

# HOW STUDENTS PERCEIVE THE VALUE OF ACCOUNTING EDUCATION: THE CASE OF A PORTUGUESE HEI

## COMO OS ESTUDANTES PERCEBEM O VALOR DA EDUCAÇÃO EM CONTABILIDADE: O CASO DE UMA IES PORTUGUESA

*Patrícia Quesado<sup>1</sup>; Maria de Lurdes Silva<sup>2</sup>; Cláudia Cardoso<sup>3</sup>*

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### Resumo

O objetivo deste artigo é o de avaliar a percepção dos estudantes de contabilidade/fiscalidade de uma Instituição de Ensino Superior (IES) sobre o valor da educação em contabilidade financeira e de custos. A investigação destaca e distingue a relevância da contabilidade financeira e/ou de custos para o mercado de trabalho e para as organizações na perspetiva dos estudantes. O estudo é quantitativo e os dados foram recolhidos através de um questionário aplicado aos estudantes que estão a concluir um curso em contabilidade ou fiscalidade. Os estudantes consideram a contabilidade fundamental para o mercado de trabalho e de extrema importância a informação prestada pela contabilidade para o cumprimento das obrigações legais, para ajudar na tomada de decisões internas e para prestar informação a todo o público relevante.

**Palavras-chave:** Educação em Contabilidade; IES; Percepção.

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### Abstract

The objective of this paper is to evaluate the perception of accounting/tax students of a Higher Education Institution (HEI) about the value of education in financial and cost accounting. The research highlights and distinguishes the relevance of financial and/or cost accounting to the labour market and to organisations from the perspective of students. The study is quantitative, and the data was collected through a questionnaire for students who are completing a course in accounting or taxation. Students consider accounting fundamental to the labour market and extremely important the information provided by financial and/or cost accounting for the fulfilment of legal obligations, to assist in internal decision-making and to provide information to all relevant audiences.

**Keywords:** Accounting Education; HEI; Perception.

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<sup>1</sup> pquesado@ipca.pt; CICEF, School of Management, Instituto Politécnico do Cávado e do Ave (IPCA), Barcelos, Portugal.

<sup>2</sup> lsilva@ipca.pt; CICEF, School of Management, Instituto Politécnico do Cávado e do Ave (IPCA), Barcelos, Portugal.

<sup>3</sup> ccardoso@ipca.pt; School of Management, Instituto Politécnico do Cávado e do Ave (IPCA), Barcelos, Portugal.

## 1. INTRODUCTION

In the contemporary organizational context, characterized by globalization and internationalization of the markets, technological innovation, the speed of change and strong competition, it is essential that the accounting professional possess a broad and comprehensive knowledge that made him prepared to face the labour market and capable of adding value to his work.

Given the complexity of business, accounting has sought to go with the evolution of society by enabling essentially financial information (Caiado, 2020).

Nowadays, companies should own enough, relevant, clear, objective and opportune information, to support the control process and decision making. Thus, the accounting systems should adjust to the new realities in which companies operate, seeking to adapt to the challenges of global competitiveness (Jordan, Neves, & Rodrigues, 2011). In this sense, Coelho (2012) states that the implementation of an accounting system facilitates control, cost reduction and improves management by enabling a greater amount of relevant economic information for decision-making.

According to Aquino, Sousa, Aquino, Medeiros, and Cavalcante (2018), the increasingly globalized labour market has demanded multidisciplinary knowledge so that companies have felt the need to hire more skilled professionals in order that their actions are carried out in a fast and efficient way.

With the development of information technologies, accounting has become a very relevant source of information in decision making, leading to knowledge of the state and results of organizations and facilitating planning and control, and consequently affecting the organization's performance by reporting the past, present and future economic and financial realities (Macedo, 2013).

In recent decades, there have been recurring debates by researchers, educators, professionals and employers on the ability of HEIs to adequately prepare accounting students for the increasingly complex and dynamic labour market (Mihret, Mirshekary, & Yaftian, 2020; Ott, Cunha, Júnior, & Luca, 2011). In addition, innovative pedagogical methods have also been implemented to promote learning skills for accounting students, including by raising group-minded perspectives (Akindayomi, 2015), strengthening educational, technical and personal skills through active learning (Spiceland, Spiceland, & Schaeffer, 2015; Stephenson, 2017) and interrelation of cognitive aspects, imagination and critical thinking in real-world understanding (Boyce & Greeger, 2013). In this sense, the HEI should consider the vision and opinion of a set of stakeholders, including students, during the process of creating the courses, so that the profile of the accountant is in line with what is required by the labour market (Carr, Chua, & Perera, 2004).

