

# (De) legitimization of accounting information in public procurement processes in Brazil

(Des) legitimação da informação contábil em processos licitatórios no Brasil

(Des) legitimación de la información contable en los procesos de contratación pública en Brasil

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### **Abstract**

This study consists of analyzing the legitimacy of accounting information in the economic and financial qualification (EFQ) stage of public procurement involving construction industry works, as well as the outsourced laborforce service delivery. For the interpretation of the phenomenon it was used the attributes of normative legitimacy (normativity) and the qualitative characteristics of useful financial information present in the accounting conceptual framework. The results are based on documentary analysis of public procurement processes concerning of six federal higher education institutions, complemented by interviews with agents who work in the EFQ process. This study's finding indicates that the accounting information has been viewed with low level of legitimacy, which has hampered the economic evaluation of companies in the public procurement process. Furthermore, the research contributes by suggesting that the low level legitimacy of accounting information is a relevant factor for its formality use, which can be useful for research and for practice.

Keywords: Accounting Information; Normative Legitimacy; Economic and Financial Qualification; Public Procurement

#### Resumo

O objetivo deste estudo consiste em analisar a legitimidade da informação contábil na etapa de qualificação econômico-financeira (QEF) das licitações públicas que envolvem obras de construção civil e serviços de mão de obra terceirizada. Para a interpretação do fenômeno se utilizou dos atributos da legitimidade normativa (normativity) e das características qualitativas da informação contábil presentes na Estrutura Conceitual da contabilidade. Os resultados baseiam-se em análise documental de processos licitatórios de seis instituições federais de ensino superior, complementado por entrevistas com agentes que atuam no processo de QEF. Os resultados indicam que a informação contábil tem sido vista com baixa legitimidade, o que têm prejudicado a avaliação econômica das empresas no processo licitatório. No aspecto teórico, a pesquisa contribui sugerindo que a baixa legitimidade da informação contábil perfaz em fator relevante para seu uso cerimonial, o que pode ser útil para pesquisas e para a prática.

Palavras-chave: Informação Contábil; Legitimidade Normativa; Qualificação Econômico-Financeira; Licitações Públicas

#### Resumen

El objetivo de este estudio es analizar la legitimidad de la información contable en la etapa de calificación económico-financiera (QEF) de licitaciones públicas que involucran obras de construcción civil y servicios de mano de obra tercerizada. Para la interpretación del fenómeno se utilizaron los atributos de legitimidad normativa (normatividad) y las características cualitativas de la información contable presentes en la Estructura Conceptual de la contabilidad. Los resultados se basan en el análisis documental de los procesos de licitación de seis instituciones federales de educación superior, complementados con entrevistas a agentes que trabajan en el proceso QEF. Los resultados indican que la información contable se ha visto con poca legitimidad, lo que ha dificultado la evaluación económica de las empresas en el proceso de licitación. En el aspecto teórico, la investigación contribuye al sugerir que la baja legitimidad de la información contable es un factor relevante para su uso ceremonial, que puede ser útil para la investigación y para la práctica.

**Keywords:** Información contable. Legitimidad normativa; Calificación económica y financiera. Licitaciones públicas

### 1 Introduction

One of the most discussed topics in the scope of public management in the countries is public procurement, due to the representativeness of the financial volume spent by governments, an average of 12.5% of the Gross Domestic Product (GDP), and also due to the fact that countries can integrate public procurement, the environmental and social issues agenda (OECD, 2019). Public procurement in most countries, especially in Europe, is at the top of the agenda for academics and professionals dealing with public administration (Milosavljević & Milanović, 2019).

Under the guidelines of *New Public Management* (NPM), with a focus on the public sector approach based on elements of efficiency and effectiveness, the contractualization among public administration with the private sector and with the third sector has increased, which has transformed it increasingly in a contract manager through outsourcing or other contracting modalities (Broadbent & Guthrie, 2008).

In this context, new problems arose, such as the situations of companies that do not deliver services, materials and works, which were contracted by the state, in addition to many of them with financial difficulties that it could be verified through a more careful evaluation of the contractors (Romzek & Johnston, 2002). Currently, this scenario has not changed, since as of 2016 the number of companies that have been punished for default, non-suitability and non-compliance with various contractual clauses has grown on average 200% per year (Transparência Brasil, 2020).

In order to ensure compliance with contracts, the assessment of companies financial capacity is determined by the economic-financial qualification (EFQ) stage, which involves requirements intrinsic to accounting, such as the presentation of financial statements and the minimum values of economic and financial indicators (Brasil, 1993). However, there are indications, across the country, that this step is not being effective in assessing the economic and financial capacity of companies, as there are relevant cases of contracts that were discontinued due to factors that involve the companies' financial incapacity in executing the object contractual nature, such as the cases presented in the survey carried out by the Federal Court of Accounts (TCU). In 2019, there were more than a hundred large-scale works (with values in excess of R \$ 1.5 million) paralyzed across the country, causing significant losses to society (TCU, 2019).

The Association of Courts Auditors (Atricon, 2019) also carried out a study related to the paralyzed constructions in the country 2,555 with a value of more than R\$ 1.5 million were found, paralyzed in Brazil, with 9.1% of the total being paralyzed due to abandonment by the contracted companies.

In general, the researches carried out on the EFQ stage sought to assess whether the required economic and financial indexes were related to the contractual object, whether there was consistency of requirements between the notices of the same institution and whether statistical techniques could improve the process (Machado, 2006; Sobreira et al., 2014). No research was found that would deepen the analysis of the process of implementing the EFQ by the institutions, or their relationship with the accounting literature.

This gap suggests that accounting information may not be satisfactorily fulfilling its purposes in the context of public procurement (Ribeiro et al., 2020). In these circumstances, problems related to normativity may be occurring. The normativity occurs when the attributes of the norms are voluntarily accepted by their users, even in the absence of coercion (Franck, 1990). In this sense, it is questioned whether questions related to the legitimacy of the standard in the EFQ stage, such as the use of unreliable and little useful accounting information in the processes, are contributing to the discontinuation of companies' contracts.

Given the above, the objective of this study is to analyze the legitimacy of accounting information in the EFQ stage of the public procurement processes of federal education institutions. This analysis is justified because, if the requirement for accounting information present in the EFQ stage of the procurement processes is not seen by the actors with sufficient legitimacy to assess the economic and financial situations of the companies, this stage may be being carried out only to demonstrate compliance with the legislation, without its effectiveness.

The study uses the basis of the Theory of Legitimacy to build the theoretical framework necessary to examine and explain the investigation, since, according to Bebbington et. al (2012), legitimacy depends not only on the authority of the standard, but also on its internal characteristics and the processes from which they are formed. The empirical reports of the Theory of Legitimacy applied to accounting concentrate on exploratory studies applied to organizations, since few studies have focused on the normativity of accounting information (Deephouse & Suchman, 2008).

