152,051	19%
TOTAL	5,922,418	100%

SOURCE: sheet 650/651 of the TCDF's Process no. 21250/12 (TCDF, 2013).

Table 4

INVESTMENTS AND OPERATING EXPENSES	VALUES (IN THOUSAND REAIS – R\$)	PERCENTAGE
Civil Works and Building Maintenance	1,470,325	21.2%
Medical Equipments and Services	2,669,936	38.4%
IT Services	1,388,302	20.0%
Other Services	1,421,212	20.4%
TOTAL	6,949,775	100%

SOURCE: sheet 651 of the TCDF's Process no. 21250/12 (TCDF, 2013).

As mentioned previously, technical literature suggests the use of a weighted average of betas in this case, which is the subject of the next topic.

4.1 CALCULATION OF THE HEALTH PPP'S BETA THROUGH THE WEIGHTED AVERAGE OF BETAS OF ALL SECTORS INVOLVED

At first, we must clarify that, due to the difficulty to find a specific beta for the item Other services (see Table 4), only the values related to investments were used in this analysis (see Table 2).

Based on the same database suggested in the consortium document (Aswath Damodaran's website), the unlevered betas of the three business lines involved in the PPP were collected (sheets 377/378, Process no. 21250/12): Engineering and construction, IT services and Medical services.

Table 5

SECTOR	BETAS
Engineering & Construction	1.17
IT Services	1.00
Medical Services	0.59

FONTE: (DAMODARAN, 2013).

The debt/equity ratio for the three sectors (D/E) was extracted from the same website (DAMODARAN, 2013):

Table 6

SECTOR	D/E
Engineering & Construction	13.23%
IT Services	5.72%
Medical Services	50.23%

SOURCE: (DAMODARAN, 2013).

The final result was achieved by using the formula presented by the Regional Department of Health in the Process no. 21250/12, sheet 332 (TCDF, 2013):

$$\beta \times [1 + (D/E) \times (1 - T)]$$

This expression is known as the Hamada equation³ and it allows finding the levered beta (from the unlevered beta) of the company's debt ratio and the income tax rate⁴.

The betas obtained for each sector are presented below. The data was collected from Aswath Damodaran's database (DAMODARAN, 2013) in January 2013, according to Process no. 21250/12, sheets 377/378 (TCDF, 2013):

$$\beta_{EC} = 1.17 \times [1 + 0.1323 \times (1 - 0.34)] = 1.27 \text{ (Beta for Engineering and construction)}$$

$$\beta_{TI} = 1.00 \times [1 + 0.0572 \times (1 - 0.34)] = 1.04 \text{ (Beta for Information Technology services)}$$

$$\beta_{SM} = 0.59 \times [1 + 0.5023 \times (1 - 0.34)] = 0.78 \text{ (Beta for Medical services)}$$

In order to achieve the project's beta, weighing was performed with the investment percentage of each sector. For that reason, the investments and reinvestments table was adapted (TABLE 1):

- Civil works are equivalent to the Engineering and construction from Damodaran's table (DAMODARAN, 2013);
- Clinical equipments and furniture are equivalent to the Medical services from Damodaran's table (DAMODARAN, 2013);
- Investments in nonclinical furniture, which represented only 1 percent of the total, are also considered Medical Services.

Therefore, the percentage participation in investments presented the following results:

Finally, the Health PPP's estimated beta would be:

$$\beta_{SPE} = W_{EC} \beta_{EC} + W_{TI} \beta_{TI} + W_{SM} \beta_{SM}$$

$$\beta_{SPE} = (0.4 \times 1.27) + (0.23 \times 1.04) + (0.37 \times 0.78)$$

$$\beta_{SPE} = 1.03$$

Therefore, considering that the Health PPP in the DF involves more than one business line, the beta found in this work was different from the one presented by

Table 7

INVESTMENTS AND REINVESTMENTS	VALUES (IN THOUSAND REAIS – R\$)	PERCENTAGE
Engineering & Construction	413.054	40%
Medical Services	378.052	37%
IT Services	236.251	23%
TOTAL	1.027.357	100%

SOURCE: sheet 654 of the TCDF's Process no. 21250/12 (TCDF, 2013).

the Regional Department of Health , 0.92, to indicate the risk in this sector.

