Brazilian and International Accounting Standards Applied to the Public Sector and the Challenge of Convergence: a Comparative Analysis - IPSAS and NBCTSP

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Abstract

The aim in this study is to analyze the current stage of conceptual convergence between Brazilian accounting standards applied to the public sector (NBCTSP) and the International Public Sector Accounting Standard (IPSAS). The complexity and range of transactions between public or private sector entities, as a result of market internationalization, demand continuous and dynamic assessment of the events that promote quantitative or qualitative equity changes. For this evaluation process, observing accounting principles and standards is important to guarantee, among other information characteristics, understandability and comparability, thus reducing costs for investors and users

Published in Portuguese, English and Spanish. Original Version in Portuguese.

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in general, in view of the barriers raised by diverse languages, cultures, tax and economic policies. For convergence analysis, the standards' contents were subject to a comparative study, based on a descriptive analysis, with a view to verifying the existing adherence between Brazilian and international standards applied to the public sector. The results found highlight that different aspects still have to be discussed with a view to an actual convergence with the international standards; the current convergence is partial. The high-quality conceptual exposure of the NBCPSPs is observed though, while the contents of the IPSAS are more focused on operating procedures.

Key Words: Convergence; Internationalization; Public Sector.

1. INTRODUCTION

The successful definition of a process for all organizations in one country, and then in different countries, to use a same set of accounting rules, procedures and concepts derives from a broader and more complex phenomenon that combines the development and increasingly easy access to information and communication technologies (ICTs); the growth in international trade; and the impact of the successive confidence crises deriving from managers, boards and auditors' faulty integrity in large public and private organizations..

On the other hand, Accounting, as a social science, works to develop a method to support the application of its technical artifacts, also according to a "universal business language" perspective. The premise, therefore, is that this "language" – Accounting – should be capable of managing, de to its economic event measurement and information standards, a communication context with a local and global range at the same time.

Nevertheless, cultural variables in force among countries, among countries that are members of the same economic block and even among regions in the same country, arouse so-called "linguistic" challenges for Accounting, which has weakened or at least postponed its conceptual and practical universalization intents.

Efforts to universalize accounting standards and concepts continue at an increasingly intense pace though, now in a more systematic framework, which ranges from a standard *adoption* process to *harmonization* and is now pointing towards *convergence* based on international standards.

Brazil is going through this process. In the private sector, the issuing of Laws 11.638/07 and 11.941/09, which altered determinations from the previous Corporate Law 6.404/76 to incorporate accounting procedures and rules of the International Accounting Standards/International Financial Reporting Standards (IAS/IFRS), launched by the International Accounting Standards Board (IASB). And, for the public sector, ongoing work by the Federal Accounting Council (CFC) Advisory Group for the elaboration of Brazilian Technical Accounting Standards Applied to the Public Sector (NBCTSP), culminating in the publication of CFC Resolution 1.111/07, which addresses the application of the Fundamental Accounting Principles for the public sector: and Resolutions 1.128/08 until 1.137/08, totaling ten published technical standards so far. And, in continuing education, also by the CFC, the Public Sector Convergence Workgroup (GTCP), to comply with the convergence agenda until 2012, moving towards the International Public Sector Accounting Standards (IPSAS), published by the International Federation of Accountants (IFAC).

Thus, this papers analyzes the accounting convergence challenge in the Brazilian public sector and interpretation, language and terminology issues, between the international public sector accounting standards produced by IFAS and the current conceptual context of the CFC's Brazilian accounting standards applied to the public sector.

This scenario is observed based on the premise of Accounting as a social science, which therefore elaborates and improves its technical artifacts and concepts, standards and procedures, as a result of a social construction process. Hence, the accounting phenomena that are measured and disclosed translate the collisions deriving from studies that are at the heart of the struggle for the academic and professional assertion of groups, as well as current beliefs, values and political opinions in the economic context, which define the way the distributive conflict resulting from wealth creation, movement and distribution should be arbitrated.

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1.1 Definition of problem and objectives

Efforts to provide Accounting with an unbiased communication standard, so that both the accounting phenomena measurement system and the name or title attributed to each can be readily understandable in any context, go back a long time and continue both actual and necessary. In his book *"Rethinking the Rules of Financial Accounting – Examining the Rules for Proper Reporting"*, Anthony (2003, p. 21) comments:

> In 1998 I made a study of FASB concepts and standards that showed that often there were two names for the same item. For example, operating income was used 356 times and operating profit 146 times. On the other hand, there are no preliminary definitions for each term, so that their understanding can shift from the contexto and be subject to different interpretations.