As long as there is a model capable of more clearly identifying the economic reality of companies, the public administration will be able to select, in fact, more advantageous proposals based on more reliable information. This possible finding may contribute, directly, to the efficiency in the application of resources and, indirectly, to the quality of public spending.

This article is structured in five topics. In the introduction, the objective of the study, the expected contribution and the research justification are presented. The second topic analyzes the stage of economic-financial qualification, relating it to the normativity and to the qualitative characteristics of useful financial information. The third topic presents the methods used and the respective stages of the research and the information of the analyzed cases. The fourth topic presents the documentary analysis of the cases and also the analysis according to the qualitative comparative analyze (QCA). In topic five, the final considerations are presented. Finally, the references are presented.

#### 2 Theoretical framework

### 2.1 Economic-financial qualification in public procurement Processes

The Federal Constitution of 1988 (Brazil, 1988) requires companies to be evaluated in economic terms to verify their ability to comply with the intended contractual object. In this normative environment, the EFQ stage determines requirements, such as economic-financial indexes and accounting statements for the assessment of the economic and financial capacity of companies that must be complied with in the public procurement processes.

The requirements of the legislation for analyzing the EFQ, listed in Table 1, are not in line with the accounting literature. Of particular note is the prohibition on charging minimum billing amounts, as well as profitability indices (Item 2). This provision of the procurement law seems to conflict with the Federal Constitution in its conceptual form, since the Constitution itself allows economic qualification to be carried out with requirements that are indispensable to guarantee compliance with the object (Brazil, 1988). In addition, the criteria of minimum billing values and profitability are metrics related to the economic evaluation of companies. Therefore, there is an inconsistency between the constitutional text and the procurement law.

Table 1: Items of legislation dealing with economic-financial analysis in the law versus literature

Item	Text of legislation	Literature
1	Art. 31, I - Law 8,666 / 93 - The documentation related to the economic and financial qualification will be limited to: - balance sheet and financial statements of the last fiscal year []	three financial years (Martins et. Al., 2020).
2	Art. 31, §1 - Law 8,666 / 93 - The requirement for indices will be limited to the demonstration of the bidder's financial [] capacity, the requirement of minimum values of previous billing, profitability or profitability indices is prohibited	One of the most evident constructs for insolvency forecasting models relates to profitability (Pereira & Martins, 2015; Kanitz, 1978)
3	Art. 31, § 2 - Law 8,666 / 93 - The Administration, in the purchases for future delivery and in the execution of works and services, may establish, in the bidding instrument, the requirement of minimum capital or minimum equity.	
4	Art. 31, § 4, Law 8.666 / 93 - It may also be required to list the commitments assumed by the bidder that imply a decrease in operating capacity or absorption of financial availability []	
5	Art. 19, XIV, IN 06/2013, a) balance sheet and accounting statements referring to the last fiscal year, proving general liquidity ratios - GL, current liquidity - CL, and general solvency - GS higher than 1 (one);	Observe sector specificities for defining indexes (Martins et., 2020).
6	Art. 19, XIV, IN 06/2013 - b) Net working capital or working capital (current assets - current liabilities) of at least 16.66% of the estimated value of the contract []	There is no forecast in the literature for these percentages.
	Source: Elaborated by the authors.	

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Insolvency forecasting studies show that profitability is an essential construct in empirically tested models, both in Brazil and in other countries (Du Jardin, 2015; Pereira & Martins, 2015). Kanitz (1978, p. 2) highlights that "the first symptoms of an insolvency appear long before it materializes", pointing this out to the importance of using profitability indicators.

The economic-financial indexes and their respective values to be demanded in public notices are: current liquidity (CL) and general liquidity (GL) greater than 1 (one) and general solvency (GS) less than 1 (one) (Brazil, 2017). In addition to the fact that these required indicators are not sufficient for a broader and

more thorough assessment of the company, the legislation does not consider sectoral parameters, which is a fact that distorts the analyzes, since each business sector has particularities inherent to its activities (Martins et. al., 2020).

It is noted, therefore, that the legal system does not allow the analysis, in essence, of the economic and financial situation of the companies participating in the public procurement processes. The analyzes are based almost exclusively on the form that the law expresses. In order to better understand this reality, some studies have been carried out.

Rodrigues et al. (2017) sought to identify which criteria related to liquidity are being required in procurement bills in Brazil, comparing them with sectoral parameters. As a result, it was observed that the required indices do not portray the reality of the sectors, suggesting the need for greater alignment between the criteria used by the bidders and the market reality. At the state level, Lester et al. (2009) observed that there is no congruence between the criteria adopted by the government in the procurement bills. In the case of local governments, the studies by Michelin et al. (2012) in which it was observed that there is a lack of use of indices traditionally used in accounting literature, and these studies suggested the inclusion of other indices.

Other studies had different approaches than the previous ones, with some of them focusing on the execution of the EFQ stage, such as Sobreira et al. (2014). The authors noted that there is greater predictive power with the application of the bankruptcy forecast model using other accounting ratios, in addition to those determined by legislation (CL, GL and GS). In turn, Carneiro Júnior et al. (2015) found that, by including other indicators in the analyzes, they obtained a higher level of assertiveness and concluded that a more robust analysis could better select companies.

Therefore, it is noted that the studies related to the EFQ stage focus on two main aspects: (i) existence of problems in the execution of contracts related to financial issues of the contracted companies; (ii) discrepancy between the determinations of the legislation and the literature for analyzing the economic and financial situation of the companies. Despite these studies awakening to the importance of the theme, it is noted that they do not analyze the relevance attributed to the accounting information used in the procurement processes (CPC 00, 2019).

### 2.2 Normativity

The norms or rules are everywhere, whether in the degree of morality and beliefs of people and groups, as well as in organizations and social systems, represented by various instruments, such as: an act, a procedure, a routine, a position, a group or a team, the structure or status of a group, an authority structure, organizational symbols, among others (Parsons, 1956). Thus, the core of legitimacy lies in the congruence among these norms, structures and socially constructed values and their users (Deephouse & Suchmann, 2008).

Normativity can be understood as a state or condition that reflects voluntary agreement, cultural alignment, support or consonance on the part of its users in relation to the norm or rule, based mainly on its attributes and not on its coercive authority (Franck, 1990). In relation to this dynamic environment of normativity, Salancik and Pfeffer (1978) state that it (legitimacy) is more noticeable when it is absent than when it is present, and it may vary in degree or intensity according to the level of agreement of its users with the standard and present itself in the following situations: (i) the rules that are commonly obeyed; (ii) rules that are never obeyed; and (iii) the rules that are obeyed less frequently (Franck, 1990; Ashforth & Gibbs, 1990).

