Disclosure Level before and after the application of an IPSAS based accounting system: The case of Greece

Eleni Vrentzou

doi: 10.12681/icbe-hou.5360

To cite this article:

Disclosure Level before and after the application of an IPSAS based accounting system: The case of Greece

Eleni Vrentzou
Ministry of Finance of Greece

May 2022 (revised March 2023)

1 Corresponding author: Ministry of Finance, 10 Karageorgi Servias, Athens 15063, Greece, tel +30-210-3375387, email: e.vrentzou@minfin.gr
Abstract

Purpose – The purpose of this paper is to compare the level of central government financial information disclosed in the annual financial statements before and after the adoption of an accounting system based on International Public Sector Accounting Standards (IPSAS). A comparison of this disclosure level to the IPSAS required disclosure level is also performed.

Design/methodology/approach – This study uses a checklist of disclosure items used to measure the IPSAS disclosure level and compare this with the score of the government financial statements in Greece for the years 2011-2020.

Findings – The results show significant differences between the disclosure level of the government financial statements before and after the application of an IPSAS based accounting system. Specified application difficulties explain the difference between the required IPSAS disclosure level and the level already achieved by the Greek public accounting system.

Practical implications – The research findings are potentially relevant to academics and practitioners since it provides evidence on the improvement of the disclosure level on the process of IPSAS application and the accounting method performed. It also identifies difficulties faced on this process on specific standards and explains how they affect the disclosure level achieved.

JEL CODE: H83

Key words: International Public Sector Accounting Standards, Disclosure, Public Sector Accounting
1. Introduction

The role of accounting in business world and global economy is well recognized. The movement of businesses towards a global economy has accelerated the need to move towards global accounting standards. (A. B. Fosbre, 2010). Even in the first steps of accounting standards harmonization it was obvious that comparison and analysis were significantly enhanced by specific accounting principles and guidelines. In this sense, very fast, International Accounting Standards were substituted by International Financial Reporting Standards and the process for total standardization in all the accounting aspects had began. At the same time, next to IAS and IFRS, IFRS for SMEs were also developed and special standards for the public sector were being finalized. The benefits of accounting standardization of developed countries were also realized by developing and emerging countries, which also started to base their annual reports disclosures on internationally accepted standards. Simultaneously, embracing globalization and adopting IFRS, required the development of appropriate regulatory systems to overcome cultural issues relating to secrecy and fraud (Irvine, Helen & Lucas, Natalie, 2006). The whole set of accounting standards was expected to reduce risks, transaction costs, and variety, while it was also expected to increase compatibility and comparability. The comparability achieved through the application of internationally accepted accounting standards was not only apparent for bigger in size and higher quality firms, but also for smaller and lower quality firms (Bradshaw et al, 2004; Daske et al, 2007). Facilitation of international integration of capital markets in an era of Capital Markets Union development, was also realized through the application of generally accepted standards (Covrig et al, 2007).

The advantages of accounting harmonization in private sector and businesses were soon reflected in the area of government reporting. Complex financial and economic environments as well as complicated financial transactions and evaluations in governments level, required a highly accepted and approved accounting system. Sound governments were in any case closely related to transparency in public budgeting following relevant accounting principles (De Renzio & Masud, 2011).

International Public Sector Accounting Standards Board (IPSASB) soon evolved as the only international standard setter that caters for public sector financial reporting. Its duties of developing and promoting International Public Sector Accounting Standards (IPSAS) in order
to advance public financial management worldwide has been proved to be highly recognized by public accounting world (ipsas.org). Initially, IPSAS had the role to identify and analyze the main differences between public and private sectors in order to ensure high quality disclosure level. Once the initial stage was completed, the development of the foundational standard setting on general purpose public sector financial reporting, followed. It was also soon realized that specific standards should address issues identified only in public sector and in governmental transactions. An interaction between IFRS and IPSAS was evident and continues even today with a close follow up of IPSAS regarding IFRS developments, amendments and supplements.