The development of a sole and common language, to be used as a universal accounting structure, points towards the definition of a taxonomy, structured in a hierarchical system of terms, in the same sense attributed, for example) to the organization adopted in biological sciences, with gender, species, phyla, classes, orders etc. In Accounting, a communication standard is sought to support the intended universal language. As an example, Anthony (2003, p. 23) uses the efforts made to create a conceptual body for global business, based on the adoption of the eXtensible Business Reporting Language (XBRL) standard, which should serve as a computer language standard, influencing corporate systems, file exchanges and the elaboration of financial statements.

Also according to Anthony (2003, p. 22), this panorama should work towards uniformization, also for accounting terms, among the private, non-governmental and governmental activity sectors:

> Recent accounting standard pronouncements for non-governmental (non-for-profit) and governmental sectors use different terms from what is used in the for-profit business environment. That is unnecessary and confusing. The proper terminology in the commercial environment should be used in governmental contexts and in the non-for-profit sector when they indicate similar phenomena.

This process, on the other hand, does not take place immediately. And, at the same time as it seems probably simple to perceive and even wanted, with a view to possible advances for Accounting through the strengthening of communication with stakeholders, this process is essentially complex, multifaceted and polysemic.

In November 2006, for example, the IASB issued a discussion paper called *Fair Value Measurements* to further the discussion and reach an understanding about the fair value contained in the IFRS and in *Statement of Financial Accounting Standard* 157 (SFAS 157), issued by the Financial Accounting Standard Board (FASB), which is an organization in the United States responsible for the US GAAP. In other words, a need for conceptual convergence emerges to explain the same title, fair value, even when addressed in the same English language, by the international (IASB) and the US standard setter (FASB). According to the IASB, fair value means a consensus value in an orderly transaction. According to the FASB, then, fair value is associated with the output or market value concept.

Professor Zeff (2007) discusses that obstacles for the comparability of financial statements between companies from different countries, and also for accounting standard convergence among countries, are cultural and involve interpretation, language and terminology problems, respectively.

In Brasil, in 2008, the CFC issued the Brazilian technical accounting standards applied to the public sector (NBCTSPs), a novel fact ever since the organization of the CFC/CRCs System more than 60 years earlier. At the same time, a timetable was established for the convergence of the NBCTSPs with the IPSAS, so that the country can be listed among those nations moving towards the incorporation of uniform accounting standards for the public sector.

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Considering that a convergence process means taking into account cultural variables that go beyond purely technical accounting issues, this study is based on the following question: *What is the current stage of conceptual convergence between the Brazilian accounting standards applied to the public sector (NBCTSPs) and the IPSAS?*

To drive reflections about this proposed question, the following general and specific objectives are set: verify the current stage of conceptual convergence between NBCTSPs and IPSAS; analyze the adherence of the concepts in the NBCTSPs according to the concepts in the IPSAS; infer on the current convergence state of the NBCTSPs with the international standards for the public sector.

2. THEORETICAL PLATFORM

In view of the complexity and range of transactions between public or private organizations, the continuous and dynamic assessment of the events that promote quantitative or qualitative equity changes remains a challenge. Therefore, procedures need to be oriented by principles and standards, which consist of "...expressions of positive law, which based on the principles establish orders about 'how to do' things, involving technics, procedures, methods, criteria etc., considering substance as well as form aspects..." (CFC, 2008, p. 19, authors' translation).

As a result of the internationalization of markets and diverse range of facts, the need for harmonized standards, evaluation, convergence and accounting procedure reviews becomes fundamental and challenging.

> One relevant aspect is to understand the huge difficulty members of regulatory accounting entities experience. They experience great dualities, including the need to define whether the number of standards should increase, accompanying all new operations companies carry out, or regulation should be based on principles. At the same time, they have to define how to balance the necessary strict posture without totally constraining accounting professionals' ability to picture reality according to the characteristics of the company and the economic transaction made. And, also, how to guarantee the application of economic substance over legal form. (SZUSTER et al., 2005, p.22-23, author's translation**)**

The challenge is to set converging standards in order to guarantee the quality of the information Accounting produces and keep up understandability and comparability standards, reducing the costs associated with this process for investors and users in general, considering the barriers raised by the range of languages, cultures, tax and economic policies for example.

