The Impact of Different Determination of Intangible Fixed Assets in Accordance with CAS and IPSAS on Financial Statements

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Abstract:

The paper deals with the determination of intangible assets of Czech public sector. On 15 January 2013, the International Public Sector Accounting Standards Board issued new standard IPSAS 31 - Intangible assets. This standard represents a very sophisticated construction of accounting axioms moving public sector much closer to the private sector. The aim of this paper is to identify and make subsequent comparison of methodological elements in the context of intangible assets according to CAS and IPSAS 31. Moreover the paper tries to show the share of intangible fixed assets to the total assets throughout every type of organization of public sector like regions, municipalities, government departments etc. to assess subsequently the extent of possible impacts on financial situation in case of transition of financial reporting to IPSAS.

Key words: IPSAS; CAS; Intangible fixed assets.

JEL classification: M41, C10, H50.

1 Introduction

The convergence process of public sector financial reporting influences many countries including the Czech Republic. The high level of professionalism and transparency should be guaranteed within the convergence of particular national accounting standards in public sector. Both of these fundamental characteristics are met by International Public Sector Accounting Standards (hereinafter referred to as "standards" or "IPSAS"). These standards as a whole are based on International Financial Reporting Standards (IFRS) that serve as a useful information basis in many countries during the current change of view on public sector accounting. In this respect there is a question to what extent it is necessary to change the way of definition of assets, liabilities and equity. At present the identification and measurement of intangible fixed assets is one of the most

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mentioned area because the phenomenon of ICT expansion has been still increasing. In respect of this fact, in January 2010 the International Public Sector Accounting Standards Board (also IPSASB) released new standard IPSAS 31 - Intangible assets based on IAS 38 with the same name and SIC 32 - Web Site Costs. This standard provides comprehensive accounting view of the very specific attributes of the components of intangible assets, which is neglected very often in national legislation of individual countries. Furthermore, taking into account the fact that non-current assets represent a major share of total assets of all public sector bodies, it can be said that the way used for reporting of those assets represents the significant level of correspondence of national accounting legislative in relation to a uniform methodology contained in the standards.

The goal of the paper is to point out possible impact on financial situation of public sector entities in the area of intangible fixed assets with the potential transition of financial reporting from Czech accounting standards (CAS) to IPSAS. First of all it is necessary to make the qualitative analysis to fulfil the goal mentioned. Thus the research is based on analysing the differences in accounting concepts, accounting treatments and disclosures of intangible assets in the financial statements in accordance with standards and CAS. The research is mainly based on comparison of valid relevant parts of CAS and IPSAS 31. Subsequently the paper shows the summary financial data (of intangible assets) divided into the groups comprising the single types of public sector entities like government departments, municipalities, regions, etc. to understand how large the potential impact caused by the transition would have been.

2 Literature Review

Our comparative analysis is based on numerous publications and literature that have been written in this area. It was published the study focused on the identification and subsequent classification of intangible assets of local municipalities in Spain (Cinca et al., 2003). They focused mainly on selected attributes of intangible assets such as separability, and determination of their useful life. The authors also looked at the different measurement approaches relating to the different classification of assets. The empirical research was made dealing with the information power of financial statements for public sector entities in Romania (Calu et al., 2008). The research included a number of hypotheses that are applicable for states such as the Czech Republic where the budgetary view prevailed over the accrual accounting for a long time. Their research also contained the comparison between IPSAS and Romanian accounting rules. They concluded within this comparison that the Romanian accounting rules have very tight bond with the budgetary needs of the state to be able to correspond with the general approach contained in IPSAS. The authors also mention that the

