Accounting and Management Information Systems
Vol. 13, No. 4, pp. 800–819, 2014

An analysis of the international proposals for harmonization accounts statement and government finance statistics

Andrei Răzvan Crişan[a1] and Melinda Timea Fülöp[a]

[a] *Babeş-Bolyai University, Cluj-Napoca, Romania*

Abstract: Considering the modern market requirements and the government in the last decade that require two information systems: accounting and statistic. In accordance with these requirements, we believe it is very important to analyze the harmonizing of the two systems between Government Finance Statistics (GFS), used in support of macroeconomic analysis and General Purpose Financial Reports (GPFR) according with International Public Sector Accounting Standards, used for making decisions and accountability in the public sector entities. The purpose of the article is to make a comparison between GFS and GPFR in order to determine the similarity and dissimilarity level between them. Moreover, the article purposes to examine the comment letters of the Consultation Paper - IPSASs and Government Finance Statistics Reporting Guidelines and presents the latest news in the field of GFS system. The research results highlight that the similarity level between GFS and IPSAS is low, so we consider that the harmonization efforts are early.

Key words: GFS, IPSAS, harmonization, similarity, dissimilarity

JEL codes: H83

1. Introduction

Public institutions represent that system of the structures created with the purpose of managing public affairs within society. These represent the only way to organize the state that can face the nowadays challenges related to a large population, to diversity and complexity of human needs that have to be satisfied.

[1] *Corresponding authors*: Andrei Răzvan Crişan, Department of Accounting and Audit, Babeş-Bolyai University; Faculty of Economics and Business Administration, Str. Teodor Mihali 58-60, 400591, Cluj-Napoca, Romania; tel. (+40) 264 418 655; e-mail addresses: andrei.crisan@econ.ubbcluj.ro

The activity of public institutions in a democratic state depends on preparing and adoption of laws, on their implementation and surveillance of execution public decisions. There are circumstances in that personal initiative cannot satisfy the demands of society totally, and that is the reason they are necessary particular organizations whose aim is to serve the public interest. There are various conditions, in which public institutions cannot be adequately controlled, and their success is less than private companies, which would be appropriate that privatization of public services.

The aim of International Public Sector Accounting Standards is to help the public concern by creating and developing high-quality financial reporting standards and facilitating the convergence of international and national standards. Thus, the quality and uniformity of financial reporting increase worldwide. IPSASs are based on International Financial Reporting Standards (IFRS), developed and published by International Accounting Standards Board (IASB), where the directives of them are applicable in the private sector. Also, these refer to financial reporting issues specific for public sector that are not treated by IFRSs. The adoption of IPSASs by governments will develop both quality and comparability of financial information issued by global public sector entities.

Adopting a unique set accounting on an accrual basis at all levels of public administration within European Union would have undeniable benefits for public sector management and governance. Accrual accounting at the micro-level in public sector should lead to improving the effectiveness and efficiency of the public administration and to assist the assurance of liquidity, an essential condition for public sector activity (Fülöp & Crişan, 2013:20).

Also, it is important to study the comparability between European accounting systems in order to assess the degree of IPSAS implementation. Also, IPSAS could be a significant tool in order to sustain accounting harmonization, transparency, and a better control in the public sector (Bellanca & Vandernoot, 2014: 257). At the moment, the IPSAS are promoted worldwide by the IFAC (Oulasvirta, 2014: 274).

Considering the implication of the topic and the international concerns regarding harmonization between GFS and IPSAS, we consider that it is desirable to analyze this aspect. The professional bodies make significant efforts with the goal of harmonization between these two financial reports, for reducing the differences. To that end, we consider that is pertinent to present the objective of both GFS and IPSAS, their design and application.

GFS and IPSAS have different goals. GFS system is used for macroeconomic analysis and IPSAS reports are used for accountability and making decisions.

Although there are many similarities between GFS and IPSAS, there are some significant differences regarding presentation and terminology.

The purpose of Government Finance Statistics system is to make available a broad conceptual and accounting framework proper for analyzing and evaluating fiscal policy, especially the performance of the public sector of any country. The system was developed in order to give some information required to accommodate the unique nature and roles of governments and for assessing the economic impact on the nation (Barton, 2011: 427).

The aim of this article is to establish the similarity and dissimilarity between GFS and GPFR according to IPSAS, using Jaccard coefficients. For improving the comparability, we also used Rogers and Tanimoto coefficient and Jones and Williams coefficient. Firstly, we have conducted a qualitative research, a content analysis of the literature. Then, we conducted a quantitative study that consists in the comparison between GFS and GPFR. Also, we analyzed the opinion of some relevant international bodies regarding the differences between GFS and GPFR. The paper is structured in the following parts: a brief introduction, theoretical aspects - GFS and GFPR in literature, research methodology, findings and a summary of conclusions.

2. Governmental Financial Statistics and IPSAS in literature

Theoretical basics and practical accounting solutions for public and also for private sector are traditionally very diverse in numerous countries. (Benito *et al.*, 2007; Carmona & Trombetta, 2008). Nevertheless, the near practice of public sector accounting harmonization founded on adaptation of accounting standards from the private sector (e.g. as IPSAS based on IFRS or GFS for governments) naturally avoids addressing significant questions of differences in the conceptual basis of public and private sector accounting. This process reduces the significance of understanding public sector accounting as fixed in and affected by its economic, political, cultural and country-historical particular background. The private sector diversity has, therefore, become an important characteristic of accounting in the public sector.