For several years and in several countries, professional organisations have debated and, consequently, extended the various technical and personal skills that accountants must demonstrate throughout their careers (Stephenson, 2017). Kavanagh and Drennan (2008) conducted a study highlighting the importance given by accounting students to additional skills and competences that do not relate to the accounting area, specifically associated with information, communication and teamwork technologies. Lange, Jackling, and Gut (2006) highlight the need for greater emphasis on generic skills that help students in the labour market. Cosenza, Gomes, and Devillart (2015) say that the market increasingly requires accountants to keep up with the frequent economic and social changes that have occurred in the organisational environment and the need to meet users' demand for information. Thus, it is essential the development of skills that allow them to perform their activities in an appropriate manner, meeting the expectations of stakeholders. For these authors, it is necessary to rethink and improve the role assigned to the accountant, with more solid knowledge related to management control, knowledge of other related areas that interact in the decision-making process of companies, as well as of information technology.

As such, HEIs, through their pedagogical projects, must develop skills and competencies so that the accountant is able to follow the new technical, management and personal requirements imposed by the labour market (Apostolou, Dorminey, Hassell, & Rebele, 2015; Cardoso, Souza,

& Almeida, 2006; Cosenza, 2001; Fari & Nogueira, 2007; Spiceland *et al.*, 2015; Yap, Ryan, & Young, 2014).

For Hardern (1995), the accountant should not only be focused on the quantitative aspects of the information, seeking to report qualitative information, thus demonstrating a systemic view of the environment in which it is inserted. Nevertheless, Yu, Churyk, and Chang (2013) say that students were the first to recognise their limitations in database use, oral communication, technology and problem solving, and adequate preparation in HEIs for these aspects is essential. Pan and Perera (2012) add critical thinking to these aspects. For Mohamed and Lashine (2003), HEIs are responsible for filling the gaps between the skills and competences acquired by the trainees and the skills that the labour market requires of these professionals, and concluded in their study that the teaching and qualification of students are not in accordance with the need of the labour market. Contrarily, Moura and Filho (2019) observed that students, mostly, regularly participate in extracurricular activities, such as congresses, seminars and lectures. Also, students partially agree that the curricular structure of the course, especially in the accounting curricular units, is appropriate to the training that the market requires from the accountant. As such, they are being acquiring the necessary skills to enter and act in the market.

Santos, Araújo, Cavalcante, and Barbosa (2014) study the perception of the students of the Accounting Sciences course of a Brazilian Federal HEI regarding academic training and the labour market. The results indicate that the students do not demonstrate a degree of total agreement that they are acquiring the necessary skills to enter and act in the labour market, so the HEI should prioritize the development of skills and values that ensure, to students, conditions to enter the labour market. In fact, the study by Politelo, Manfroi, and Cunha (2013) points out that the main difficulty in the perception of students for the purpose of entering the labour market is the lack of training.

In view of the above, main goal of this study is to evaluate the perception of accounting/tax students from a HEI on the value of financial and cost accounting education. The work is structured as follows: initially we present a brief theoretical framework on the importance of financial accounting and cost or analytical accounting for the labour market. Subsequently, we present the methodology that guided the research and the main results obtained. Finally, we highlight the final considerations, study limitations and future research suggestions.

## 2. THEORETICAL FOUNDATION

### 2.1 Financial Accounting: Scope and Definition

Accounting has felt intense developments in recent years resulting from a growing demand for the quality of financial information. In Portugal, an accounting harmonization effort derived from the approval, in 2009, of the Accounting Standardization System (SNC), which configures the adaptation of the international standards of International Accounting Standards Board (IASB) adopted by the European Union, and which aims to provide useful information to users in economic decision-making.

The accounting harmonisation effort we have been assisting will meet the need for useful information for decision-making, guaranteeing the comparability of information on the globalized market (Lopes, 2013). These progresses have attributed to accounting a high attention on the part of higher education students, and the teaching of accounting, according to Alves (2018), is being reinforced with components of management control, strategy, corporate governance, corporate finance and evaluation of companies.

The scope of financial accounting is defined, mainly, by regulators, namely the IASB, worldwide, and the Accounting Standardization Commission (CNC), in Portugal. Those regulatory bodies consider that the objective of the financial statements is to provide information about the

financial position, its variations and performance, that is useful to a wide range of users, for economic decision-making. The financial statements present, however, financial effects of past events and do not necessarily provide non-financial information. In the definition of objectives, it seems confusing the objective of financial accounting with the purpose of financial statements, which, to fulfil its mission, must meet the fundamentals of financial accounting standards (Frezatti, Aguiar, & Guerreiro, 2007).

