

Tax audit at the heart of tax risk management in commercial SMEs in Cameroon

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Abstract

Auditing is a major topic of interest for contemporary economic studies, given the impact of this function at the level of SMEs. Tax auditing plays a decisive role in an economy that largely depends on the information produced and the declarations made by entities independently. It guarantees the security of operations and contributes to the reduction of risks within SMEs and preserves its credibility with stakeholders, especially the State. The objective of this research was then to determine the contribution of tax auditing in the management of tax risks in commercial SMEs in Cameroon. To achieve this objective, a factor analysis and linear regression were carried out on the basis of data obtained from a survey conducted among 184 commercial SMEs in Cameroon using a questionnaire. The regression analysis shows that: the Tax Recovery Rate (*TRR*), Duration of the Tax Audit (*DTA*), the Cost of the Tax Audit (*CTA*) and the Post-Audit Tax Compliance Rate (*PATCR*) significantly and positively influence the management of tax risks of commercial SMEs in Cameroon.

Keywords: Tax audit, Tax risk management, Tax adjustment rate, Duration of tax audit, Cost of tax audit

Introduction

The financial scandals experienced this last decade all over the world (Enron, Worldcom, Parmalat, Adephia, Xerox, UBS, Batam, Vivendi- Universal...) increasingly raise the need to have an effective management system. In this context, several researchers emphasize the importance of risk management as one of the fundamental elements of good business management (Zeghal and Ajili, 2005) ^[56]. It is thus essential that an effective management process recognizes the different types of risks that the company may face and controls them in order to ensure its sustainability and competitiveness both nationally and internationally.

The life of the company is organized by a set of social, legal, tax, and accounting rules. The commitment of a company to Corporate Social Responsibility (CSR), regardless of its size and sector of activity (Djounda Tchinda, 2024), inevitably leads to compliance with these rules for the purpose of sustainability of its business (Djounda Tchinda *et al.*, 2018). Although these rules are quite often perceived as a set of constraints imposed on the manager, Amann and Lethielleux (2005) ^[1] consider them as "a tool for diagnostics in management, optimization of management and regulation of concepts in this area".

Taxation is a highly complex subject that poses financial and reputational risk. Taxes are among the largest out-of-pocket costs of corporations. Corporate tax obligations are complex and diverse, and governments in Cameroon and around the world are becoming increasingly aggressive and creative in their tax collection practices. Directors have personal liability for unremitted payroll deductions and certain sales and other taxes, including interest and penalties.

As part of their overall stewardship function, directors must consider the risks that the cycle of the tax planning and management process implemented for the production of tax

returns, tax audits may create for the organization. Whether the tax plan concerns an extraordinary transaction or an ongoing tax planning structure, directors must ensure that management has identified significant or material risks and taken appropriate measures to avoid, manage or mitigate them through a system of control and verification (audit).

Auditing is the verification procedure in an accounting, tax, legal or social field, entrusted to a professional sometimes called an auditor whose mission is to control the timeliness of a project, the conformity of a project or the conformity to the law, of an act or a series of legal acts and to report on it. It makes it possible to ensure that the accounting of a company is kept in compliance with the accounting standards in force, and that taxes are paid in accordance with and with the laws.

The work of Ebondo (2006) ^[17], contributed to the determination of the contribution of audit and internal control to the performance of the company. This study showed that audit and internal control have become two mechanisms for regulating the behavior of the stakeholders of the company. In addition, it explained that the failure of certain companies is caused by poor management systems and especially the absence of control and audit. According to the lexicon of legal terms, audit is: "a verification mission, compliance of an operation or the situation of a company with the rules of law in force, we thus speak of legal audit, tax audit, social audit, among others".

According to Renard (2010) ^[46], internal auditing is "an independent and objective activity that gives an organization assurance on the degree of control of its operations, provides advice to improve them, and contributes to creating wealth." It allows irregularities to be detected and corrected. These irregularities can be detrimental to both the company and the tax administration.

Taxation is a major concern of the State and national and international companies. Since the beginning of the 20th century, tax has been the main source of financing for the State and the essential instrument of economic and social policy. According to Disle and Saraf (2001) ^[16], "*Taxes are financial benefits imposed on individuals and legal entities according to their ability to contribute and without any specific compensation with a view to contributing to public expenditure and achieving the economic and social objectives set by the public authorities.*"

Taxation has always been, and still is, suffered by most investors who did not really have the notions of it on the one hand and on the other hand because of the often ambiguous policy of the tax administration. Nevertheless, some companies unaware of the tax issues come up against a complex legal framework and even a limited knowledge of tax practices, often unstable, in the tax management of their expenses, hence the use of the technical skills of a tax consultant. Achieving this goal inevitably involves establishing a climate that promotes legal and tax security within a structure on the one hand and on the other hand optimal management that allows the most relevant tax choices to be made and to benefit from the legal vacuum and the advantages provided for by the regulations in force.