From the point of view of the properties or attributes that give legitimacy to the rules, Franck (1990) mentions four main ones: (i) determination; (ii) symbolic validation; (iii) coherence; (iv) adhesion. The determination consists of the linguistic dimension of the norm and is linked to the idea of textual clarity and interpretation, showing how the communicative power of the rule exerts its own impulse towards conformity, such as, which conduct is allowed and which conduct is outside the limits (Franck, 1990). The attribute of the norm must be more important than its imposing authority and, therefore, users would obey the rules because they perceive that it and its institutional reflexes have a high degree of legitimacy (Franck, 1990).

Adherence consists in the systemic acceptance of the standard by its users, as the attraction and conformity of the community are indispensable conditions to achieve legitimacy, as this is the standard by which the community measures the capacity of the rules to be applied. Franck (1990) suggests strategies for symbolically validating norms, making their objectives clearer, gaining authority for the rule by connecting with other accepted rules and principles, and adding rule compliance with a rules hierarchy.

In short, it is not enough to edit a law or a rule for it to be followed, but it still needs to appear legitimate to the people who will use it. One way is the validation carried out by *stakeholders* who have a mandate to carry out this action. This validation can be carried out by accreditation systems, such as the creation of symbols or certificates. Still, it needs to be understood and be consistent with the other rules in force, so as not to have its legitimacy questioned.

Several international researches have sought to relate accounting and legitimacy, such as the studies by Hyndman et al. (2018), Liguori et al., (2018) and Aquino et al. (2020). In the latter, the authors

noted that although the audit bodies have neglected the requirement to comply with the IPSAS, the "legislators" have collaborated with each other to create normativity for accounting standards, as the standardization process in the field of accounting results from pressure different actors in the regulatory landscape (Bebbington et al., 2012).

#### 2.3 Qualitative characteristics of useful financial information

Considering that the phenomenon under analysis involves accounting information from private companies that won public tenders, the qualitative characteristics of useful financial information were based on the pronouncements of CPC 00 R2 (2019). It is noteworthy that the qualitative characteristic of useful financial information applied to the public sector (CFC, 2016) maintains conceptual alignment with CPC 00 (2019).

Martins et al. (2020) state that financial information is relevant when it is able to influence the decisions made by its users, helping them to assess the impact of past, present or future events. In addition, to legitimize the importance of accounting information, it is necessary that it be reliable, given three attributes: being complete, neutral and error-free. The usefulness of accounting information is also linked to four attributes of enhancing: comparability, verifiability, timeliness and understandability (CPC 00, 2019). Comparability allows users to identify and understand item similarities and differences between them, comparing at least two items (CPC 00, 2019). For information to be comparable, similar things need to look similar and different things need to look different (CPC 00, 2019).

In turn, the verifiability consists of a characteristic that contributes to the representation of the economic reality of the company in a reliable way, meaning that different observers, conscious and independent, can reach an agreement about the portrait of a particular economic reality for satisfy the design of an authentic representation (CPC 00, 2019). Timeliness is related to the availability of information for decision makers in time to be able to influence them in their decisions, being, in general, the oldest information that has less use (CPC 00, 2019). Otherwise, if there is a delay in the dissemination of information, there is a possibility of impacting its relevance or usefulness. In terms of comprehensibility, the financial statements are prepared for users who have a satisfactory understanding of business and economic activities, as well as who accurately review and analyze the information because there are phenomena that are complex and cannot be easily understood (CPC 00, 2019).

Therefore, the qualitative characteristics of useful financial information provide subsidies and support the preparation of the financial statements in order to be useful in making economic decisions and assessments by users in general. Information about the nature and amounts of economic resources and claims of the entity can assist users in identifying the weakness and financial strength of the entity that reports the information.

It can be concluded that the attributes presented above give utility and confidence to accounting information, making it a fundamental element in the *stakeholders*' decision-making process. On the other hand, information without these attributes will not be able to influence the decision-making process, consequently losing its legitimacy with users.

### 3 Methodological Aspects

### 3.1 Research steps

As a methodological strategy, multiple case studies were used because they are considered more attractive than isolated studies, as well as being a more robust method (Yin, 2003). In institutions where data collection was carried out in person, such as the Federal University of Uberlândia (UFU), the Federal University of Ouro Preto (UFOP) and the Federal Institute of Triângulo Mineiro (IFTM), interviews were conducted with the managers of the procurement department, in order to complement the documentary analyzes.

The research protocol, previously approved by the Ethics and Research Committee, was structured as follows: (a) date of the interviews (September / 2019 to January / 2020); (b) criteria for defining the respondents, who would be the actors who deal with the execution of the EFQ stage of the contracting agencies. The interviews duration was from thirty to fifty minutes, depending on the level of openness and objectivity of the interviewee. The research excelled in the validity and reliability attributes of the instrument, as it is understood that factors related to bias and fallibilities intrinsic to human nature can interfere in the research (Mackinnon, 1988). Thus, the interviews aimed to clarify and confirm the information of the processes and also to allow the triangulation of the methods.

The analyzes were consolidated using the *Qualitative Comparative Analysis* (QCA) method, which consists of a qualitative analysis method that performs better when used with case studies that focus on the causal quality of its results (Schneider & Rohlfing, 2013). The QCA model adopted to analyze the phenomenon was the crisp-set (csQCA) which uses causal conditions that are dichotomous, using values that can be translated into 0 or 1 (absent or present). This model was adopted due to the fact that it is

appropriate for studies with a small number of cases, and allows the deepening of its causal characteristics (Rihoux & Marx, 2013). The QCA is commonly applied in studies in the area of Sociology and Political Science (Rihoux; Marx, 2013), but it has been used in research in the area of accounting in Brazil, as is the case of Lino et al. (2019) and Dias et al. (2020).

For the analysis of the QCA, three steps were performed. First, documentary analyzes were carried out, looking for inconsistencies in the analyzes. Inconsistencies were verified by comparing the action that should have been taken at each stage in the public procurement process, such as, for example, analyzing whether the financial statements had internal inconsistencies that pointed to evidence of earnings management, errors or fraud. Then, a table of causal conditions was elaborated that organized the information considered necessary and that must be present for the condition tested in the QCA table to be validated.

After this procedure, the truth table was constructed from the information extracted from the second step, using as a reference (*benchmarking*) a public procurement process from the Federal Council of Accounting (CFC). The purpose of this process was to hire specialized technical services for the preparation and application of the CFC sufficiency exam test, according to Electronic Auction No. 002/2019. The referred institution (CFC) used the accounting literature as a reference both for the preparation of the bidding notice regarding the requirements of EFQ and in the stage of analysis of the financial statements.