For Caiado (2020), the objective of financial accounting is the control of relations with third parties, the analysis of the equity changes and the clearance of results. Costa and Alves (2005) report that accounting is an information system for the management of organizations, that values the resources put at their disposal, the obligations contracted, and the means used in obtaining these resources, as well as the rights and the means obtained in the transmission of goods and services produced. In addition, it transmits, in an appropriate way to the different users, the results of these valuations. In the same line of thought, Lourenço, Morais, and Lopes (2018) report that financial accounting is a system that provides information about the business for external users, and it is necessary to use a clear language that will help in making decisions.

Palma (1997) states that the information provided by financial accounting relies on external relations and is obtained a posteriori, using historical data (to register invoices, receipts, etc.), that is unalterable. In fact, accounting applies to past facts which are indispensable to know the present and, above all, to plan the future (Costa & Alves, 2005). However, the aforementioned authors consider the following objectives of financial accounting: to assess the financial position, the variation of the results and the cash flows; to provide information for the control of assets, liabilities and equity; to ensure the control of the costs of products, services and functions; to enable the establishment and control of the implementation of policies, plans, programmes and budgets; to provide tax authorities with the information indispensable to the taxation of wealth generated by the company; to enable statistical entities to provide the necessary elements for national accounting and to value the impact of the company's action on human activity and the surrounding environment.

Based on a synthetic definition that is always difficult to give (Costa & Alves, 2005), we should, first, distinguish between bookkeeping and accounting. The authors refer to bookkeeping as the language by which the accounting is expressed, i.e. the bookkeeping deals mainly with the registration of the data of a company, while accounting is concerned not only with the design of the records system, but also with the preparation of reports based on the recorded data and the interpretation of such reports. Nabais and Nabais (2016a) advocate that accounting is a discipline linked to the measurement of quantities and the registration of amounts, which has evolved in the sense of being a science of an economic nature. We consider, such as Rodrigues (2017), that the teaching of accounting has changed its approach by turning over in recent years to real accounting more than the guidance for the bookkeeping.

Qualitative information acquires increasing importance, as part of the integrated financial reporting, which goes beyond the requirements emanated from the accounting normative (Lopes, 2013). This financial information must be credible to sustain timely decisions and valid interpretations by a wide range of users (Costa & Alves, 2005). Thus, accounting is essentially useful for decision-making. However, it presents in this context some limitations: it reflects the past (historical-financial information) and this has a limited value, and it should complement the relevant historical information with the company's future cash flows and with a prospective reporting of non-financial information (Rodrigues, 2017). The adoption of the historical cost is also presented, according to the author, as a limitation of accounting, since it poses difficulties in interpreting the information. Moreover, the possibility of using alternative measurement criteria poses difficulties in comparing the financial statements, and in this case the demonstration of cash flows is the accounting piece that provides more reliably comparable data.

Financial information users are investors, employees, financiers, suppliers and other commercial creditors, customers, government and public departments, and the public in general (CNS

Conceptual Framework, 2015), to which we add the academic researchers.

The tax administration is one of the main stakeholders in obtaining accounting information provided by the companies to perform the taxation. Still, more and more, other stakeholders are interested in the information provided by the accounting. The idea of using accounting for taxation dates to the late nineteenth century, when a balance sheet was prepared for commercial purposes and another for the tax authorities. At that time, a cash-based accounting was prepared for tax purposes and an accounting based on the evolution for commercial purposes. In the twentieth century, the taxation of corporate profits became generally accepted and originated many specific rules on tax-oriented accounting in each country (Rodrigues, 2017). These areas, although historically convergent, present themselves as complementary and with very distinct objectives (Lopes, 2013, Rodrigues, 2017). Accounting seeks to provide information to the multiple users of information from a wide system of organizational value and taxation aims to ascertain fiscal and declarative obligations in the perspective of a single stakeholder: the State (Lopes, 2013). In Portugal, where is prevalent the accounting for the taxation purposes, the other users of financial information were harmed because their needs are not considered in the elaboration of the financial statements. The excessive linkage of accounting to taxation limits the quality of financial statements in Portugal (Rodrigues, 2017). In the context of integrated and prospective management, accounting and financial information cannot be dissociated from taxation and management control (Lopes, 2013). This integration and complementarity are more important than convergence or divergence between areas.

Although broadly standardized, but increasingly harmonized, integrated management information systems allow for the provision of indicators of performance, of internal and external usefulness, able to answer to the main information needs of the several users. We consider, for this, such as Lopes (2013), indisputable the growing need for an ever greater and better information available for the stakeholders, in general, with the elaboration of an integrated financial report.

According to Alves (2018), accounting needs to adapt to a business environment facing new challenges, namely: changes in business models by establishing business partnerships; channeling financial reporting in a more effective communication with investors; norms that need to meet more innovation factors; mandatory disclosure of non-financial information; adapting to start-ups and a closer accounting of the stakeholders, assuming itself as a source of primordial information.