Founded on a methodology supported by the financial theory, the value 1.03 was calculated by means of the weighted average of the betas of each PPP activity.

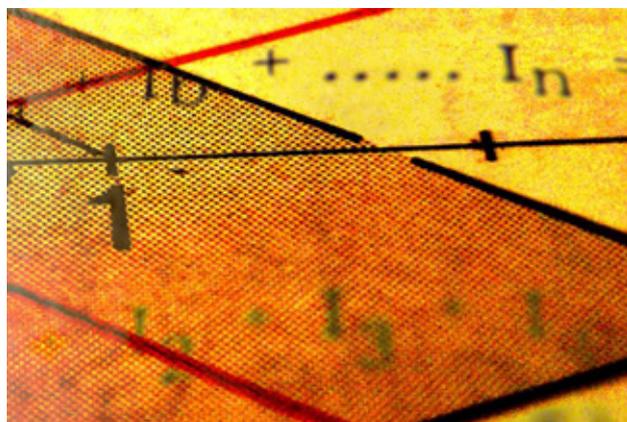
5. FINAL REMARKS

PPP projects usually involve firms with different business lines, and it can generate some difficulties when choosing the beta that better represents the enterprise.

Based on the financial literature and describing a practical and effective application, this paper showed that, instead of selecting the beta of the predominant sector, calculating the weighted average of the betas of each sector would be a more technical procedure. In this case, it is necessary to consider the percentage participation of each activity in the investments and/or service provision.

As a conclusion, the Federal Court of Accounts can now consider this technical perspective as a parameter to evaluate beta in WACC calculations in PPP projects.

REFERENCES



ASSAF NETO, Alexandre & LIMA, Fabiano Guasti. Curso de administração financeira. São Paulo: Atlas, 2009.

BRIGHAM, Eugene F. & EHRHARDT, Michael C. Administração financeira. Tradução da 13ª ed. norte-americana. 2ª ed. brasileira. São Paulo: Cengage Learning, 2012.

COPELAND, Tom; KOLLER, Tim & MURRIN, Jack. Avaliação de empresas. Valuation. Calculando e gerenciado o valor das empresas. 3ª ed. São Paulo: Makron Books, 2002.

DAMODARAN, Aswath. Web site de Aswath Damodaran. Disponível em <http://pages.stern.nyu.edu/~ADAMODAR/New_Home_Page/datafile/Betas.html>. Acesso em: 12 dez. 2013.

ROSS, Stephen A., WESTERFIELD, Randolph W. & JAFFE, Jeffrey F. Administração financeira. São Paulo: Atlas, 2002.

TCDF. PROCESSO nº 21250/12: Parceria Público-Privada da Saúde do DF. Disponível em <[https://www.tc.df.gov.br/app/mesaVirtual/implementacao/?a=consultaPublica&=pesquisaPublicaProcessoTCDF&filter\[nrproc\]=21250&filter\[anoproc\]=2012](https://www.tc.df.gov.br/app/mesaVirtual/implementacao/?a=consultaPublica&=pesquisaPublicaProcessoTCDF&filter[nrproc]=21250&filter[anoproc]=2012)>. Acesso: 12 dez 2013.

TCU. Instrução Normativa nº 52/07: Dispõe sobre o controle e a fiscalização de procedimentos de licitação, contratação e execução contratual de Parcerias Público-Privadas (PPP), pelo TCU. Disponível em <http://www.planejamento.gov.br/secretarias/upload/Arquivos/ppp/legislacao/federal/instrucao_Normativa_TCU_52.doc>. Acesso em: 22 maio 2014.

TCU. ANEXO 4 – DOC 1-002. Roteiro de Verificação do Cálculo do Custo de Capital. Disponível em <<http://portal2.tcu.gov.br/portal/pls/portal/docs/2055930.PDF>>. Acesso em: 7 jan 2015.