intangible assets in the Romanian environment are not reported according to their substantive nature but according to the formal requirements arising from the inconsistent approach of the statutory rules. It was published an article (Lutilsky and Percevic, 2011) focusing on aspects of asset measurement through the concept of fair value illustrated by specific examples of the Croatian public sector. The authors of the article also dealt with the impairment rules required by IPSAS and its potential use in Croatian conditions. Within the measurement based on the fair value they concluded that it is always more reliable and for external users more comprehensible if the valuation model is based on comparable market prices instead of discounted cash flows. It was introduced comprehensive study focused on the specifics of intangible assets in relation to the reporting of lower level of municipalities in Romania (Bunget et al, 2014). From a substantive point of view they were critical to particular valuation techniques based on replacement costs as too subjective measurement basis. In the case of intangible assets internally generated on the contrary the cost model was positively assessed because of used calculation approach. It was made a research on the consolidated financial statements of the state according to IPSAS (Matis and Cirstea, 2015). From the aspect of fixed assets they accentuated the general attributes of fixed assets which must always be met, and also stated illustrative examples illustrating the importance of distinguishing expenses and capitalization of fixed assets.

3 Data and Methodology

The following text provides the comparative analysis of intangible assets in accordance with IPSAS 31 and CAS. This analysis is constructed as summary table bringing the main concepts and requirements that are compared between two analysed accounting frameworks. Besides, this paper aims to find answers to several practical questions:

- Where can the biggest differences between the concept of CAS and the general approach of IPSAS be found?
- Would it be appropriate to define intangible assets in accordance with IPSAS without the specifics of Czech environment in the Czech Republic?
- What item of intangible assets in balance sheets prevails among the Czech public sector entities?
- Is there a stable ratio of intangible assets to total assets of public sector entities or research institutes and similar bodies have significantly higher proportion of intangible assets?
- Under what conditions can the CAS capitalize the expenditure for intangible assets instead of expensing this expenditure?

This information included in five questions above was gained from two main sources, the first, from the text of IPSAS 31 and relevant texts of CAS, and the second, the financial information from public database (www.monitor.statnipokladna.cz). This database was released by the Ministry of Finance of the Czech Republic in 2013 allowing free entry to budget and accounting information from all levels of state administration and autonomy. This is required by the § 21 of the Act no. 563/1991, Coll. on Accounting.

4 The Differential Analysis of IPSAS 31 and CAS

Within the Czech approach it is essential to distinguish three basic groups of intangible assets - intangible results of research and development, software and valuable rights with a useful life longer than one year. The most important characteristics for the first two groups is that they must be acquired for trading or be acquired from other entities. The database internally generated are very common example for illustrating. If they are not created for the purpose of trading, the relevant costs are recognized as operating expenses. The capitalization of those costs is not permitted. The second group - intangible results of research and development - can contain many different assets such as feasibility studies, conference papers or a new production process or technology. It is important to take into account (i) the economic benefits to the entity of the intangible assets, (ii) the period for which the economic benefit is likely to flow, (iii) identifiability, (iv) separability of asset from other assets, and (v) reliability of measurement in monetary units. On the other hand the IPSAS do not consider research results as intangible asset, only the development phase is recognized as intangible asset. In the case of software it is essential whether the separate economic benefit is identified or whether it is part of tangible fixed assets that is necessary for proper working of that asset. Another problem is the existence of different types of licenses. It is possible to use the general rules of IPSAS to identify separate asset that brings economic benefits or service potential to the entity. From the perspective of registration it is interesting to distinguish two types of license – "per user" and "per device" type. It is obvious at first sight the limitations on the benefits of both types of licenses for the purpose of allocation of costs. There is currently very hot topic pre-emptive rights for newer versions or patches related to their recognition as a separate asset bringing the benefits to the entity. The next very often discussed area is impairment of outdated software or weakening its security because of non-availability of required patches. It can also be made impairment for newly acquired assets that have not been put into use, but no longer meet the specifications assumed by the entity in accordance with CAS. The basic attribute of valuable rights with a useful life longer than one year is that it is an exclusive intellectual property rights such as copyright, trademarks, industrial