## 2.2. Cost or Analytical Accounting: Scope and Definition

Despite the importance of financial accounting for organizations, it is unable to provide all the necessary information for good management, by providing timely and useful information. As Caiado (2020) refers, the information is quite global, standardized and subject to strict standards, not providing the necessary elements that lead to the calculation of production costs.

For Nabais (1991), and Nabais and Nabais (2016b), cost or analytical accounting was born as a way of resolving some shortcomings presented by financial accounting, in particular the fact that it does not analyse the internal conditions of exploitation, nor its control on the basis of calculating the costs and income of the various functions, divisions, sections and jobs of the undertaking; not to ascertain the costs and results of the manufactured products in the various phases of the production process; not to ascertain the contribution of each product to the formation of the result of the exercise; and of not allowing the planning and control of activities, since the expenditures and incomes are determined by nature and based on historical data (a posteriori).

According to Pereira and Franco (1994), the fundamental objective of accounting, for a long time, was limited to determining the company's patrimonial situation and its overall results. The information provided by financial accounting was insufficient to manage organizations due, above all, to the reduced operational control, management and planning of activities related to the

expenses and income of organization. Thus, cost or analytical accounting should be objective and clearly reflect the business reality, obtaining clear, accurate, enough and timely information. In addition, it should be structured and used according to the needs of the organization.

In this context, the importance of cost or analytical accounting is a reflection of the need felt by the managers of the organizations of an accounting oriented to the interior of the company, which provides the appropriate information, more detailed (analytical) and with the desirable periodicity (for shorter periods), enabling a knowledge of all expenditures, from the products manufactured and sold, to the expenses of the various departments and functions.

As pointed out by Nabais and Nabais (2016b) and Martí (1999), cost or analytical accounting is focused on business leaders, supporting them in making more concrete decisions about how they should manage companies, facilitating planning and budgetary control and enabling them to predict their economic consequences. Thus, its space of action is the internal operations, carried out within the company itself and related to the production process, measuring and reporting financial and non-financial information related to the acquisition and consumption of resources (Cherman, 2010; Drury, 2021; Ferreira, Caldeira, Asseiceiro, Vieira, & Vicente, 2019; Hansen & Mowen, 2001; Horngren, Foster, & Datar, 2000; Mortal, 2007; Palma, 1997; Rabbit, 2012). Therefore, it should be adapted to the company's organic structure and its specific exploration activities (Ausset & Margerin, 1990; Caiado, 2020; Cruz et al., 2023; Franco, Oliveira, Morais, Oliveira, Lourenço, Jesus, Major, & Serrasqueiro, 2007, 2009; Garrison et al., 2021; Rabbit, 2012).

Rocha and Rubio (1999) highlight its role in the evaluation of some elements of the balance sheet, for example, stocks of ongoing, intermediate or finished products, complementing the information provided by financial accounting. One of the objectives of cost or analytical accounting is to inform a wider group of people about the different economic and financial aspects of the organization, to facilitate the decision-making process, that is, to facilitate the management of company (Coelho, 2019). Other objectives are summarized in the clearance and explanation of expenditures, income and results; to the classification, grouping, control and appropriation of expenditures for the purpose of calculating inventory values, assisting in the establishment of the sales price and providing data for good management of the company; to support other technical and management instruments; to determine the profitability of departments and products; to assessing the economic and financial performance of one or multiple segments of the company; to the allocation of responsibilities; to the establishment of forecasts providing information for the elaboration of economic estimates and to monetize possible alternatives of choice; to calculation and analysis of deviations from predicted (Caiado, 2020; Coelho, 2019, 2012; Cruz et al., 2023; Drury, 2021; Ferreira et al., 2019, 2016a, 2016b; Franco et al., 2009; Garrison & Noreen, 2003; Hansen & Mowen, 2001; Jordan et al., 2011; Lukka & Granlund, 1996, Nabais & Nabais, 2016b; Palma, 1997; Rahaman, Talukder, & Darda, 2017; Santos, 1998; Uyar, 2010).

For Martins and Rocha (2010), cost or analytical accounting is responsible for the elaboration and dissemination of financial statements that assist decision-making in its various stages: planning, execution, control and evaluation of performance, and in areas, for example, as strategic and operational planning; preparation and monitoring of budgets; product management, production, people, prices, processes and results; evaluation of the economic viability of projects; automation of operations, activities and processes, among others.

In view of the foregoing, the object of cost or analytical accounting is the expenses, income and results of the organizations, which determine the analysis, not in a globalizing way, as in financial accounting, but rather in an analytical manner and in accordance with the management needs (Anand, Sahay, & Saha, 2004; Caiado, 2020; Garrison & Noreen, 2003; Garrison et al., 2021; Hansen & Mowen, 2001; Medeiros, Santana, & Guimarães, 2017; Nabais, 1991; Nabais & Nabais, 2016b; Pereira & Franco, 1994; Santos, 1998; Van Triest & Elshahat, 2007).