NOTES

1
$$\beta_i = \frac{\text{Cov}(R_i, R_M)}{\sigma^2(R_M)}$$

2 Eugene F. Brigham and Michael C. Ehrhardt presented an example of application of the beta calculation through the weighted average of the beta of each sector (BRIGHAM, 2012, p. 356/357):

“Many firms use the CAPM to estimate the cost of capital for specific divisions. To begin, recall that the Security Market Line equation expresses the risk/return relationship as follows:

$$r_3 = r_{RF} + (RP_M) bR_{ip}$$

As an example, consider the case of Huron Steel Company, an integrated steel producer operating in the Great Lakes region. For simplicity, assume that Huron has only one division and uses only equity capital, so its cost of equity is also its WACC. Huron’s beta = $b = 1.1$, $r_{RF} = 5\%$, $RP_M = 6\%$. Thus, Huron’s cost of equity is (and WACC) 11.6 percent:

$$r_3 = 5\% + (6\%) 1.1 = 11.6\%$$

This suggests that investors should be willing to give Huron money to invest in average-risk projects if the company expects a return of 11.6 percent or more on this money. By average risk we mean the projects having risk similar to the firm’s existing division.

Now suppose Huron creates a new transportation division consisting of a fleet of barges to haul iron ore, and barge operations have betas of 1.5 rather than 1.1. The barge division, with $b = 1.5$, has a 14 percent cost of capital:

$$r_{\text{barcaças}} = 5\% + (6\%) 1.5 = 14.0\%$$

On the other hand, if Huron adds a low-risk division, such as a new distribution center with a beta of only 0.5, its divisional cost of capital would be 8 percent:

$$r_{\text{centro}} = 5\% + (6\%) 0.5 = 8.0\%$$

A firm itself may be regarded as a “portfolio of assets”, and since the beta of a portfolio is a weighted average of the betas of its individual assets, adding the barge and distribution center divisions will change Huron’s overall beta. The exact value of the new beta would depend on the relative size of the new divisions versus Huron’s original steel

operations. If 70 percent of Huron’s total value ends up in the steel division, 20 percent in the barge division, and 10 percent in the distribution center, its new corporate beta would be calculated as follows:

$$\text{New beta} = 0.7(1.1) + 0.2(1.5) + 0.1(0.5) = 1.12$$

Thus, investors in Huron’s stock would have a required return of:

$$r_{\text{Huron}} = 5\% + (6\%) 1.12 = 11.72\%$$

3 Hamada equation is explained by Alexandre Assaf Neto (ASSAF NETO, 2009, p. 508):

“The economic risk and the financial risk can be estimated through the indicator of beta, according to Hamada’s work and further research on this matter. The basic formula proposed is the following:

$$B_L = B_V \times [(P/PL) \times (1 - IR)]$$

Where:

B_L = beta coefficient of a company that uses financial leverage. It expresses the economic and the financial risk. It is the total beta;

B_V = beta coefficient of a company without debts. It expresses only the business risk;

P = debt;

PL = equity;

IR = income tax rate.

4 The rate adopted here is the same used by the Secretary of State for Health, which was 34 percent, and it corresponds to the social contribution and income tax rate.

* HAMADA, Robert S. Portfolio analysis market equilibrium and corporate finance. Journal of Finance, p. 13-31, mar. 1969.”

Quality analysis of a performance audit by the federal court of accounts (brazil) according to the statements of the joint committee on standards for educational evaluation



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ABSTRACT

This paper approaches a quality analysis of a performance audit conducted by the Federal Court of Accounts – Brazil (TCU) on the University for All Program (Prouni) with the aim to identify improvement opportunities. This research adopted the quality standards for evaluation purpose stated by the Joint Committee on Standards for Educational Evaluation (JCSEE). It was a single-case study. A documental analysis of the working papers, the audit report, and interviews with people involved in the audit was carried out. The JCSEE quality standards, comprised of 200 statements, were translated into Portuguese and adapted to a questionnaire that was used in the interviews. The audit received a good score in four of the five standards evaluated (Propiety, Feasibility, Accuracy and Utility), but it got a low score in Accountability. These results showed that the audit process, findings and products could have different possible uses. Moreover, the audit process had a suitable level of effectiveness and efficiency, and it was considered impartial, correct, proper and fair, so that its findings, purposes and process are reliable. However, documentation and communication issues related to the work developed can have some improvement.

Keywords: Performance Audit; Quality Standards.