The process of adopt a uniform set of accounting standards, as a part of the global convergence of financial reporting systems, is visible a vital aspect of the globalization of the world economy (Herz, 2007). The tendency of global convergence and harmonization strategy of private sector accounting and IFRS has also made the sway on the process of whole public sector restructuring that has been making progress worldwide. Additionally, the changes the in public sector accounting were central to the public sector reform (Roje *et al.*, 2010). One thing is sure; namely international accounting standards become an international accounting culture (Whittington, 2008).

In the last years, the IPSAS Board has made critical evolution in developing a set of standards for the public sector financial reporting on the accrual basis of accounting. Though, these standards are not yet complete or comprehensive (Tiron-Tudor, 2010:427).

There are some terminology differences between GFS and IPSAS. They are presented in the following table:

Table 1. Terminology differences between GFS and IPSAS

GFS	IPSAS
Balance Sheet	Statement of Financial Position Alternative: Balance Sheet, Statement of Assets and Liabilities
Statement of Government Operations	Statement of Financial Performance Alternative: Income Statements, Statement of Revenue and Expenses, Operating Statement, Profit, and Loss Statement
Statement of Other Economic Flows	Statement in Changes in Net Assets/Equity
Statement of Sources and Uses of Cash	Cash Flow Statement
Comparison of Budget and Actual Amounts	-

(*Source*: the authors' own research, based on IPSASB, based on IPSASs and Government Finance Statistics Reporting Guidelines (2012), available on-line at https://www.ifac.org/publications-resources/ipsass-and-government-finance-statistics-reporting-guidelines)

It has been discovered an indispensable move to accrual accounting, mostly to IPSAS-accrual accounting whereby there still remains a lack of interest frequently in central governments, mainly in countries where businesslike accrual accounting has been developed (Christiaens *et al.*, 2013).

A vital characteristic of the IPSAS is that governments are not obliged to assume them and thus their adoption depends on the free option. It is obvious that the success of IPSAS powerfully depends on setting out its strengths and highlighting the needed conditions to be met (Christiaens *et al.*, 2010: 537).

The implementation of IPSAS at EU level would have a series of benefits (Sanderson & Van Schaik, 2008: 23):

- Improved internal control and improved transparency with respect to assets and liabilities;
- The compliance with the best accounting practices through the application of accounting standards on a full accrual basis;

- More comprehensive information related to costs that will better support results-based management;
- Improved allocation of resources.

It is important to provide a better understanding of the relationship between GFS and IPSAS and the degree to which these systems duplicate or conflict with each other (Parry, 2011).

With the intention of encourage and make safe global intelligibility of national economies as for public finances are worried and to continue with their amendment towards the future trends regarding upgrading public sector accounting standards, a range of national and global accounting boards and organizations worldwide have been intensively working on preparing and improving international public sector accounting standards and their national equivalents. In that way, IPSASB has been frequently publishing a group of studies that deal with helping to solve a number of major questions in the field of accounting and auditing, with a plan of transferring and to convert the experiences of several countries that follow public sector accounting trends and have nearly finished the reform processes, to the ones that have just started setting up the public sector accounting reforms. Some articles published in well-known and globally recognized journals (Pallot, 1996; Simpkins, 1998), plus research published by some well-known and recognized bodies (Australian Bureau of Statistics (2002), New Zealand Treasury Annual Reports etc.), had their role to accounting harmonization and information systems' harmonization in general. In an attempt of summarizing main issues addressed in a broad range of articles and reports, the next trends related to public accounting are treated as primary (Roje *et al.*, 2010):

(1) The development of accrual accounting in public sector accounting systems and the agreement of national accounting with International Public Sector Accounting Standards;
(2) The require putting into the process of information systems' convergence – the convergence of accounting and statistics systems (GFS-Government Finance Statistics, ESA-European System of Accounts, SNA-System of National Accounts);
(3) The practice of implementing resource accounting and budgeting with the aim of setup the links between the inputs, goals and reason of activities undertaken by the government, and the outcome (outputs) accomplished;
(4) The regularity of accounting base adopted for the budget (budget and actual amounts comparison);
(5) The consistency of accounting base for financial reporting with the accounting basis for the budgeting.

The IMF is urging international standard-setters to cooperate in order to align reporting standards for budget, statistics, and accounts. There are many issues to resolve. For instance, should the fiscal forecasting cover both cash and accrual budget forecasts, including balance sheets? Must the new statements on contingent liabilities and social security obligations be incorporated in budgets and accounts (Heiling *et al.*, 2013: 301)?

Accordingly, accrual based Government Finance Statistics is seen as a lane towards establishing contextual and functional connection regarding financial and statistics reporting on public expenditure (GFSM 2001).

Statistics has some fundamental characteristics. Firstly, statistics is provisional, and the findings can always be improved. Statistics is uncertain, and the users should be skeptical. Statistics aims for impartiality. In a world of spin, the users of statistics must be determined to as themselves whether something is what it seems (Pullinger, 2013: 823).