A study conducted by the Cameroon Economic and Social Policy Analysis Center (Camericap-parc) in 2014 states that more than 70% of business leaders have a negative perception of taxation, regardless of the sector of activity. The latter consider taxes and other charges as "an obstacle to achieving their growth objectives". Following this study, we noted within SMEs that the accounting and management control department also handles all operations related to taxation. Observations made in these SMEs led to the observation that the tax aspect is totally neglected. This observation is justified by a set of observations made in relation to the process of processing elements related to taxation such as:

- errors in determining the tax base;
- delay in validating tax returns;
- late filing of tax returns;
- late payment of taxes;
- irregular change of the tax regime (without notifying or warning the tax administration).

All these remarks and irregularities have led some companies to be subject to adjustments and penalties. Moreover, auditing the management of tax risks, which often leads to bankruptcy, seems to us to best avoid sanctions and prevent litigation. In a very changing economic environment, where investors are constantly looking for profitability, we ask ourselves the question: To what extent can tax auditing contribute to improving the management of tax risks for companies? In other words: Does tax audit have an effect on tax risk management in commercial SMEs in Cameroon?

The objective pursued by this research is to determine the contribution of tax audit in the management of tax risks in general and in commercial SMEs specifically. In the pages that follow, we will first present in the first part of the literature review a conceptual approach to tax audit, in the second part the management of tax risks by tax audit, then the methodology, the results and discussions, finally a conclusion.

Literature review

The conceptual approach to the tax audit

According to Bougon (1986) ^[5], "tax audit is a critical examination of the tax situation of a natural or legal person with a view to formulating an assessment". This author specifies that it is a diagnosis of the tax situation of a natural or legal person. Tax audit is a tool for detecting tax risks and improving risk management through the corrective measures that it can suggest.

Although necessarily different from tax audits ^[1], the interest in using tax audits is justified in order to best prepare for tax audits and to improve the management of the company in this area. To this end, the tax audit provides information on the existence or absence of tax risk and, where applicable, on the extent of such risk. The tax diagnosis can also be part of a tax risk management perspective. Indeed, tax risk not only generates financial consequences but also hinders the management and competitiveness of the company.

Tax risk naturally originates from the complexity and multiplicity of applicable rules, from unrealizable choices of advantages granted by law, but also from the way the company approaches them within the framework of its tax policy. The notion of tax risk actually brings together two consents:

- the first corresponds to the non-compliance, voluntary or not, of the tax rules,
- the second involves ignorance of a favorable tax provision which can generate financial gains.

The forecasting of tax risks requires a tax audit which includes certain measures, in particular the implementation of tax procedures, the formalization of the tax risk management process, the provision of sufficient resources for tax management, the documentation and archiving of tax files.

The objectives of the tax audit

The purpose of a tax audit is to examine the company's tax situation. In fact, it involves using specialists in the field to see how the company understands taxation and how it integrates the tax parameter. In fact, a company's tax situation is influenced by two types of decisions. First of all, and this is certainly the most widespread aspect, the company's tax situation is influenced by decisions whose initiative is beyond its control; these decisions are in reality only the result of legal obligations, obligations with which the company must comply under penalty of exposing itself to sanctions. Conversely, the company's tax situation can be influenced by decisions whose initiative belongs to it; within the framework of this type of decision, the company can influence its own tax situation.

It can, within a certain limit, and with more or less success, modulate the size of its tax debt; this is essentially a function of the use it makes of the tax choices and tax options available to it. These two types of decisions naturally determine the objectives of a tax audit, which justify the existence of the mission. On the one hand, it will ensure that the company actually complies with the legal obligations to which it is subject and that it complies with the tax rules. The tax audit then aims to verify that the company is not exposed to tax risks attributable to non-compliance with tax law.

On the other hand, the tax audit will assess the company's ability to use, in its best interests, the possibilities offered by tax legislation, its ability to demonstrate efficiency in its tax management. The tax audit then aims to verify that the company is not exposed to a risk of loss of opportunity due to a lack of awareness of a favorable provision that can generate a significant loss of earnings.

Tax risk management through tax auditing

According to Le Damany (2005) ^[34], "knowledge of dysfunctions, of major risks not treated satisfactorily, requires action. Knowing and not acting greatly exposes the one who knows. So, action is essential". Given the importance of the negative effect that tax risk can have on the management, performance and reputation of companies, the latter must set up management systems based on tax audits in order to protect themselves against its occurrence or reduce its effect. And for Hassid (2008) ^[27], "the company was the first organization to invest in the field of risks by equipping itself with suitable means such as audits to combat them". Thus, to respond effectively to the clouds of uncertainty that surround them, companies are called upon to set up a management or risk management system.

1. Tax audit as a factor in the detection of tax risks

Detecting tax risks is the first step in a management tax audit strategy and determines its effectiveness. According to Elgood *et al.* (2004) ^[19], several approaches can be used to identify all tax risks: relying on board meetings to detect tax risks that may result from changes in the company's activities, focusing on current business processes to identify operational risks, having special contact with the people who create the risk in the company (decision-makers who develop new segments or who carry out mergers, etc.). In the same context, Erasmus (2009) ^[20] emphasizes that it is a matter of collecting all the relevant facts surrounding all the issues that are "on the radar screen" and "off the radar screen", analyzing them (determining the tax implications) and possibly obtaining objective opinions from experts.

