



The Main Gaps and Nonconformities Identified in the Accountability in SNC-AP

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Abstract: This research study is part of the issue of public accounting with the national standards, in terms of the quality of financial information and perspective of external control of Portuguese Polytechnics (PP). Specifically, this study has two main objectives: (1) study the application of the new public accounting model based on IPSAS (SNC-AP) by PP, and (2) understand the main gaps and nonconformities identified by the external audit. The analysis focuses on the period from 2018 to 2020. The theoretical approach focuses on coercive and normative isomorphism inspired by institutionalist arguments, namely the New Institutional Sociology (NIS). The methodology followed a qualitative approach of an exploratory nature through the analysis of the content of the financial statements (FS) and the legal certification of accounts (LCA) of the PPs disclosed in the period of implementation of the SNC-AP (2018-2020). The main results show that entities have paid more attention to formal compliance with the presentation of the financial statements, neglecting some more specific aspects such as the disclosures and descriptions in the Annex and the recognition of income with and without consideration. Through the LCA, it was noticed that the auditors issued different emphases and reservations in the period under analysis in order to point out the aspects where there is no compliance with the regulations. The theoretical line of coercive isomorphism, inspired by the NIS, can help to explain these results insofar as law imposed the SNC-AP as well as the external audit based on the ISAs and are mandatory, which leads the entities to demonstrate compliance. The study helps to clarify the process of transition to the new accounting regulations by the PPs, and can be generalized to other contexts and sectors of public administration. In practical terms, the results help to clarify areas where there is a need for more training and clarification on the part of professionals in order to increase compliance with the new regulations.

Keywords: New Public Management; SNC-AP; Financial Statements; Legal Certification of Accounts.

1 Introduction

The challenges introduced by the new public management (NPM) paradigm in the 1990s, inspired by economic theory, and more recently the new public governance, have demanded greater accountability and transparency to improve governance and promote the creation of public value (Agostino et al., 2021; Guthrie & Martin-Sardesai, 2020). One of the most important aspects of NPM is the reform of financial information systems, primarily consisting of the introduction of accrual accounting and the adoption of private-sector-style financial statements (Wynne, 2007), focused on the need to provide more precise performance information of public entities; ultimately, functioning as an accountability tool (Christiaens et al., 2015).

This context has pressured organizations into introducing changes based on accrual accounting and the International Public Sector Accounting Standards (IPSAS) into the public accounting system (see for example Brusca et al., 2015 and 2018; Christiaens et al., 2015; Pina et al., 2015; Pina et al. al. 2009). Despite greater advancements of accrual accounting in developed economies, this process of change has been adopted all around the world in a generalized manner, even in underdeveloped economies (Polzer et al., 2021; Salato et al., 2022; van Helden et al., 2021).

As mentioned by Christensen et al. (2019), the fragmentation of financial information due to different standards systems has led to the need for greater harmonization of public and private accounting systems, which facilitated the approval of IPSAS based on accrual accounting. On the other hand, the International Public Sector Accounting Standards Board (IPSASB, 2014) has issued standards and recommendations with the goal of implementing the general purpose financial reporting, which aims to introduce a more complete approach to accountability, including greater transparency and accountability of public governance.

In Portugal, this context of change gave rise to a public accounting reform that remains active until the present day (Gomes et al., 2015 and 2021; Jorge et al., 2021), where its highlight was the approval of the Public Accounting Official Plan in September of 1997 (Fernandes & Gomes, 2010). Portugal maintained the POCP and its sectoral plans as an accounting system for public entities until December 21st of 2017. The strong economic and financial crisis experienced in our country between 2010 and 2015 established the need to implement a new accounting system based on IPSAS (Gomes et al., 2015), which supports the reviewed literature on the acceleration of accounting changes in periods of financial crisis dominated by pressures of international lenders like the International Monetary Fund (Adhikari & Jayasinghe, 2017; Harun et al., 2012). These changes are expected to continuous after the crisis of the COVID-19 pandemic (Cohen et al., 2020). The external pressure (coercive and normative isomorphism) and the reform process carried out in most developed countries (mimetic isomorphism) to improve public accounting systems, led to the approval of the new public accounting system based on IPSAS - the SNC-AP (by DL n^o 192/2015) in 2015 and the mandatory application for Portuguese Polytechnics (PP) since 2018. This is considered an important milestone in the Portuguese public sector accounting reform (Gomes et al., 2021). This means that, despite the NPM's impetus for public accounting reform, the institutional theory inspired by the New Institutional Sociology

(NIS) (DiMaggio & Powell, 1991) has a complementary role in the research of Portuguese public accounting reform given the influence of isomorphism in the process (Gomes et al., 2015) as was concluded by prior research (see for example van Helden et al. 2021). However, the research on the implementation of the new public sector accounting system, specifically within the context of Higher Education Institutions (HEIs) remains scarce.

Therefore, this article intends to achieve two research objectives: (1) to study the application of the new public accounting system based on IPSAS (SNC-AP) by the public PP, and (2) to understand the main irregularities and the items of non-compliance identified by the external audit. The analysis focuses on the period of implementation of the SNC-AP for which there is accounting information (2018 to 2020). The choice to focus on the higher education system is due to the assumption that these entities have the mission to produce new knowledge and innovation, and thus, must be an example in the rigorous application of transparency and accountability presumptions for international references. On the other hand, these entities have carried out the new accounting system by three consecutive fiscal years, which makes it possible to execute the study in question with some depth. Although it remains impossible to perform this qualitative and exploratory study in all Portuguese HEIs, the authors' professional context motivated their interest in choosing the PP, as it facilitates the collection of data and the understanding of the phenomenon of change that has been experienced in this sector. However, the lessons and information obtained from the study may provide general and useful knowledge about public accounting reforms in public administrations.

The content analysis on financial statements (DF) and legal certifications of accounts (CLC) available from 2018 and 2020 allowed for the development of an exploratory study capable of responding to the study objectives. The main results of the study indicate that these entities give greater attention to the general compliance with the presentation of financial statements, rather than focussing on more specific aspects, such as the more descriptive disclosures and explanations in the Annex, as well as the recognition of exchange and non-exchange incomes (cf. standards 13 and 14 of the SNC-AP). In the external audit processes in which these entities are required to perform by law, it was found that the auditors issued various emphases and qualified audit opinions in the period under review, to identify the aspects in which there is non-compliance with the accounting standards. The main irregularities identified by the CLC are associated with the disclosure of the impacts caused by COVID-19. In short, the results obtained in this study help clarify the process of transition to the new accounting standards based on IPSAS, which can be applied to other contexts and sectors of public administration. In practical terms, the results help identify areas with a need for more professional training and clarification, to increase compliance with the new regulations and success in implementation.