3. Methodology

The purpose of our paper is to make a comparison between the structure and content of Government Finance Statistics (GFS) and the structure and content General Purpose Financial Reports (GPFR) presented by IPSAS 1 and IPSAS 2 (Cash Flow Statement). After studying the literature, we focused our attention on the methodologies applied for the preparation of Government Finance Statistics as well as identification of optimal solutions for an efficient and fair application of directives provided by Government Finance Statistics Manual: Second Edition (2001) and the Handbook of International Public Sector Accounting Standards (IPSAS).

Based in this general idea drawn from international regulations in this field and the studies conducted, we move into another stage of our research by making a practical study on analysis similarity and dissimilarity between the two financial reporting systems.

The purpose of the paper is to establish a similarity level between these two types of financial reporting, analyzing the common components they present. It is significant to reveal that our comparison refers only to the presentation, not to the valuation and measurement.

To that effect, we calculated Jaccard coefficients for every component of the financial statements (Balance Sheet, Statement of Government Operations, Statement of Other Economic Flows, Statement of Sources and Uses of Cash, taking into consideration the principal components of the GPFR according to IPSAS 1).

We present the content of IPSAS Statements presented by IPSAS 1 and IPSAS 2 because they are considered benchmark for this comparison. Actual, the comparison involves counting how many of these elements are presented in Government Financial Statements.

Of the most representative studies that measured the degree of formal harmonization of national regulations and international standards, between the regulations of various countries, and regulations related to different periods, we can mention: Weetman *et al.* (1998), Fontes *et al.* (2005), Strouhal *et al.* (2008), Tiron-Tudor (2010), Fülöp *et al.* (2010), Ritsumeikan (2011) The calculation formula for the Jaccard coefficients shows as follows:

Similarity degree $S_{i,j}=\frac{a}{a+b+c}$

Dissimilarity degree $D_{i,j}=\frac{b+c}{a+b+c}$

where:

$S_{i,j}$ – represents the similarity degree between the two sets of analyzed accounting regulations;

$D_{i,j}$ – represents the dissimilarity or difference between the two sets of analyzed accounting regulations;

a – represents the number of elements that take the 1 value for both sets of regulations;

b – represents the number of elements that take the 1 value within the j set of rules and the 0 value for the i set of regulations;

c – represents the number of elements that take the 1 value within the i set of rules and the 0 value for the j set of regulations.

Jaccard coefficients are applicable to analyze the level of convergence between different regulations at different points in time or among different countries. To make this comparison, we used the structure presented by *Government Finance Statistics Manual – Second Edition* (2001), issued by International Monetary Fund Statistics Department.

For an improved comparability, we also used the Rogers and Tanimoto and Lance and Williams coefficients'. As Jaccard association coefficients, Rogers and Tanimoto coefficient and Lance and Williams coefficient represent algorithms of proximity used for calculating the level of association between two binary variables. Binary variables are those variables that can take only two possible values, 1 and 0, depending on the existence or absence of a particular item, or by the performance or failure of certain conditions. The calculation formulas for Rogers and Tanimoto coefficient, respectively Lance and Williams coefficient are:

$$\mathbf{RT = (a + d)/(a + 2 * b + 2 * c + d)}$$

and

$$\mathbf{LW = (b + c)/(2 * a + b + c)}$$

where:

RT – Rogers and Tanimoto coefficient
LW – Lance and Williams coefficient
a – represents the number of elements that take the 1 value for both variables
b – represents the number of elements that take the 1 value for "j" variable and the 0 value for the "i" variable
c – represents the number of elements that take the 1 value for "i" variable and the 0 value for the "j" variable
d – represents the number of elements that take the 0 value for both variables
a + b + c + d – represent the total number of the topics

Also, we made an analysis using information provided by The Consultation Paper *IPSASs and Government Finance Statistics Reporting Guidelines*, issued in October 2012 and developed by International Public Sector Accounting Standards Board (IPSASB). Using this document as a benchmark, we analyzed the responses given by the international bodies regarding differences between GFS and IPSAS. The questions that we analyzed are the following:

- Do you agree that the issues categorized as resolved (Category A in Table 2) are indeed resolved?
- Are there further differences between IPSASs and GFS reporting guidelines that should be added to this list? If so, please describe these.
- Do you agree that the IPSASB, in conjunction with the statistical community, should develop guidance on the development of integrated Charts of Accounts, which would include (i) an overview of the essential components of an integrated Chart of Accounts, and (ii) wider coverage such as that listed in paragraph 4.16 of this CP?
- Do you think that the IPSASB should take a more systematic approach to reducing differences between IPSASs and GFS reporting guidelines?
- If so, are there changes other than those listed in paragraph 5.4, which the IPSASB should consider adopting?
- Are there other areas where IPSAS changes could address GFS differences? Please describe these.

The request for comments also includes questions related to IPSAS 22. We do not investigate these issues because the aim of the research is to examine the similarities and dissimilarities between IPSAS and GFS and not to explain a particular standard.