1. INTRODUCTION

This study aimed to analyze the quality of a performance audit conducted by the Federal Court of Accounts – Brazil (TCU) according to the standards established by the Joint Committee on Standards for Educational Evaluation (YARBROUGH et al., 2011). The object of the audit assessed was the University for All Program (Prouni), which the Brazilian Ministry of Education promotes. The aim of the program is to facilitate access to higher education, especially to low-income students by providing scholarships. This audit was performed in 2008.

It is worth mentioning that the JCSEEC standards are applicable to evaluations in general, and, although performance audit is called an audit, it is actually an evaluation activity (BARZELAY, 2002).

According to the TCU (2010), a performance audit is the independent and objective examination of economy, efficiency, efficacy and effectiveness of government organizations, programs and activities, intended to improve public governance.

The definition of performance audit adopted by the TCU coincides with Barzelay's thoughts (2002) on the objectives of this type of audit: to promote performance accountability of the programs or entities assessed. All these features characterize performance audit as an evaluation approach (MARK; HENRY; JULNES, 2000).

Once we accept that performance audit is an assessment method, guaranteeing good quality is important to maximize its influence (HENRY, 2003). The quality of evaluations or the quality of the performance audit, in this case, is an essential aspect to use this evaluation method (WEISS, 2005; HENRY, 2003; UNDP, 2011). Attention to the quality of the evaluation is even common sense and, sometimes, it may be implicit (COOKSY; MARK, 2011).

Henry (2003) highlights that a common aspect in some evaluation cases, whose outcomes and findings influenced changes in public policies in the United States: was the high technical quality of the evaluations performed. Besides, he mentioned that if these findings had had any technical fault, as a reflection of a poor quality work, evaluations would probably not have exerted such influence.

The factors that affect any assessment are closely related to the way it is conducted. The main observations on the way to carry out an evaluation include relevance, credibility, and quality, ability to generate important findings, the evaluator's communication skills and the time to present results. There is a strong relationship between the evaluation quality and its use (UNDP, 2011).

Therefore, as the major aim of analyzing the performance audit conducted on Prouni was to identify its influence on changing this public policy, it was neces-

sary to analyze previously the quality of the audit performed by the TCU.

2. METHODOLOGY

This paper is a case study on the performance audit conducted by the TCU on the University for All Program (Prouni). The single-case study methodology was chosen in order to understand a complex social phenomenon (YIN, 2010), such as the influence of an evaluation on a public policy. Case studies allow dealing with a large variety of evidences collected by document analysis, interviews and observations.

The Prouni audit was selected because it has been five years since it was performed, enough time to notice changes in the program. Besides, this subject was widely spread in the media.

This research analyzed working papers and the audit report. In addition, the evaluation standards were the ones proposed by the Joint Committee on Standards for Educational Evaluation (YARBROUGH et al., 2011). This organization gathers the main professional entities responsible for evaluating education in the United States, and their American national standards guide this practice. These standards are referred to broadly in literature as tools that ensure the quality and the credibility of evaluations (SERPA, 2010).

There are five standards and they are comprised of 200 statements. These statements were organized in a questionnaire, in which the respondent was supposed to answer whether the statements were fully followed, partially followed or not followed during the performance of the audit. The statements were interpreted and translated by the researcher and their terms were adapted to the Brazilian reality.

The coordinator and the supervisor of the audit, in person, answered the questionnaire separately. In both cases the researcher was present in order to clarify any points that could be unclear. The application of the questionnaire lasted 3 hours and 30 minutes and 2 hours and 40 minutes, respectively. The main author of this paper was in the audit team, but did not answer the questionnaire.

All the answers were transferred to an electronic spreadsheet and the simple average was calculated for each statement and for each quality standard and their factors.