Although IPSAS are not yet compulsory and officially adopted, various supranational organizations, such as the EU, support these standards and analyze them in the framework of European Public Sector Accounting Standards, for future application in all the member states. At this stage, European countries apply differ accounting systems with different level of disclosure and quality. The general tendency for EU countries to apply accrual accounting based on internationally accepted accounting principles like IPSAS, creates expectations for improvements in governance and management of public funds. The implementation though of these harmonized standards, is currently almost non-existent, since member states apply different levels of accrual accounting and degree of IPSAS application. Many governments have implemented accounting reforms over the past forty years to respond more effectively to growing demands of international borrowing and transactions (Guthrie et al., 1999; Bergmann, 2012, Soguel and Naomi Luta, 2020). Generally, most countries are being in the process of public accounting reforms but have not yet reached the level of full ISPAS application, while being in the continuous process of increasing financial accountability and reliability and enhancing decision-making purposes (Guthrie et al., 1999; Bergmann, 2012).

Australia and New Zealand pioneered the application of private sector based accounting standards to all government transactions. The tendency to transform traditional cash based accounting in government reporting to accrual accounting and the development of internationally accepted public sector standards are considered among the major innovations in government accounting practices under what is commonly known as the New Public Financial Management (NPFM) reforms (Sellami and Gafsi, 2018). According to Mnif and Gafsi (2020), recent developments in government accounting standards do not ensure ISPAS benefits and could not be compared to total adoption. As already mentioned EU
supports this tendency with the development of EPSAS which aim to increase the transparency and comparability of public sector financial accounting and reporting between and within EU Member States following the motto that “superiority of the accruals principle, whether for macro or micro fiscal monitoring, is indisputable” (EC, 2013). The common goal of collecting and providing relevant information in order to make macro-economic decision-making processes and budgetary surveillance possible and enhance statistical reporting and supervision was a priority. International financial aids and exploitation of successful experiences of specific governments led to IPSAS based accounting standards. (Amiria and Hamzab, 2020).

In this context and since EPSAS are still under progress the need for a reliable accrual based accounting system provided to Greece the opportunity to apply a new Presidential Degree (PD 54/2018) according to which full accrual accounting is adopted based on Internationally Accepted Accounting Standards. In this process, Double Entry Modified Cash Basis Accounting that was applied in Greece since 2011, was substituted for Central Government financial reporting, by the new accounting principles. More specifically Double Entry Modified Cash Basis Accounting defined the basic accounting principles of the central government accounting system. The new accounting system was mainly based on the principle of accrual of income and expenses and had as its ultimate goal the gradual transition from traditional cash accounting basis on the most accurate and efficient accrual accounting basis. This system was followed by full accrual accounting introduced by PD 54/2018. According to its provisions the transition to the full application of accrual basis accounting was expected. The goal was to upgrade the quality of financial information provided by General Government entities to citizens, to taxpayers, investors and lenders. This accounting system aims to make financial accounting a useful decision-making tool for those who take responsibility for managing public property.

The new accounting system is applied to central government from 1.1.2019 whereas the whole public sector will be obliged to adopt it by 1.1.2025. Double Entry Modified Cash Basis Accounting adopted by PD 15/2011 was the first step for Greek Public Accounting System towards accrual accounting. There were still some further steps required for full accrual accounting system to be reached and these were set by PDS4/2019. The disclosure level for Greek Government report was highly improved and ISPAS were approached for Greek Government financial statements.
The gradual process followed by the Greek government accounting system towards total accrual basis and the main restrictions and constraints that have to be faced raised the question of the degree of accrual accounting already achieved in this IPSAS based accounting framework. The identification of the disclosure level of the new accrual accounting system applied and the quantification through a score process will provide further understanding of the disclosure level achieved and the degree of ISPAS application.

This research is expected to be a useful guide for future adjustments and next steps in the accounting system already applied by the central government and which is expected to be extended to the whole public sector from 1.1.2025. The main concerns raised as well as the achievements in the area of accrual accounting are potentially relevant to academics and practitioners since they provide evidence on the improvement of the disclosure level on the process of IPSAS application and the accounting methodology followed in order for the necessary information to be readily available by the accounting data. It also identifies difficulties faced on this process and explains how they affect the disclosure level already achieved, when the specific IPSAS score board is examined.