For our analysis, we coded the responses of the international bodies in the following way to establish further confidence in the coding, using a 5-point Likert scale where:

Table 2. Codification of the responses

Code	Meaning
1	Yes
2	No
3	Yes, with further explanation
4	No, with further explanation
5	There is no answer

4. Findings

In order to bring together comparable government finance statistics, the International Monetary Fund (IMF) published the Government Finance Statistics Manual (GFSM, 2001) to implement the System of National Accounts promulgated by the United Nations in 1993. The GFSM requires the information to be brought together on the accrual basis on accounting and to be reported in the next financial statements (ICGFM, 2013:2): Balance Sheet; Statement of Government Operations; Statement of Sources and Uses of Cash; and Statement of Other Economic Flows.

The GFS covers all entities that substantially affect fiscal policies. Fiscal policies are implemented by the institutions entirely faithful to the economic functions of government, such as a government ministry. Additionally to those institutions, fiscal policy may be carried out by government-owned or controlled enterprises that employ primarily in trade activities. These enterprises, for example the central bank or national rail-road, which are referred to as public corporations, are not seen as a component of the government, but statistics should be collected on them (International Monetary Fund, 2001: 6). Even though GFS system is considered a statistical reporting system, it has every one of the attributes of the accounting system (Parry, 2011:23). It adopts an accounting model; It defines many accounting terms: liabilities, assets, expenditures, revenues, etc. It prescribes reporting formats including an operating statement and a balance sheet.

GFS permit financial analysts to investigate the changes in the financial operations, financial position and liquidity situation of the public sector. Other probable users include (Statistics New Zealand, 2011:5): Government taxes analysts – to inspect tax rates and taxes revenue; Diverse levels of government – to argue cases for further funding from superior levels of government; Worldwide bodies (OECD and International Monetary Fund) – to analyse the performance and sustainability of government; International credit rating agencies – to review international credit ratings; Worldwide economists – to analyse government services across countries; The financial sector; and Taxpayers – to observe the way their payments are spent by government.

Under the GFS approach, separate reports should be published for the general government sector, the financial public corporation sector, and the non-financial public corporation sector. Consolidation is encouraged, but not required. These reports should facilitate economic analysis. IPSAS are standards for general purpose financial reports, regarding the financial performance of an entity, considering all assets, liabilities, revenues, and expenses. Thus, full consolidation of all entities controlled is required (Abushamsieh *et al.*, 2013:791).

During each IPSAS project, IPSASB will consider whether there is a field for the plan to address differences between IPSAS and GFS reporting guidelines. The process they will follow is represented in the following figure:

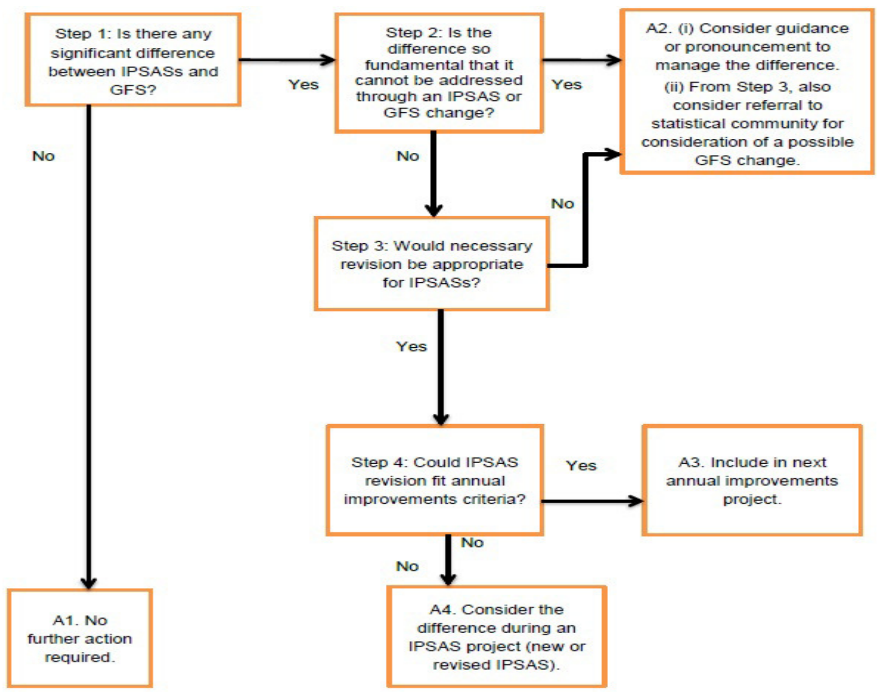

Figure 1. Process for Considering Differences between IPSASs and GFS Reporting Guidelines
(*Source*: IPSASB, 2014: 8)

Although the IPSAS statements and Government Finance Statistics serves for different purposes, it is crucial to determine the similarity and dissimilarity between them. As a result, it could be created and implemented a system that generates both in the same time. Implementing this system could save time and costs.

Within the comparison, we analyzed the similarity and dissimilarity between the IPSAS statements and their GFS equivalents.