The sample of cases comprised five federal institutions of Higher Education (IFES) and a Federal Institute of Education Science and Technology located in the State of Minas Gerais (MG). It is noteworthy that, in the State of Minas Gerais, there are 11 (eleven) federal universities and 5 (five) federal institutes of science and technology education. Table 2 presents the institutions analyzed and the characterization of the cases.

Table 2: Sample: Federal Institutions, obtaining documents and number of analyzed processes

Item	Institutions	Method	Number of cases	Data collection period
1	Federal University of Lavras (UFLA)	FOIA	4	January - 2020
2	Federal University of Minas Gerais (UFMG)	FOIA	1	January - 2020
3	Federal University of Ouro Preto (UFOP)	Presential	3	October - 2019
4	Federal University of Uberlândia (UFU)	Presential	3	September - 2019
5	Federal University of Viçosa (UFV)	FOIA	2	January - 2020
6	Federal Institute of Triângulo Mineiro (IFTM)	Presential	2	January - 2020

Source: Research data. Note. FOIA: freedom of information act.

At each education institution, at least three procurement processes were selected at random from those unilaterally terminated due to non-compliance with contractual clauses by the contractors. The documents of the UFU, IFTM and UFOP cases were collected in person, at the agency itself, with the authorization of the respective managers. As for the others, the documents were received by letter or by request via freedom of information act (FOIA) request. The documentary analysis comprised fifteen files from six institutions, as shown in Table 3.

Table 3: Modality and object of each contract analyzed by Management Unit (MU)

ITEM		UFU			UFOP			IFTM			UFLA			IFV	UFMG
	C1	C2	C3	C1	C2	C3	C1	C2	C1	C2	C3	C4	C1	C2	C1
Modality	1	2	3	1	1	1	1	1	3	3	3	3	1	1	3
Contractual															
object	1	2	2	1	1	1	1	1	2	2	2	2	1	1	2

Notes: (a) Caption for contract item: (C1) Contract 1; (C2) Contract 2; (C3) Contract 3; (C4) Contract 4;

(b) Caption for public procurement modalities: (1) Electronic Auction; (2) Price Taking; (3) Competition; c) Caption for the contractual object: (1) Outsourced Labor; (2) Civil Construction.

Source: Research data.

For each contract, the content examination of the information in the EFQ stage was carried out, comparing the requirements of both the procurement bill and the legislation with the qualitative characteristics of useful financial information, as well as with the accounting literature, as proposed by Martins et al. (2020). The following documents were analyzed in each bidding process: procurement bill, balance sheet and income statement of the companies winning the bid, contract, termination term, justifications of the companies for non-compliance with the contracts and the opinions of the attorney general in relation to the reasons termination.

### 3.2 Presentation of the Cases

Each entity analyzed has particularities related to its management, which range from budgetary issues, procurement management and issues related to the discontinuity of contracts (Table 4). With the exception of UFOP, in the other cases investigated, there are no accounting professionals in the procurement committee. Although the existence of an accounting professional alone cannot guarantee the process, as it must stick to the principle of legality. In all contracts related to the assignment of labor, the reasons for unilateral termination were the same, which is, related to the failure to comply with labor obligations, such as delays and non-payment of wages, and the failure to pay social charges.

Characterization of the institutions related to the analyzed contracts

ITEM / HEI	UFU	UFOP	IFTM	UFLA	UFV	UFMG
Rectory City	Uberlândia	Ouro Preto	Uberaba	Lavras	Viçosa	Belo Horizonte
Number of campuses	7	3	7	1	3	3
Annual budget 1	1.535.799	444.527	243.706	420.411	940.499	2.415.944
Number of students	31.613	13.694	10.901	12.95	18.23	51.166
Bidding management	Centralized	Centralized	By campus	Centralized	Centralized	Centralized
Number of bidding <sup>2</sup> :	606/(-7%)	240/(- 40%)	89/(-31%)	172/(-14%)	285/(-15%)	2627/(-13%)
Members PBC	9	5	5	5	6	15
Is the EFQ performed by an Accountant <sup>3</sup> ?	No	Yes	No	No	No	No

Notes: (1) 2018 Annual budget (in R\$ thousand); (2) Number of bids in the year 2018 with the variation of 2019; (3) Information extracted through interviews. Caption: PBC: Permanent Bidding Commission; GSAU: General Services Administration Unit - allows consultations on the federal government's purchasing system.

It is noteworthy that, in one of the contracts terminated by UFOP, the contract was insured, but the insurer claimed that the policy could only be triggered after the court decision. UFOP, in this case, was forced to open a process for emergency hiring, but the employees were still without receiving their rights and awaiting the outcome of the situation. In the civil construction contracts present in the cases of UFU, UFLA and UFMG, the reasons for termination were delays and abandonment of the work, in addition to non-compliance with labor issues.

### 4 Analysis of the Lack of Accounting Legitimacy in the Procurement Process

The analysis of the use of information from the EFQ stage was carried out in three stages, namely: 1) Inconsistencies in the financial statements presented by the companies; 2) Analysis of economic and financial; and 3) Synthesis of the analyzes and application of the QCA.

### 4.1 Analysis of Financial Statement

In relation to the analysis, of the total of fifteen processes, it was found that, of 87% of them (13 contracts), only the balance s(BS) and the income statement (IS) were presented, and of the other 13% (2 two contracts), only the BS was presented, as shown in Table 5. No contract analyzed presented explanatory notes and other financial statements. Despite the partial fulfillment of the requirement, all companies were qualified to bid.

Inconsistencies are in all groups of accounts, however, they are more evident in the circulating groups. It is worth calling attention to more relevant issues, which could have been questioned, such as balance sheets for incorrect periods (C1 / UFU); balance sheets with the cash account, representing the totality of the assets (C1 / UFU), that is, in this case there is no accounting evidence of the existence of the company itself; balance sheets with the cash account representing almost all assets (C2 / UFV = 78.9%; C2 / IFTM = 90%); profits far above the usual, such as 730% of net revenues (C2 / UFU); provisions, representing 63.2% of assets (C2 / UFV). In addition, none of the contracts presented explanatory notes and complete statements, and C2 / IFTM and C2 / UFLA did not even present the income statements.

The horizontal analysis could corroborate for the analysis of public procurements, however the legislation does not allow the financial statements of more than one financial year to be required. In view of the above, it can be said that most balance sheets are precarious in terms of information and without the minimum structure of accounts. Even so, all these processes were approved in the respective procurements.