According to Stacey (2005) ^[50], it is necessary to identify all areas of activity that can trigger tax risk, document the risks and determine those that must be controlled or eliminated. Laroque and Alepin (2008) address the issue of tax risk management at the level of small and medium-sized enterprises and develop a practical guide for managing this risk specific to this type of enterprise. According to the authors, the accountant of the SME must be aware of the taxes payable by the company and the risks associated with them. SMEs can also use proven professionals through tax audits to identify tax risks and assess the inherent tax consequences.

2. Concept of risk and management of tax risk

According to Yaich (2004), "effective risk management is a key success factor for any company, regardless of the sector of activity or size". Such management is increasingly a differentiating tool for the company. In the same vein, Moreau (2002) ^[41] emphasizes that all companies, regardless of their size, age, sector and competitive situation, must integrate, to varying degrees, management risk into their strategic, organizational or operational thinking. First, let us emphasize that the term "risk management" has several meanings depending on the field. However, Aubert and Bernard (2004) ^[3] recognize that this term integrates the

components of risk analysis and treatment, regardless of the field studied. A framework of good practices in corporate risk management was proposed by the COSO (Committee of Sponsoring Organization of the Treadway Commission) in 2004.

In this sense, the COSO report (COSO, 2004) defines enterprise risk management as follows: "Risk management is a process implemented by the board of directors, senior management, management and all employees of the organization. It is taken into account in the development of strategy as well as in all activities of the organization. It is designed to identify potential elements likely to affect the organization and to manage risks within the limits of its risk appetite. It aims to provide reasonable assurance regarding the achievement of the organization's objectives."

Tarantino (2008) ^[54] defines risk management as follows: "risk management seeks to identify, evaluate and measure risk and then develop countermeasures to treat it." In the same sense, Maurer (2006) ^[36] emphasizes that "risk management in the company (Corporate Risk Management (or CRM) is the process by which different risk exposures are identified, measured, and controlled. These identifications are carried out through audits, whether accounting, financial or tax.

Other authors emphasize, in their definitions, the need to adopt proactive or preventive risk management, in addition to curative management, at the company level. Thus, Darsa (2009) ^[13] emphasizes that "risk management consists of implementing appropriate actions to identify, understand, evaluate and control preventively or curatively the potential or proven risks of the company; this implementation is achieved through the deployment of appropriate human, financial and material resources promoting awareness and commitment of teams around a common objective: controlling the risks of the organization, therefore strengthening its sustainability."

According to Moreau (2002) ^[41], risk management intervenes preventively in the present and prospectively in the short and medium term and aims to "identify and anticipate events, actions or inactions likely to impact the implementation of the strategy in a given horizon, define treatment options and ensure that an optimal option is chosen, implement this option and monitor the effectiveness of the chosen solution in relation to expectations". In the same sense, we can stipulate that risk management therefore consists of providing the company with the means of anticipation such as tax auditing, by managing and making visible, a priori, future events likely to occur, rather than by managing claims when the events have occurred".

These definitions thus raise the need to adopt not only defensive strategies that allow minimizing the effect of a risk in the event of its occurrence, but also offensive strategies aimed at preventing the occurrence of certain risks. The definitions cited above also emphasize the stages of the risk management process in the company.

3. Tax audit and tax risk management: conflict or solidarity?

Tax risk management involves identifying, assessing, and mitigating risks related to tax obligations. These risks may include compliance errors, misinterpretations of tax laws, or aggressive tax policies across a range of variables.

▪ **The tax adjustment rate and tax risk management**

The link between tax adjustment rate and tax risk management is strong, as tax risk management aims to minimize uncertainties and potential tax exposures through rigorous monitoring and compliance. When tax risks are well managed, the tax adjustment rate should decrease, as tax returns will be more accurate and compliant with applicable regulations. In this perspective, Mills (1998)^[40] finds that tax risk management decisions influence tax audit outcomes and adjustment rates. Desai and Dharmapala (2006)^[15] highlight the relationship between aggressive tax management and tax adjustments, as well as how prudent risk management can mitigate these adjustments. Hanlon and Heitzman (2010)^[25] determine the impact of tax risk management policies on tax adjustments. The OECD (2013) report explores how tax risk management strategies, such as base erosion and profit shifting (BEPS), can affect tax assessments. Graham, Raedy, and Shackelford (2012)^[24] argue how effective tax risk management influences accounting practices and reduces post-audit adjustments. Ernst and Young (2014)^[21] highlighted tax risk management practices and their role in reducing tax assessments. From the above, we formulate the following first hypothesis:

H₁: There is a positive relationship between the tax recovery rate and tax risk management in SMEs in Cameroon.