designs or patents. These assets are protected by authorship which is transferable and the entity has or may have economic benefits in the future. From the perspective of CAS there is a group of intangible assets similar to the previous three groups of intangible assets which substantially meets the definition of their substance, but the book value does not exceed CZK 60,000 and it is not less than 7,000 CZK. The last group of intangible assets in accordance with CAS is "Other intangible assets" which includes assets with different characteristics than the previous three groups. The peculiarity of this type of asset is the recognition as a long-term assets, although the condition of sufficient level of value is not met as with other types, only factual difference and character traits of fixed assets is sufficient. In practice, it is mostly about the independent technical evaluation (e.g. Of small long-term assets that is not reclassified subsequently as fixed assets with a higher threshold value), or secret information hidden before users of financial statements in the aggregate amount of remaining assets (e.g. the financial statements of military and civilian intelligence agencies and secret services, where is applied the interest of national security not to see the assets of this nature in detail). In terms of identification and factual characteristics filmed movie spot is an interesting example which is possible with regard to certain conditions to consider as an intangible results of research and development (for example, a video containing the technological process with a detailed description of partial works), with regard to other conditions as royalties with the useful life longer than one year (for example instructional video) or even for other intangible assets (e.g. advertising spot). Another such asset is the feasibility study if it is used for one-time decision, it will be a common expense and not an acquisition of fixed assets, if used, and will potentially be used for future decisions repeatedly, then it will be a separate intangible assets. If the example has already use for the purpose of the acquisition of other fixed asset, this study will be identified as the element of costs. Leaving aside the highly unsystematic approach to the definition of intangible assets from the perspective of CAS, the biggest differences between the CAS and the general approach of IPSAS can be found on the side of depreciation or impairment testing, which is recognized only for assets held for sale. The regime of "assets held for sale" implicitly works with all facts influencing the current value of the asset due to its likely sales. In practice, if intangible assets resides a long time (over one accounting period) in an account designated for, then it is very probable that the amount based on external information was adjusted more than once. When relatively new fixed asset is being sold there is a relatively common phenomenon that the initial fair value increases the value of the asset over its book value after amortization. Amortization is an area that is often neglected and where amortization policy is set on the basis of formally specified periods listed under CAS in many cases. One of the most common sources used for determination of the useful life is represented by Czech Accounting Standard

no. 708 - Depreciation of fixed assets where is, for example, stated that the standard useful life of audiovisual works, software and related assets of is three years, the standard useful life for intangible results of research and development, licenses and similar rights is 8 years old and standard useful life of studies, plans, analyses and plans is 30 years. It is necessary to emphasize that the useful life according to CAS is estimated under the amortization plan, which should be constant, but the entity will reassess it when the asset's useful life comes to its end. The reason is that the asset permanently and properly used must never get to zero book net value. In practice it can happen the amortization expenses of that asset are represented by Heller values annually decreasing the residual value, which itself had no further economic justification. Another area where the CAS might inspire from IPSAS is the de-assembling of components within the group of fixed assets, where the Czech conception does not apply the impairment testing of the original group of assets which obviously lost its overall economic potential for entity during the de-assembling. One of the illustrating example is the removal of the software due to sub-license expiration.

The table below provides a summary of main requirements and definitions included in IPSAS 31 in comparison with CAS. It tries to find the similar characteristics (if any) in both accounting frameworks to provide much better view of similarities or dissimilarities.

Tab. 1 Conceptual differences between IPSAS 31 and CAS

Analysed area	**IPSAS 31**	**CAS**	**Level of correspondence**
Name	Intangible assets	Intangible fixed assets	partial
Definition criteria	identifiable non-monetary asset without physical substance; the term "identifiable" means that: (1) asset is separable (i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented, or exchanged, and (2) asset arises from binding arrangements	general definition does not exist, only the list of concrete individual items, i.e. intangible results of research and development, software, databases and royalties, the useful life must be longer than a year and its value higher than 60.000 CZK	partial
Recognition criteria	(a) it is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the entity; and (b) the cost or fair value of the asset can be measured reliably	there is no similar criteria in CAS explicitly	partial