Table 3. The results of similarity and dissimilarity

Analyzed items	Similarity	Dissimilarity	Rogers and Tanimoto	Lance and Williams
Balance Sheet (IPSAS) – Balance Sheet (GFS)	0.1311	0.8689	0.0702	0.7681
Statement of Financial Performance (IPSAS) - Statement of Government Operations (GFS)	0.1458	0.8542	0.0787	0.7455
Statement in Changes in Net Assets/Equity (IPSAS) - Statement of Other Economic Flows (GFS)	0	1	0	1
Cash Flow Statement (IPSAS) – Statement of Sources and Uses of Cash (GFS)	0.3125	0.6875	0.1852	0.5238
TOTAL	**0.1474**	**0.8526**	**0.0835**	**0.7594**

Regarding similarity level between Balance Sheet presented by IPSAS 1 and the GFS equivalent shown by GFS Manual, the similarity level between them is 0.1311. The calculated value of Rogers and Tanimoto coefficient is 0.0702, and the Lance and Williams coefficient is 0.7681. The similarity between Statement of Financial Performance presented by IPSAS 1 and the GFS equivalent - Statement of Government Operations – is 0.1458. The value of Rogers and Tanimoto coefficient is 0.0787, and the value of Lance and Williams coefficient is 0.7455. Statement in Changes in Net Assets/Equity is entirely different from Statement of Other Economic Flows presented by GFS Manual, the similarity level between them is 0, Rogers and Tanimoto coefficient being the same. In this case, the value of Lance and Williams coefficient is the same as the dissimilarity coefficient: 1. The highest similarity level (0.3125) exists between Cash Flow Statement presented by IPSAS 2 and Statement of Sources and Uses of Cash presented by GFS Manual. In the case of Cash Flow Statements, Rogers and Tanimoto coefficient is 0.1852, and the Lance and Williams coefficient is 0.5238.

Balance Sheet presented by IPSAS 1 and the GFS equivalents present common elements such as fixed assets, inventories, currency and deposits or liabilities. Balance Sheet presented by IPSAS 1 classifies the assets and liabilities into current and non-current assets and the Balance Sheet presented by GFS classifies the assets into financial and non-financial assets. According to IPSAS 1, an asset is considered current when it meets any of the following conditions:

- It is expected to be realized in, or is held for sale or utilization in the entity's normal operating activity;
- It is held principally for the intention of being traded;
- It is expected to be realized in twelve months after the reporting date or
- It is cash or a cash equivalent (as defined in IPSAS 2, unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date).

On the other hand, IPSAS 1 states that the liabilities shall be seen as current when it meets any of the following conditions:

- It is expected to be settled in the entity's regular operating activity;
- It is held primarily for the purpose of being traded;
- It is due to be settled in twelve months after the reporting date or
- The institution does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

Statement of Financial Performance presented by IPSAS 1 and Statement of Government Operations show some elements such as revenue, taxes, wages, salaries and employee benefits or grants. Also, Statement of Financial Performance present expenses by Function and Nature.

Statement of Changes in Net Assets/Equity presented by IPSAS 1 presents following information: Changes in accounting policy, Restated balance, Gain on property revaluation, Loss on revaluation of investments, Exchange differences on translating foreign operations, Net revenue recognized directly in net assets/equity and Surplus/deficit for the period. None of these elements exists in the GFS equivalent (Statement of Other Economic Flows).

The highest similarity level exists between Cash Flow Statement presented by IPSAS 2 and the Statement of Sources and Uses of Cash. They have 15 common items such as purchase of plant and equipment, proceeds from the sale of plant and equipment, interest paid, taxation and grants. We consider that the most significant similarity between these two statements is that both of them classify cash flows in operating activities, investing activities and financing activities.

Analyzing the comments of international bodies regarding differences between GFS and IPSAS, we got the following results:

Table 4. Descriptive Statistics

	Yes	No	Yes, with further explanation	No, with further explanation	There is no answer	**Mean**	**Mode**
Q1a.With respect to the summary in Table 2 of progress on reducing differences and the supporting detail in Appendix B: Do you agree that the issues categorized as resolved (Category A in Table 2) are indeed resolved?	32%	4%	44%	12%	8%	**2.6**	**3**
Q1b. With respect to the summary in Table 2 of progress on reducing differences and the supporting detail in Appendix B: Are there further differences between IPSASs and GFS reporting guidelines that should be added to this list? If so, please describe these.	0%	32%	36%	12%	20%	**3.2**	**3**
Q2. Do you agree that the IPSASB, in conjunction with the statistical community, should develop guidance on the development of integrated Charts of Accounts, which would include (i) an overview of the basic components of an integrated Chart of Accounts, and (ii) wider coverage such as that listed in paragraph 4.16 of this CP?	12%	8%	56%	16%	8%	**3**	**3**
Q3.a.Do you think that the IPSASB should take a more systematic approach to reducing differences between IPSASs and GFS reporting guidelines?	4%	8%	60%	16%	12%	**3.24**	**3**
Q3.b.If so, are there changes other than those listed in paragraph 5.4, which the IPSASB should consider adopting?	4%	2%	48%	4%	20%	**3.12**	**3**
Q4. Are there other areas where IPSAS changes could address GFS differences? Please describe these.	0%	40%	36%	8%	16%	**3**	**2**