▪ **The duration of the audit tax and tax risk management**

Tax audit duration can impact tax risk management in several ways. A lengthy tax audit may indicate complex internal processes or a lack of transparency, potentially signaling increased tax risks. In addition, lengthy audits consume more resources and can disrupt day-to-day operations. According to McGuire, Omer, and Wang (2012)^[39], effective tax risk management can reduce audit duration by maintaining orderly documentation and responding more quickly to requests from tax authorities. Audit duration can also provide companies with valuable feedback to assess and improve their internal controls and reduce the likelihood of lengthy audits in the future. Similarly, Graham and Tucker (2006)^[23] examine the impact of lengthy tax audits on tax risk management and find that faster audits can improve organizational effectiveness. Desai and Dharmapala (2006)^[15] explore the impact of tax audit duration on costs and tax risk management, showing that firms that manage their risks well can reduce audit time. Hanlon and Heitzman (2010)^[25] highlight how tax audit duration can be affected by tax risk management, as well as the impact of this duration on improving internal controls. OECD (2013) in its report on cooperative compliance teaches how companies can reduce tax audit duration by implementing proactive tax risk management. Ernst and Young (EY) (2014)^[21] study the impact of tax audit duration on risk management practices, and conclude that transparency and well-structured processes can reduce audit time. Based on the above, we formulate the following hypothesis two:

H₂: The duration of the audit fiscal positively influences the management of tax risks in SMEs in Cameroon.

▪ **Tax recovery after tax audit and tax risk management**

Tax recovery after a tax audit is a key step in strengthening tax risk management. It indicates the extent of adjustments

needed to comply with regulations, and reveals weaknesses in the company's tax management. Effective and timely recovery helps strengthen internal controls and improves tax transparency, which contributes to reducing the risks associated with future audits. It can also influence the perception of tax authorities towards the company, fostering a more stable relationship and reducing the risk of repeat audits. In this perspective, Desai and Dharmapala (2006)^[15] analyze how tax adjustments and recovery impact compliance and tax risk management, emphasizing the importance of increased transparency in post-audit recovery. Graham and Tucker (2006)^[23] argue that timely and transparent recovery helps to better manage tax risks. Hanlon and Heitzman (2010)^[25] explore the impact of tax adjustments and post-audit recovery on companies' tax risk management practices. McGuire, Omer, and Wang (2012)^[39] study the influence of tax adjustments and post-audit recovery on risk management and strengthening internal tax controls. OECD (2013) find that cooperative compliance, including the impact of post-audit recovery, reduces the risk of future non-compliance. Ernst and Young (2014)^[21] find that post-audit tax recovery leads to improved tax risk management practices of firms. Tax recovery after a tax audit has a significant impact on tax risk management. It provides firms with crucial information to strengthen internal controls, minimize future adjustments, and reduce the risk of fines. Proactive management of recovery improves tax practices, which in the long run contributes to reduced risk and improved compliance. Based on the above, we formulate the following three hypotheses:

H₃: Tax recovery after tax audit positively influences tax risk management in SMEs in Cameroon.

▪ **The cost of tax audit and tax risk management**

Tax audit costs can have a significant impact on a firm's tax risk management. When audit costs are high, firms often have an incentive to strengthen their tax risk management strategies to reduce future audit costs (McGuire, Omer, & Wang, 2012)^[39]. This can lead to increased allocation of resources to improve tax compliance, the implementation of strengthened internal controls, and the training of specialized personnel to proactively identify and mitigate tax risks. According to Graham and Tucker (2006)^[23], tax audit costs influence risk management policy and the choice of less risky tax strategies to reduce future audit costs. Hanlon and Heitzman (2010)^[25] explore how tax audit costs influence tax risk management decisions, showing that high costs encourage proactive compliance. The increase in tax audit costs motivates, according to McGuire, Omer and Wang (2012)^[39] companies to strengthen their compliance expertise to reduce adjustments and therefore future costs. Ernst and Young (2014)^[21] examine the impact of tax audit costs on risk management strategy, and recommend that companies strengthen their tax policies to reduce future adjustments. De Simone (2016)^[14] concludes that tax audit costs influence tax risk management decisions, particularly in terms of investments in compliance which contributes to reducing the frequency and intensity of audits. All of the above allows us to formulate the following fourth hypothesis:

H₄: There is a positive relationship between the cost of tax audit and tax risk management in SMEs in Cameroon.

▪ **Post-tax audit compliance rate on tax risk management**

A high post-tax audit compliance rate indicates effective management of tax obligations and strengthens tax risk management. By adopting compliant tax practices, companies reduce their risks of future adjustments, fines, and additional audits. This helps improve tax risk management processes, as a high compliance rate provides valuable feedback to refine the company's internal controls and tax policy. The analysis of the relationships between compliance and risk management by Desai and Dharmapala (2006) ^[15] shows that a high tax compliance rate helps stabilize tax management and minimize future tax audits. In the same perspective, Graham and Tucker (2006) ^[23] show how a high compliance rate helps companies control their tax risks, thereby reducing the need for resources for recurring audits and litigation. Hanlon and Heitzman (2010) ^[25] find that tax compliance influences tax risk management, particularly on improving control processes and reducing future adjustments. McGuire, Omer and Wang (2012) ^[39] show that tax compliance allows for better risk management, by reducing future adjustments and optimizing tax policies. The OECD (2013) in its report examines cooperative compliance and its impact on tax risk management, and concludes that a high compliance rate can minimize risks for companies. In the same vein, the analysis of the benefits of a high rate of post-audit tax compliance made by Ernst and Young (EY) (2014) ^[21] shows that the high rate of post-audit tax compliance improves tax risk management and minimizes disputes and penalties. Based on the above, we formulate the following fifth hypothesis:

H5: The post-tax audit compliance rate positively improves tax risk management in SMEs in Cameroon.