Table 5: Inconsistencies in the Financial Statements by contract analyzed.

		cies in the Financial Statements by contract analyzed.	V .: 1A 1 .						
IFE	СТ	Inconsistencies in the financial reports	Vertical Analysis						
	C1	- It presented only BS and IS without EN; BS with REY account balances without explanation; Incorrect exercise BS	- "Customers" account = 49.72% of TA; - "Tax Recoverable Reserve" account = 38.5% of TA; - LL = 22.8% of the RL.						
UFU	C2	<ul> <li>Presented only BS and IS without EN;</li> <li>Assets presented only the cash and cash equivalents "account, as a counterpart to all liabilities and equity.</li> </ul>	- "Accumulated Losses" account = 37.9% of PT; - The LL was negative in 730% of the RL.						
	C3	- Presented only BS and IS without EN; - DR at a loss.	- Account "Emp. and Financ. = 51.3% of the TA; - "P.A." account = 26% of the PT.						
	C1	- Presented only BS and IS without EN.	- Cont. Rec. CA + NCA = 60,34% do TA.						
_	C2	- Presented only BS and IS without EN.	- Imp. Res. to Recov. =.= 38,5% do PT.						
UFOP	СЗ	- Presented only BS and IS without EN.	<ul> <li>Clients + Banks w / mov. = 69.9% of the TA;</li> <li>NP amounted to 47.1% of TA;</li> <li>Capital Reserves = 66% of TA.</li> </ul>						
	C1	- Presented only BS and IS without EN.	- Count "Caixa" = 90% do AT; - NP = 43,8% das NR.						
IFTM	C2	<ul> <li>It presented only BS. He did not present IS and EN;</li> <li>"Banks with Mov." Account it was registered with the CC with a negative balance and was reclassified to the PC for the purpose of analyzing the MC.</li> </ul>	- Account "Adiant. to Partners = 30,07% of TA.						
	C1	<ul> <li>It presented only BS and IS. He did not show EN;</li> <li>It has a generic title with a high balance: "Miscellaneous Clients".</li> <li>Installment of several taxes without explanation.</li> </ul>	- "Miscellaneous Clients" = 36,5% do TA.						
UFLA	C2	- Presented only BS without IS and without EN; - BS without inventories, fixed assets and ANC "Cashier" with a balance of R \$ 505,268.00 while the "Suppliers" account has a balance of R \$ 500.00.	- The IS for calculating the indices was not presented The "Customers" and "Various Customers" accounts are equivalent to 36.5% of TA.						
5		- Presented only BS and IS without EN.	- "Customers" and "Various Customers" accounts = 65.6% of the TA; Accumulated Profits = 73% of TA. - "Customer" accounts = 44.1% of TA;						
	C4	<ul> <li>Account "Advances to partners" with high value and without explanations.</li> <li>Company with high amounts in cash and at the same time with high loans.</li> </ul>	- Accounts "Advances to Partners" = 13.9% of TA; - "Loans and Financing" account = 37.6% of TA.						
	C1	- Presented only BS and IS without EN.	- "Provisions" account = 63.2% of TA.						
UFV	C2	- Presented only BS and IS without EN.	- Caixa Account = 78.9% of TA; Sundry debtors = 44% of PT.						
MG	C1	<ul> <li>Presented only BP and DR without NE.</li> <li>High available with short-term investments and still taken Loans for working capital = 8.59% of TA.</li> </ul>	- The "Customers" account = 46.5% of Total Assets;						

Note: BS (Balance sheet); IS (Income statement); NP (Net profit); NR (Net revenue); TA (Total assets); EN (Explanation notes); CA (Current assets); NCA (Non-current assets); REY (Results of future years); ROE: Result on equity; EFQ (Economic and Financial Qualification).

Source: Prepared by the authors based on the research data.

The next step followed was the analysis of the economic and financial indicators. In addition to the indices required by the legislation (CL, GL and GS), the indices were calculated: indebtedness, profitability, immediate liquidity (IL) and net equity fixed asset ratio (IPL), as shown in Table 6.

The minimum value required by law for CL, GL and GS indicators is 1 (one). It is noteworthy that UFLA Contract 2 presented liquidity ratios outside the sector's reality (CL = 1010), as the BP presented by the company is elementary in terms of information and structure, presenting only two accounts, namely, caixa and suppliers. In addition, the company did not present the income statement. Other contracts also had unreasonable current liquidity ratios (examples: C1 / IFTM = 19.9; C1 / UFLA = 12.17; C1 / UFU = 7.1). It is also noted that three cases had negative profitability indexes (C2 / UFU; C3 / UFU; C2 / UFV), but this fact was not an impediment, as required by law. On the other hand, other cases call attention for presenting very high profitability rates, given the ROI presented (C1 / UFLA = 42%; C4 / UFLA = 67%; C2 / UFOP = 99%; CI / UFU = 206%). These discrepancies in the indexes ratify those shown in Table 5.

The average time lag of the financial statements corresponds to 10 (ten) months, with bids that this period reached 16 (sixteen) months, as is the case of Contract 2 -IFTM. This gap is legally permitted, however harmful from the point of view of information usefulness (Martins et al. 2020).

Table 6: Economic and Financial Indicators of the cases analyzed

ID				Liquidity -	Solvency	y	In	debtedn	ess	Profitability				
CASE	СО	ОС	CL	IL	GL	GS	ID	DC	FA	ROI	AT	OPM	ROE	
IFTM	1	МО	19,9	19,2	19,9	21,3	0,1	1,0	0,1	31%	0,7	44%	31%	
11 1101	2	МО	1,8	0,0	1,8	4,3	0,3	1,0	0,8	s/ dr	s/ dr	s/ dr	s/ dr	
	1	CC	12,7	2,4	14,7	19,2	0,1	0,9	0,3	42%	7,0	6%	21%	
UFLA	2	CC	1.010	1.011	1.011	1.011	0,0	0,5	0,0	-	-	-	-	
OI LA	3	CC	5,2	0,1	5,2	7,7	0,2	1,0	0,4	15%	0,9	18%	8%	
	4	CC	1,9	0,3	1,9	2,3	0,8	1,0	0,3	67%	3,7	18%	56%	
UFMG	1	CC	3,0	0,2	2,3	2,4	0,7	0,8	0,4	s/ dr	s/ dr	s/ dr	s/ dr	
	1	МО	1,3	0,3	1,1	1,3	4,0	0,8	0,2	16%	5,4	4%	52%	
UFOP	2	MO	6,5	3,3	6,5	8,6	0,1	1,0	0,3	99%	2,1	47%	99%	
	3	МО	1,0	0,1	1,3	1,4	2,3	0,8	0,2	33%	5,2	6%	24%	
	1	МО	7,1	0,1	6,9	7,6	0,2	0,9	0,1	206%	9,0	23%	104%	
UFU	2	CC	4,1	4,1	4,1	-	0,3	1,0	0,0	-97%	0,1	-7%	-48%	
	3	CC	1,1	0,1	1,0	1,2	6,4	1,0	0,9	-89%	7,8	-504%	-219%	
UFV	1	MO	1,2	0,2	1,2	1,2	5,3	0,9	0,0	1%	6,1	2%	7%	
	2	МО	1,2	1,1	1,3	1,3	3,2	1,0	0,2	-3%	0,9	-3%	-7%	

Note: CO (Contract); OC (Object of the contract); CL(Current liquidity); IL (Immediate liquidity); GL(General liquidity); GS (General solvency); ID (Indebtedness); DC (Debt composition); FA (Fixed assets); ROI (Return on investment); AT (Asset turnover); OPM (Operating margin); ROE (Return on equity). \* Index not calculated due to the lack of presentation of the Income Statement by the company.

