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THE USE OF EMERGING TECHNOLOGIES AND TAX GOVERNANCE PRACTICES: ANALYSIS AND DISCUSSION OF MODELS ADOPTED BY BRAZILIAN ECONOMIC GROUPS

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ABSTRACT

This paper aims to identify the challenges imposed by technological evolution to the development of Tax Governance, understood as a vertical of Corporate Governance, dedicated to transposing and adapting its fundamentals to the area of Tax Management and Execution. In this mission, the methodological tool of the case study of two large Brazilian companies, Petrobras and OAS Group, present in various segments of economic activity, from Energy and Construction, and with international operations in geographic terms, was used. The research developed had a qualitative bias, having as main methodological instruments the study of multiple cases, using bibliographic and documentary survey, as well as semi-structured interviews with key executives of the two companies. Likewise, it adopted direct observation through on-site visits to their respective shared service centers. The study was carried out from 2013 to 2019. The theoretical basis was anchored in the areas of Corporate Governance, Tax Governance and Emerging Technologies, applicable to the tax execution process. It was concluded that the challenge of meeting tax obligations in Brazil is very large, consuming organizational and financial resources, which demands significant investments in emerging technologies such as a focus on management, governance and auditing. Both companies suffered from corruption scandals, but Petrobras, a partner in the government, is in an outstanding position in relation to OAS Group, which is still undergoing intense restructuring. The health crisis at COVID-19 contributed to negative results, but promoted important changes in the structure and way of working, consolidating the decision to share services, mainly to increase compliance and control, as well as reduce corporate risks.

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INTRODUCTION

Business economics is a widely studied topic in global research centers, as the movement of international capital is monitored by government entities, mainly brazilian ones, with complex legislation, high taxes and significant investments in technology for auditing, validation and data crossing, using mathematical and statistical resources based on Data Science. In this context, this research starts from figures released by the company Serasa Experian, which show commercial debts higher than those of a fiscal nature in Brazil. Current information describes that companies owe more debts to different government oversight bodies than to suppliers, customers and other commercial actors, in this case other interested parties. The analysis of changes in liability accounts validates this context. Three factors converge in favor of this tax reality of increasing compliance

costs, attesting to a picture of changes in the sources of third-party resources within companies. The first of them is represented by the high brazilian tax burden, then equivalent to developed countries, and this equivalence in tax burden is not reflected in the quality of services provided to society, with an uncomfortable discrepancy in the case of Brazil. The second factor refers to the multiplicity of taxes existing in Brazil. The third is related to the high tax burden and the numerous obligations provided for in the brazilian legal system, forcing the taxpayer to comply with tax requirements in the sense of regular presentation of accounting and tax information of the most varied types. Indicators presented by World Bank (2014) show that Brazil leads the international ranking with regard to the degree of effort on the part of the taxpayer to carry out the control and payment of taxes. We have gone through impacting technological advances in this area of knowledge around the world. In Brazil, such advances materialized from the creation of the national register for companies,

through the Integrated Information System on Interstate Operations with Goods and Services. The SPED Project, Public Digital Bookkeeping System, represented an enormous regulatory challenge even for large economic agents, described in this text in the energy and civil construction sectors. Emerging technologies are allies of inspection departments and companies, since they deal with a large volume of information transmitted, verified and audited frequently. There is a calendar of tax obligations. The study proposed in this document has the general objective of analyzing the technologies that support tax governance practices and models of important Brazilian business groups based on sharing services and transactional activities. The study was carried out from 2013 to 2019. The theoretical basis was anchored in the areas of Corporate Governance, Tax Governance and Emerging Technologies, applicable to the tax execution process.