Methodological framework

The methodological framework is structured around four points. We will start with the presentation of the sample and the data collection method, the presentation and operationalization of the study variables, the econometric model of the study and finally, the statistical tools used.

1. Data collection and sampling

This study uses data from a survey conducted among companies with fewer than 100 employees in the Littoral, Center, South, East, West and Adamaroua regions that have had disputes with the Cameroonian tax administration in terms of tax management. The sampling frame used by this study is the 2016 General Business Census (GBC) conducted by the National Institute of Statistics (INS). According to this census, Cameroon has 104,527 SMEs that fall under the trade sub-sector. This 2016 RGE shows that SMEs that are involved in trade represent 61.1% of the tertiary sector. The data collection method used is a questionnaire that we designed and self-administered face-to-face with 250 SMEs in Cameroon during the months of February and March 2024. At the end of the data collection, the completion rate is estimated overall at 84%. 210 completed questionnaires were collected. Their exploitation in light of the objectives pursued by our study allowed us to

retain only 184 usable questionnaires in the end. The rejection of certain questionnaires is justified by the fact that certain responses are missing, although useful for conducting the study. Ultimately, the sample for the research consists of 184 commercial SMEs in Cameroon as indicated in the table below.

Table 1: Survey results and sample size

Regions	Numbers	Percentage %
Coastline	63	34.23
Center	42	22.83
South	28	15.21
East	22	11.96
West	17	09.24
Adamaroua	12	06.53
Total	184	100

Source: authors

2. Presentation and operationalization of the model variables

They arise from the theoretical analysis that encompasses tax auditing and tax risk management in companies. From a review of the literature and our personal knowledge on the subject, we have, in the context of this work, retained two types of variables: an explanatory variable and an explained variable.

As for the independent variable (tax audit), it is captured from five indicators. These tax audit measurement indicators make it possible to assess the effectiveness of tax audits, as well as the tax compliance of companies. The main tax audit measurement indicators include the recovery rate (Talla, 2017) ^[52], the duration of the audit (Hopkins, 2016 ^[28] and Mbassi, 2018) ^[37], tax recovery after the audit (Nkoum, 2020) ^[43], the cost of the audit (Keen et Slemrod, 2020) ^[29] and the post-audit compliance rate (Kirchler, Hoelzl and Wahl, 2008 ^[31] and Ekanga, 2021) ^[18]. These indicators are used by tax administrations and researchers to assess the effectiveness of tax audits and their impact on corporate tax risk management. Authors such as Talla (2017) ^[52], Mbassi (2018) ^[37], and Ekanga (2021) ^[18] have contributed to identifying and analyzing these indicators in the context of Cameroon, highlighting the challenges and opportunities associated with tax management.

For the dependent variable (tax risk management), the main indicators for measuring tax risk management include the tax compliance rate (Talla, 2015), the number of tax disputes (Slemrod and Venkatesh, 2002 and Kouam, 2016). For COSO (2013) ^[32] and Fotsing (2018) ^[22] the quality of internal tax controls, the rate of revision of tax returns (Mbassi, 2019) ^[38], the cost of tax risks (Noubissie, 2020) ^[44], predictability of tax outcomes for Chen and Chu (2005) ^[8], Kengne (2017) ^[30], and stakeholder engagement (Tadadjeu, 2018) ^[51]. Authors such as Talla (2015), Mbassi (2019) ^[38], and Noubissie (2020) ^[44] have examined these indicators in the context of Cameroonian companies, highlighting the challenges they face in effectively managing tax risks. The following Table 1 summarizes the measurement of these variables.

Table 2: Summary of the measurement of study variables

variables (tax audit)		
	Captures	Authors
Tax adjustment rate	Dichotomously	Smith (2015), Talla (2017) ^[52]
Duration of the audit		Hopkins (2016) ^[28] , Mbassi (2018) ^[37]

Tax recovery after audit		Baurer (2017), Nkoum (2020) ^[43]
Cost of tax audit		Fofung (2019), Keen and Slemrod (2020) ^[29]
Post-audit compliance rate		Kirchler <i>et al.</i> (2008) ^[31] , Ekanga (2021) ^[18]
variable (tax risk management)		
Tax compliance rate	Dichotomously	Talla (2015)
Number of tax disputes		Kouam (2016) ^[32]
Quality of internal tax controls		COSO., (2013), Fotsing (2018) ^[22]
The rate of revision of tax returns		Mbassi (2019) ^[39]
Cost of tax risks		Noubissie (2020) ^[44]
		Chen and Chu (2005) ^[8] , Kengne (2017) ^[30]
		Tadadjeu (2018) ^[51]
Stakeholder engagement		

Source: authors

3. Econometric model, logistic regression

In our research, our *dependent variable is *Fiscal Risk Management (FRM)*. The model is given by $Y_i = f(X_{1i}, X_{2i}, X_{3i} \dots)$ and the equation is in the following form:

$$Y_i = \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 Or FRM = \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \epsilon_i$$

With: Y_i = the variable explained by *Fiscal Risk Management (FRM)*

X_{1i} = Tax Recovery Rate (*TRR*)

X_{2i} = Duration of Tax Audit (*DTA*)

X_{3i} = Tax Recovery After Tax Audit (*TRATA*)

X_{4i} = The Cost of Tax Audit (*CTA*)

X_{5i} = The Post-Tax Audit Compliance Rate (*PTACR*)

β_1 = the regression coefficient of the variable X_{1i} ; β_2 = the regression coefficient of the variable X_{2i} ; β_3 = the regression coefficient of the variable X_{3i} ; β_4 = the regression coefficient of the variable X_{4i} ; β_5 = the regression coefficient of the variable X_{5i} and ϵ_i = the residue.