Source: Prepared by the authors based on the results of the research.

From the point of view of the comprehensibility characteristic, only UFOP has an accounting professional in the procurement department, however it was reported by this institution that there were cases in which the accountant tried to be more judicious, and the companies did not agree and judicialized the public procurements. In the other bodies, the economic-financial qualification is prepared by the agents of the procurement commissions without necessarily having specific technical knowledge of accounting (analysis of the financial statements). Regarding the verifiability characteristic, the process lacks greater transparency, since the financial statements are not public and there are no mechanisms to confirm the list of contracts in which the companies are part. It also highlights the difficulties of access to carry out this study.

In summary, it was noted that, for the reasons presented, the attributes of predictive value and confirmatory value of accounting information were not met. The FSs presented, hardly, portray the economic and financial reality of the entities participating in the respective procurements.

### 4.2 Analyzes using the Qualitative Comparative Analysis Method (QCA)

Table 7 summarizes the results of the document analysis according to the qualitative characteristics of useful financial information. In each contract analyzed, a rating of "0" (not met) or "1" (met) was assigned to each criterion analyzed in the documentary stage. Finally, each requirement was totaled for the purpose of assisting in the analysis of adherence to the qualitative characteristics of useful financial information.

Among the criteria associated with the relevance characteristic, the following stand out: item "(a) financial statements required in public notice *versus* presented", in which 100% of the analyzed contracts did not present reports other than the balance sheet and the income statement; item (b) "Inconsistencies found in the balance sheet", in which 93% of the companies presented inconsistencies; and item (i) "profitability indices with relevant sectoral discrepancy", in which 100% of the contracts analyzed did not show congruence with the sectoral standards, as shown in Table 7.

In relation to the faithful representation, it is observed that 100% of the financial statements were not audited and that 80% of the processes presented evidence of earnings management. Thus, the evidence points out that the EFQ steps carried out in the processes did not privilege useful information in the decision-making process, since the fundamental qualitative characteristics (relevance and faithful representation) of the accounting information used were very fragile.

Regarding the enhancing qualitative characteristics, the same trend can be noted, since, in the case of comparability specifically, it was observed that the requirements of the economic-financial indexes in the notices did not consider the sectoral parameters and did not show uniformity, considering the processes of the same case. Another important information is related to comprehensibility, that is, in 80% of the analyzed processes, the EFQ step was not performed by an accounting professional.

Table 7: Criteria analyzed according to the qualitative characteristics of useful financial information

Institution		UFU		U	IFOP		IF	TM		UFI	LA		U	FV	UFM	G	%
								Co	ntract	s							
Analysed Items	C1	C2	C3	C1	C2	<b>C</b> 3	C1	C2	C1	C2	C3	C4	C1	C2	C1	Т	%
						F	Releva	nce									
FS Presented.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100
Inc. (FS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100
Inc. (VA) BS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	93
Inc. (VA) DR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	47
EFI Liq. Disc.	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	33
IEF CS Disc.	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	3	80
IEF Prof. Disc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	67
					F	aithfu	Repr	esenta	tion								
Error/EM apar.	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	12	80
Audited BS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100
						Co	mpar	ability									
EFI. Ad./sufic.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100
						T	imelir	ness									
TL of BS1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	12	53
						Com	prehe	nsibilit	y								
EFQ Accountant	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	12	80
Total incons.	9	10	8	8	5	9	9	10	9	10	8	10	9	9	8	131	67

Legend: C1 (Contract1); C2 (Contract 2); C3 (Contract3); C4 (Contract 4); FSs (Financial Statements); VA (Vertical Analysis); BS (Balance Sheet); IS (Income Statement); EFI (Economic-Financial Index); Liq (Liquidity); CS (Capital Structure); Prof. (Profitability) EM (Earnings Management); EFQ (Economic-Financial Qualification); WC (Working Capital); TL (Time Lag). Inc. (Inconsistency); EFQ Accountant (EFQ step is performed by an accountant).

Notes: 1: Lag parameter: Period greater than six months.

Source: Prepared by the authors based on the results of the research.

In summary, it is observed that there is no evidence that the attribute "adherence", which refers to the widespread acceptance of the standard by its users and which is in a condition to achieve legitimacy (Franck, 1990; Bebbington et al., 2012), is not present in the category of *stakeholders* that carry out the EFQ. This finding is supported by the fact that neither the norms determinations that are considered elementary are complied with by users, such as the verification of the presentation of all financial statements and their internal consistency. Normativity, through the determination attribute, provides explanations for this situation. The lack of an accounting professional in 80% of the cases indicates that the organizations analyzed have not seen the organization of the procurement sector as necessary for this analysis to be carried out, even if the evaluation is within the competence of the accountant due to legal requirements.

### 4.3 Causal conditions and result of case analysis

Based on the foundations of the economic-financial analysis literature, the analysis of insolvency forecast, the qualitative characteristics of useful financial information recommended by the accounting conceptual framework (CPC 00, 2019) and also of the Brazilian accounting standards, evaluating which the causal conditions, both necessary and sufficient for the analysis of the cases, were reached at in five necessary conditions, as detailed below:

- a) Consistency and scope: verify if all financial statements have been presented and that their accounting accounts are consistent between the different statements considering the type and size of the company in accordance with the law. In addition, it is necessary to present the financial statements of more than one financial year in order to carry out the horizontal and vertical analysis.
- b) Analysis of the profitability of companies in relation to the sector: without profitability, the continuity of the company may be compromised. Insolvency forecasting studies reveal that profitability is one of the most relevant indicators of forecasts (Pereira & Martins; 2015; Kanitz, 1978). The indices are better understood when establishing parameters for comparisons with the sector.
- c) Audited financial statements: for contracts of significant value, the financial statements must be subject to auditing in addition to verification of all contracts to which the company is a contracted party. In this case, there is a relationship with the characteristic of reliable representation due to the verification of possible concealments, fraud and errors. Necessary condition for the solution of the cases.
- d) Timeliness: under the characteristic of relevance, the oldest accounting information is less useful. Financial statements with a time lag of up to sixteen months reveal a loss of

- informational utility. Therefore, timely financial statements are a necessary condition for the correct economic-financial analysis.
- e) Understandability: verify that the requirements of the notice and the performance of the economic-financial analysis are carried out by a professional with the necessary technical knowledge. This condition is necessary because, on the contrary, the economic and financial qualification may not be carried out properly, much less be useful for the evaluation of companies.