MATERIALS AND METHODS

The study of Corporate Governance had its origins in the increase in the level of complexity of companies, which, in turn, was accompanied by the dispersion of the controlling capital of these organizations. From the 20th century, marked by the industrial revolution, companies underwent important changes, which were reported by Berle and Means (1932, p.22), so that the modern society by actions [...] innovative in its effects, it has placed the wealth of numerous individuals under sole control. Due to these transformations, the power of those in charge has been greatly expanded, and the situation of stakeholders – workers or owners – has radically changed. Thus, the owner who invests in a modern company, hands over his assets to those who are in charge of the company and his position as an independent owner changes to that of a simple receiver of dividends. In this sense, the Agency Theory tries to realize that it involves the separation between ownership and direction of companies. Denis and McConnell (2003, p.1), dealing with this conflict between the structures of heritage and management, point out that “[...] when ownership and control of corporations are not fully coincident, there is a potential of conflicts of interest between owners e controllers. There are also benefits to separation ownership and control; otherwise such a structure highly unlikely to have persisted as it has”.

Aguilera and Cuervo-Cazurra (2004) describe the internationalization of economies, the technological development, the integration of the capital market and the process of transformation of the structure of ownership of companies, as vectors for the development of Corporate Governance. Important contributions came from the combination of practices investigated by the LENS Investment Management fund, the Cadbury Report and the principles of the Organization for Economic Cooperation and Development (OECD). The new global standards spread as a result of the globalization process lead institutions to a true paradigm shift, requiring them to align themselves with the various guidelines set forth by international organizations. Brazilian tax system demands a lot from organizations. structures, processes, systems and people are mobilized to study and deliver business information to the government. Moge et al. (2011) even uses the term “tuning” to express this correlation between the models. Points out Moge et al. (2011, p. 21) that “the synchrony of management and business operation practices with the management and operation of taxes must form a single integrated and harmonious set”. Regarding the relevance attributed by the Organization for Economic Cooperation and Development to Tax Governance, it is worth recalling the effects that taxes play in the construction of institutions, markets and democracy itself, we quote the author Ben Dickinson (2011) who in his article Tax and Good Governance that signal that taxes are much more than just a source of income. Tax is more than just a source of revenue and growth. It also plays a key role in building strong institutions, competitive markets and democracy, making the state accountable to society and taxpayers (OECD, 2010). Only an excessive tax burden can impede growth in the richest countries; in developing economies, the lack of tax structures is one of the main causes of weak and insufficient governance, maintaining an excessive dependence on aid.

A good tax system can allow the public to hold governments to account for their decisions, and this means that developing countries do not feel tied to the will of aid donors. [...] Recent evidence also indicates that tax administration reforms can catalyze reforms in other parts of the public sector, rejuvenating stagnant change processes. (DICKINSON, 2011). Reinforcing the understanding that the tax issue is fundamental for the effective and sustainable development of any society, consider the authors Alink & Kommer (2016, p. 31) that “Taxation plays a fundamental role in the construction of institutions and markets”. Tax Governance represents a set of procedures and tools designed and implemented from the perspective of the principles of governance, applied by managers working in the area of tax enforcement. Following the line of reasoning according to which Tax Governance has its basis for development and applicability in Corporate Governance itself, the following excerpts from the work of Castro (2013, p. 193) are cut.

[...] Corporate Governance, adopted in the business organization process, becomes an important basis for the development of Tax Governance, and it is difficult to dissociate the contribution from that in the structuring of the tax activity of large corporations, with a high level of complexity in operations and in meeting its tax obligations.

[...] It is perceived [sic] that the contribution of CG in the development process of Tax Governance enables the optimization of financial resources, possibly making them available for reinvestment in the company itself, also allowing an increase in results for shareholders and other investors.

For this text, it is also important to highlight that Tax Governance must be thought of from an interdisciplinary perspective, then seen as inseparable from the idea of tax management. Thus, it is understood that its conceptual bases permeate knowledge that goes beyond Administration, advancing in other issues such as Law, Economic Sciences, among others. The analysis model used in this research takes into account factors such as the global and Brazilian context of Corporate Governance and Tax Governance, their respective definitions, as well as the challenges in terms of people training, business structure and information technology, so to organizations in the sense of adapting their activities performed in tax execution to the parameters of Tax Governance. To carry out the appropriate tests of the hypotheses described in the introduction, it was considered appropriate to carry out a research with a qualitative bias, from the use of non-numeric information in order to explore individual characteristics, comparing them with pre-existing data from other researches. In this case, the study of multiple cases was used, here “[...] characterized by the deep and exhaustive study of one or a few objects, in order to allow its broad and detailed knowledge, a task practically impossible with the other types of considered designs” (GIL, 2008, p. 58).