4. Statistical tools used for data analysis

We used, for descriptive analyses, flat sorting. For explanatory analyses, we used correlation tests and logistic regression. Logistic regression allows us to explain our dependent variable and of binary nature (FRF), according to several other variables called explanatory. The advantage of this method is that it takes into account the interrelations that may exist between all the explanatory variables. Similarly, it is very often used to highlight the factors determining the management of tax risks of a company. This method has been used by authors such as Singh and Mitchell (1996) ^[49], Carter, Williams and Reynolds (1997) ^[7], Ananga Onana and Makani (2018) ^[2], Makani, Ntoh Ntiege and Tonye (2019) ^[35], but, nevertheless, with some specificities.

Presentation of the results of the study

This section mainly presents the results of the reliability analysis of the variables and then those of the logistic regression.

1. Results of the reliability and factorial of the study variables

The tax audit was studied has across 05 variables. On these latest, We have operated a analysis of there consistency internal Who has watch a satisfactory result. Cronbach ‘s alpha coefficient is of a value of 0.803 > 0.8, with the understanding that 0.8 is considered the “acceptable” threshold.

Table 3: Reliability statistics of tax audit variables

Reliability statistics	
Cronbach 's alpha	Number of elements
0.803	5

Source: authors, software release

For the tax risk management variable, it has summer studied has across 07 item m s. Compared to these latest We have operated a analysis of there consistency internal Who has watch a satisfactory result. Cronbach’s alpha coefficient is of a value of 0.762 > 0.7, with 0.6 being considered the “acceptable” threshold.

Table 4: Reliability statistics of the items of the tax risk management variable

Reliability statistics	
Cronbach 's alpha	Number of elements
0.762	7

Source: authors, software release

2. The Tax Compliance Rate (TCR) and the Quality of Internal Tax Controls (QIC): explained variables of tax risk management

It should be noted that the 05 variables of the tax audit were not used for the factor analysis because they are those with which we want to explain the management of tax risks which is capped via 07 items which go through the analysis in principal components. It was studied has through its 07 items. We have retained Next two of the items For continue analysis. This gave a clear factor structure. Indeed, not all items had contributions greater than or equal to 0.50 on the single factor except two which had contributions greater than 0.8 that the analysis retained.

Table 5: Matrix of initial components of the tax risk management variable

	Matrix of components after rotation ^a	
	Component	
	1	2
Tax compliance rate	0.821	0.121
Number of tax disputes	0.564	-0.050
Quality of internal tax controls	0.537	0.875
The rate of revision of tax returns	- 0.259	-0.819
Cost of tax risks	- 0.083	0.475
Predictability of tax results	- 0.078	0.147
Stakeholder engagement	- 0.065	0.286

Extraction method: Principal component analysis.

Rotation method: Varimax with Kaiser normalization.

a. The rotation converged in 2 iterations.

Source: authors, software release

Reading the table above allows us to conclude that only two items clearly explain the management of tax risks in our work (Tax Compliance Rate (*TCR*) and the Quality of Internal Tax Controls (*QITC*)). This result then predisposes us to estimate two regression models.

$$TCR = \beta_0 + \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \varepsilon_i(1)$$

$$QITC = \beta_0 + \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \varepsilon_i(2)$$

2. Presentation of estimation tests and discussions of the results of the study

As a reminder, our empirical model aims to assess the impact of tax audit on tax risk management within commercial SMEs in Cameroon. Given the nature of the dependent variable and tax risk management, we opted for binary logistic regressions. Tables 6 and 7 below present the result of the estimations according to the basic model.

When reading these tables, our analyses will first focus on model 1 (equation 1; Table 6) and then on model 2 (equation 2; Table 7).

Model (1) presented in Table 6 tests the link between the different variables of the study and tax risk management (Tax Compliance Rate (*TCR*)). The quality of adjustment and the overall significance of model (1) are satisfactory for this measure of tax risk management. The Chi-square statistic attesting to the specification of the model is significant at the 1% threshold for the measure of tax risk management. We conclude, according to the Cox & Snell R-square and the Nagelkerke R-square that tax risk management is explained, respectively approximately 67% and 68.9% by the explanatory variables retained in the first model.

Table 6: Estimation of the variables of model 1 (Tax audit and *TCR*) $TCR = \beta_0 + \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \varepsilon_i(1)$

Variables in the equation						
	β	ES	Forest	ddl	Sign	Exp (β)
TRR	0.133	0.365	0.134	1	0.015 **	1,143
DTA	-0.032	0.411	0.006	1	0.938	0.968
TRATA	0.153	0.371	0.170	1	0.680	1,165
CTA	1,539	0.519	8,810	1	0.003 ***	4,660
PTACR	1,182	0.503	5,514	1	0.019 **	0.307
Constant	0.267	0.512	0.271	1	0.603	1,306

a. Variable(s) entered in step 1: TRR, DTA, TRATA, CTA, PTACR.