- **Question 1:** With respect to the summary in Table 2 of progress on reducing differences and the supporting detail in Appendix B:

  a.) Do you agree that the issues categorized as resolved (Category A in Table 2) are indeed resolved?
  As we can see, the most of international organizations (76%) agree that the issue categorized by IPSASB as resolved are indeed resolved. 44% of the international organizations provide further explanations for their response and 32% just agree with the statement. 12% of the organizations do not agree with the statement, and they provide further explanation and 4% of them just do not agree. 8% of the international institutions do not answer the question. If we take into consideration the Likert scale, the man of responses is 2.6, and the mode is 3, most of the respondents providing a positive response and some further explanation.
  Organizations as PwC believe that the issued listed as resolved should be presented as areas where options are available for IPSAS reporting to be more aligned with GFS guidelines, rather that issues that are resolved and closed. Also, European Commission believes that the list captures the conceptual convergence of the two systems. Also, the practical implementation of the concepts is essential too. One example refers to the words "current value" and "fair value" . The use of these terms does not necessarily mean that in practice the same value and measurement technique can be used, and there would need to be carefulness in the recording of transaction costs.

  b.) Are there further differences between IPSASs and GFS reporting guidelines that should be added to this list? If so, please describe these.
  36% of the organizations think that there are further differences that should be added to the list, and they provide further explanation for their responses. 32% of them just find that there are not differences that should be added on the list, 12% of the institutions provide further explanations for this and 20% of the organizations do not answer the question. On the considered Likert scale, the mean is 3.2 and the mode is 3. As before, the most of the respondents give a positive response with some further explanation.
  Some organizations such as PWC, IDW, Australian Bureau of Statistics or Direction Generale des Finances Publique (France) consider that there are further differences between IPSAS and GFS reporting guidelines that should be added to the list. Other organizations such as CCSP, ICGFM, IPSAS Steering Committee (Guatemala) or ACCA think that the list of differences is complete, and there are not further differences that should be added to the list. European Commission is not aware of other significant differences,

excepting some minor issues or differences in the practical interpretation. Five institutions (Joint Accounting Bodies, Schweizerisches Rechnungslegungsgremium, Cour des Comptes (France), Ministero dell' Economia (Italy) and Joe Cavanagh (United Kingdom) have not answered this question.

- **Question 2:** Do you agree that the IPSASB, in conjunction with the statistical community, should develop guidance on the development of integrated Charts of Accounts, which would include (i) an overview of the essential components of an integrated Chart of Accounts, and (ii) wider coverage such as that listed in paragraph 4.16 of this CP?
  56% of the organizations agree with the statement and provide further explanations, 16% of them do not agree with the statement and provide explanations, 12% of them just agree with the statement, 8% of them just do not agree with the statement, without providing further explanation and the rest of 8% of institutions do not answer the question. On the considered Likert scale, the mean response is 3, the same as the mode. One of the most important respondents (European Commission) does not believe that is should be the direct task of the IPSASB to develop a detailed chart of accounts. A detailed chart of accounts developed by IPSASB could be considered as an interpretation by the board on how to apply IPSAS. However, EC considers that there is a clear need for the development of integrated charts of accounts that already include information needed for GFS compilation. A development would increase timeliness and consistency of GFS data, bringing down the need for a preparer to devote resources to compile separate statistical reporting.

- **Question 3:**

a.) Do you think that the IPSASB should take a more systematic approach to reducing differences between IPSASs and GFS reporting guidelines?
60% of the bodies find that IPSASB should take a more systematic approach to reducing differences between GFS and IPSAS and justify their answer. 16% of them do not believe the same, and they also explain their answer. 12% of the institutions do not answer the question, 8% of them just do not think that a more systematic approach would be useful and 4% of the companies just agree with the idea that IPSASB should take a more systematic approach to reducing differences between GFS and IPSAS. On the considered Likert scale, the mean response is 3.24, and the mode is 3, the most of the international organizations giving a positive response and some further explanation.
Regarding this topic, ACCA believes that there are lessons to be learned from countries such as Australia where the standard setter has attempted to reduce the differences between government's consolidated accounts and

GFS. Also, European Commission agrees that the IPSASB positively commits to avoiding unnecessary differences between GFS and IPSAS. However, Also, from a preparer's perspective, EC does not think that there is a reason to take a more systematic approach. The standard setting process should follow the objectives of financial reporting as detailed in the Conceptual Framework. The harmonization of GFS and IPSAS is not an objective of financial reporting.

b.) If so, are there changes other than those listed in paragraph 5.4, which the IPSASB should consider adopting?

48% of the institutions believe that there are further changes that the IPSASB should consider adopting and describe these changes. 24% of the bodies just do not think that there are further changes, 20% of the organizations do not answer this question, 4% of them believe that there are not further changes and argue their answer and the rest of 4% just find that there are further changes, without arguing the answer. On the considered Likert scale, the mean response is 3.12, and the mode is 3.

Direction Generale des Finances Publiques (France) states that the objectives of the IPSAS and the GFS differ and that is the reason the standards convergence, even if could appear theoretically relevant, is not applicable in practice. As a consequence, the cost-effectiveness would be unfavorable. Also, a very important organization (European Commission) believes that the inclusion of comparisons with GFS in final standards could potentially be confusing and misleading as the objectives of financial reporting in IFRS and IPSAS are similar and a number of IPSAS are based on IFRS. Statistically, a possible compromise could be that a comparison with GFS is systematically included in exposure drafts so that respondents can see a fuller picture. However, such a comparison would not enter the final IPSAS.