> The growing interdependence in global financial markets demands that all companies working in the same globalized market improve the comparability of their financial information, through the approximation of accounting legislations. (MANZANO, CONESA, 2005, p.104, author's translation)

Therefore, the convergence process of accounting standards with international standards is an effort that involves different countries. In Argentina for example, Manzano and Conesa (2005, p.107) highlight that the movement was divided in two phases:

> In the first work phase, the harmonized Argentinean accounting model was defined, establishing the changes needed to avoid differences from the International Standards, and incorporating themes that were not addressed in the Argentinean standards but were in the international ones (leasing, business combinations, financial instruments, utility per share, segment information, among others). During the second phase, modifications started being made in the Technical Resolutions in force, proposing other new ones.

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The authors also comment on the convergence process in Brazil, Chile and Mexico. Pohlmann (1995, p. 3, authors' translation), however, emphasizes that

> a consensus exists that, to understand any particular accounting system, a country's cultural, social, economic, legal and religious systems should be considered. In developed countries, these factors can be sufficient to permit reasonably consistent classifications over time; but in developing countries, unfortunately, environmental changes can be frequent and dramatic, reducing the significance of any categorization attempt.

The factors discussed in Pohlmann (1995) are relevant but, when one assesses the international crisis, which the USA is still recovering from, focusing on governmental measures, highlighting Brazil's (globally acknowledged) good performance, the argument that developed countries may have solid bases to define consistent systems becomes faulty. The current context is more unstable than it seems, resulting in an even more complex convergence process than in earlier years.

Also, in the treatment of the standard convergence process, investments, international transactions and capital markets are emphasized, focusing on publicly traded companies. There is a lack of bibliographic references about accounting standard convergence in the public sector.

3. METHOD

This study is in line with Popper's methodological view (1975), in that the essence of the scientific method is to establish a systematic approach that serves as a guide to explain a set of phenomena that are categorized as similar.

The deductive method is used, in which the standard set identified as IPSAS and NBCTSPs, available on the respective websites of their issuers, offer the room for analysis that will be used to identify the underlying premises, i.e. the *explicans* Popper (1982) proposed. Based on the identification of the premises, which correspond to the set of concepts in force in the standards, the *explicandum* is deduced, which is the set of concepts one intends to explain, as they are present in the three standardization contexts.

The convergence of each conceptual topic in the NBCTSPs (considering the number mentioned in the body of the standard) with the IPSAS was used to elaborate the comparison. Descriptive statistics was used to quantify how many topics and subtopics were addressed or not in the international public sector standards. This revealed the convergence percentage, presented in Table 2. Only valid conceptual topics in the NBCTSPs were considered, excluding those topics entitled "general determinations", which simply present each standard.

After this convergence assessment, the comparative study reveals those topics that converge between the Brazilian and international standards, and also presents not addressed or diverging facts.

4. COMPARATIVE ANALYSIS – IPSAS AND NBCTSP

A comparative base was used for the convergence analysis, which presents the IPSAS corresponding to the Brazilian NBCTSPs, also including the IAS/IFRS, due to the existing conceptual likelihood between the standards the IASB issued for the private sector and IFAC standards, in this case the IPSAS, for the public sector. The proximity between the conceptual contents of the IAS/IFRS and IPSAS is immediately perceived, suggesting a significant conceptual approximation between the accounting environments that prevail in the private (IAS/IFRS) and public sectors (IPSAS).

Before the CFC had issued the NBCTSPs, this situation placed the private and public accounting contexts in very distinct spheres, to the extent of talking about "two totally different accountings". The launch of the NBCTSPs brings about a conceptual approximation between private and public sector accounting in Brazil, which did not exist in accounting practice earlier. In Figure 1, correspondences between IPSAS/IFAC x IAS-IFRS/IASB x NBCTSPs/CFC standards are displayed.