This paper should be further extended to the whole public sector when the new PD 54/2018 has been already applied to the General Government and the results of the study would be useful to be compared with the relevant results and scores of other countries in order for the whole process of EU countries towards IPSAS and EPSAS to realize a fair view of the accounting developments already achieved. Then, the results could be further compared with specific Government characteristics in order to realize motives and strategic decisions as well as difficulties in the process of applying generally accepted accounting standards in the public sector.

This paper is organized as follows: this introduction is followed by the literature review which is presented in Section 2. Then, the research question and the methodology applied are analyzed in Section 3. Section 4 describes the findings and section 5 concludes the paper.

2. Literature review

Greece is included in the countries that have put great effort in following international developments regarding governmental accounting beginning with the application of Double Entry Modified Cash Basis Accounting and continuing with the application of total accrual accounting system of PD 54/2018, based on ISPAS. The disclosure level has been significantly improved during the process of getting close to complete accrual accounting adoption.
Though it is not expected that total IPSAS application or IPSAS based accounting will have identical results in all governments. The relationship between disclosure level and degree of government openness and experience on IAS/IFRS has been also examined by Mnif and Gafsi (2020) who realized a significant relationship which was though not connected to government financial position. During the process to full accrual accounting it was realized that the application is a long and very expensive process for complex public organizations although common and reliable accounting standards seem compulsory (G. Grossi, M. Soverchia, 2011).

According to G. Grossi, M. Soverchia, (1988) international exchanges and transactions influence mainly governments to turn to accruals following IPSAS and proved that the transition to full accrual-based IPSAS only aims to gain good governance. This because IPSAS disclosure is expected to increase accountability and “fiscal information” transparency of government. Then, improvements in the area of comparability, relevance, timeliness and faithful representation were realized by the application of IPSAS according to Opanyi (1983). IPSAS has improved the level of accountability through budget planning and implementation, which in turn enhanced financial reporting. (Muraina, Bello, 2019).

The examination of the data on an accrual basis and their future comparison with the cash data highlight additional aspects of the financial situation of the municipalities and are of particular interest. For this purpose, the total public sector electronic infrastructure should be strengthened in order to collect regularly the data from the balance sheets and the rest of the financial statements. This should certainly not be limited to monitoring systems of the municipalities (FEIR, 2017). Accrual-based IPSAS accounting is expected to improve transparency on the availability of a single set of high-quality accounting system procedures and enhances comprehensiveness and reliable reporting (IFAC, 2012a).

Accounting harmonization has been measured by indices using several accounting criteria and were intended to evaluate how accounting standards were practically applied in both national and international contexts (Van der Tas, 1988). Copeland and Ingram (1983) developed a relevant compound measure of disclosure quality, including both importance and extent of disclosure in order to examine the information level in governmental financial reports. Other indices consist of many component items, which have been identified as relevant to the set and the purposes of the like the public accountability index: crafting a parametric disclosure index for annual reports. In the same framework OECD developed
“The Best Practices” to be used as a reference tool for member and non-member countries to use in order to increase the degree of budget transparency. Although it is totally understood that different countries have different implications on transparency by following different accrual accounting standards, it is expected that best practices will improve the desired disclosure level.

According to David Coya, Keith Dixonb, 2003 and Rodriguez Bolivar, Lopez Hernandez and Caba Perez (2014) the Internet can be used as a channel for financial budgetary disclosures by the central governments and they proved that there is little agreement about the content of budgetary information between different countries. More specifically they realized that factors previously found to be important in paper-based reporting, such as education level, population, internet access or fiscal pressure were not proved to have influence on the public financial information disclosed on the internet. Their studies suggest that the quality and quantity of the additional policy and accountability reports made available online are associated with a political variable, that of political competence.