- **Question 4:** Are there other areas where IPSAS changes could address GFS differences? Please describe these.

40% of the organizations think that there are not other areas where IPSAS changes could address GFS differences. 36% of them believe the opposite and justify the answers, 16% of organizations do not answer the question and the rest of 8% feel that there are not other areas where IPSAS changes could address GFS differences and justify the answers. If we take into consideration the Likert scale, the mean response is 3, and the mode is 2, most of the respondents giving a negative response, without further explanation.

Conclusions

Taking into consideration that the objectives of the study were aimed, it is supposed that this scientific approach has achieved its purpose and can be used in practice. The similarity level between GFS Statements and statements given by IPSAS is little. The highest similarity level – 31.25% - exists between the Cash Flow Statement presented by IPSAS 2 and the GFS equivalent (Statement of Sources and Uses of Cash). Contrary, the lowest similarity level exists between Statement in Changes in Net Assets/Equity and Statement of Other Economic Flows. These two financial reporting do not have common elements.

Though, the low similarity level among GFS Statements and IPSAS Statements is expected because these two serve for different goals. GFS statements serve as support for macroeconomic analysis and statistics and statements presented by IPSAS serve as support for making decisions in the public sector entities and accountability. The low similarity level between these statements is determined by the different purposes they have. If GFS Statements and IPSAS statements were very equal, it would be ineffective to create both of them. The overall similarity level (0.1474) is calculated as an average of the four similarity levels between the IPSAS Statements and GFS Statements. The overall dissimilarity level (0.8526) is calculated in the same way.

European Commission agrees that IPSASB should avoid unnecessary differences between GFS and IPSAS. Also, the European Commission thinks that IPSASB standard setting process should follow the objectives of financial reporting as described in the Conceptual Framework. Also, the alignment of GFS and IPSAS is not an objective of financial reporting and not of use for service recipients and resource providers that do not possess the authority to require disclosure of information. Plus, European Commission believes that there will continue to be certain fundamental conceptual differences between GFS and IPSAS, and these will need to be managed. However, to avoid any unnecessary differences and benefit from the experience, it is crucial to sustaining a dialog between statisticians and the IPSASB.

PwC believes that reducing the gaps among IPSAS and GFS principles is an aim that should be pursued, and the IPSASB should consider the opportunity for alignment with GFS in each and every project it carries out. PwC also believes that the standards-setting process should primarily be concerned with developing standards in accordance with the principles laid down in the conceptual framework and that provide information that is relevant, useful and reliable. Convergence with GFS should also involve exploring whether GFS requirements could be amended or enhanced to reflect developments in accounting standards.

Australian Bureau of Statistics also states some significant differences between GFS and IPSAS. For instance, in the IPSAS, unpaid taxes are recorded as a deferred tax liability, whereas in the GFS they are not recognized. Taxes and other compulsory transfers are only accepted when the events occur that create claims or taxes or other payments. Coins issued by government are not known by the IPSAS, whereas in GFS they are treated as a liability of the central government. Purchased goodwill is not amortized in IPSAS. In GFS, purchased goodwill is valued at its acquisition cost less accumulated amortization.

The suggestion is to attempt to put into practice a system that generates together GFS Statements and IPSAS Statements or a mixture. Creating this structure could decrease the expenses and make the providing of information easier. Additionally, the paper contributes to a better understanding of the associations existing between GFS and IPSAS.

Acknowledgements

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/159/1.5/S/142115 „Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain."

References

Abushamsieh, K., Lopez-Hernandez, A.M., Ortiz-Rodriguez, D. (2013) "Administrative Reforms to Governmental Financial Information Systems in GCC Countries: The Case of Qatar", *Middle Eastern Studies*, Vol. 49, No. 5: 790-804;

Accounting Standards Review Board (ASRB) (2005) "New Zealand equivalents to international financial reporting standards: Policies for the financial statements of the government of New Zealand", *New Zealand Treasury*

Australian Bureau of Statistics (ABS) (2002) "Implementation of accrual accounting in Australian Government Finance Statistics and the National Accounts", *Australian Bureau of Statistics (ABS)*, OECD Meeting of National Accounts Experts, Paris: 8-11.

Barton, A. (2011) "Why Governments Should Use the Government Finance Statistics Accounting System", *ABACUS*, Vol. 47, No. 4: 411-445;

Bellanca, S., Vandernoot, J. (2014) "International Public Sector Accounting Standards (IPSAS): Implementation in the European Union (EU) Member States", *Journal of Modern Accounting and Auditing*, Vol. 10, No. 3: 257-269;

Benito, B., Brusca, I. & Montesinos, V. (2007) "The Harmonization of Government Financial Information Systems: The Role of the IPSASs", *International Review of Administrative Sciences*, Vol. 73, No. 2: 293-317;

Carmona, S. & Trombetta, M. (2008) "On the Global Acceptance of IAS/IFRS Accounting Standards: The Logic and Implications of the Principle-Based System", *Journal of Accounting and Public Policy*, vol. 27: 455-461;