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IPSAS/IFAC	IAS-IFRS/IASB	NBCTSPs/CFC
IPSAS 1 - Presentation of Financial Statements.	IAS 1 - Presentation of Financial Statements	NBC T 16.1 – Concept, Object and Application Field;
		NBC T 16.6 – Financial Statements
IPSAS 2 - Cash Flow Statements	IAS 7 - Cash Flow Statements	NBC T 16.6 – Financial Statements
IPSAS 3 - Net Surplus or Deficit for the Period - Fundamental Errors and Changing in Accounting Policies	IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors	NBC T 16.4 – Public Sector Transactions (Fundamental Accounting Principles – Accrual Basis)
IPSAS 4 - The Effects of changes in Foreign Exchange Rates	IAS 21 - The Effects of Changes in Foreign Exchange Rates	N/A
IPSAS 5 - Borrowing Costs	IAS 23 - Borrowing Costs	N/A
IPSAS 6 - Consolidated Financial Statements – Accounting for Controlled Entities	IAS 27 - Consolidated and Separate Financial Statements	NBC T 16.7 – Consolidation of Financial Statements
IPSAS 7 - Accounting for Investments in Associates	IAS 28 - Investments in Associates	NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities
		NBC T 16.2 – Equity and Financial Systems
IPSAS 8 - Financial Reporting of Interests in Joint Ventures	IAS 31 - Interests in Joint Ventures	NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities (Permanent Investments – interests in companies and in public or public-private consortia)
IPSAS 9 - Revenue from Exchange Transactions	IAS 18 - Revenue	Resolution 1.111/07 CFC – Fundamental Accounting Principles –Accrual Basis Decree 3 STN/MPOG – Revenues from a Budget and Equity focus.
		NBC T 16.6 – Financial Statements – Economic Income Statement (Opportunity Cost)
IPSAS 10 - Financial Reporting in Hyperinflationary Economies	IAS 29 - Financial Reporting in Hyperinflationary Economies	Resolution 1.111/07 – PFCs – Inflation Accounting
IPSAS 11 - Construction Contracts	IAS 11 - Construction Contracts	N/A
IPSAS 12 - Inventories	IAS 2 - Inventories	NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities
IPSAS 13 – Leases	IAS 17 – Leases	N/A
IPSAS 14 - Events after the Reporting Date	IAS 10 - Events after the Balance Sheet Date	N/A
IPSAS 15 - Financial Instruments: Disclosure and Presentation	IAS 32 - Financial Instruments: Disclosure and Presentation	N/A
IPSAS 16 - Investment Property	IAS 40 - Investment Property	N/A
IPSAS 17 - Property, Plant and Equipment	IAS 16 - Property, Plant and Equipment	NBC T 16.2 – Equity and Accounting Systems
		NBC T 16.5 – Accounting Records
		NBC T 16.9 – Depreciation, Amortization and Depletion

IPSAS 18 - Segment Reporting	IAS 14 - Segment Reporting	NBC T 16.1 – Concept, Object and Application Field
		(Accounting Unit)
IPSAS 19 - Provisions, Contingent Liabilities, Contingent Assets	IAS 37 - Provisions, Contingent Liabilities and Contingent Assets	NBC T 16.8 – Internal Control
		NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities
IPSAS 20 - Related Party Disclosures	IAS 24 - Related Party Disclosures	N/A
IPSAS 21 - Impairment of Non-cash-generating Assets	IAS 36 - Impairment of Assets	NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities
IPSAS 22 - Disclosure of Financial Information About the General Government Sector	N/A	N/A
IPSAS 23 - Revenue from Non-Exchange Transactions (Taxes and Transfers)		Resolution 1.111/07 – Fundamental Accounting Principles – Accrual Basis of Accounting.
		Economic Income Statement (Opportunity Cost)
IPSAS 24 - Presentation of Budget Information in Financial Statements		NBC T 16.3 – Planning and Instruments from an Accounting Focus
IPSAS 25 - Employee Benefits		N/A
IPSAS 26 - Impairment of Cash-Generating Assets		NBC T 16.10 – Valuation and Measurement of Assets and Liabilities in Public Sector Entities

Figure 1: IPSAS x IAS/IFRS x NBCASPs Convergence
Source: Elaborated by the Authors

The convergence level presented by the NBCTSPs, based on the list presented in Figure 1 and on the analysis of each conceptual topic is presented in Figure 2:

NBCTSPs	Conceptual topics	total validated topics (a)	topics addressed by corresponding IPSAS (b)	convergence percentage (b/a) x 100
nBCT 16.1	2 to 10	9	4.29	47.67%
NBCT 16.2	2 to 13	12	6.5	54.17%
NBCT 16.3	2 to 6	5	3.67	73.40%
NBCT 16.4	2 to 11	10	1	10.00%
NBCT 16.5	2 to 25	24	0	0.00%
NBCT 16.6	2 to 41	40	27.7	69.25%
NBCT 16.7	2 to 8	7	5	71.43%
NBCT 16.8	2 to 12	11	1	9.09%
NBCT 16.9	2 to 16	15	7.63	50.87%
NBCT 16.10	2, 4 to 40	38	15.5	40.79%