This article is divided into five sections. First, the introduction, then section 2, which presents the literature review and the theoretical framework. Section 3 follows with the description of the methodological options and description of the sample. Section 4 describes the results and their discussion. Finally, the work ends with the main conclusions, limitations, and clues for future research in section 5.

2 Literature Review

2.1 Public Accounting Reform in Portugal

The growth of the NPM paradigm has led to an increasing tendency to implement business-like tool in public management (Hood, 1995; Lapsley, 1999), to make them more efficient and effective in achieving public values (Hood, 1991 e 1995; Christensen et al., 2019). On the other hand, the inefficiencies of the cash-based traditional accounting system cause enormous obstacles in the preparation of consolidated accounts, which constituted an important stimulus for the public accounting reform (Brusca et al., 2015; Christiaens et al., 2010; Lapsley et al., 2009). In fact, the increased diversity of accounting standards in public accounting, predominantly in cash accounting, as well as the need to improve financial information quality for the purpose of decision-making and public accountability, demonstrates the need for a more complete public accounting system (Christiaens et al., 2010; Grossi & Pepe, 2009; IPSASB, 2014; Jorge, 2019; Oulasvirta, 2014).

In the literature, the IPSAS are referenced as a key starting point in the creation of this reform, which aims to harmonize international public accounting. The adoption and implementation of this international framework has been widely studied in several developed countries (Brusca et al., 2015; Christiaens et al., 2015; Pina et al., 2009), specifically in Portugal (Gomes et al., 2015 e 2021; Jorge et al., 2021).

However, the literature points out the various difficulties in this process of change and transition of the national standards to the IPSAS associated with the complexity of the new accrual-based system and the need of civil servants and accounts to have new specific skills and competencies (Wynne, 2007), on the one hand, and the fact that it is a voluntary decision (Christiaens et al., 2010; Lapsley et al., 2009; Pina et al., 2009; Polzer et al., 2021), on the other hand. In other words, the decision to transit to IPSAS depends on the will of each country, which may be more influenced by instrumental and rational issues, or by institutional pressures and the need to obtain external legitimacy (Gomes et al., 2015; Lapsley, 2009; Polzer et al., 2021; Wynne, 2007).

Thus, coercive, normative, and mimetic isomorphism within institutional theory can play an important role in understanding these public accounting reform processes (Carruthers, 1995; Modell, 2009). More specifically, in the Portuguese context, the implementation of the SNC-AP was a legal imposition by international lenders and the Government, resulting in a process of coercive change (Gomes et al., 2015; Nogueira et al., 2020).

In Portugal, the public accounting reform had two important moments. First, the publication of the Public Accounting Basic Law (by Law n.º 8/90), and the POCP (by DL n.º 232/97), marked the first transition steps from cash-based accounting to accrual-based accounting (Fernandes & Gomes, 2010). As concluded by Gomes et al. (2015, p. 269), the main objectives of the public accounting system approved in the 1990s are “the introduction of the accrual regime, accounting standardization, budget integration, accounting specialization and management, and faster collection of data for national public accounts”. However, as concluded in the EUROSTAT (2012) report, this reform fell short of expectations, despite Portugal’s advancement with accrual accounting since the 1990s. The

truth is that, after 20 years, accrual-based accounting only remains implemented in a limited number of entities (Gomes et al., 2021; Nogueira et al., 2021). The second moment was determined by the approval of the new IPSAS-based system – the SNC-AP, approved by law in 2015 (DL n.º 192/2015), which revoked the system previously installed. This second moment was also marked by the economic and financial crisis living in our country since 2010, which led to the request for international financial assistance from the IMF. As a result of this international context, the Portuguese Government created a public sector committee responsible to produce the new IPSAS-based accounting system (Gomes et al., 2015). The SNC-AP became an essential legal instrument for the reform of public finances, having come into effect (for all the public entities, with the exemption of local government) in 2018. One of the greatest challenges in implementing this new system is related to the changes in the processes of entry and financial reporting because entities should adopt an accrual point of view, rather than simply a cash point of view (Gomes et al., 2021).

One objective of this new IPSAS-based accounting system is to provide information on the financial and economic position of entities, providing a generalized purpose report for different users (Gomes et al., 2021; IPSASB, 2014; Jorge, 2019). In response to the appeal from IPSASB (2014), it is intended to contribute to a general purpose financial report that includes financial and non-financial information from the past and future, which allows the various users to remain informed, whether they are decision-making bodies; control or inspection bodies; politicians; financiers; creditors; or citizens, who are increasingly called upon to participate in organizations. In this sense, Brusca et al. (2021) highlight that greater quality accounting information is essential for decision-making, planning, and control in the public sector.

In the Portuguese context, the main objective of the new-IPSAS based system is to eliminate the fragmentation and inconsistencies that prevailed with the traditional accounting plans, to oblige the adoption of the accrual basis for central and local governments' financial reporting, as well as to institutionalize the concept of State Accounting Entity, through the preparation of budget statements (DO) and financial statements (FS). It is expected that the information produced will be coherently aggregated to build economic-financial and budgetary indicators “indispensable for decision-making, within the scope of the Government’s political measures at its different levels (local, regional, and national)” (UNILEO, 2018, p. 8). The complete set of FS consists of balance sheets (BS), income statements (IT), cash flow statements (CFS), statement of changes in equity (SCE) and the Annex. The FS’s main objectives are to provide to the various user’s useful information that will support decision-making and maintain their responsibility in rendering accounts for the resources entrusted to public entities. The consistency of FS’s must be maintained from period to period, except in cases in which changes to certain accounting policies result in more appropriate financial statements. In this case, the changes in accounting policies and their impact on FS’s must be disclosed and duly substantiated in the Annex. FS’s in SNC-AP are prepared and presented according to accrual accounting, in accordance with Conceptual Framework and Public Accounting Standards (NCP).