Analysed area	IPSAS 31	CAS	Level of correspondence
Recognition of an item as intangible asset	both of criteria defined above (definition and recognition) must be met	not explicitly	partial
Intangible heritage assets	the recognition is not required but it must be applied the disclosure requirement (and measurement requirements optionally)	the term "intangible heritage assets" is not defined; CAS mention some exhaustive list of "valuable" (tangible) things (i.e. cultural sights) for the purpose of setting the measurement rules	no correspondence
Research	original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding	CAS do not contain the definition of "research" despite of using this term. It is defined by another legislation.	no correspondence
Development	Application of research findings or other knowledge to a plan or design for the production of new substantially improved materials, devices etc. Before the start of commercial production or use	The same as "research" line above	no correspondence
Initial measurement	Cost or fair value (where a non-exchange transaction occurred)	cost model	partial
Elements of cost	Purchase price + directly attributable costs of preparing the asset for its intended use	price of acquired assets including the directly attributable costs	partial
Subsequent measurement	Initial measurement after deduction of accumulated depreciation and impairment (impairment is not relevant for revaluation model); if the revaluation model cannot be applied no longer because of no active market the subsequent accumulated amortization and impairment losses must be used	CAS strictly keep the concept of historical costs.	partial

Analysed area	**IPSAS 31**	**CAS**	**Level of correspondence**
Subsequent measurement (revaluation model)	Choice of revaluation model is correlative of reliable fair value measurement. Then, the carrying amount of this asset is measured as fair value less any subsequent accumulated depreciation and subsequent accumulated impairment losses. If the carrying amount of a class of assets is increased as a result of a revaluation, the increase shall be credited directly to revaluation surplus. However, the increase shall be recognized in surplus or deficit to the extent that it reverses a revaluation decrease of the same class of assets previously recognized in surplus or deficit. If the carrying amount of a class of assets is decreased as a result of a revaluation, the decrease shall be recognized in surplus or deficit. However, the decrease shall be debited directly to revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that class of assets. If the revaluation method is chosen, it must be used for a whole class of intangible assets. Moreover this model has to be applied at regular intervals for the ensuring the adequate revaluated carrying amount significantly not diverged from the current fair value.	Irrelevant	no correspondence
Research phase	expenditure on research shall be recognized as an expense	the capitalization of research phase is permitted; it depends on the decision of the entity (see more detailed information in the next row)	no correspondence

Analysed area	IPSAS 31	CAS	Level of correspondence
Development phase	An intangible asset shall be recognized only if the entity can demonstrate all of the following: (a) the technical feasibility of completing the intangible asset exists so it will be available for use of sale; (b) the intention to complete the intangible asset and use or sell it; (c) ability to use or sell the intangible asset; (d) the usefulness of the intangible asset (i.e. the existence of a market for the output of the intangible asset); (e) the availability of adequate technical, financial and other resources to complete the development; (f) ability to measure reliably the expenditure attributable to the intangible asset during its development	CAS require the recognition of development phase as an intangible asset; the recognition as an asset is possible only if the results of R&D and internally generated SW are intended for sale to other parties.	partial
Residual value	the residual value of an intangible asset with a finite useful life shall be assumed to be zero unless: (a) there is a commitment by a third party to acquire the asset at the end of its useful life; or (b) residual value can be (or will be probably at the end of useful life) determined by a market	provable positive estimated amount which could be acquired at expected date of disposal	absolute
Useful life	entity shall assess whether the useful life is finite or indefinite and if finite, the length of that useful life or number of production	undefined explicitly; the term used indirectly only	partial
Derecogni-tion	An intangible asset shall be derecognized: (a) on disposal, (b) When no future economic benefits or service potential is expected from its use or disposal. The gain or loss arising from the derecognition of an intangible asset shall be included in surplus or deficit when the item is derecognized.	The derecognition of fixed assets is not defined precisely. Czech accounting norms characterize the various possibility of disposal by exhaustive way only. Potential economic benefit from disposal is recognized as revenue, and the related expense is reported separately (it follows that no gain or loss from disposal of fixed assets is reported).	partial