Figure 2: Conceptual convergence percentage NBCTSPs/IPSAS
Source: elaborated by the authors

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- Conceptually compared with IPSAS 1 and 18, NBC T 16.1 presents the concepts, object and application field of the Brazilian Accounting Standards Applied to the Public Sector. The following aspects of this standard converge:
- Information characteristics, especially considering understandability, utility and the concept of social control-related resource control (IPSAS 1 and 18).
- In the concept of standards and techniques applied to the segment (IPSAS 1).
- In the definition of the application field, of the entities covered and of the standards' application level – complete or partial application (IPSAS 1 and 18).
- In the accounting unit concept and its reflection on information verification, control and consolidation (IPSAS 1 and 18).

The analysis of IPSAS 1 and 18 reveals that the Public Equity, Public Sector, Public Accounting, Public Resource and Social Promotion Action concepts are not found or not detailed didactically like in NBCT 16.1. On average, these concepts correspond to 52% of the topics presented in the standard.

Conceptually compared with IPSAS 7, NBC T 16.2 discusses Equity and Accounting Systems. The following aspects of this standard converge:
- Considering the concept of current, non-current, convertibility, enforceability and accounting unit, the latter repetitive, as NBC T 16.1 also presents this definition.
- Considering the public equity classification: Assets, Liabilities and Net Equity, as well as the concepts associated with each.
- Considering the characteristics of current assets: immediate realization, until the end of the subsequent period. Also considering other assets, classified in the non-current group, when their characteristics do not fit into the above.
- Considering the classification of current and non-current liabilities, according to the due date.

The international standard does not define and/or address the concepts linked with the remaining topics: Public Equity (repetitive concept, also cited in NBCT 16.1). No reference is made to the classification of liabilities when the entity plays the role of "bona-fide depositary" of values and/or retentions from third parties; no reference is made to the accounting system concept; and the conceptual definition and integration of subsystems, like the budget, financial, equity, cost and compensation systems are not clear, which are well defined in NBCT 16.2

Conceptually compared with IPSAS 24, NBC T 16.3 presents concepts associated with planning and its instruments from an accounting focus. The following aspects of this standard converge:
- Performance assessment and planning of public sector entities.
- Comparative assessment of programmed and realized targets, with differences appointed in notes to the financial statements or complementary statements.
- Quantitative and qualitative information disclosure for decision-making (contents, execution, implementation, evaluation).
- Information to be detailed, including targets, actions, amounts, years.

The Brazilian standard underlines the importance of adopting "hierarchically interconnected plans", which consist in the definition of strategic and operational planning phases (programs and actions), besides the evaluation of constraints in the development of these phases, as well as the obtained results (impact). The international standard does not highlight this logic when defining planning.

Conceptually compared with IPSAS 9, NBC T 16.4 presents concepts on public sector transactions. The following aspects of this standard converge:
- The concept of public sector transactions, the evaluation of events that promote qualitative and quantitative equity changes, guided by accounting principles and standards.

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The international standard does not mention the classification of public sector transactions into economic-financial and administrative. The concept of equity variations and transactions involving values from third parties is not addressed systematically like in the NBCTSP.

Conceptually compared with IPSAS 17, NBC T 16.5 presents the concepts associated with accounting records. As presented, the contents of this standard, its classification and nature do not converge with the respective international standard.

Conceptually compared with IPSAS 1, 2, 18 and 19, NBC T 16.6 presents contents about Financial Statements. The standard is repetitive though with regard to current, non-current, convertibility, enforceability and accounting unit concepts (also presented in NBCT 16.2). The following aspects of this standard converge:

- Concept of current and non-current; financial statement as technique; generic designations; simplified versions of statements; asset convertibility; enforceability of obligations; clarifications about direct and indirect cash flow methods.
- Definition of financial statements: Balance Sheet, Cash Flow Statement.
- Disclosure in attached statements and notes to the financial statements.
- Information for registration taken from evidential documents.
- Identification of the entity, responsible authority and the accountant who elaborated and issued the statements.
- Inclusion of values from earlier years for the sake of comparability.
- Grouping of some information, with low balances but similar, in generic accounts (materiality).
- Balances in thousands or millions for the sake of publication.
- Rectifying accounts, reductive of the original group.
- Balance Sheet: concept of asset, liability, net equity and compensation accounts.
- Separation between Net Equity results and accumulated results of earlier periods.
- Presentation of current and non-current classification.
- Concept of current and non-current.
- Order of enforceability and convertibility.
- Cash flow statement (concept, direct and indirect method, classification in cash from operations, investments and funding.
- Notes to financial statements: applications concept.