2.2 Relevant aspects in the transition from POC-Education to SNC-AP

In the particular context of HEIs, the main changes brought by the new IPSAS-based accounting system are associated with changes in the terminology (for example, from the equity accounting system to financial accounting; from fixed assets and current assets to current and non-current assets, ...), the use of a conceptual framework (with particular focus in the definition of assets in public entities), the format and content of FS and the increasing demand for to disclose notes and speeches in the Annex to FS. The following table presents the main differences between the traditional and the new system in relation to fixed assets, considering the important changes introduced in the entry of this kind of asset.

Table 1 - Differences between the traditional and the new accounting system for fixed assets

Traditional		IPSAS-based system
Does not establish criteria for recognition of fixed assets		Fixed assets are goods with physical substance held for use in the production or supply of goods and services, expected to be used during more than one reporting period.
Initial measurement – acquisition or production cost, exceptionally fair value		Initial measurement – historical cost, fair value recommended for exceptional situations. Subsequent measurements – general rule is to measure at cost (less accumulated depreciation and accumulated impairment losses), with revaluation allowed.
Subsequent measurement – historical cost		

We share the same opinion as Rua (2017), who states that the SNC-AP advances in the standardization process of public accounting in Portugal, specifically when defining the criteria for recognizing and measurement the elements of FS. More specifically, greater emphasis is placed on the clarification of the concept of asset and fixed assets, the existence of two criteria to measure fixed assets, and, explicitly, the possibility of applying fair value criterion as a base or criteria of measurement applicable to specific situations. The following table demonstrates the main differences in the entry and measurement of investment grants for fixed assets, comparing the traditional and the new system.

In this sense, in the transition to the SNC-AP, these grants must be recognized as a component of the entities' Equity, and must be recognized as an income on a systematic basis, as the depreciation/amortization of the investment that relates to income is registered.

Table 2 - Differences in the entry and measurement of investment grants for fixed assets

Traditional		IPSAS-based system
Recognition Criteria	Not defined	Reasonable assurance by which future economic benefits will flow to the entity and the fair value if it can be measured reliably.
Recognition	Initially as deferred income; transferred to results on a systematic basis, as the	Presented in the balance sheet as a component of equity (other changes in equity) and imputed as income in a

depreciation/amortization of systematic basis over the useful life of the the fixed asset to which they asset. are related.

2.3 The external audit and the compliance with the new accounting system

In the context of pressure and external demand to increase the efficient management of public resources and value for money, with sights on great public governance, reducing management and corruption risks in public entities has allowed for significant growth in the adoption of internal and external auditing practices in the public sector (Hay & Cordery, 2020). The International Standards of Auditing (ISA), issued by the International Federation of Accountants (IFAC), have been widely adopted by the States to harmonize and unify the tasks performed by external auditors in audit processes, ultimately contributing to greater accountability and integrity in the public sector, as well as increasing trust between citizens and public bodies. The first studies on public sector auditing, motivated by NPM paradigm, began to appear in the 2000s, but these studies only grew after 2016, which shows that this topic is still recent and little explored (Grossi and Mattei, 2020; Hay & Cordery, 2020).

Public managers are not only obligated to carry out an external audit of public accounts, in addition to auditing and internal control procedures, which are fundamental, but they must also assume greater responsibility for the rigorous implementation of good accounting practices and collaborate with the external auditor in providing the information necessary to complete an adequate audit. The regular practice of auditing in the public sector to assess the correct application of public resources, occurs more frequently, although more progress is required (Marques & Almeida, 2004).

In Portugal, external auditing is mandatory in HEI, which is carried out by independent external auditors, who adopt the ISA, as well as other technical and ethical standards and guidelines issued by the Order of Statutory Auditors (OROC). In other words, the adoption of external audit practices following the ISA is being determined by coercive isomorphism within the scope of the NIS, contrary to what Hay & Cordery (2020) concluded about the dominance of the normative and mimetic isomorphism considering that several countries adopted these practices voluntarily.

Through the CLC, the auditors register their independent technical opinion on the compliance of public accounts in relation to the approved standards. The auditor's work follows a series of audit procedures corroborated by a relevant set of tests to collect sufficient and appropriate auditing evidence (Freire, 2016) that will allow them to guarantee, to an acceptable level, that the FS can be exempt from material distortions. After the completion of the audit procedures, the auditor issues the CLC, which must contain, among other elements, the identification of the entity, the accounts, and accounting standards applied, the opinion (modified or not), the basis for the issued opinion, the emphases, and any reservations (Freire, 2016). The auditor's opinion may or may not be modified. The modified opinion is expressed when the auditor concludes that the FS possesses relevant material distortions or lacks sufficient evidence to be able to pronounce true and appropriate information of the FS, and thus, must justify the modification of opinion. In turn, the unmodified (or clean) opinion is issued when the FS represents the true and fair view of the

audited entity. The CLC is an element that integrates the accountability tools of the entities under study, therefore, it was also considered in the analysis carried out in our study.

3 Methodology

3.1 Data

The assumption that coercive isomorphism, inspired by the NIS, determines the application of the SNC-AP has inspired this study, which intends to investigate the application of the new IPSAS-based accounting system based by the PP since 2018, as well as to understand the main irregularities and non-conformities identified by the external audit. The analysis focuses on the entire period of implementation of the SNC-AP for which the information is available (2018 to 2020). This study is still relevant and with high potential to produce new knowledge due to a lack of research on the recent transition to IPSAS-based accounting in the context of HEI, and particularly considering the perspective of auditors in the external audit process.