Model Summary	
R-two of Nagelkerke	Chi-square
0.689	Value = 11.228; Sig = 0.001 ***
a. Estimation was stopped at iteration number 4 because the parameter estimates changed by less than .001.	

***, **: Significant at the respective thresholds of 5 and 10%

Source: authors, software release

$$TCR = \beta_0 + \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \varepsilon_i(1)$$

2.1. Tax adjustment rate, tax audit cost and post-tax audit compliance rate as proof of the tax compliance rate

We note, firstly, when reading table 6 above that the Tax Recovery Rate (*TRR*) significantly and positively influences the management of tax risks via the Tax Compliance Rate (*TCR*). This influence is significant at the 5% level with a β

value = 0.113 and a Wald probability of 0.134. This result clearly means that companies will be more likely to manage tax risks well if tax adjustment rates are high. Moreover, it is consistent with the econometric model and aligns with the results of Desai and Dharmapala (2006) [15] determining how prudent risk management can mitigate adjustments. Hanlon and Heitzman (2010) [25] determine that tax risk management policies influence tax adjustments. The OECD report (2013) argues that base erosion and profit shifting affect tax adjustments. Graham, Raedy and Shackelford (2012) [24] conclude that effective tax risk management influences accounting practices and reduces post-audit adjustments. Ernst and Young (2014) [21] who conclude that tax risk management practices reduce tax adjustments.

Second, that the Cost of Tax Audit (*CTA*) exerts a significant and positive influence on the management of tax risks through the Tax Compliance Rate (*TCR*). This influence is significant at the 1% threshold with a value $\beta = 1.539$ and a Wald probability of 8.810. This result means concretely that, the higher the costs for tax audits, the more tax risk management will be increased in the company. This conclusion is in line with that of Graham and Tucker (2006) [23] who argue that the costs associated with tax audits influence the risk management policy and the choice of less risky tax strategies to reduce future audit costs; that of Hanlon and Heitzman (2010) [25] show that a high cost encourages proactive compliance and that of McGuire, Omer and Wang (2012) [39] who determine that when audit costs are high, companies are led to strengthen their tax risk management strategies in order to reduce the costs of future audits.

Third, that the Post-Audit Tax Compliance Rate (*PATCR*) significantly and positively influences, at the 5% threshold with a value $\beta = 1.182$ and a Wald probability of 5.514, the management of tax risks via the Tax Compliance Rate (*TCR*). This result highlights the fact that companies will be more excited to better manage tax risks if the post-tax audit compliance rate is high. Along the same lines, Desai and Dharmapala (2006) [15] show that a high tax compliance rate helps stabilize tax management and minimize future tax audits. In the same perspective, that of Graham and Tucker (2006) [23] who show that a high compliance rate helps companies control their tax risks, thus reducing recurring audits and litigation. Hanlon and Heitzman (2010) [25] find that tax compliance influences tax risk management. McGuire, Omer and Wang (2012) [39] show that tax compliance reduces future adjustments and optimizes tax policies. The research of the authors mentioned shows how a high compliance rate constitutes a strategic advantage for effective and resilient tax management. Because by investing in compliant practices, companies can limit tax risks, minimize future audits and optimize their resources.

Model (2) presented in Table 7 tests the link between the different variables of the study and the management of tax risks (Quality of Internal Tax Controls (*QITC*)). The quality of adjustment and the overall significance of model (2) are satisfactory for this measure of tax risk management. The Chi-square statistic attesting to the specification of the model is significant at the 1% threshold for the measurement of tax risk management. We thus conclude, according to the Cox & Snell R-square and the Nagelkerke R-square that the management of tax risks is explained, respectively approximately 83.3% and 88.1% by the explanatory variables retained in the second model.

Table 7: Estimation of the variables of model 2 (Tax audit and *QITC*) $QITC = \beta_0 + \beta_1 TRR_i + \beta_2 DTA_i + \beta_3 TRATA_i + \beta_4 CTA_i + \beta_5 PTACR_i + \varepsilon_i(2)$

Variables in the equation						
	β	ES	Forest	ddl	Sign	Exp (β)
TRR	0.666	0.361	3,404	1	0.065 *	1,947
DTA	0.903	0.436	4,286	1	0.038 **	0.405
TRATA	-0.377	0.371	1,032	1	0.310	0.686
CTA	1.821	0.513	12,619	1	0.000 ***	6,179
PTACR	0.872	0.477	3,349	1	0.067 *	0.418
Constant	0.149	0.509	0.086	1	0.769	1,161

a. Variable(s) entered in step 1: TRR, DTA, TRATA, CTA, PTACR.

Model Summary			
-2log-likelihood	Snell R-two	R-two of Nagelkerke	Chi-square
182,986 ^a	0.833	0.881	Value = 22.009; Sig = 0.001 ***

a. Estimation was stopped at iteration number 4 because the parameter estimates changed by less than.001.