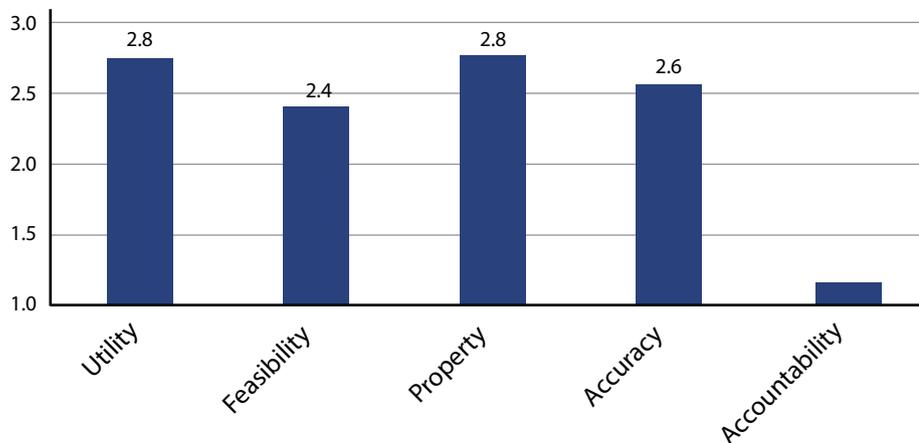
Applying the questionnaire to someone who did not participate directly in the audit was not possible due to the great amount of time needed to answer it and the lack of people who knew the process of the audit performed. Answering the questionnaire only by analyzing the audit working papers is not possible because some factors of the quality standards were subjective and required personal information from those whom participated in the audit.

3. RESULTS AND ANALYSIS OF THE EVALUATION OF THE AUDIT QUALITY

The application of the questionnaire, consisting of all the 200 statements of the five quality standards proposed by the Joint Committee on Standards for Educational Evaluation, allowed the evaluation of the quality of the performance audit conducted by the TCU on Prouni.

The audit received high scores for quality in almost all standards, except in the Accountability Evaluation standard. The main results are displayed in the graph below.

Figure 1: General results of the application of the JCSEE quality standards to the Prouni audit



Source: Authors.

Table 1:

Results for the Utility standard after the application of the JCSEE quality standards to the Prouni audit.

U – UTILITY – Average	2.76
U1 – Evaluator Credibility	2.78
U2 – Attention to Stakeholders	2.90
U3 – Negotiated Purposes	2.81
U4 – Explicit Values	2.90
U5 – Relevant Information	3.00
U6 – Meaningful Processes and Products	3.00
U7 – Timely and Appropriate Communicating and Reporting	2.00
U8 – Concern for Consequences and Influence	2.67

Source: Authors.

Keeping in mind that the scale used was of three points, Utility, Feasibility, Propriety and Accuracy obtained the highest scores. The low score for Accountability (1.2) was not a surprise, because the statements of this standard refer almost exclusively to the preparation of documents to conduct internal and external meta-evaluations, which TCU does not perform. Only two studies were found in the literature mentioning this type of evaluation in the TCU (HEDLER; TORRES, 2009; SERPA, 2010). Generally, the audit documentation is not usually prepared for meta-evaluations.

The results for each standard will be presented next in more detail.

3.1 UTILITY

The Utility standards refer to the extent to which the stakeholders of Prouni find evaluation processes and products valuable in meeting their needs. A good way to consider the utility of evaluation is to examine the variety of possible uses for the evaluation processes, findings and products (YARBROUGH et al., 2011).

In this standard, the score for the audit was 2.76, and this shows a high level of utility. The table below shows the results for each subdivision of the statements included in the Utility standard.

It is clear that the statements in the U7 subdivision clearly obtained the lowest results. This standard has statements regarding the adaption of the audit report to different audiences. It also considers broader social implications of the evaluation. Thus, the audit report and its information could be adapted for the visually and hearing impaired. Moreover, there was no communication plan to disseminate audit information, and no interaction with the community members was promoted, not even in social networks.

3.2 FEASIBILITY

The Feasibility standards refer to the effectiveness and efficiency level of an evaluation. Improving feasibility enhances the evaluation in three ways: a) it highlights logistical and administrative requirements that need to be managed in order to ensure a good evaluation project; b) it makes existing and possible procedures meet for a particular evaluation; c) it is a prerequisite for other quality aspects, because feasibility improves the use of the resources available and the efficiency of activities in an evaluation process (YARBROUGH et al., 2011).

The audit obtained the second lowest score in Feasibility (2.4), although this score cannot be considered low. The next table details the scores for each component in this standard.

Subdivision F4 was marked with the lowest score in Feasibility. Among other aspects, it is related to the identification of evaluation costs and to the cost-benefit analysis of strategies adopted in the evaluation. There was no clear analysis of the cost-benefit of the actions carried out in the audit. In addition, there was no discussion on this topic with the key stakeholders in order to identify different points of view. Finally, the identification of all the important costs in the evaluation was not a common practice in the audit.