Research question and methodology design

This study assesses the degree of accrual accounting and IPSAS application on the financial statements published by the central government during the years 2011 - 2020. In this research, the level of IPSAS disclosures compliance was used in order for the accrual accounting level to be quantified. The extent of compliance will take into account the different accounting systems applied during the period 2011-2018 and the period 2019-2020. Although only the legislation framework for the period 2019 onwards provides for international accepted accounting standards, the accounting system applied since then (for the period 2011-2018) was also based on an analysis performed on IPSAS accrual accounting principles. The degree of IPSAS based accrual accounting is quantified by a disclosure level analysis and score.

More specifically the financial statements and the annual report published by the central Greek government for the years 2011-2020 were analyzed on the level of the disclosure provided based on an IPSAS disclosure checklist provided by Ernst and Young (2012b). This checklist consists of 98 disclosure items from the following accrual-based standards:

- IPSAS 1 (presentation of financial statements);
- IPSAS 2 (cash flow statements);
_ IPSAS 3 (accounting policies, changes in accounting estimates and errors);
_ IPSAS 14 (events after the reporting date);
_ IPSAS 22 (disclosure of financial information about the general government sector) and
_ IPSAS 24 (presentation of budget information in financial statements).

The choice of the specific standard follows the method of the disclosure index already developed by Mnif and Gafsi (2020) and was based on the IFAC guidelines. The specific accrual-based IPSAS were judged to contain the main disclosures required in a complete accrual based accounting system. The specific disclosure index includes the minimum disclosure requirements in order for reliable and transparent government financial statements to be presented. Special adjustments have been performed on the disclosure checklist of Ernst and Young regarding disclosure items that were not applicable on Greek Government Financial Statements. The model developed by Mnif and Gafsi (2020) was enriched with IPSAS 22 (disclosure of financial information about the general government sector) which was considered to complete the disclosures for accrual based accounting for government financial statements. The specific list of the disclosure items included in the score board is presented in Table 1.

Each annual report and the whole set of the financial statements and notes published by the Greek central government for the fiscal years of 2011-2020 were analyzed and scored according the disclosure level provided. The total items disclosed will then provide the degree of IPSAS based accrual accounting achieved for each year. Restrictions for the whole period examined regarding especially property, plant and equipment and provisions were taken into account during the score board application.

Results

The IPSAS based accrual accounting disclosures score is presented in table 2. According to this the differences of the average disclosure is not significant within each of the two periods examined (2011-2018 and 2019-2020) but there is an important difference in the score for the year 2019 when the new PD 54/2018 (which is ISPAS oriented), is applied. The highest score belongs to the years 2019 and 2020 when further information is provided and the index reaches the highest score of 68%. Significant increase in the disclosure index was also realized for the years 2012 (from 34% in 2011 to 42% in 2012) and 2016 (from 41% in 2015
to 54% in 2016). One of the significant changes in the disclosure index was realized in the second year of Double Entry Modified Cash Basis Accounting when comparative information was provided and budgetary information was also included and analyzed in the annual report. The second significant change realized in 2016 financial statements included information provided in view of the new PD 54/2018 application.

The results reveal that the lowest score was achieved for the years 2011-2012, the first two years of Double Entry Modified Cash Basis Accounting. This is in line with the first effort at this period to apply accrual basis within all the restrictions of the traditional cash basis system applied so far by the central Greek government. A constant improvement in the score achieved each year provide evidence that the accrual accounting is evolving in the Greek public sector, where the final score achieved during the last two years indicate the new PD 54/2018 is actually IPSAS based and that the Greek accounting system continues to adjust towards the full application of the new PD and therefore taking it closer to full IPSAS (and eventually EPSAS) application with all the benefits described and the disclosure level universally required.