For to accomplish these research objectives we carried out a content analysis of the FS and CLC, collected between 2018 and 2022. The institutional documents were collected on the PP websites between May and October 2021, as well as from the Court of Auditors, in case of the lack of online publications. To collect data, a grid consisting of 22 items was constructed (see appendix nº 1) based on a literature review, namely the questionnaire applied by the PricewaterhouseCoopers (PwC, 2014) and the studies developed by Sour (2012) and Kartiko et al. (2018). The areas with the greatest impact in the transition to SNC-AP were: (1) the recognition and measurement of non-current assets (ANC), (2) financial assets and liabilities, (3) debtors for transfers and grants, (4) income from exchange and non-exchange transactions, and, finally, (5) accruals and deferrals. From the FS's collected, the study focused mostly on the information presented by the Balance Sheets, the Income Statements, and the Annex to FS. The following table presents the main elements collected from FS of PP:

Table 3. Elements analysed from the FS of PP

1. Non-current assets	1.1. AFT (tangible fixed assets) and AI (intangible assets) recognition 1.2. AFT and AI measurement base 1.3. Depreciation/Amortization of AFT and AI 1.4. Validation of the non-current assets by the Annex to FS
2. Financial assets and liabilities	2.1. Measurement basis of financial assets and liabilities
3. Debtors of transfers and grants	3.1. Validation/consolidation of the value of debtors of transfers and grants (registered in the Balancer Sheet and in the Annex).
4. Incomes from exchange and non-exchange transactions	4.1. Classification of incomes from exchange and non-exchange transactions. 4.2. Recognition of incomes from exchange and non-exchange transactions in accordance with the NCP 13 and 14 respectively.

	4.3. Recognition of incomes in the period to which it relates (exchange) and when the right to receive them is established (non-exchange).
	4.4. Measurement basis of incomes from non-exchange transactions.
	4.5. Recognition of impairment losses (PI) related to incomes from exchange transactions.
	4.6. Validation of incomes from exchange and non-exchange transactions reflected in the DR of the Annex.
5. Accruals and Deferrals	5.1. Validation of expense accruals and income included in the Balance Sheet by the Annex.
	5.2. Validation of expense deferrals and income included in the Balance Sheet by the Annex.

3.2 Sample

Actually, fifteen Polytechnics integrate the Portuguese system of higher education. After the data collection step it was possible to obtain a complete sample of the FS for fourteen PP (in a total of 15 entities), for the 3 years under analysis. In our sample, the Polytechnic of Bragança was the only entity excluded because it was not possible to obtain its FS from our communication channels.

In regard to the CLCs, our concern was to identify the main areas of non-compliance identified by the external audit. External and for which recommendations were presented. Although the obligation to disclose the CLC on the website, unfortunately not all the entities of the sample fulfil this requirement. To our study, it was possible to collect the CLCs from 6 entities in 2018, 8 in 2019 and 7 in 2020, that are considered in the analysis. The following table describes the sample and the information considered in the analysis by each entity/year.

Legal certification of accounts		1	1	1	1	1	0	0	1	1	0	1	1	0	0
		6	6	6	6	6	5	5	6	6	5	6	6	5	5
Balance sheet	2020	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Income statement		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Statement of changes in net worth		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cash flow statement		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Annex		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Legal certification of accounts		1	1	1	1	0	0	0	0	1	1	1	1	0	0
		6	6	6	6	5	5	5	5	6	6	6	6	5	5

4 Results and Discussion

4.1 Descriptive analysis

Looking to the content analysis of FS, one first point was to analyse if the entities proceeded in the Annex to the disclosure of the first-time adoption of the SNC-AP. According to NCP 1, the Annex to FS must contain a set of information regarding the impact of transitioning to the new accounting system. As expected, most entities complied with this requirement, except two PPs that failed to make these disclosures. In a second point, the level of compliance was analysed considering the grid described in the methodology section. The table below presents the levels of compliance for each item analyzed in the FS. As demonstrated in the table, the items with the lowest compliance are (1) the validation by the Annex about the information of debtors for transfers and grants contained in the Balance Sheet, (2) the validation by the Annex about the accruals and deferrals included in the Balance Sheet, and (3) the recognition of incomes from exchange and non-exchange transactions.

On the other hand, the items with greater compliance are those related to: (1) the presentation of a complete set of FS (formal and general compliance); (2) the recognition and measurement of non-current assets (AFT and AI); (3) the classification of incomes into exchange and non-exchange transactions; and (4) the recognition of Investment Properties related to income from non-exchange transactions. These results show that entities find it easier to generically comply with the formal obligations to present the DF, as well as the recognition and measurement of assets (namely the AFT and AI). However, the difficulties experienced tend to increase in more specific aspects, specifically in the disclosure in the Annex to FS, the measurement of exchange and non-exchange incomes, in accordance with NCP 13 and 14, respectively, and the recognition of accruals and deferrals of expenses and income, which remain sensitive areas in the transition to the new IPSAS-based accounting system.

Another finding of the study is that the situation keeps constant during the period under analysis. As this is a transition period, it would be expected that entities would improve conformities over time. However, the results do not show a continuous improvement over time, being visible the limitations in the accomplishment of more concrete and specific aspects related to the disclosures in the Annex to FS. On the other hand, in the third year of implementation, the results show an increase in the notes and observations issued by the external auditors in the CLC. A reference should also be made to the recommendations issued to the entities for which it was possible to analyze the CLC of the need to carry out the implementation of management accounting (an accounting system obligatory by the SNC-AP). So, after 3 years of the SNC-AP implementation, it would be expected that CLC becomes cleaner and the auditors' recommendations to eliminate irregularities and non-compliance will decrease but this was not true in our study. Contrary, the external auditors increased their level of demand in the verification of the compliance of the rendering of accounts, which resulted in more notes and recommendations for

entities. Thus, this study clarifies and reinforces the elements on which professionals and managers should primarily focus to improve the quality of FS in the short term. These results guide the definition of a more assertive and effective training policy with the goal of increasing compliance levels.

Table 4. Descriptive statistics of the compliance level

Item Description	N	Frequency	%
General set of FS	41	41	100
AFTs recognized in the Balance Sheet	41	38	93
AFT measurement criteria	41	41	100
AFTs are depreciated over their useful life	41	41	100
Als recognized in the Balance Sheet	41	41	100
AI measurement criteria	41	40	98
Als are amortized over their useful life	41	41	100
The value of the non-current assets registered in the Balance Sheet is validated by the Annex	41	32	78
The measurement criteria of financial assets and liabilities are in accordance with the provisions of the SNC-AP	41	38	93
The value registered in debtors for transfers and grants in the Balance Sheet is validated by the Annex	41	17	41
Incomes are classified as from exchange and non-exchange transactions	41	41	100
The entity recognizes incomes from exchange transactions in accordance with NCP 13	41	22	54
Incomes from exchange transactions are recognized in the period to which they relate	41	30	73
The measurement criteria of incomes from exchange transactions is in accordance with section 12 of NCP 13	41	27	66
Investment Properties related to income from exchange transactions are recognized	41	41	100
The value of earnings from exchange transactions reflected in the Incomes Statement is validated by the Annex	41	39	95
The entity recognizes incomes from non-exchange transactions in accordance with NCP 14	41	22	54
Incomes from non-exchange transactions are recognized when the right to receive them is obtained	41	26	63
The measurement criteria of incomes from non-exchange transactions is in accordance with section 43 of NCP 14	41	24	59
The value of incomes from non-exchange transactions reflected in the Incomes Statement is validated by the Annex	41	35	85
The value of accruals and deferral expenses and incomes included in the Balance Sheet is validated by the Annex	41	20	49
The amount of expenses and incomes recognized in the Balance Sheet is validated by the Annex	41	24	59