Despite its usefulness, the costs of implementing a cost accounting system, when it is not mandatory, relegates this type of accounting for a second choice (Macedo, 2013).

### 3. MATERIALS AND METHODS

The Polytechnic Institute of Cávado and Ave (IPCA) started operation in the academic year 1996/1997 and, throughout its more than 20 years of pedagogical and scientific activity, has contributed to the increase of qualification of the Portuguese population, guaranteeing more training for more students. The IPCA is a growing institution, with a formative offer in the areas of business sciences, technologies, design and tourism, addressed to different audiences and that, using its technical and scientific valences, creates, transmits and disseminates the knowledge, in close articulation with the surrounding community.

The School of Management (ESG) is an organic unit of teaching and research of IPCA. ESG currently offers masters, graduate, postgraduate and post-secondary education courses, with professional superior technical courses (TESP). Of a professional nature and applied research, the master's courses offered by ESG-IPCA provide an advanced level of vocational training that prepares highly qualified staff and contributes to initial research training. The postgraduate courses in operation in ESG-IPCA are specific formations created with a view to providing the updating, deepening and widening of knowledge in specific subjects.

In this study the research paradigm or philosophy was essentially positivist receiving, the data, a predominantly quantitative treatment, to the extent that the research method used was the survey by questionnaire, and an exploratory and descriptive analysis was performed.

The use of individual description of variables (univariate analysis) predominated in the study, mainly using the distribution of frequencies and analysis of measures of central tendency and dispersion. However, we also tried to test the hypothesis of association of some variables by applying the statistical tests considered more appropriate for this purpose.

The questionnaire, structured in two parts, was elaborated based on the review of literature and consists predominantly of closed questions, mostly of multiple and dichotomic choice, with application of the 5-point Likert scale: 1. "Totally unimportant", 2. "Unimportant", 3. "Moderately important", 4. "Important", 5. "Extremely important". The first part of the questionnaire includes questions about the characteristics of respondents, such as age, gender, type of student (student or working student), job (in the case of working students), degree (bachelor, TESP, postgraduate or master's degree), academic qualifications (in case of already having some previous course). The second part of the questionnaire includes questions about the importance of financial accounting and cost or analytical accounting for the labour market and the main obstacles and challenges they face.

The information was collected in the classroom. After data collection, it was statistically treated, using EXCEL and SPSS (Statistical Package for the Social Sciences – version 23 for Windows environment).

The sample, by convenience (for financial reasons, geographic location and easy access to the study population) and non-probabilistic (intentional non-random sampling), is composed of students from the undergraduate courses in Accounting and Taxation (3rd years); of the TESP in Accounting and Taxation (2nd year); of the postgraduate course in Financial and Business Accounting, and of the master's degrees in Accounting and Finance and in Taxation.

We selected the students attending the 3rd year (in the case of the graduates) and the 2nd year (in the case of the TESP), because they already had the curricular units object of study, and we extended to the postgraduate and the masters on these areas.

130 questionnaires were collected in total (13 TESP students; 65 undergraduate students, being 36 students of the degree in Accounting and 29 of the degree in Taxation; 7 Postgraduate students; and 45 master's students, being 26 master's students in Taxation and 19 students in the master's degree in Accounting and Finance). All questionnaires were considered valid, although there was "no response" to some questions in some questionnaires.

## 4. RESULTS

Regarding the general characteristics of respondents (table 1), we observed that the mean age is around 27 years (with a standard deviation of 9 years, which reflects the heterogeneity of ages in relation to the mean). Most respondents (73 students) present an age between 19 and 25 years (the youngest inquest is 19 years old and the oldest 56 years). As for gender, 70.54% of respondents are female and the type of student most students are working student (55.04%).

These figures show that we are in the presence of a young sample composed mainly of students who are already exercising a professional activity, essentially in accounting. It should be noted that most of these working students are attending postgraduate and master's degrees.

**Table 1:** Characterization of the profile of respondents

Age	N	%
19 to 25 years	73	56.59%
25 to 35 years	39	30.23%
>=35 years	17	13.18%
Total	129	100%

  

Gender	N	%
Female	91	70.54%
Male	38	29.46%
Total	129	100.00%

  

Type of student	N	%
Student	58	44.96%
Working student	71	55.04%
Total	129	100.00%

**Source:** self elaboration

Part II of the questionnaire is on the importance of financial accounting (table 2) and cost accounting (table 3), and almost all respondents consider financial accounting fundamental for the labour market (129 Students) and that in training they are given the fundamental tools to face the labour market (114 students).