The use of primary sources, here characterized as original data, from which there is a direct relationship with the facts to be analyzed, adopted in the documentary research, as well as semi-structured interviews with key executives and main actors in the execution and modernization of the two companies studied. It is worth recalling that, in recent times, in corporations, organizational trends have emerged, aiming at solutions to internal issues, as well as sustainable development. The main reason for these is the growing pressure to obtain positive results. Within this highly competitive and dynamic environment, economic agents survive in the market with solutions and differentials attributed to efficient and effective management, as well as the encouragement of creativity. As organizations grow, the administrative and bureaucratic burden increases. According to Porter (1999), a company's activities fall into nine generic categories grouped into primary activities and support activities. The implementation of Shared Services is perceived as a global trend, which, according to Quinn, Cooke and Kris (2000), is the practice in which business units decide to share a set of services, instead of having it as a series of duplicated support functions within the organization. For the CSC to work properly, Schulman et al (1999)

point out that some requirements are essential: 1) the service unit needs to be semi-autonomous, not answering hierarchically to any of these sectors that use the services undertaken in this Center, although these must participate in its governance, with a view to directing and evaluating results; 2) the CSC must seek continuous improvement and act in accordance with the best market practices, constituting a constant center of excellence for the services that make up its portfolio; 3) the Center in question must charge for the services provided, as it is managed as a business unit; and 4) there must be a high degree of automation, so that the benefits of reducing costs and raising the quality of services can be achieved. The research developed had a qualitative bias, having as main methodological instruments the study of multiple cases, using bibliographic and documentary survey, as well as semi-structured interviews with key executives of the two companies. Likewise, it adopted direct observation through on-site visits to their respective shared service centers. The study was carried out from 2013 to 2019. The theoretical basis was anchored in the areas of Corporate Governance, Tax Governance and Emerging Technologies, applicable to the tax execution process.

RESULTS

The research concluded that the governance issue is a strategic component for controlling companies and meeting organizational, methodological and regulatory demands. These are under the supervision of the collection and inspection departments, which invest significant resources in data crossing systems, called fiscal mesh, and other audit mechanisms. The professionalization of management was an important step both for the exponential growth of the groups studied and for the restructuring process of OAS Group. The problem of agency was addressed in the issues of separation between family and business, keeping only qualified family members for the operation. The groups studied maintained operations in practically all segments of economic activity and, therefore, were included in the transmission of a large volume of information to the government, which would be cross-checked with data, through auditing systems. The SPED Project forced an adjustment in governance models, creating a tax governance vision that had the primary objective of integrating relevant information from the areas: accounting, fiscal, tax and financial, within the context of corporate controllership. The sharing of services was the best solution for optimizing resources and concentrating systems and specialized human capital to meet the demands of tax governance, highlighting compliance and internal controls.

The correct fulfillment of the tax obligation, on an international basis, surpassed the monetary issue of taxes and became an important instrument of economic and social development, making institutions and markets stronger. Tax governance gained notoriety in discussions with major economic agents and in their relations with taxing entities. The recovery process is long, complex and uncertain. As a result of this concern, the new executive board adopted regulations related to the Governance of the companies that make up the Group, rewritten a Code of Conduct and instituted two new entities, the Compliance Committee and the Management Audit. Since all the pillars of Governance have passed and be observed by all employees, including members of tax enforcement, with application oriented "for results", to "preserve the image, reputation and equity of OAS" and the "perpetuation of the company". In the case of OAS Group, the market had also been changed, other existing advantages were no longer accessible. A framework of greater equity is established among the players operating in the engineering and infrastructure area. Still on Tax Governance, the Group, in terms of understanding the business structure, promoted greater segregation of activities, which were concentrated in shared service centers. The research results show a lack of control and audit systems of the systems responsible for processing tax information. Audit support tools are not being applied. An indicator that represents a weakness in Corporate Governance and more intensely in relation to Tax Governance, is translated by the opinions issued by the Independent