In Table 8, the bold lines referring to the causal conditions refer to the results of the conditions considered necessary, according to the respective category, so that the accounting information in the EFQ stage is legitimate to evaluate the companies. There were no causal conditions considered sufficient because there are no subsidies in the accounting literature that point to the fact that only the isolated presence of a causal condition could be sufficient to arrive at the solution of the cases.

Table 8:

Analysis of the causal conditions according to the qualitative characteristics of useful financial information

Analyzed item		UFU			UFOP		IF.	ГМ		U	FLA		UI	FV	UFMG
Contracts	C1	C2	СЗ	C1	C2	C3	C1	C2	C1	C2	СЗ	C4	C1	C2	C1
Bidding modality	EA	TP	CC	EΑ	EA	EA	EA	EΑ	CP	CP	CP	CP	EA	EA	CP
Bidding Object	OL	СР	CP	OL	OL	OL	OL	OL	CP	CP	CP	CP	OL	OL	CP
Contract duration	9	11	6	4	9	3	8	7	17	16	15	24	4	30	17
Reason for termination	LO	Α	LO	LO	LO	Bk	LO	LO	WS	WS	WS	WS	LO	LO	PO
					Ca	usal C	onditio	ns							
Consistent FSs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All FS presented.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consistency/abr.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EF Rent Index Cf Sector.	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Rentab.cf. sector	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Audited FSs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Faithful Represent.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Timel.FSs	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1
Timeliness	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1
Accountant performs EFQ	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Understandability	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0

Legend: (a) C1 (Contract1); C2 (Contract 2); C3 (Contract3); C4 (Contract 4). (b) FS(Financial Statements); EA: (Electronic Auction); PT (Price Taking); CP (Competition); OL (Outsourced labor); CC (Civil Construction); LO (Labor Obligations); A (Abandonment of the work); Bk (Bankruptcy); WS (Work Stoppage); EFI (Economic-Financial Index); EFQ (Economic-Financial Qualification); Source: Prepared by the authors based on the results of the research.

Table 8 summarizes the causal characteristics considered necessary for the accounting information to be considered legitimate by its *stakeholders* in the EFQ stage. Items that include profitability, auditing, timeliness and the obligation of an accounting professional to carry out the EFQ (understandability) stage are necessary conditions, but which are currently not permitted by law. If a more adequate analysis had taken place, there are strong indications that such companies would not be qualified.

The QSA (Table 9) summarized the necessary conditions for the results to occur. To this end, a bidding process held at the Federal Council of Accounting (CFC) was used as a standard process (benchmarck), the purpose of which was to hire technical-specialized services to apply the sufficiency exam tests. In this process (line 1 of Table 9), all necessary causal conditions were verified, resulting in the legitimacy of accounting information and the disapproval of the EFQ of several companies that did not meet the causal criteria.

In the procurement processes analyzed, six different situations (lines) were reached involving the causal contexts, showing the results, in all of them, that the accounting information was not considered legitimate. It is noteworthy that the internal consistency and the requirement of all FSs (Relev1) were not fully observed in any of the processes. In this case, there were processes in which only the balance sheet was included and, even so, there was no minimum structure consistent with the corporate law. In this way, it is understood that the attribute adherence to the standard by its users, which is indispensable for normative legitimacy, was not present in the analysis of the processes. One reason would be the lack of agreement or the lack of understanding and textual clarity of the standard itself (Franck, 1990).

The profitability of companies is not a requirement of the legislation and was not observed in any process, however, in situations such as those described in lines 5, 6 and 7, of Table 9, profitability was within the sectoral parameters. In this context, companies were qualified in the procurement process without any observation being made, even with the existence of significant losses and other inconsistencies, as an indication of exorbitant profits. It is also noteworthy that the company that won the procurement at UFMG did not present the income statement, however, it was qualified in the EFQ stage of the aforementioned

procurement process. It is worth reinforcing the failure of the standard here, because although the stage is called "economic and financial qualification", the standard itself does not allow the "economic" situation to be assessed.

Table 9: Analysis of the QCA based on the causal conditions

	Condi	itions (C	ausal C	ontexts)		Result	
Lines	Rel1	Rel2	RFid	Time.	Comp.	AccInf	Observed Processes
1	1	1	1	1	1	1	CFC
2	0	0	0	0	0	0	UFU-C1; UFU-C2; UFU-C3; IFTM-C1;IFTM-C2;UFLA-C1;UFLA- C2
3	0	0	0	0	1	0	UFOP-C1; UFOP-C3
4	0	0	0	1	1	0	UFOP-C2
5	0	1	0	1	0	0	UFLA-C3;UFMGC1
6	0	1	0	0	0	0	UFLA-C4;UFV-C1; UFV-C2
7	0	1	0	1	0	0	UFMG-C1

Legend: Rel1: Indicates whether internal consistency and coverage were verified. Relev2: Indicates whether the company's profitability has been compared with that of the sector; RFid: Indicates whether the financial statements have been audited; Time.: Indicates whether the Time Lag in Financial Statements has been observed; Understanding: Indicates whether the accountant performs the EPF step; AccInf: Indicates whether the Accounting Information is relevant and seen as legitimate for the process (Result). Source: Prepared by the authors based on the results of the research.

The comprehensibility of accounting information was associated with the fact that the EFQ stage is performed or not by a professional who has knowledge of economic-financial analysis, since only the processes that relate to UFOP (lines 3 and 4) met this causal condition. Regarding the timeliness, it was evidenced that of the total of fifteen processes analyzed, only 4 (25%) did not present outdated financial statements, given the characteristics of relevance and reliability. It is noteworthy that in contract Nº. 02 of the IFTM case, the bidding was carried out in the year 2017 and the balance sheet refers to the year 2015, as at the date of the procurement, the financial statements had not yet been published, therefore the lag time corresponds to sixteen months.

These findings show that the accounting information used in the EFQ stage did not meet the necessary requirements that characterize useful and relevant information (CPC 00, 2019), even so the contracts were established. Subsequently, all of them were terminated for non-compliance with labor obligations, failure to pay charges and failure to pay employees in the case of outsourced services. In the case of civil construction works, the main reasons are related to bankruptcy and delays in company schedules due to financial issues. It is noted that such contracts could have been avoided if the accounting information had been used in the processes. However, those problems that would result from a lack of financial qualification could be detected still in the procurement phase, which has not been occurring.