**Table 2:** Importance of Financial Accounting

	Yes	No	Total
Do you consider financial accounting fundamental to the labour market?	129	1	130
Do you consider that in training you are given fundamental tools to face the labour market in financial accounting?	114	16	130

**Source:** self elaboration

As for cost accounting, also almost all respondents consider the same fundamental for the labour market (114 students). On the other hand, in relation to the mandatory implementation

in the organizations, 89 students consider that it should be compulsory while 40 students understand that it should not be compulsory. It is also pointed out that 86 students consider that in their training they are given the fundamental tools to face the labour market in the area of cost accounting, while 41 students understand that the training is not enough.

**Table 3:** Importance of cost accounting

	Yes	No	No answer	Total
Do you consider cost accounting fundamental to the labour market?	114	15	1	130
Do you consider that the implementation of cost accounting should be mandatory in an organization?	89	40	1	130
Do you consider that in training you are given the fundamental tools to face the labour market in cost accounting?	86	41	3	130

**Source:** self elaboration

Students were also asked to comment on the reasons for the use of financial accounting in an organization (table 4). Thus, 11 reasons were listed, distributed by a frequency scale, i.e., ordered from “totally unimportant” to “extremely significant”. Given the little relevance of the responses of the scale “1 – totally unimportant” and “2-unimportant”, we decided not to present these results (similar situation occurred in table 6).

**Table 4:** Reasons for using financial accounting in an organization

How important do you consider the following reasons for using financial accounting in an organization?	Moderately important	Important	Extremely important
Comply with legal/tax obligations	5.40%	28.50%	60.80%
Register the facts only by legal imposition, namely from the Accounting Standardization Committee.	25.40%	45.40%	22.30%
Obtain information for internal analysis of the economic and financial situation of the company.	3.80%	36.20%	58.50%
Assist in making business decisions.	7.70%	36.20%	53.80%
To present to external agents only the company's patrimonial situation.	30.00%	44.60%	20.00%
Develop reports on the economic growth of the organization.	11.50%	46.90%	39.20%
Meet the needs of information to a wider range of interested audiences.	13.80%	52.30%	29.20%
Contribute to an integrated organization of information of a company.	7.70%	53.10%	34.60%
Allow you to more effectively control the resources of a company.	10.00%	33.80%	53.80%
Develop a reliable financial reporting for obtaining external financing.	7.70%	36.90%	54.60%
Prepare valid information on the financial flows of a company.	6.20%	39.20%	53.10%

**Source:** self elaboration

Table 4 shows the descriptive results on the perception of students about the reasons for the use of financial accounting in an organization. The data show that 60.8% of the students consider “extremely important” the use of financial accounting to fulfil legal/fiscal obligations, seeming to be the reason that brings together the greatest consensus by the students. In addition, 58.5% of respondents also classify as “extremely important” that financial accounting is used in organizations to obtain information for internal analysis of the company’s economic and financial situation. The third reason students point as extremely important for the use of financial accounting is to elaborate a reliable financial reporting for obtaining external financing. The reasons presented in the scientific and technical literature as the most relevant (and which seem to be more suited to the needs of current companies) are to assist in making business decisions (Alves, 2018; Costa & Alves, 2005; Lourenço et al., 2018; Rodrigues, 2017) in which this study was considered “extremely important” by 53.8% of students and to meet the needs of information to a wide range of interested audiences (Costa & Alves, 2005; Lopes, 2013; Lourenço et al., 2018) which was revealed only as “important” to 52.3% of the students surveyed.

Although most of the results do not present statistical evidence to conclude about the existence of significant differences in the variables analysed (through the Kruskal-Wallis test), we can assess trends of opinion.

**Table 5:** Importance attributed to the use of financial accounting according with the degree

How important do you consider the following reasons for using financial accounting in an organization?	TESP	Undergraduate	Postgraduate	Master	sig.
Comply with legal/tax obligations	68.73	71.43	68.43	55.54	0.090
Register the facts only by legal imposition, namely from the Accounting Standardization Committee.	73.81	68.96	62.71	58.53	0.371
Obtain information for internal analysis of the economic and financial situation of the company.	57.38	64.15	81.71	67.27	0.429
Assist in making business decisions.	71.00	60.76	98.64	65.60	0.038
To present to external agents only the company’s patrimonial situation.	68.04	65.45	58.79	65.88	0.955
Develop reports on the economic growth of the organization.	61.31	64.22	81.57	66.07	0.610
Meet the needs of information to a wider range of interested audiences.	78.42	64.82	94.36	58.26	0.032
Contribute to an integrated organization of information of a company.	81.04	63.68	89.71	59.87	0.052
Allow you to more effectively control the resources of a company.	75.96	64.35	85.36	61.04	0.210
Develop a reliable financial reporting for obtaining external financing.	78.04	60.31	68.50	68.91	0.269
Prepare valid information on the financial flows of a company.	69.95	64.18	86.43	62.94	0.348