It should be mentioned that the research period examined is rather limited due to the recent application of PD54/2018 and the comparison performed is restricted by the available financial statements according to the new standards and adjusted for specific type of disclosure that was not possible to be verified. Disclosure items were coded as disclosed (1), not disclosed (0) or not applicable (NA), taking into account that there should be no effect for omitting irrelevant disclosure items or limited accessed by the current legislative framework. Irrelevant or limited accessed Items were identified based on a number of criteria such as legislative framework, the government entity’s principal activities, limitations mentioned in the financial statements and the restrictions in the presentation of assets and liabilities (Yorsa et Yorsa, 2018). The disclosure index examined is unweighted, for each category. Unweighted scores reduce subjectivity and may be considered the norm in annual report studies (Ahmed & Courtis, 1999).

**Conclusion**

This paper aims to compare the level of central government financial information disclosed in the annual financial statements before and after the adoption of an accounting system based on International Public Sector Accounting Standards (IPSAS). More specifically the two
distinctive accounting periods of 2011-2018 and 2019-2020 were analyzed, based on a score board in order for the disclosure level of these accrual based accounting systems to be quantified and compared.

The use of a checklist of disclosure items used to measure the IPSAS disclosure level and the comparison of the results indicate significant differences between the disclosure level of the government financial statements between the two periods, whereas the disclosure level was similar within the two periods examined. Significant increases in disclosure level were though identified on specific years during the period 2011-2018 due to improvements in the notes and the analysis of the annual report, especially for the years close to the transition to the full accrual accounting basis.

The research findings are potentially relevant to academics and practitioners since they provide evidence on the improvement of the disclosure level on the process of IPSAS application. Accounting methods applied should be adjusted for the required information to be systematically obtained during the accounting process. It identifies the main disclosure areas where practitioners should focus on and identifies the areas that should be further analyzed and enforced with accounting data and analysis, in order for IPSAS requirements to be met. It also identifies the accounting areas where difficulties are faced on this process (ie IPSAS 1, IPSAS 2, IPSAS 3, IPSAS 14, IPSAS 22, IPSAS 24) since the highest score of 68% is still far from the total disclosure level required by IPSAS, providing stimulus for further progress in the public accounting system of Greece. Finally the comparison between the score recorded for each standard indicates the weaknesses (IPSAS 22) and strengths (IPSAS 3) in the application of ISPAS in the public sector in Greece and could be further examined.
References


<table>
<thead>
<tr>
<th>Accrual-based standard</th>
<th>Nbr. of items by standard</th>
<th>Disclosure category</th>
<th>Nbr. of items by disclosure category</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPSAS 1</td>
<td>63</td>
<td>1. Identification and components of financial statements</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Entity Information</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Going Concern</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Comparative information</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Consistency of presentation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Date of authorization</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Statement of financial position</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Current - non current</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Statement of changes in net assets/equity</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Notes to financial statements</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Net assets/equity</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. Capital</td>
<td>5</td>
</tr>
<tr>
<td>IPSAS 2</td>
<td>14</td>
<td>1. Presentation of cash flow statement</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Components of cash and cash equivalents</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Other cash flow information</td>
<td>5</td>
</tr>
<tr>
<td>IPSAS 3</td>
<td>7</td>
<td>1. Summary of significant accounting policies</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Changes in accounting policies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Key estimation assumptions</td>
<td>2</td>
</tr>
<tr>
<td>IPSAS 14</td>
<td>3</td>
<td>1. Events after the reporting period</td>
<td>3</td>
</tr>
<tr>
<td>IPSAS 22</td>
<td>1</td>
<td>1. Information about the general government sector</td>
<td>2</td>
</tr>
<tr>
<td>IPSAS 24</td>
<td>9</td>
<td>1. Comparison of budget and actual amounts</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Note disclosure of budgetary basis, period and scope</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Reconciliation of actual amounts on a comparable basis and actual amounts in the financial statements</td>
<td>2</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Disclosure level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPSAS 1</td>
<td>32%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>IPSAS 2</td>
<td>64%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>IPSAS 3</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>IPSAS 14</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>IPSAS 22</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>IPSAS 24</td>
<td>0%</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>%</td>
<td>34%</td>
<td>42%</td>
<td>42%</td>
</tr>
</tbody>
</table>