3.3 PROPRIETY

The Propriety standards support what is proper, fair, legal, right and just in evaluations. Issues related to the evaluator's and the participants' responsibilities, ruling systems, and roles and tasks inherent to the evalua-

Table 2:

Results for the Feasibility standard after the application of the JCSEE quality standards to the Prouni audit.

Source: Authors.

F – FEASIBILITY – Average	2.42
F1 – Project Management	2.42
F2 – Practical Procedures	2.88
F3 – Contextual Viability	2.22
F4 – Resource Use	2.17

tion professional practice are included in this standard (YARBROUGH et al., 2011).

The Propriety standard obtained a high score, 2.78. The table below details the components of this standard.

Subdivisions P2 and P7 were considered not applicable in this case, because there was not a formal agreement between the TCU and the auditees to perform the evaluation. Besides, the members of audit teams are not disbursement officers who monitor the expenses when conducting the audit.

3.4 ACCURACY

The Accuracy standards refer to the reliability of evaluation propositions and findings, especially those that support judgments about the quality of the program and its components. Accuracy is usually achieved through solid theory, methods, evaluation design and solid arguments (YARBROUGH et al., 2011).

The score for this standard was 2.57 in the audit evaluated. The next table displays the components of this standard.

Subdivisions A3 and A8 obtained the lowest scores for the Accuracy standards. Among other aspects, subdivision A3 refers to the replication of information sources (triangulations) and to the consultation with experts to share concerns and technical procedures related to reliability. Subdivision A8 consists of devel-

oping a communication plan, issuing partial reports during evaluation, pilot testing data presentation, caring about translating documents into other languages, and using other media to communicate, such as movies and photographs.

The TCU does not issue formal or informal partial reports to stakeholders during the audit, and it does not perform pilot tests on the best way to present data before issuance of the final report. Besides, the report does not focus on each stakeholder’s particular interests, because the only final report is directed to all audiences. The ideal situation would be issuing a beneficiary-focused report, another one focused on higher education institutions, and versions aimed at other audiences.

3.5 EVALUATION ACCOUNTABILITY

The Evaluation accountability standards refer to the responsible use of resources to produce value. This standard investigates the implementation of the evaluation, the ways to improve it and its importance to stakeholders. It basically includes all the documentation of the whole evaluation process (YARBROUGH et al., 2011).

This was the lowest-scored standard in the evaluation, 1.17. The table below details the components of the accountability standards.

Table 3:

Results for the Propriety standard after the application of the JCSEE quality standards to the Prouni audit.

Source: Authors.

P – PROPERTY – Average	2.78
P1 – Responsive and Inclusive Orientation	2.58
P2 – Formal Agreements	n.a.
P3 – Human Rights and Respect	2.57
P4 – Clarity and Fairness	2.86
P5 – Transparency and Disclosure	2.90
P6 – Conflicts of Interests	3.00
P7 – Fiscal Responsibility	n.a.

Table 4: Results for the Accuracy standard after the application of the JCSEE quality standards to the Prouni audit.

A – ACCURACY – Average	2.57
A1 – Justified Conclusions and Decisions	2.79
A2 – Valid Information	3.00
A3 – Reliable Information	2.20
A4 – Explicit Program and Context Descriptions	2.60
A5 – Information Management	2.61
A6 – Sound Designs and Analysis	2.75
A7 – Explicit Evaluation Reasoning	2.75
A8 – Communication and Reporting	1.86

Source: Authors.

All subdivisions of the Evaluation Accountability standards were marked with low scores. They are related to information documentation issues and internal and external meta-evaluation processes in the evaluation.

Usually, there is no clear definition of the audience that will need the audit documentation nor for what reasons. Documentation was not cataloged nor was there a table with the information needed. There was no review of the documentation check completion, quality and value. There was no clear identification of whom could provide which information in order to facilitate meta-evaluations. In addition, there was no internal or external meta-evaluation of this evaluation, neither a planning process to perform it.

4. FINAL REMARKS

The findings presented in this paper indicated that the performance audit on Prouni had good quality according to the standards adopted by the Joint Committee on Standards for Educational Evaluation (YARBROUGH et al., 2011). This shows that the audit had greater potential to influence changes in the public policy evaluated (HENRY, 2003).