In relation to the CLC, the following table shows that, in general, all entities presented a CLC with a modified opinion issued by the auditor. Some of the CLC have a qualified auditor's opinion which can be considered natural in the transition phase to a new normative accounting system. In the 3 periods under analysis, the results reflect an increasing demand of auditors in the compliance of standards considering the increase in the issued of modified opinions and qualified opinion, especially in 2020. However, in 2019, the qualified opinions are mainly associated with the needed disclosures regarding the impact of COVID-19 on the public accounts, which is a new element and independent from the transition process. The following table presents the main results in the analysis of the CLC and the auditor's opinion.

Table 5. Summary of the auditor's opinion collected from the CLC

Year	IP	Modified Opinion	Non-modified Opinion	CLC with emphases
2018	Castelo Branco		X	
	Cávado e do Ave		X	
	Coimbra	X		
	Lisboa	X		
	Portalegre		X	
	Porto		X	X
	Setúbal	X		
2019	Beja		X	X
	Castelo Branco		X	X
	Cávado e do Ave		X	X
	Coimbra	X		X
	Guarda		X	X
	Portalegre		X	X
	Porto	X		X
	Setúbal	X		X
	Tomar	X		X
2020	Beja		X	
	Castelo Branco	X		
	Cávado e do Ave		X	X
	Coimbra	X		
	Porto	X		
	Santarém	X		
	Setúbal	X		X
	Tomar	X		X

4.2 An in-depth analysis to data

The results of the content analysis of the FS and the CLC for each PP, by the longitudinal period 3 years, are presented below, highlighting the most sensitive aspects of the transition such as non-current assets, debtors for transfers and grants, exchange and non-exchange incomes, accruals and deferrals.

a) Non-current assets

In general, all the PP recognize AFT and AI in their Balance Sheets. However, there are emphases and qualified audit opinions related to this theme in the CLC of some entities, ultimately, showing some problems with compliance. The following table summarizes the main emphases and qualified audit opinions, as well as the results of the FS content analysis on this subject:

Table 6. Main results about non-current assets

Entity	Year	Recognition/ Measurement/ Disclosures	Emphases /Qualified audit opinion	Contents of FS
Beja	2018	Disclosures	n.a.	The measurement criteria used is not disclosed in the Annex, so it is not possible to validate whether it is in accordance with the paragraph 26 of NCP 3.
Coimbra	2019 and 2020	Measurement	Set of properties acquired through non-exchange transactions, or whose acquisition cost is unknown, not having them measured by the VPT or fair value; AFT inventory and reconciliation process is underway.	There is no note in the Annex about the financial holdings.
Guarda	2019	n.a.	Properties not registered at the Land Registry Office (CRP), without influence on their recognition or measurement.	Nothing to register
Lisboa	2018	Recognition and Measurement	Relevant uncertainty regarding future economic benefits in relation to capitalized costs and any Investment Property to be recorded (AFT in progress); the properties are not registered by the Tax Equity Value, and the regularization process is in progress; Correction in fixed assets (2011), of 2,787,000 euros, without any physical inventory or reconciliation with the accounting records. The amount recorded in buildings and other construction does not include the land and the respective building where the social services of the entity develop their activity. There is no information to confirm the respective ownership of all the goods included in the assets, as well as their fullness.	Presents deferrals in the non-current assets for which there is no explanatory note in the Annex.

Portalegre	2018 to 2020	Disclosures	n.a.	No notes in the Annex about financial investments.
Tomar	2019	Recognition and Measurement	Performed a retrospective restatement with an impact on AFT and on the net worth for 510,169.33 euros.	Nothing to register

Legend: n.a. – not applicable

b) Debtors of transfers and grants

One of the areas of greatest impact in the transition to SNC-AP is the recognition of transfers and grants, particularly, grants for investments. However, only one qualified opinion was found on this subject. The following table summarizes the main aspects highlighted on this topic:

Table 7 - Main results of the analysis on Debtors for transfers and subsidies

Entity	Year	Recognition/ Measurement/ Disclosures	Emphases /Qualified audit opinion	Contents of FS
Beja	2018	Measurement and Disclosures	n.a.	Shows a balance on the Balance Sheet but does not disclose any notes in the Annex that allow it to be validated.
Castelo Branco	2018 to 2020	Measurement and Disclosures	The entity has an established procedure for the recognition of incomes related to funds received within the scope of financed projects, upon receipt, even if they are multi-annual, their level of execution at the closing date of the annual accounts is not taken into consideration, specifically when the right to receive the funds is obtained. Thus, it is not possible to form conclusions on the balances of the item.	Shows a balance on the Balance Sheet but does not disclose any notes in the Annex that allow it to be validated.
Cávado e do Ave	2020	Measurement and Disclosures	n.a.	Presents a value under this heading in the Balance Sheet, which is different from the value disclosed in the Annex.
Coimbra	2019 and 2020	Measurement	n.a.	Does not present a balance in the Balance Sheet, however, it has amounts recognized in current

Guarda, Santarém and Setúbal	2018 to 2020	Measurement and Disclosures	n.a.	projects, which will become receivable income in the future. Does not present a balance in the Balance Sheet, but it refers to Other accounts in which debts from projects may be received.
Lisboa	2019 and 2020	Measurement and Disclosures	n.a.	Does not present a balance in the Balance Sheet, but it refers to Other accounts in which debts from projects may be received.
Portalegre	2018 to 2020	Recognition, Measurement and Disclosures	n.a.	Does not present any amount in the Balance Sheet nor any notes that allow us to assess compliance of this item. It has a very reduced/limited Annex.
Viseu	2018 to 2020	Measurement	n.a.	Does not present a balance in the Balance Sheet, however, it has amounts recognized in current projects, which will become receivable income in the future.