The following aspects of this Brazilian standard do not converge with the international standards mentioned earlier:

- No clear definition is provided about the budget balance, financial balance, statements of equity variations and economic income statement, although orientations can be found about procedures that are prerequisites for their elaboration, the concept of revenues and expenses exists and its classification in terms of nature and function, estimates and realization. No reference is made to quantitative and qualitative variations, nor to the concepts of economic revenue and opportunity cost.
- No indications were found about the place where financial statements are to be published or disclosed (official press, electronic means, means to get access to and inform about the dates when this information is made available to the public/society, forwarding to internal and external control entities). Although the emphasis is on information disclosure and transparency, no direct indication is given as to what means to use.

Conceptually compared with IPSAS 6, 7 and 27, NBC T 16.7 presents concepts and orientations about Financial Statement Consolidation. The following aspects of this standard converge:

- The consolidation concept of financial statements and the relation of dependence between public sector entities: Budgetary and Regimental, as well as the consolidated accounting unit concept.

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- The standard converges with regard to consolidation procedures: evaluation of the dependence relation, of all transactions involving entities, as well as the mutual exclusion of transaction effects.
- Survey of statements on the same date, with an acceptable lag of up to three months, whose effects should be disclosed in notes to the financial statements.
- Additional information to be mentioned in notes to the financial statements: identification and characteristics of entities that participate in the process, procedures performed, reasons to adopt non-uniform criteria, nature and amount of adjustments, events subsequent to the closure.

The international standards do not emphasize the adoption of auxiliary documents to register the organizations' consolidation procedures.

Conceptually compared with IPSAS 19, NBC T 16.8 presents concepts associated with internal control. The following aspects of this standard converge:
- Concept of risks and unpredictable facts that can affect financial information quality.

No reference is made in the international standard to the internal control concept, its application at different organizational levels; the classification between operational, accounting and normative; nor to risk mapping, risk assessment and prevention, detection and monitoring procedures with the help of an information system.

Conceptually compared with IPSAS 17 and 26, NBC T 16.9 presents Depreciation, Amortization and Depletion concepts. The following aspects of this standard converge:
- Depreciation and amortization concept; definition of depreciable value, residual value and economic useful life.
- Orientation to periodically review the asset's residual value and useful life.
- Disclosure of depreciation, amortization until the moment when the net value of the good equal its residual value, and this disclosure should start when the good is in normal conditions of use.
- Definition of factors to estimate the useful life of an asset: future benefits, physical depletion, technological obsolescence, legal or contractual usage limits.
- The determination methods need to be compatible with the useful life and applied uniformly.
- Orientation to calculate real estate depreciation based on the construction cost minus the value of the land.
- Disclosure in notes to the financial statements: method used, useful life, gross book value accompanied by depreciation, amortization, accumulated at the start and end of the year; and changes made to any earlier information.

Divergences are associated with the absence of the concept associated with the term depletion, definition of gross book value and net book value from the contents of the compared international standards. Aspects associated with depreciation, amortization and depletion and the indication of disclosure in income accounts are not mentioned in the compared IPSAS either. Other aspects not addressed in the IPSAS are:
- the fact that assets that become obsolete or temporarily inactive are still depreciated or amortized, as the case may be;
- definition of useful life through a technical report;
- in case of revaluation of goods, depreciation, amortization or depletion calculations should be based on the new value;
- indication of some specific assets that are not depreciable, like animals for exhibition and preservation;
- depreciation calculation methods: sum of digits and produced units method;

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Conceptually compared with IPSAS 7, 8, 12, 17, 19, 21 and 26, NBC T 16.10, presents asset and liability valuation and measurement concepts in public sector organizations. The following aspects of this standard converge:

- Definition of significant influence.
- Revaluation concept.
- Concept of reduction to recoverable value.
- Fair value concept.
- Net realizable value concept.
- Recoverable value concept.
- Orientations about disclosure of risks associated with not receiving debts.
- Orientations about valuation of preset rights and obligations, adjusted at their present value.
- Reserves to be estimated based on probable realization values for assets and disclosure values for liabilities.
- Valuation of inventories, registered at their purchase, production or construction value.
- Classification of distribution, administration and financial spending, considered as expenses in the period they occur in.
- Orientations that when the purchase, production or construction value is lower than the fair value, the latter should be adopted.
- Any differences observed in inventories (adjusted in the valuation) should be reflected in income accounts.
- Adoption of the equity accounting method in case of significant influence in a company's administration, as opposed to adopting the cost method. All adjustments in these transactions should be made in income accounts.
- Fixed assets should be valued at the purchase, production or construction value, including additional spending.
- If the fixed asset has a limited economic useful life, depreciation and amortization calculations should reflect this condition.
- Any spending after the purchase or registration of the asset should be incorporated into its value only when the fact generates future benefits; otherwise it should be classified as expense in the period during which the spending occurred.
- Revaluation or impairment only related to the adoption of fair value or market value at the end date of the balance sheet. Adjustments deriving from these revaluations should be disclosed in income accounts.

The following contents of the Brazilian standard are not addressed or do not converge with the corres ponding international statements:

- equity valuation, measurement, revaluation value, purchase value, gross book value, net book value concepts;
- evaluation of supplies at their original value. When evaluated in foreign currencies, these values should be converted at the exchange rate applicable on the balance sheet date;
- financial applications with immediate liquidity accounted for at their original value, updated to the balance sheet date, and results of this update should be registered in the income statement;
- valuation of rights and obligations at their original value. When valued in foreign currency, they should be converted at the exchange rate applied on the balance sheet date; when post-fixed, should be adjusted by applying the charges due until the balance sheet date, with proper accounting treatment of the results in the income statement;
- the Brazilian standard defined the weighted mean cost to measure and value outflows for inventories. IPSAS 12 sets conditions to adopt the following three methods: Specific Price, Mean Cost and FIFO (*first in first out*).

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- the Brazilian standard establishes that inventories should be valued at their market value in case of partial physical deterioration, obsolescence or analogue factors, while IPSAS 12 recommends valuation at the net realizable value;
- the Brazilian standard defines the valuation criterion at the net realizable value for waste and residues (inventories), while IPSAS 12 determines that registration is due in current expenses, without inclusion in production costs;
- definition of market value for inventories of animals and agricultural products in case of primary activities and activities whose production costs are difficult to measure. IPSAS 12 refers to valuation at the net realizable value when the sale is guaranteed;
- definition of purchase or production value for intangible assets, "rights on intangible assets". IPSAS 26 refers to valuation at fair value;
- concepts not addressed in the evaluated IPSAS:
  - Valuation of fixed assets: obtained through donation, transfer of these assets, common goods that absorb or absorbed public resources.
  - Intangible assets: valuation criteria when obtained for free, evaluation of spending or results obtained after their purchase or registration.
  - Deferred assets: valuation criteria or pre-operational expenses or restructuration expenses.
  - Revaluation and recoverable value: definitions about the impossibility to measure at market value, estimation of fair value (for specific fixed assets) based on the replacement value, establishment of asset replacement value based on purchase or construction price of a very close or similar good.

5. CONCLUSION

The analysis of the conceptual convergence phase between Brazilian accounting standards applied to the public sector (NBCTSPs) and the IPSAS demonstrated that, in order of convergence, the topics related to NBC T 16.3 – planning and instruments from an accounting focus – and NBC T 16.7 – financial statement consolidation – were the standards that most converged with the IPSAS, with adherence percentages of 73.40% and 71.43%, respectively. The following standards showed adherence percentages inferior to 10% of their conceptual base: NBC T 16.4 – public sector transactions, NBC T 16.5 – accounting records and NBC T 16.8 – internal control. It can be inferred that, in their conceptual frameworks, the standards that most converged contain concepts that are more linked with the current global reality with regard to planning and the financial statement consolidation process. What public sector transactions, accounting records and internal control are concerned, particular characteristics (culture, regulation, economy) are predominant, which could justify the small convergence percentage. In the comparison, it was identified that IPSAS are more directed at "how to" orientations, while conceptual, argumentative presentations predominate in the Brazilian standards. Constant divergences are found in terms of asset valuation, mainly in the adoption of fair value, market value or net realizable value, deriving from distinguishing accounting practices. On the opposite, Brazilian practice is much more coherent in the classification of budget, financial, equity systems and in the definition of specific statements for each system, resulting in effective accountability.

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