

ROMANIAN PUBLIC ACCOUNTING VS. BUSINESS ACCOUNTING ANALYSIS

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Abstract: *The transformation of public institutions into entrepreneurial entities becomes more and more obvious. This need has led world states to adopting in the public sector certain managerial and accounting instruments largely used in the private sector. Using a positivist-type research we will quantify the consistency degree (similarities and dissimilarities) between national rules and international reference systems – IPSAS, given the fact that the shift of the Romanian public accounting system from cash based accounting to accrual based accounting is consistent with the international trend to accept IPSAS influences. Our findings represent useful feedback to bodies with legitimacy to issue international accounting references because they provide information about the way in which emerging countries assimilate the content of international regulations either directly or indirectly.*

Key words: *public accounting, IPSAS, national rules, consistency*

1. INTRODUCTION

There is an international acknowledged trend to change the orientation of public institutions' accounting systems (Olson et al., 2001; Sutcliffe, 2003; Nistor et al., 2009) from cash based accounting to a more business style accounting, namely accruals-based. Romania has taken on the same trend after the accession to the European Union (2007). Considering the accounting techniques of performance measurement, the accounting system finds itself within public institutions in one of its two basic forms: cash accounting and accrual accounting.

Empirical evidence indicates that accrual accounting could provide a more accurate measurement and a more comprehensive communication of public sector entities' financial position (Chan, 2003) and performance (Hodges & Mellett, 2003), improve accountability (Perrin, 1998) and transparency (Van der Hoek, 2005; Yamamoto, 1999), and encourage ongoing monitoring of assets (Hodges & Mellett, 2003; Pallot, 2001). Thus, accrual accounting offers a better image of the business's dynamic financial performance than cash accounting (Collier, 2003:32, Deaconu et al., 2009).

This study shows a great level of originality by quantifying and measuring the way in which national rules (hereafter NR) relate to IPSAS. By combining qualitative and quantitative research, this study performs an empirical computation of the degree to which IPSAS international references as a support of an accrual based system shapes the structure of the Romanian financial statements specific to the public entities regulated by NR. We consider that the findings of this study can be a benchmark for the position of an emerging country on its way to adapting to the international reality in the field of the public accounting system.

2. RESEARCH DESIGN

Given these opinions, determining the consistency degree between elements specific to the Romanian accounting system and IPSAS references through similarity/dissimilarity tests is a

fundamental element in order to validate the hypothesis that the outcome of the transition specific to the Romanian accounting system for public institutions is a purely accrual based accounting system build on IPSAS references.

In order to validate or invalidate the stated hypothesis we have taken the following steps:

- Through a content analysis and applying the comparison, selection and integration technique we have determined the elements specific to the accrual based accounting, in accordance with the content of financial statements designed for the Romanian public accounting system, from two points of view i.e. NR and IPSAS;
- We have compared the occurrence or non-occurrence of these elements (N=28) by 1=occurrence, 0=non-occurrence;
- We have empirically determined the consistency degree through similarity/dissimilarity tests, in order to identify the correlation degree between NR and IPSAS references in the case of financial statements.

Consistency through the similarity and dissimilarity degree valuation was determined using the following indicators:

- Simple matching binary similarity coefficient - is the rate of correspondences between the two observations or variables

$$(a+d)/(a+b+c+d) \quad (1)$$

- Jaccard - is the rate of correspondences when at least one of the vectors is marked 1

$$a/(a+b+c) \quad (2)$$

- Russell - is the rate of correspondences between the two observations or variables

$$a/(a+b+c+d) \quad (3)$$

- Hamann - is the number of similarities minus dissimilarities divided by the total number of observations or variables