Legend: n.a. – not applicable

c) Exchange and non-exchange incomes

The descriptive results show that all PPs classify incomes into incomes from exchange and non-exchange transactions. However, in relation to its recognition, a common irregularity identified in various entities is the classification of fees paid by students as incomes from non-exchange transactions, instead of exchange transactions, which goes against point 2.4 of NCP 13 that establishes that fees paid by students must be recognized as income from exchange transactions. Income from exchange transactions must be recognized in the period in which they occur, however, there is no evidence of compliance with this requirement in the Annex of some entities as established in the SNC-AP.

The recognition of incomes from exchange transactions is made against customer, taxpayer, or user (asset) accounts. At each reporting date, PPs must assess the impairment of their assets that are not measured at fair value and, if there is objective evidence of impairment, recognize the investment property in the Income Statement (§ 24 of NCP 18). After analyzing the data, it was noted that all the entities of the sample perform impairment tests and recognize, if necessary, impairment losses.

However, there are entities that fail to establish a basis of measurement that allows for the effective measurement of incomes received from exchange transactions. In addition, the value of incomes from exchange transactions reflected in the Income Statement is not validated by the Annex of certain entities. The following table summarizes the main results of the incomes from exchange transactions.

Table 8. Main results on the incomes from exchange transactions

Entity	Year	Recognition/ Measurement/ Disclosures	Emphases /Qualified audit opinion	Contents of FS
Castelo Branco, Santarém, and Setúbal	2018 to 2020	Measurement	n.a.	Does not indicate the measurement base.
Cávado e do Ave	2019 and 2020	Recognition	n.a.	Fees paid by students classified as income from non-exchange transactions.
Coimbra and Santarém	2019	Measurement and Disclosures	n.a.	The value of incomes reflected in the Statement of Incomes are not validated by the Annex.
Coimbra	2019 and 2020	Recognition	n.a.	There is no evidence that the recognition of incomes occurs in the period to which it relates.
Guarda, Leiria, Porto, Portalegre, and Viana do Castelo	2018 to 2020	Recognition	n.a.	Fees classified as incomes from non-exchange transactions.
Guarda and Lisboa	2018 and 2019	Measurement	n.a.	Does not indicate the measurement criteria.
Lisboa	2018 and 2019	Recognition and Measurement	n.a.	Fees paid by students classified as income from non-exchange transactions.
Lisboa, Viana do Castelo and Viseu	2018 to 2020	Recognition	n.a.	There is no evidence that the recognition of incomes occurs in the period to which it relates.
Porto	2019	Recognition and Measurement	Change in the method of accounting for student debts, specifically those related to fees paid by students, with the outstanding debt related to students enrolled in the 2019/2020 academic year not being reflected; Reinforcement of the impairments of student debts from previous years, reached around 500 thousand euros, ultimately, penalizing the year's result by this amount.	The Annex refers to the change in accounting for student debts related to fees paid by students.

Porto	2020	Recognition and Measurement	The outstanding debt related to students enrolled in the 2019/2020 academic year is not reflected, and the effects on the FS resulting from the lack of accounting for said outstanding debt have not been determined.	The Annex refers to the change in accounting for student debts related to fees.
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Legend: n.a. – not applicable

In turn, the recognition of incomes from non-exchange transactions must be made when the right to receive them is established. With that, some entities do not disclose the moment to which this type of income may be recognized. There are also entities that fail to identify the measurement criteria used in measuring income with non-exchange transactions.

The value of income from non-exchange transactions reflected in the Income Statement is also not validated by the Annex of some entities. The following table presents the main emphases and qualified audit opinion, as well as the results of the content analysis on the FS of this topic:

Table 9 - Main results on non-exchange incomes

Entity	Year	Recognition/ Measurement/ Disclosures	Emphases /Qualified audit opinion	Contents of FS
Castelo Branco	2020	Recognition and Measurement	The entity has an established procedure for the recognition of incomes related to funds received within the scope of financed projects, upon receipt, even if they are multi-annual, their level of execution at the closing date of the annual accounts is not taken into consideration, specifically when the right to receive the funds is obtained. Thus, it is not possible to form conclusions on the balances of non-refundable grants obtained.	The FS do not reflect the recognition of non-exchange transactions when they are obtained.
Coimbra	2019 and 2020	Recognition and Measurement	n.a.	Does not disclose the moment these incomes are recognized; does not refer to measurement criteria.
Coimbra	2019	Measurement	n.a.	Does not present a breakdown of the amounts that contribute to this item.

Lisboa, Viana do Castelo, and Viseu	2018 to 2020	Recognition and Measurement	n.a.	Does not disclose the moment these incomes are recognized.
Lisboa, Portalegre, Santarém, and Viseu	2018 to 2020	Measurement	n.a.	Does not refer to the measurement criteria
Santarém	2018	Recognition	n.a.	Does not disclose the moment these incomes are recognized.
Santarém, and Viseu	2019	Measurement and Disclosures	n.a.	The amount of income reflected in the DR is not validated by the Annex.
Santarém	2020	Recognition	The full income was registered when received and not as a function of the depreciation costs of the respective AFT, or as a function of the costs considered for the purpose of reimbursing the expenses of community projects, contrary to what the NCP 14 establishes.	Note 14 indicates that they are recorded in the period to which they relate.
Tomar	2018 to 2020	Recognition	n.a.	Income is recognized as inflow, that is, upon receipt.
Tomar	2019 and 2020	Measurement and Disclosures	References amounts recognized in other changes in equity related to AFT. In accordance with applicable accounting principles, these grants must be recognized in income in the same proportion as the depreciation of the assets to which they relate. As they originate from previous periods, it was not possible to confirm the assertions in this item.	The amount of income reflected in the Income Statement is not validated by the Annex.

Legend: n.a. – not applicable

d) Accruals and deferrals

The accrual basis is an accountability base in which transactions and other events are recognized when they occur regardless of their payment or receipt. Thus, transactions and other relevant events are recognized in the FS of their respective periods (§6 NCP 1 do SNC-AP). In this section, it was verified whether the values in the Balance Sheet with regards to accruals and deferrals were reflected in the Annex, ultimately, validating those findings. To facilitate data collection, this item was divided into 2 areas: accrued expenses and income, and deferred expenses and incomes.