Analysed area	IPSAS 31	CAS	Level of correspondence
The extent and structure of presented financial information in financial statements	The following financial information must be presented for each class of intangible assets: (a) whether the useful lives are indefinite or finite and if finite, the amortization rates used (b), used amortization methods, (c) the gross carrying amount and any accumulated amortization at the beginning and end of the period, (d) the line item(s) of the statement of financial performance in which any amortization of intangible assets is included, (e) reconciliation of the carrying amount at the beginning and the end of period showing additions indicating the internal development and external acquisition separately, assets classified as held for sale, increasing and decreasing from revaluations, impairment losses recognized/reversed in surplus or deficit during the period, any amortization, etc.	The notes to financial statements shall contain more detailed information explaining the financial information in financial statements. The notes must provide the information relating to revaluation of fixed assets held for sale or about the received transfers for acquisition of fixed assets. The CAS talk indirectly about other disclosure requirements (such as accounting methods used etc.)	partial
Other disclosures	entity shall disclose the aggregate amount of research and development expenditure recognized as an expense during the period	Irrelevant	no correspondence
	the intangible assets measured by revaluation model have specific disclosure requirements, i.e. the effective date of revaluation, the carrying amount, the amount of the revaluation surplus, the methods applied in estimating fair values etc.	Irrelevant	no correspondence

Source: Authorial computation.

It can be seen from the table above that many characteristics in IPSAS 31 and CAS have no correspondence or just a partial correspondence. It can be explained by the fact that intangible assets characterize the specific and sophisticated area of accounting framework that needs to set relatively strict rules. Unfortunately, CAS have insufficient requirements that hardly copy the scope of IPSAS requirements. Now it is appropriate to show how large is the extent of intangible assets in financial statements of Czech public sector entities and show what trend in time is linked to.

Tab. 2 Intangible assets and their share of total assets in 2015

Types of public sector entities in the Czech Republic	BS items for the year 2015 (in mil CZK)				IAs/Total assets (in %)
	Total assets	Intangible assets (IAs)	IAs held for sale	Fixed assets	
Voluntary associations of municipalities	55 111	145	0	46 963	0,3
Regions	128 434	1 193	0	85 789	0,9
Municipalities	1 619 896	6 432	11	1 431 055	0,4
Government departments	1 317 881	13 899	0	674 260	1,1
Allowance organizations	1 012 137	1 686	0	924 505	0,2
Regional councils of the cohesion region	8 292	20	0	148	0,2
State funds	48 448	339	0	14 855	0,7
Others	111 006	267	0	88 661	0,2
TOTAL	**4 301 206**	**23 980**	**11**	**3 266 235**	**0,6**

Source: www.monitor.statnipokladna.cz.

It can be seen that the proportion of intangible assets to total assets is on minimal level, almost at all types of entities under 1 %, even though the majority of fixed assets of total assets is evident as well. It can be explained by two ways. The first is that the public sector entities do not use the intangible fixed assets to much and the second, those assets are not reported in the balance sheets because of relatively prohibitive requirements e.g. for internally generated R&D and SW under CAS. It is caused by the particular requirement which says the internally generated R&D and SW must be recognized as an intangible asset only if the intention of sale exists. But it is obvious that the business is not the main activity of public sector entities. The condition for asset recognition under IPSAS is a little more extensive (see Table 1). Then the transition to IPSAS might lead to a substantial increase of the amount of intangible assets.