Christiaens, J., Reyners, B., Rolle, C. (2010) "Impact of IPSAS on reforming governmental financial information systems: a comparative study", *International Review of Administrative Sciences*, Vol. 76, No. 3: 537-554;

Christiaens, J., Vanhee, C., Manes-Rossi, F., Aversano, N. (2013) "The Effect of IPSAS on Reforming Governmental Financial Reporting: an International Comparison", Working Paper;

Eurostat (2013) "Government finance statistics – Summary tables", *Eurostat Statistical Books*;

Fontes, A., Rodriguez, L.L, Craig, R. (2005) "Measuring Convergence of National Accounting Standards with International Financial Reporting Standards", *Accounting Forum*, Vol. 29, No. 4: 415-436;

Fülöp, M.T., Crişan, A.R. (2013) "Consideraţii privind armonizarea contabilă în sectorul public la nivelul UE", *Revista Audit Financiar*, 108: 18-25;

Fülöp, M.T., Şpan, G.A., Pop, A., Popa, I.E. (2010) "The similitude and dissimilitude of OECD, Romanian and German corporate governance codes", *International Journal of Business Research*: 185-189;

Heiling, J., Schurer, S., Chan, J. (2013) „New development: Towards a grand convergence? International proposals for aligning government budgets, accounts and finance statistics", *Public Money and Management*, Vol.33, No. 4: 297-303;

Herz, R. H. (2007) "Towards a global reporting system: Where are we and where are we going?" *Paper presented at the AICPA National Conference on SEC&PCAOB Reporting Developments.*

International Monetary Fund Statistics Department (2001) "Government Finance Statistics Manual – Second Edition", *available on-line at https://www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf*

International Public Sector Accounting Standards Board (2012) "IPSASs and Government Financial Statistics Reporting Guidelines", *Consultation Paper*

International Public Sector Accounting Standards Board (2014) "Process for Considering GFS Reporting Guidelines during Development of IPSASs", *IPSASB Policy Paper*;

International Public Sector Accounting Standards (2013) "IPSAS 1 – Presentation of Financial Statements", *International Federation of Accountants (IFAC)*;

International Public Sector Accounting Standards (2013) "IPSAS 2 – Cash Flow Statement", *International Federation of Accountants (IFAC)*;

IPSASs and Government Finance Statistics Reporting Guidelines (2012) available on-line at https://www.ifac.org/publications-resources/ipsass-and-government-finance-statistics-reporting-guidelines, *International Public Sector Accounting Standards Board*

Pallot, J. (1996) "Innovations in national government accounting and budgeting in New Zealand", *Research in Governmental and Non-profit Accounting,* vol. 9: 323-348;

Oulasvirta, L. (2014) "The reluctance of a developed country to choose International Public Sector Accounting Standards of the IFAC. A critical case study", *Critical Perspectives on Accounting*, Vol. 25, No. 3: 272-285;

Parry, M. (2011) "International Standards for Accounting and Statistics", *International Journal of Governmental Financial Management*, vol. 1, no. 2: 20-32;

Pullinger, J. (2013) "Statistics making an impact", *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, Vol. 176, No. 4: 819-839;

Ritsumeikan, L. (2011) "Empirical Evidence on Formal and Material Harmonization of National Accounting Standards", *Journal of International Business Research*, Vol. 10, No. 2: 69-86;

Roje, G., Vašiček, V. & Vašiček, D. (2010) "Accounting regulation and IPSAS implementation: Efforts of transition countries toward IPSAS compliance", *Journal of Modern Accounting and Auditing*, ISSN 1548-6583, USA, December 2010, Vol.6, No.12: 1-17;

Sanderson, I., Van Schaik, F. (2008) "Public Sector Accounting Standards: Strengthening accountability and improving governance", *Accountancy Ireland*, Vol. 40, No. 5: 22-24;

Simpkins, K. (1998) "Budgeting and accounting issues-New Zealand", Presentation to the *International Federation of Accountants Public Sector Committee, Executive Forum,* Washington.

Statistics New Zealand (2011) "Introducing government finance statistics", *Tatauranga Aotearoa*, Wellington, New Zealand, available on-line at http://www.stats.govt.nz/browse_for_stats/government_finance/local_government/intro-govt-fin-stats-info-paper.aspx;

Strouhal, J., Matis, D., Bonaci, C. (2008) "Financial Instruments under the IFRS - a priori analysis from the Czech and Romanian regulations' perspective", *Journal of Accounting and Management Information Systems*, Vol. 25: 22-44;

Tiron-Tudor, A. (2010) "Romanian Public Institutions Financial Statements on the Way of Harmonization with IPSAS", *Accounting and Management Information Systems*, Vol. 9, No. 3: 422-447.

Weetman, P., Adam, C.A., Jones, E.A., Gray, S.J. (1998) "Profit Measurement and UK Accounting Standards: A Case of Increasing Disharmony in Relation to US GAAP and IASs", *Accounting and Business Research*, Vol. 28, No. 3: 189-208;

Whittington, G. (2008) "Harmonisation or discord? The critical role of the IASB conceptual framework review", *Journal of Accounting and Public Policy*, Vol. 27, No. 6: 495-502.