The results show that most entities either do not disclose the item in the Annex, or the information disclosed remains insufficient to propose conclusions about the calculation of accruals and deferrals. In regard to accrued expenses and income, only 5 entities have notes in the Annex that allow for the conclusion of this topic. All the other entities have failed to provide data in this area in 1 or more years.

Table 10 - Main results on accruals and deferrals

Entity	Year	Recognition/ Measurement/ Disclosures	Emphases /Qualified audit opinion	Contents of FS
Beja and Coimbra	2018 and 2019	Disclosures	n.a.	Does not disclose or the information disclosed in the Annex is not sufficient to form conclusion about the calculation of accruals and deferrals.
Castelo Branco	2020	Recognition and Measurement	The entity has an established procedure for the recognition of income related to funds received within the scope of financed projects, upon receipt, even if they are multi-annual, their level of execution at the closing date of the annual accounts is not taken into consideration, specifically when the right to receive the funds is obtained. The way in which it they been treated does not allow for the calculation of expenses and income in the year to which they relate, as well as the recording of their deferrals or accruals. It is not possible to form conclusions on the balances of income to be recognized from transfers and current grants obtained, specifically those with conditions.	The financial statements do not reflect the recognition of non-exchange earnings. It does not allow the calculation of expenses and income in the year to which they relate, as well as the recording of their deferral or accruals.
Lisboa	2018	Recognition and Measurement	There is not sufficient and appropriate auditing evidence available to allow for the formation of conclusions on the balance of this item, as well as on the recognition of the respective income in the	Does not disclose or the information disclosed in the annex is not sufficient to form conclusion about the calculation of accruals and deferrals.

			current year and in previous years, namely with regard to the respective contracts, detail of the calculation basis, and associated assets.	
Lisboa	2020	Disclosures	n.a.	Does not disclose or the information disclosed in the Annex is not sufficient to form conclusion about the calculation of accruals and deferrals.
Cávado e do Avo, Portalegre, Santarém, Tomar and Viseu	2018 to 2020	Disclosures	n.a.	Does not disclose or the information disclosed in the Annex is not sufficient to form conclusion about the calculation of accruals and deferrals.
Santarém	2020	Disclosures	It adopted procedures so that the deferral of fees paid by students for the 2020/2021 academic year complied with the accounting principle of year specialization. However, a regularization was made in this exercise, leading to an overvaluation of the results. In this way, the balance of the current liability deferrals account for this year is not comparable to the Balance Sheet in 2019.	Does not disclose or the information disclosed in the Annex is not sufficient to form conclusion about the calculation of accruals and deferrals.
Setúbal	2018 to 2020	Disclosures	n.a.	Does not disclose or the information disclosed in the Annex is not sufficient to form conclusion about the calculation of deferrals.

Legend: n.a. – not applicable

e) *Other observations resulting from the analysis of the CLC*

- Regarding budget accounting

The following table shows the non-conformities in budget accounting.

Table 11 - About the budget statements

Entity	Year	About budget statements
Beja	2019	Did not present a Statement on the execution of the multi-annual investment plan.
Cávado e do Ave	2018	Did not present the consolidated statement of rights and obligations by nature.
Coimbra	2019	Did not present information relevant to the previous year (comparative).
Santarém	2020	Did not present a statement of budgetary performance and a consolidated statement of rights and obligations by nature.
Tomar	2019	Did not comply with the Budgetary Balance Law; Due to insufficient funds, invoices in the amount of 313,445.23 euros were not promised or appropriateness; It has not yet fulfilled the principle of the Treasury Unit in the months of February to May, July, November and December.

- Regarding management accounting

The SNC-AP states that the management report must refer to specific information obtained from the management accounting system. However, certain entities do not have a management accounting system, as required in the NCP 27. The disclosure of the consolidated management report was also not made by all entities. The following table presents the nonconformities in management accounting. However, it is expected that all the entities will refer the delay that this branch of accounting has had within the public sector (Carvalho et al., 2012).

Table 12 - About the management report

Entity	Year	About budget statements
Beja	2019 and 2020	Does not have the management accounting system implemented, as required by NCP 27.
Cávado e do Ave and Setúbal	2018 to 2020	Does not have the management accounting system implemented, as required by NCP 27.
Coimbra	2020	The management report does not include the disclosures provided for in NCP 27, and it does not disclose the reasons for this insufficiency.
Guarda	2019	Does not have the management accounting system implemented, as required by NCP 27.
Porto	2020	Does not have the management accounting system implemented, as required by NCP 27.
Santarém	2020	The management report is not prepared in accordance with applicable legal and regulatory requirements, so the auditor cannot comment on the legal compliance and consistency with the FD presented.

In summary, the analysis of the FS and the opinion issued by the auditors in the CLC demonstrate that the entities in this sample generally complied with the requirements demanded by the SNC-AP. However, there remain several elements, such as the more detailed analysis and the elements with the greatest impact of transition, that deserve better clarification and to be registered in favor of greater compliance, and transparency in the rendering of accounting. On the other hand, in 2020, the third year of implementation, there is no significant improvement in the level of compliance, as there are several aspects that the external auditors believe require correction and improvement, specifically the demand to strengthen the role of the Annex to FS, as a key element for the quality of financial information.

4.3 Discussion of the results

In Portugal, there are no previous studies on the compliance of accounting information disclosed according to the SNC-AP, particularly in the context of higher education. This study focused on the compliance of the accounting information disclosed by the PP, who are obliged to apply this regulation since 2018. Within the scope of public accounting reform, the quality and accuracy of the accounting information disclosed by public sector entities remain one of the most important duties of accountability to the various stakeholders. According to Costa (2011, p. 1), "this quality is determined by compliance with the requirements of legislation and accounting standardization...". Thus, this study is focused on understanding whether public entities comply with the new regulations in place, to promote greater transparency and accountability, providing an in-depth analysis of official documents produced by PP.

