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Article

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Assessing the Impact of IPSAS on Financial Reporting and Public Management in Greece

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Abstract

The adoption of International Public Sector Accounting Standards (IPSAS) is gaining momentum across the world. Greece initiated a general financial management reform program which includes the transformation of financial accounting. The public sector in Greece adopted IPSAS-based standards (P.D.54/2018) in June 2018. The transition from modified cash accounting to accruals accounting brought the country one step closer to IPSAS. P.D.54/2018 resulted in material adjustments on the state accounts. However, public management was not able to assert full compliance due to lack of necessary accounting records. The objective of this study is to assess the impact of IPSAS on financial reporting and public management in Greece and discuss the anticipated benefits and the challenges to be encountered in the transition process. The results of this study indicate that Greece is at a premature stage regarding IPSAS. Meanwhile, research regarding the implementation of IPSAS in Greece appears to be limited. The adoption of IPSAS is expected to have significant impact on the financial statements of Greece due to the gap between IPSAS accounting principles and current accounting practices. The move towards IPSAS has the potential to radically change the practice of accounting and financial reporting in public sector. Nonetheless, it appears that the implementation of IPSAS has to overcome several challenges in order to be successful and utilise these benefits. The study provides useful insights on the transition to IPSAS for all the parties engaged in public administration reform as well as to countries that are in process or planning to adopt IPSAS.

JEL Classifications: M40, M41, M49

Keywords: International Public Sector Accounting Standards (IPSAS), Financial Reporting, Public Management, Public Accounting, Public Sector

1. Introduction

The global financial crisis and the subsequent sovereign debt crisis have brought to light that the lack of transparency in public finances and poor public finance management may put at risk governments' ability to service large public debts and meet their welfare commitments and other public service delivery objectives. There is now growing recognition of the

importance of appropriate accounting and financial management in the public sector as a key means of achieving sustainable public finances¹.

Greek economy and society were deeply affected by the financial and sovereign debt crisis. As a result, the imperative need for high quality financial information was raised on top of the political agenda. The financial information based on cash accounting proved insufficient to predict and prevent the financial crisis that hit the country and led to a program of general reform and restructuring of public debt.

Over the last few decades, the public demand for radical improvement of public sector activities resulted in a wave of organizational, managerial and accounting reform in the public sector worldwide (Christiaens, 2008)². Many of these reforms show a number of characteristics often summarized under the term New Public Management (NPM). According to Christiaens, governmental accounting reform has often been the first step of government reform and that is why it can be considered as an important condition and prerequisite for the success of other consequent governmental reforms under the transformation wave of NPM, such as organizational and managerial reforms. Therefore, effective and successful implementation of the accounting reform plays an important and dominant role in the implementation and success of other NPM practices and techniques within public organizations³.

According to Hood (1995)⁴, the NPM focuses on reducing the differences between the public and the private sectors by moving public sector practice closer to private sector practice. Within the context of NPM, several countries have adopted financial accounting reforms at public sector by adopting an accruals accounting basis that is widely used in private sector organizations, in order to increase their financial accountability and transparency and improve measurement of public sector performance.

The adoption of International Public Sector Accounting Standards (IPSAS) is gaining momentum across the world and promote the transparency and accountability to public management. Greece has initiated financial management reform which includes the adoption of accrual accounting and brings the country one step closer to IPSAS adoption.

Good accounting is an essential element of good governance; high-quality public financial management enables tighter fiscal control; the transparency associated with IPSAS-based financial statements leads to a better-informed electorate and a more accountable government. In such a context, government accounting is an essential element of a well-functioning management system, enabling decision-makers to measure and monitor performance, and creating incentives for them not to take decisions that impact negatively on either efficiency or inter-generational equity (Ball, 2015)⁵.

The objective of this study is to assess the impact of the adoption of IPSAS on public management, financial reporting and auditing of public sector in Greece. Emphasis will be given to the impact of IPSAS on the quality of financial reporting and its effect on

¹ PricewaterhouseCoopers, 2015. Towards a new era in government accounting and reporting. Available at <<https://www.pwc.com/gr/en/publications/towards-a-new-era-in-government-accounting-and-reporting.pdf>> [accessed: 30 January 2022]

² Christiaens, J. and Rommel, J., 2008. Accrual Accounting Reforms: Only in businesslike (parts of) governments. *Financial Accountability & Management*, 24(1), 59-75.

³ Stamatiadis, F., 2009. Investigating the Governmental Accounting Reform of Greek National Health System (ESY): Some preliminary evidence. *International Journal on Governmental Financial Management*, 9(2), 73-97.