Tab. 3 The trend of progress of intangible assets during the period 2013-2015

Types of public sector entities in the Czech Republic	Intangible assets (each closing balances by years; mil CZK)			Index 2014/ 2013	Index 2015/ 2013
	2013	2014	2015		
Voluntary associations of municipalities	129	134	145	1,04	1,13
Regions	1 228	1 101	1 193	0,90	0,97
Municipalities	6 818	6 428	6 432	0,94	0,94
Government departments	21 047	13 389	13 899	0,64	0,66
Allowance organizations	1 650	1 557	1 686	0,94	1,02
Regional councils of the cohesion region	34	26	20	0,75	0,58
State funds	644	422	339	0,66	0,53
Others	0	0	267	n/a	n/a
TOTAL	**31 550**	**23 056**	**23 980**	**0,73**	**0,76**

Source: www.monitor.statnipokladna.cz.

The table 3 illustrates the progress of volume of intangible assets in financial statements of Czech public sector entities. It is possible to notice that the significant decrease was recorded in 2014. The volume of intangible assets for the year 2015 was stable at the level of year 2014. It can be said that no substantial capital expenditures for the purpose of acquisition of intangible assets were not realized from the side of Czech public sector entities

5 Results and Discussion

The biggest differences between the CAS and the general approach of IPSAS is caused by non-existence of general conditions for the recognition of intangible assets, which primarily serve to distinguish the acquisition of intangible assets (capitalization) from services representing one-time expenses incurred in the reporting period. Further significant problems with regard to the specifics of CAS can be represented by testing the fixed assets for impairment. It can be generally said that CAS have responded to the tremendous progress in intangible assets rather by formalistic way because they have created an aggregated group of accounts that are not possible to interpret without knowledge of the broader context, for example general rules are lacking for each subcategory of accounts allowing to identify e.g. intangible results of research and development on one hand and other intangible assets on the other hand. The following table provides the results of comparative analysis made in Table 1. The table shows there are many parts of CAS which are not in compliance with the IPSAS ("partial" or "no correspondence" results) which could make a contribution to financial reporting quality in Czech public sector.

Tab. 4 Summary of levels of correspondence between CAS and IPSAS 31

Level of correspondence	Frequency	Share of total (in %)
Absolute	1	5,3
Partial	11	57,9
No correspondence	7	36,8
TOTAL	**19**	**100**

Source: Authorial computation.

It is often taken into account the budgetary rules for the purpose of differentiation of current operating expenses from the acquisition of intangible assets according to Czech approach. Unfortunately, there is a disunity between the budgetary and accounting legislation in the area of definition of intangible fixed assets. Due to the high penalties for breach of budgetary discipline the budgetary view often outweigh the accounting view and then the assets are in many cases classified in accordance with budgetary classification rather than synthetic accounts in the balance sheet. Nevertheless, it can be generally said that it is always taken into

account the expected lifetime, or potential economic benefits for a period longer than one year respectively.

The analysed data sample (see Table 2) shows that the government departments (i.e. ministries) and regions have a significantly higher proportion of intangible assets than other types of institutions. The reason is that sample contains valuable rights and software acquired by central procurements that are recognized as the intangible assets in financial statements of government departments or regions, but these assets are also used by their subordinate entities. Moreover, it has to be taken into account permanently that the low share of intangible assets in balance sheets of public sector entities does not have to mean necessarily that these entities do not use them too much.

6 Conclusion

There are many cases where the ambiguity can be found in the area of definition of intangible assets in accordance with the CAS. In our opinion the CAS should inspire the general principles contained in the IPSAS because the rules according to CAS can be often considered as formal, not substantive. It is also highly problematic the disparity of budgetary and accounting requirements for intangible assets where the budgetary rules are preferred. In our opinion the harmonization of budgetary and accounting requirements on fixed assets generally should be started to create more unambiguous rules for reporting with no space to different interpretations.

It is needed to emphasize that the limitation of this paper rests in using of relatively new database where the data of every public sector entity have been sent just for a few years. Moreover the due to accounting reform extending the use of accrual accounting in 2009 it is not possible to expect the relevance of financial information at a high level. Therefore it would be appropriate to make the similar research with the data for a longer period in the future. Besides, there are many topics in the public sector accounting to research. Such as the implementation process on the level of European Union, not just in the Czech Republic because at present the issue of European harmonisation of financial reporting in public sector prevails.

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