Source: authors, software release

*, **, ***: Significant at the respective threshold of 1; 5 and 10%

2.2 The quality of internal tax controls explained by the tax adjustment rate, the duration of the audit tax, tax audit cost and post-tax audit compliance rate

Reading Table 7 above, we firstly note that the Tax Recovery Rate (*TRR*) exerts a significant and positive influence on the management of tax risks via the Quality of Internal Tax Controls (*QITC*). This influence is significant at the 10% threshold with a value $\beta = 0.66$ and a Wald probability of 3.4040. This result perfectly illustrates the prediction made by the econometric model and is consistent with the results of the work of Hanlon and Heitzman (2010) [25] for whom tax risk management policies influence tax adjustments; of the OECD report (2013) which demonstrates that the erosion of the tax base as well as the transfer of profits affect tax adjustments and that of the work of Graham, Raedy and Shackelford (2012).

Second, that the Duration of the Tax Audit (*DTA*) exerts a significant and positive influence on the management of tax risks through the Quality of Internal Tax Controls (*QITC*) at the threshold of 5% with a value $\beta = 0.903$ and a Wald probability of 4.286. This result highlights that if entities want to better manage their tax risks, they must play on the duration of tax audits. Along the same lines, Graham and Tucker (2006) determine that faster audits can improve organizational efficiency. Desai and Dharmapala (2006) [15] showing that firms that manage their risks well can reduce audit time. Hanlon and Heitzman (2010) [25] highlight the effect of tax audit duration on the improvement of internal controls. OECD (2013) teaches how companies can reduce tax audit duration by implementing proactive tax risk management. Ernst and Young (EY) (2014) [21] conclude that transparency and well-structured processes can reduce audit time. Tax audit duration thus appears as an indicator of the robustness of a company's tax risk management practices. Proactive management and well-structured internal processes not only reduce audit duration, but also optimize the use of resources and improve tax transparency. Third, that the Cost of Tax Audit (*CTA*) significantly and positively influences the management of tax risks through the Quality of Internal Tax Controls (*QITC*) at the threshold of 1% with a value $\beta = 1.821$ and a Wald probability of 12.619. This result is consistent with the econometric model

and follows the results of authors such as Hanlon and Heitzman (2010) [25] who show that a high cost encourages proactive compliance. Those of Ernst and Young (2014) [21] who recommend that companies strengthen their tax policies to reduce future adjustments. De Simone (2016) [14] concludes that tax audit costs influence tax risk management decisions, particularly in terms of investments in compliance which contributes to reducing the frequency and intensity of audits. High tax audit costs would encourage companies to invest in more robust tax risk management strategies to avoid costs related to adjustments, litigation and penalties. Companies with high audit costs tend to adopt proactive compliance policies, strengthened internal controls and increased training in risk management.

Fourth, that the Post-Audit Tax Compliance Rate (*PATCR*) exerts a significant and positive influence on tax risk management by the Tax Compliance Rate (*TCR*) at the threshold of 10% with a value $\beta = 0.872$ and a Wald probability of 3.349. Consistent with the predictions made by the econometric model, this result confirms the fact that companies will be more excited to better manage tax risks if the post-tax audit compliance rate is high. It corroborates the work of the OECD (2013) which concludes in its report that a high compliance rate can minimize risks for companies and those of Ernst and Young (EY) (2014) [21] who find that the high post-audit tax compliance rate improves tax risk management and minimizes litigation and penalties. A high post-audit compliance rate improves tax risk management by reducing the likelihood of future adjustments, optimizing compliance policies and strengthening internal control processes.

In summary, it emerges from all the results of the study that the Tax Recovery Rate (*TRR*), Duration of the Tax Audit (*DTA*), the Cost of the Tax Audit (*CTA*) and the Post-Audit Tax Compliance Rate (*TCPAF*) significantly and positively influence the management of tax risks of commercial SMEs in Cameroon. To this end, hypotheses 1, 2, 4 and 5 that we formulated within the framework of this study are found to be validated.

Conclusion

The objective of this research was to determine the contribution of tax auditing to the management of tax risks in general and in commercial SMEs in particular.

To achieve this objective, a factor analysis and linear regression were carried out on the basis of data obtained from a survey conducted among 184 commercial SMEs in Cameroon using a questionnaire. The regression analysis shows that: the Tax Recovery Rate (*TRR*), Duration of the Tax Audit (*DTA*), the Cost of the Tax Audit (*CTA*) and the Post-Tax Audit Compliance Rate (*PTACR*) significantly and positively influence the management of tax risks of commercial SMEs in Cameroon. On the other hand, the Tax Recovery After Tax Audit has no influence on the management of tax risks in commercial SMEs in Cameroon. Generally speaking, the internal tax audit, through the Tax Recovery Rate (*TRR*), Duration of the Tax Audit (*DTA*), The Cost of Tax Audit (*CTA*) and the Post-Tax Audit Compliance Rate (*PTACR*) significantly and positively influence the management of tax risks in the Commercial SMEs in Cameroon. The results obtained in this work should serve as a guide for SMEs. Because they must make the efforts to properly ensure tax audit missions, to ensure the proper application of tax standards and laws and to ensure the objectivity of internal auditors.

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