Audit companies on the Accounting Statements produced and disclosed by the Company annually. At this moment, the Group is making efforts towards improvements to meet the demands of the organization, the market and the government. Petrobras continues with the integration of online business management, governance and tax audit platforms, based on emerging technologies, based on Data Science, such as the standardization and crossing of tax data, aiming at reducing corporate risk and financial impacts for the company and investors. Even though OAS is a privately-held corporation, it was possible to verify that the guidelines structured by the International Financial Reporting Standards (IFRS), the Brazilian Securities Commission and the Sarbanes-Oxley Act were observed by the Company after the adoption of good Corporate Governance and Tax practices, which are even required, as the company maintains shareholding relationships with pension funds and other regulated entities, in addition to being subject to scrutiny by risk rating agencies, such as Standard & Poor's and to Fitch Ratings. It is suggested that further research be carried out and, with this, there is observation of a greater number of concrete cases, in order to broaden the analysis and discussions of this work. These new researches can not only be destined to studies of other organizations, broadening the research universe in a horizontal way, but also be carried out on Tax Governance, then analyzed under other biases. This is because the contours of Tax Governance, as a kind of Corporate Governance, are still deserving of further development. Those used in this research follow a multidisciplinary perspective, with a focus on the company's development and processes.

DISCUSSION

Petrobras, Brazil's largest taxpayer, has dispersed control and its largest shareholder is the government. With some frequency, especially in previous terms, it was used as an instrument for public policies of an economic nature. OAS Group has a more centralized control and a family as the main shareholders. Even so, after the corruption scandals, it had to be restructured to meet the interests of different parties, especially society and government. The control issue was at the center of all discussions and is of fundamental importance for the maintenance of companies' capital. Considering the size of the companies and the complexity of the operations, in order to meet the demands imposed by the current tax legislation, significant efforts were made in studies, scenarios and systems for generating, transmitting and validating information on purchase and sale operations. The control and inspection departments were also investing in technology for crossing data and information. The SPED Project consolidated all tax obligations into modules that must be sent periodically to the government. There are global principles, practices and governance pillars disseminated by entities around the world. In Brazil, in terms of title and scientific delimitation, this work adopts the premise according to which the application of the pillars of Corporate Governance in the tax management activity is simply named as Tax Governance. The international market began to value the adoption of tax governance practices. Compliance with tax obligations has become an important instrument of social responsibility, contributing to regional development. Service centers seek strategic locations with attractive territorial configurations and end up boosting the regional economy. The payment of taxes in Brazil of a municipal or state nature are important for the local dynamics.

There are two types of obligations: (i) transmission of information, known as an ancillary obligation; and (ii) payment of taxes, known as the principal obligation. The volume of both is significant and consumes great efforts and corporate resources. The most adopted solution is the use of technology. It is known that the history of technological advances with a strong influence on the process (and modernization) of tax enforcement initially refers to the very origin of societies, taxes and routines used to promote their collection. Petrobras is the largest Brazilian company. In recent years there has been a record of tax payments higher than the PIB of small countries. The complexity of operations, as well as the need for greater control

and transparency (two of the basic pillars of corporate governance) promoted a change in corporate culture and strategy towards global standards. That company, founded by engineers or oil workers in 1953, which was concerned only with production and distribution, was now investing heavily in technologies and models to meet SOX (Sarbanes-Oxley) standards, IFRS (international accounting standards), US GAAP between others. Management systems, fiscal support, auditing and complementary tools were implemented with the objective of guaranteeing access to external resources and making the group a major global player in the energy segment. The interviews suggest that big data was already a reality, not only for government and enforcement departments, but also for companies. A lot of data and information became part of the operation and decision-making. The advancement of society, especially after the industrial revolution, created the need to work with an increasing volume of information; this large volume also required the creation of ways to store and manage them, giving rise to Information Systems or Management Systems that are in constant improvement, as more and more users of information need it quickly, so as not to say instant and secure. (HOFFMANN, BRIAÑO, 2013, p. 84). Thus, new technologies – such as artificial intelligence, in-cloud technologies, robotics, big data and blockchain – have promoted the simplification of countless processes in the organization. Working with an important volume of data, with constant updates of parameters, seeking to reduce costs and increase efficiency is only possible through the use of technology resources.