**Source:** self elaboration

The results presented in table 5 show that the undergraduate students are the ones that give greater importance to the compliance with the legal/tax obligations by financial accounting. Students attending postgraduate studies show a tendency to consider the use of financial accounting in order to assist in making business decisions. These students also classified the role of financial accounting as “extremely important” to meet the needs of information to a wider range of interested audiences. It is also interesting to note that these students tend to categorically classify the use of financial accounting as “extremely important” in contributing to the integrated organization of the information of a company. In fact, these students who have a more targeted view of the true role of accounting in current organizations. This may be because they are already playing a professional role in the area and seek an update through the course, managing to make a link between the teaching of accounting and practical reality.

Regarding the reasons for the use of cost accounting in an organization (table 6), it is verified that the perception of the students is very balanced in the classification as “important” and “extremely important”, being only the reason for cost reduction regarded as “extremely important” by more than half of respondents. It is considered “important” by 53.8% of the students surveyed to use cost accounting by organizations to improve the establishment of priority initiatives and the allocation of resources. The reason for highlighting the profitability analysis of customers and measuring costs related to their satisfaction is also considered as an important reason for about half of the students. In this sense, the calculation of expenses and income associated with the main functions, sections or products of the firm, allows access to the profitability of each and, by this way, enables decision-makers to optimize this profitability (Saraiva, Rodrigues, Coimbra, Fantasia, & Nunes, 2018).

**Table 6:** Reasons for using cost accounting in an organization

How important do you consider the following reasons for using cost accounting in an organization?	Moderately important	Important	Extremely important
More effective measurement of financial performance.	16.90%	40.80%	36.90%
More effective measurement of non-financial performance.	28.50%	37.70%	28.50%
Provide information on internal training of cost prices.	13.80%	38.50%	47.70%
Provide timely and relevant information to management for rational decision-making.	12.30%	41.50%	43.80%
Restructuring and flexibilization of production processes.	14.60%	49.20%	33.10%
Encourage planning and control.	8.50%	49.20%	38.50%
Reduce costs.	10.80%	32.30%	54.60%
Differentiate the products.	16.20%	46.20%	35.40%
Improving the establishment of priority initiatives and the allocation of resources.	13.80%	53.80%	29.20%
Assist in the establishment of sales prices and provide information.	4.60%	48.50%	43.80%
Highlight the profitability analysis of customers and measure costs related to their satisfaction.	13.10%	50.80%	33.80%
Analysis of results.	8.50%	40.00%	49.20%
Establish predictions and explain the resulting deviations.	8.50%	42.30%	46.90%

**Source:** self elaboration

Table 7 below shows the results on opinion trends on the importance attributed to a list of reasons for using cost accounting in an organization, classifying students by type of degree. Thus, the observed trend is that graduate students classify as “extremely important” the use of cost ac-

counting to favour planning and control. It is a result that meets the defended by Caiado (2020), Coelho (2019; 2012), Martí (1999), and Nabais and Nabais (2016b). In addition, it is also statistically significant the trend of TESP students that think to be “extremely important” the use of cost accounting to highlight the profitability analysis of customers and to measure costs related to your satisfaction.

**Table 7:** Importance attributed to the use of cost accounting according with the degree

How important do you consider the following reasons for using cost accounting in an organization?	TESP	Undergraduate	Postgraduate	Master	sig.
More effective measurement of financial performance.	72.54	60.00	77.64	69.52	0.319
More effective measurement of non-financial performance.	74.62	63.33	61.80	66.57	0.754
Provide information on internal training of cost prices.	73.65	63.90	62.64	65.86	0.820
Provide timely and relevant information to management for rational decision-making.	71.12	64.87	77.21	62.97	0.703
Restructuring and flexibilization of production processes.	70.88	61.50	70.50	68.94	0.619
Encourage planning and control.	79.69	60.47	88.21	65.13	0.080
Reduce costs.	62.42	67.26	66.79	63.64	0.934
Differentiate the products.	65.73	68.15	57.07	61.54	0.714
Improving the establishment of priority initiatives and the allocation of resources.	69.50	68.45	70.93	59.23	0.499
Assist in the establishment of sales prices and provide information.	75.92	69.73	64.71	56.50	0.140
Highlight the profitability analysis of customers and measure costs related to their satisfaction.	87.35	60.36	71.14	0.34	0.074
Analysis of results.	71.35	63.07	77.43	65.47	0.665
Establish predictions and explain the resulting deviations.	79.62	64.11	78.71	61.38	0.257

**Source:** self elaboration

The students were still questioned about what they consider to be the main problems/challenges for the future of financial accounting. As in previous questions, we also seek to relate the opinions about the problems/challenges with the course that each student attends.