$$((a+d)-(b+c))/(a+b+c+d) \quad (4)$$

- Dice - gives double weight to similarities

$$2a/(2a+b+c) \quad (5)$$

- Sneath - gives double weight to correspondences

$$2(a+d)/(2(a+d)+(b+c)) \quad (6)$$

- Anti-Dice - gives double weight to dissimilarities

$$a/(a+2(b+c)) \quad (7)$$

- Roger - gives double weight to dissimilarities

$$(a+d)/((a+d)+2(b+c)) \quad (8)$$

Where: *a* is the number of variables where observations NR and IPSAS are both marked 1; *d* is the number of variables where

observations NR and IPSAS are both marked 0; b is the number of variables where observation NR is marked 1 and observation IPSAS is marked 0; c is the number of variables where remark NR is marked 0 and observation IPSAS is marked 1.

In conclusion, the method of scientific research in this paper approaches multiple spheres. The profound study of the knowledge continues by using the retrospective method imposed by the standard research and the prospective method required by the empirical research. Among the social sciences methods used in this approach we can mention: the documents analysis, the comparative method and the observation method.

3. ANALYSIS RESULTS

For the first two stages we present an extract from the database subject to empirical computation, separated on content and form elements (Table 1). In the third stage, the following data resulted from the empirical computation of similarity and dissimilarity coefficients (Table 2).

As the empirical computation shows, as a whole, the national rules on financial statements of public institutions have a great degree of similarity to IPSAS international references. Deductively shown in two groups, the similarity is very high in the case of content elements (such as reversible depreciation, irreversible depreciation, re-evaluation, assets, equity, liabilities), with some coefficients very close to 1 (0.89, 0.8). On the other hand, the similarity is lower in the case of form elements (such as the decreasing order of asset liquidity, the increasing order of the liability pay ability, the status of financial performance according to the position) as the NR are more different compared to IPSAS. The justification lays in the fact that IPSAS references have been the basis on which the Romanian national rules for the public sector were built. But even so, certain national specific elements were kept, and they are responsible for the differences, but they do not radically affect the interpretation of the data provided by the financial statements in the public sector. Take for example terminological differences: Account of real output – NR, Statement of financial performance – IPSAS; Operational expenses and incomes – NR, Operating expenses and incomes – IPSAS; Financial expenses and incomes – NR, Non-operating expenses and incomes – IPSAS.

4. CONCLUSION

In conclusion, financial statements specific to public institutions are significantly compliant of IPSAS references, thus the hypothesis stated at the beginning of the research is validated. This enables time and space comparability of the results and performance in the public sector, as the international environment becomes the optimum framework for the manifestation of their entrepreneurial spirit.

The limits of the database submitted to analysis for specific elements of the financial statements typical for the public entities are a limit of our study.

Content elements of financial statements	NR	IPSAS
Reversible depreciation	1	1
Cashed incomes	1	1
Form elements		
Decreasing order of liquidity (assets)	0	1
Statement of financial performance according to type	1	1

Tab. 1. Database subject to empirical computation

Coefficient	Value / total criteria	Value / content elements	Value / form elements
Simple matching binary similarity coefficient	0.607	0.8	0.5
Jaccard	0.607	0.8	0.5
Russell	0.607	0.8	0.5
Hamann	0.214	0.6	0.06
Dice	0.756	0.89	0.6
Sneath	0.756	0.89	0.6
Anti -Dice	0.43	0.66	0.33
Roger	0.43	0.66	0.33

Tab. 2. Similarity and dissimilarity coefficients

In order to deepen the present topic, a more complex database typical for the whole accounting system should be analysed in order to ensure a much better practically substantiated image of the position of the accounting system in relation with the relevant international references.

We estimate that this study can be improved through a deeper assessment of more elements of public accounting system, using more complex econometric approaches. Moreover, through further research we wish to enlarge the comparison sphere with IAS/IFRS references, in order to determine the consistency degree between the accounting system of economic entities versus public institutions and IAS/IFRS versus IFRS. This study would demonstrate if harmonization and convergence between national and international accounting systems are currently situated at a feasible level or just at declarative level.

5. REFERENCES

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