In Canada, the use of Data & Analytics is identifying taxpayers who may untimely submit ancillary obligations; in Spain, invoices are sent to the tax authorities before they are issued to clients; in Scandinavia [...], Data & Analytics predicts tax default; in Australia, primary data is sent in real time, replacing the filling and delivery of ancillary obligations, in addition to the implementation of the Tax Control Framework, which imposes a focus on the assessment of internal controls in the tax area and taxpayers, analyzing the quality of processes; in China, Data & Analytics assesses the economic impact of tax reform. In Singapore, there are already more than 1.3 million income tax returns prepared automatically by the tax authorities. (COUTINHO; LA ROSA; 2018, p.1)

The content analysis carried out with the results of the interviews indicates that the challenges faced by companies are basically linked to the inspection activity to which they are submitted. In Brazil, there is complexity in the legislation, numerous changes and interpretations and volume of obligations. The OAS Group was formed in 1976, with operations focused on the engineering and infrastructure sector. There is an internal corporate vision as being a Brazilian multinational conglomerate, with private capital, which brings together companies present in the national territory and in several countries. Today, OAS is established in complementary areas carrying out heavy civil construction works in the public and private sectors, such as roads, airports, hydroelectric plants, dams and ports, and acting in infrastructure investments, sanitation, multipurpose arenas, oil and gas, concessions of urban roads, highways, subways and airports. The company was involved in the corruption scandals sparked by “Operation Lava Jato” and is currently undergoing a complete restructuring. Unlike Petrobras, also involved in corruption problems, OAS Group, in the global scenario, has gone from an institution with adequate capacity to honor its financial commitments to one with significant speculative characteristics. Issues such as governance and transparency have become institutional missions to be achieved in response to employees, customers, government, society and other stakeholders. Tax issues were also viewed with more caution and the information transmitted to the inspection bodies now undergoes several layers of verification and analysis, an important component of the strategy to restore corporate confidence in the market. The reclassification movements in the risk agencies were constant and with each write-off the company adopted more efficient internal control mechanisms, using many of the emerging technologies. Respondents stated that the government “was watching” and that the market “was watching”. The use by Duarte (2009, p. 28) of the expression “Big Brother Fiscal”, certainly alluding to the work “Big

Brother” of the fictional character in the novel 1984 by George Orwell, to demonstrate how the government has evolved in the inspection of tax collection, creating “a set of actions by the Brazilian tax authorities to obtain information on all business operations in electronic format [...], real-time surveillance by the tax authorities”. The company's restructuring plan would have to go through several levels of its structure. It was not just a matter of financial readjustment. It was necessary to advance in other competences that were not exercised or were exercised, but in a deficient manner, in the exercises that preceded “Operation Lava Jato”.

Since March 2018, OAS has had a new management, which has been working on restructuring the company, focusing on professionalized governance, drastic reduction of expenses, review and optimization of internal processes and strengthening of the Compliance area. “This has been a constant effort to create a lean, fair and effective model within all areas of the company, in addition, support for the Compliance area is unconditional and unrestricted[...].” (OAS, 2020).

Even understanding this need for differentiated tax treatment for the Group's companies, senior management also chose to unify all the company's tax enforcement activities. With that, among all the activities already unified, the tax execution was included. This activity is now carried out in a concentrated manner by a Shared Service Center (SSC), directly linked to the holding OAS S/A. Within this SSC, the analyst team is subdivided into two large groups due to specialty: the first group is dedicated to activities related to direct taxes and the second group is dedicated to tax processes related to indirect taxes.

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