It is worth highlighting that in a previous study on this matter (VIEGAS; LIMA, 2014), aimed at identifying

the influence of the Prouni audit on the changes in the public policy, several influence mechanisms were identified, according to Henry and Mark model (2003; 2004). This means that the audit contributed to promote changes in the public policy, including saving of resources.

One of the factors that contributed to this influence was the high-quality work performed (HENRY, 2003). The quality evaluation of the audit based on the JCSEE evaluation standards showed good results for Utility, Feasibility, Propriety and Accuracy. This shows that the audit is useful in the process and provides useful findings and products. Besides, the analysis revealed adequate levels of effectiveness, efficiency, impartiality, correction, opportunity and relevance. It also showed that the findings, purposes and process are reliable (YARBROUGH et al., 2011).

Finally, the main aspect to be improved is the need to enhance the documentation of the data collected and of the analyses performed. Moreover, the audit the execution of meta-evaluations, both internal and external, was not considered when conducting the audit, i.e., the documentation produced was not intended for that purpose. Meta-evaluations are one of the quality assurance tools that the TCU could adopt to improve continuously its work processes and audit quality control mechanisms.

Table 5: Results for the Evaluation Accountability standard after the application of the JCSEE quality standards to the Prouni audit.

E – EVALUATION ACCOUNTABILITY – Average	1.17
E1 – Evaluation Documentation	1.42
E2 – Internal Metaevaluation	1.10
E3 – External Metaevaluation	1.00

Source: Authors.

REFERENCES

BARZELAY, Michael. Instituições centrais de auditoria e auditoria de desempenho: uma análise comparativa das estratégias organizacionais na OCDE. *Revista do Serviço Público*, ano 53, n. 2, abr-jun, 2002.

BRASIL. Tribunal de Contas da União. *Manual de auditoria operacional* – 3ª edição. Brasília, 2010.

COOKSY, Leslie J.; MARK, Melvin, M. Influences of Evaluation Quality. *American Journal of Evaluation*, v. 33, pp. 79-87, 2011.

HEDLER, Helga C.; TORRES, Claudio V. Meta-avaliação de Auditorias de Natureza Operacional do Tribunal de Contas da União. *RAC*, v. 13, n. 3, art. 7, pp. 468-486, 2009.

HENRY, Gary T. Influential Evaluations. *American Journal of Evaluation*, v. 24, nº 4, pp. 515-524, 2003. Disponível em <http://aje.sagepub.com/content/24/4/515>.

MARK, Melvin M.; HENRY, Gary T. The Mechanisms and Outcomes of Evaluation Influence. *Evaluation*, v. 10, p. 35-56, 2004. Disponível em www.evi.sagepub.com.

_____. Beyond Use: Understanding Evaluation's influence on Attitudes and Actions. *American Journal of Evaluation*, v. 24, nº 3, pp. 293-314, 2003. Disponível em <http://aje.sagepub.com/content/24/3/293>.

MARK, Melvin M.; HENRY, Gary T.; JULNES, George. *Evaluation: an integrated framework for understanding, guiding, and improving policies and programs*. Ed. Jossey-Bass, 1st edition, 2000.

SERPA, Selma M. H. C. *Para que Avaliar? Identificando a Tipologia, os Propósitos e a Utilização das Avaliações de Programas Governamentais no Brasil*. Dissertação de Mestrado, UnB. Brasília, 2010.

UNDP. *National Evaluation Capacities: Proceedings from the 2nd International Conference*, 12 – 14 september 2011.

VIEGAS, Tiago; LIMA, Dagomar. *Influence of a Performance Auditing by the Brazilian Federal Court of Accounts on the Improvement of an Educational Program*. [2014] não publicado.

WEISS, Carol H. An Alternate Route to Policy Influence: How Evaluations Affect D.A.R.E. *American Journal of Evaluation*, v. 26, nº1, pp. 12-30, 2005. Disponível em: <http://aje.sagepub.com/content/26/1/12>.

YARBROUGH, Donald B. et al. *The program evaluation standards: A guide for evaluators and evaluation users/editors*. 3ª Edição. SAGE Publications, 2011.

YIN, Robert K. *Estudo de caso: planejamento e métodos*. 4ª edição. Porto Alegre: Bookman, 2010.

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