**Table 8:** Problems/challenges for the future of financial accounting

Indicate the main problems/challenges for the future of Financial Accounting	TESP	Undergraduate	Post-graduate	Master	sig.
Technological evolution.	67.12	58.96	79.07	72.37	0.096
End of the organized accounting obligation.	55.31	65.85	56.71	69.31	0.250
Reduction of the declarative obligations.	65.23	65.77	61.71	65.78	0.987
Greater need for non-financial information.	71.73	73.05	40.79	56.63	0.007
Accountability in Integrated systems.	68.65	70.22	51.07	60.01	0.122

**Source:** self elaboration

In the results evidenced in table 8, the technological evolution was pointed out as the major problem/challenge for financial accounting for the graduate and master's students. The problem/challenge with the highest concordance of the students of TESP and degree, was the greater need for non-financial information. In fact, the tendency of accounting teaching is to manifest financial accounting as relevant to provide qualitative information (Alves, 2018; Costa & Alves, 2005; Lopes, 2013), as well as fundamental for the presentation of a prospective report of non-financial information (Alves, 2018; Rodrigues, 2017).

**Table 9:** Problems/challenges for implementing cost accounting

Indicate the key problems/challenges for cost accounting implementation process in an organization.	TESP	Undergraduate	Postgraduate	Master	sig.
Inadequate technological support.	80.65	63.15	44.79	67.74	0.098
Implementation/maintenance costs too large.	63.12	68.87	84.21	58.41	0.152
Excessive time it takes to devote to the process.	77.88	60.01	65.93	69.79	0.205
Scarce communication structure.	62.23	64.83	58.71	68.47	0.739
Lack of skills and expertise in the area.	67.88	65.08	65.07	65.48	0.994
Lack of support and commitment of employees and management.	74.58	65.28	52.07	65.28	0.400
Difficulty in understanding the benefits derived from implementation.	77.5	67.28	50.07	61.86	0.111

Source: self elaboration

About the problems/challenges presented for the implementation of cost accounting in an organization (table 9), the existence of inadequate technological support is the reason that presents itself as more consensual for TESP students, revealing also master's students a strong tendency to consider this as an existing problem in the implementation of cost accounting in an organization.

## 5. CONCLUSIONS

In the contemporary competitive environment, the ability of organizations to produce reliable information that enables rational, grounded, accurate and secure decision-making is considered a source of value and, consequently, it is a competitive advantage by allowing for organizational continuity and growth and achieving the desired results. In this sense, financial and cost accounting are areas that assume great relevance within organizations, by assisting in the preparation of financial statements.

The empirical study revealed that the students surveyed consider financial accounting and cost accounting fundamental to the labour market. Most of them (68.5%) consider that cost accounting should be of mandatory implementation in current organizations. It is also confirmed that students recognize that in their training they are given the necessary tools to face the labour market in the area of accounting.

The students also perceive as extremely important the use of financial accounting for the fulfilment of legal/tax obligations, for analysing the internal situation of the organization and as a source of information for external users.

In general, there is a tendency for postgraduate students to consider financial accounting extremely important to assist in decision-making, to meet the needs of information to the most diverse stakeholders and to contribute to the integrated organization of the company's information.

Respondents also indicate technological developments and the greater need for non-financial information such as the main problems/challenges that financial accounting faces.

It was also possible to verify that, for cost accounting, it was highlighted as important reasons for its use the need for cost reduction; the improvement in the establishment of priority initiatives and the allocation of resources and the analysis of the profitability of customers, measuring the costs related to their satisfaction. The respondents consider as the main challenge faced by cost accounting the inadequate technological support.

The main contribution of the study was to highlight the importance of the area of financial accounting and cost accounting for the labour market and for organizations in the perception of students attending courses in those areas, at a public HEI.

The main limitation of the study, in addition to the limitations inherent to the research methodology used and the use of a conventional non-probabilistic sampling, which preclude the generalization of the sample results to the population, refers to the fact that the study is only concentrated in one HEI and is limited only to courses in the investigated areas. Furthermore, it should be noted that, for temporal reasons, a pilot test was not carried out on the questionnaire.

For future research it would be important to extend the study to other HEI (public and private) and other related areas, namely to students of audit and management courses. It would also be interesting to analyse the importance of the theme in the view of teachers, deepening the realization of studies that discuss the adequacy of the courses in relation to the needs of the labour market. Qualitative research techniques, such as interviews, can also be used to enrich the information obtained.

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