In many countries, the process of adopting IPSAS is voluntary (Christiaens et al., 2015; Polzer et al., 2021), while in Portugal the implementation of the new accounting model based on IPSAS is mandatory (Gomes et al., 2015, 2021; Jorge et al., 2019; Nogueira et al., 2020). This gives strength to NIS arguments, specifically those regarding coercive isomorphism, as they explain how the reform follows formal aspects to obtain support and external legitimacy (DiMaggio & Powell, 1991), rather than promoting the continuous improvement of the Annex, their respective disclosures, and descriptions of the more quantitative facts registered in the FS.

The analysis of the FS items also concluded that there is general compliance with the formal aspects of presenting the complete set of FS, as well as the classification of assets and incomes. However, there are more specific aspects that have not improved over the years under analysis, justifying the attention given to those sections by professionals and those responsible for the institutions, namely in relation to validations and disclosures included in the Annex of the FS. The Annex of the FS constitutes a more descriptive and explanatory section of the amounts expressed in quantitative terms in the FS, which increases its usefulness for the various stakeholders (IPSASB, 2014). In particular, the results demonstrate a need for improvement in the aspects of validation and disclosure in the Annex of the FS in relation to transfers and grants, accruals and deferrals and recognition and measurement of incomes from the exchange and non-exchange transactions. These issues were also confirmed and validated by the external auditors, in the opinion issued in the CLC. In addition, in 2020, the 3rd year of implementation, most entities presented qualified audit opinions in the CLC, meaning that the auditor issued modified opinions with some frequency. In this same year, only one entity presents a clean CLC. This finding

can be justified by the greater demand of auditors in the 3rd year of transition, as it is expected that the entities are already at a more advanced level of compliance.

In summary, the results show that in the first few years, entities were more concerned with the general compliance of presenting the complete set of DFs, in accordance with NCP-1. But, it is necessary to promote the continuous improvement of the conformity and quality of information, particularly through increasing the attention given to the Annex of the FS. Coercive isomorphism may help explain these results, as the adoption of the new system was imposed by law, leading entities to comply first-hand with the presentation aspects of the FS, which only have moderate changes in internal practices and procedures. On the other hand, continuous improvement was not noted in the period under analysis, as the number of qualified audit opinion expressed by auditors in the CLC in the 3rd year of implementation increased. Therefore, institutional theory, and more specifically the dimensions of coercive isomorphism, can help understand and validate the results obtained.

5 Conclusions

Following the tendency of public accounting reform in more developed countries, Portugal has implemented several reforms that facilitate the qualitative leap in the transition to accrual accounting and the adaptation of national regulations to international standards, through the preparation of content, as well as independent and external audits. Currently, the IPSAS and the ISA are mandatory in the national context, revealing the high formal and legal commitment to international practices. This study sought to determine how the PPs apply the new IPSAS-based accounting system, and their level of compliance in the opinion of the external auditor. In Portugal, there are no previous studies that focus on the analyses of the content of FS produced and disclosed according the SNC-AP, and the respective CLC, for higher education entities, particularly PP, ultimately making this study pioneering and relevant.

With that said, to achieve the defined objectives, this study focused on the content analysis of the FS and CLC of the PP (public entities), more specifically, those required to apply the SNC-AP, for the 3 years the new regulations were applied. The sample is composed of 14 entities (only one PP does not disclose or provide the FS and CLC). The greatest areas of impact in the transition to the SNC-AP were considered in the analysis based on the literature review

The main conclusions indicate the general fulfilment of the formalities involved in the presentation of the FS, as well as the classification, and recognition of assets, income, accruals, and deferrals. With that, there was no continuous improvement noted in the period under analysis, only limitations in the more concrete aspects associated with the disclosures in the Annex to the FS. More specifically, there were issues with the disclosures related to the recognition of transfers and grants, accruals and deferrals, and incomes from exchange and non-exchange transactions. This gap limits the interpretation and usefulness of the information for the various stakeholders, particularly for those with less financial training or skills. On the other hand, in the 3rd year of implementation, there were also no improvements, if we take into consideration the increase in qualified audit opinion issued by the external auditors in the CLC. The external auditors noted gaps in the disclosure of the impacts caused by COVID-19. Recommendations were also issued to all entities of the sample about the need to implement management accounting. After the first 3 years of

implementation, it is expected that the external auditors will increase the level of demand in the verification of the compliance of the rendering of accounts. Thus, this study clarifies and reinforces the elements to which professionals and managers should focus on in the short term to improve the quality of financial information and its compliance with the normative. These results guide the definition of a more assertive and effective training policy, as it aims to increase compliance levels.

The constant delays in the implementation of the SNC-AP (note that it was published in 2015 and only became mandatory for the rendering of accounts in 2018) may have in some extent affected the results obtained in the first year, especially given the uncertainties of its applicability. The COVID-19 pandemic experienced in the last 2 years may have also affected the evolution of the transition process. Coercive isomorphism can help explain these results, as the adoption of the new system was imposed by law, increasing the entities primary concerns with the more formal aspects of the law, ultimately, neglecting the need for a deeper change in internal practices and procedures. With the implementation of management accounting, which remains almost non-existent, this change must necessarily happen. In addition, the complexity of the new IPSAS-based accounting system and the lack of adequate technical and human conditions to implement this reform can motivate the difficulties in this transition process, but they were not explored in this study.

The relevance and contributions made in this study, along with the theoretical contributions to knowledge made in public accounting, and the transition to the IPSAS-based accounting system, have practical implications for the higher education sector and the stakeholders of that sector. The study also provides positive contributions to accounting and public auditing professionals, as it clarifies the areas of less compliance, ultimately, helping identify the areas requiring greater training and attention by the auditors. These contributions also help to define and evaluate public policies that can support HEI to improve their levels of transparency and accountability for their actions. The results obtained also support the development of an adequate structure for the evaluation of transparency and accountability practices in higher education entities.

The main limitations of this study are the difficulties to access data online, both FS and CLC, which limited the analysis and generalization of the results. So, for future research we suggest to extent the sample and period under analysis should be extended, for to improve the validation of results and increase the capacity of result generalization to the higher education systems as a whole, both in national and international contexts. In future research we also suggest that researchers develop a more qualitative study that involves different stakeholders with an interest in the accountability of HEI (CEO, presidents/deans, statutory auditors, court of auditors) and analyse the main advantages and difficulties in this transition process and in the use of financial information for decision making.

Despite the limitations presented, we believe this work adds valuable knowledge to this area, ultimately, allowing us to leverage other studies in the future.

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