It is noteworthy that other factors can cause discontinuities in contracts, such as errors in the project, changes in environmental legislation, errors in execution, lack of payments by the public administration and even corruption. The weaknesses of the bids that this study pointed out, constitute only part of an environment of vulnerability in the application of public resources. The reality of brazilian procurements is marked by factors that involve both inefficiency and corruption, as pointed out by the federal government Transparency Portal (Transparência, 2020).

In the three methods covered in the research (document analysis, interviews and QCA), it was observed that, in general, accounting information is not considered as a relevant instrument to mitigate contract discontinuities caused by companies lack of economic and financial capacity, inferring its perceived low legitimacy. It is noteworthy that in the only institution (UFOP) that has an accounting professional in the analysis of the EFQ stage, the manager of the bidding department affirmed the importance of that stage, and also reported that the professional that performs it, always seeks to be guided by an analysis careful, but sometimes this is not possible due to the judicialization of procurement processes by companies that are unable to comply with the determined requirements. Thus, there is a clear need to change the legislation, with regard to the EFQ stage.

It is argued, then, that this scenario of low use of accounting information in procurement processes stems from the perceived low utility of the information itself, which stems from the lack of legitimacy of the content of the standard. In other words, as the rule (procurement law) requires, as a general rule, the application of the information from the EFQ step, but, as it is not validated by the *stakeholders*, it loses importance and is not used. The approval of the standard would occur through the economic-financial analysis according to the attributes present in the qualitative characteristics of useful financial information and also in the attributes of normative determination, which is based on clarity and textual interpretation, considered by Frank (1990) as a fundamental characteristic for if legitimacy is achieved. Consequently, acceptance by *stakeholders*, based on the cohesion of the standard with acceptable practices, would boost widespread Adherence by users.

### **5 Final Considerations**

This study aimed to identify the level of legitimacy of accounting information in the EFQ stage of the procurement processes of federal education institutions. It was observed that the accounting information is just a formality requested as a form of procedural *compliance*. This has implications, as companies are being selected even though they are unable to comply with the contractual object.

The present study corroborates the weaknesses pointed out in previous studies (Sobreira et al., 2014; Carneiro Júnior et al., 2015) and contributes by proposing an explanation, which is the low perceived legitimacy of accounting information. This research also corroborated with the study by Ribeiro et al. (2020) because it sought procedural evidence that the low legitimacy of accounting information perceived by *stakeholders* in procurement processes was a reality as reported by them.

In this context, the results found reveal that the accounting information has been seen with low legitimacy, due to the non-compliance with the properties of the standard (Franck, 1990), which have hindered the economic evaluation of companies in the procurement process. Consequently, the weaknesses of the legislation represent causal conditions that are not observed by the agents that carry out the EFQ stage.

The determination attribute is not met by the standard, as the requirement to verify other companies' contracts does not present the necessary mechanisms to carry out this determination and, as a result, this step is no longer carried out. In addition, the standard does not have coherence or connection with other standards, for example, a lack of alignment with the qualitative characteristics of useful financial information present in the accounting conceptual framework (CPC 00, 2019), as well as with the determinations of the Federal Council of Accounting (CFC) regarding the professional prerogatives to carry out the economic-financial analysis. The adherence attribute is also not present in the process of executing the EFQ step, as there was no agreement with the precepts of the standard, this fact being observed in the absence of "obedience" to its determinations, such as, for example, the requirement of all the financial statements that are not served by companies, as well as not charged by the public administration.

It is worth mentioning that no company presented the explanatory notes, with two of them presenting only the balance sheet. Thus, it is understood that elements of normative legitimacy, such as determination and adherence, can provide causal explanations regarding the objective of this study, mainly in relation to the evidence that the accounting information in the EFQ stage is not being legitimized by its users as a useful tool to assess the economic and financial capacity of companies.

The main implications of the results found suggest that normative legitimacy is the basis for the definitions related to the EFQ requirements of companies that intend to relate to the public sector. This study demonstrated that the following points must be observed in order to attend to the legitimacy of the EFQ stage: a) attribution of responsibility to the professional (accountant or not) for issuing opinions about the economic and financial situation of the entities. Such opinions would support the analyzes, giving greater legitimacy to the accounting information; b) disclosure of the statements (greater transparency) so that the society can act as a "supervisory agent" (O'Leary, 2015); c) changes in legal requirements in order to contemplate the possibility of requiring additional information such as profitability and indebtedness indices, in addition to the complete statements and at least three periods; d) sharing of company information among federative entities.

The effective application of the EFQ stage could mitigate the problem of paralyzed works in the country that are related to the social rights of the population, such as education (schools), health (hospitals) and child protection (daycare centers), as well as how could it contribute so that the provision of services in these environments and in others necessary for the state, such as the provision of school lunches, health and safety services, would not be paralyzed due to the abandonment of adventurous or unprepared companies that currently win the procurement contracts.

It is noteworthy that construction insurance, like the american model (*performance bond*), would not solve the problems of discontinued works due to the high costs that, in the case of Brazil, are more accentuated than in the United States due to the greater risk structural impact of the country, greater legal uncertainty and greater labor risks. In addition, with a paralyzed work, even if the financial loss is mitigated, the time delay can compromise the demands of society, such as schools and hospitals with unfinished works. Additionally, in the case of provision of services, the guarantee insurance needs a judicial decision to refund the public administration, and this fact can also cause delay and compromise the functioning of the institutions.

As work limitations, it is noteworthy that the documentary analysis included only federal institutions located in the State of Minas Gerais (MG). Although the legislation that deals with public procurement is nationally effective, the realities of states and municipalities may be different due to regional particularities, such as the scarcity of interested companies and able to negotiate with the public administration, in addition to the greater turnover of public servants with commissioned positions based on elective mandates. It is also noteworthy that the problem of contract discontinuities is widespread and may involve other causes. However, this study had as its scope only the discontinuities caused by a lack of inadequate or insufficient economic-financial evaluation.

Other elements may interfere with the perceived relevance and the use of accounting information in procurement processes. First, it is suggested to analyze whether trust (Oomsels & Bouckaert, 2019) among stakeholders in public procurement relationships could influence the analysis of accounting information in this process. Second, recent research has discussed the problems and opportunities faced by public administration in public procurement related to technological barriers (Ashaye & Irani, 2019). It is suggested that researches analyze the effects of technology in the public procurement process, analyzing how the digitalization process affects the use of accounting information, and under what conditions this occurs. Third, the procurement process as a whole can be assessed from the perspective of value for money (OECD, 2019), in which not only the economy is weighed, but the efficiency and effectiveness of the entire contracting cycle. Research can analyze whether the existence of these different drivers can influence the way accounting information is used in processes.

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Does not apply.

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The research was submitted and approved by the Ethics Committee of the Federal University of Uberlândia,

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### **CONFLICT OF INTERESTS**

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