⁴ Hood, C., 1995. The "New Public Management" in the 1980s: Variations on the Theme. *Accounting Organizations and Society*, 20(2 & 3), 93-109.

⁵ Ball, I., 2015. Debate: Would IPSAS help Greece?. *Public Money and Management*, 35(6), 397-398.

management of public sector entities in terms of planning, decision making, monitoring, evaluation and on the effectiveness of the audit authorities' work.

The aim of the research is to highlight the benefits that the country could gain from the implementation of IPSAS and the challenges that is expected to face in the process. Furthermore, the study includes review of prior research on IPSAS in Greece. The results are expected to contribute to understanding of the importance of IPSAS and assist in the effective planning of their implementation in the public sector.

2. International Public Sector Accounting Standards (IPSAS)

International Public Sector Accounting Standards (IPSAS) consist an accounting framework for the preparation and presentation of public sector financial statements. IPSAS are the public sector equivalent of International Financial Reporting Standards (IFRS). IFRS have been credited with providing a more transparent and accurate financial overview of listed companies around the world, using accruals accounting as opposed to cash accounting. The move towards using IPSAS in the public sector has the potential to radically change the practice of accounting and financial reporting in the sector, just as IFRS have accomplished with listed companies⁶.

The International Public Sector Accounting Standards Board (IPSASB) is an independent standard setting board founded by the International Federation of Accountants (IFAC). The IPSASB develops accounting standards (IPSAS), guidance and other resources for use by the public sector entities around the world. The IPSASB has issued forty-two (42) accounting standards based on the accrual basis and one (1) standard on cash basis. In addition to IPSAS, the IPSASB has issued 'The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities' and three (3) 'Recommended Practice Guidelines (RPGs)'. The 'Table 1: Overview of the IPSAS and the underlying IFRS' in Appendix provides an overview of the IPSAS and the underlying IFRS⁷.

The objective of financial reporting by public sector entities is to provide information about the entity that is useful to users of General Purpose Financial Reports (GPFRs) for accountability purposes and decision making purposes. Governments and other public sector entities raise resources from taxpayers, donors, lenders and other resource providers for use in the provision of services to citizens and other service recipients. These entities are accountable for their management and use of resources to those that provide them with resources, and to those that depend on them to use those resources to deliver necessary services. Those that provide the resources and receive, or expect to receive, the services also require information as input for decision making purposes⁸. Therefore, financial reporting by public sector entities should serve the needs of the users of GPFRs.

⁶ Association of Chartered Certified Accountants, 2017. IPSAS implementation: current status and challenges. Available at <<https://www.accaglobal.com/pk/en/professional-insights/global-profession/ipsas-implementation-current-status-and-challenges.html>> [accessed: 30 January 2022]

⁷ Deloitte, 2019. International Public Sector Accounting Standards (IPSAS). Available at <www.iasplus.com/en/standards/ipsas> [accessed: 30 January 2022]

⁸ International Public Sector Accounting Standards Board, 2021. The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities. Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

IPSAS⁹ govern the recognition, measurement, presentation and disclosure requirements in relation to transactions and events in GPFRs. GPFRs are characterized by the fact that they not only comprise financial statements but also refer to other financial reports intended to meet the information needs of users who are unable to require the preparation of financial reports tailored to meet their specific information needs.

IPSAS are designed to apply to public sector entities that meet all the following criteria: a. Are responsible for the delivery of services to benefit the public and/or to redistribute income and wealth; b. Mainly finance their activities, directly or indirectly, by means of taxes and/or transfers from other levels of government, social contributions, debt or fees; and c. Do not have a primary objective to make profits. Government entities not meeting these criteria would apply IFRS¹⁰. As transactions are generally common across both the private and public sectors, there has been an attempt to have IPSAS converged with the equivalent IFRS. As a general rule, the IPSAS maintain the accounting treatment and original text of the IFRS, unless there is a significant public sector issue that warrants a departure. The IPSAS are also developed for financial reporting issues that are either not addressed by adapting an IFRS or for which no IFRS has been developed.

A complete set of financial statement, according to par.21 of IPSAS 1, comprises: a) a statement of financial position, b) a statement of financial performance, c) a statement of changes in net assets/equity, d) a cash flow statement, e) when the entity makes publicly available its approved budget, a comparison of budget and actual amounts either as a separate additional financial statement or as a budget column in the financial statements, f) notes, comprising a summary of significant accounting policies and other explanatory notes and g) comparative information in respect of the preceding period for all amounts reported in the financial statements.

Furthermore, IPSAS introduce the RPGs. Compliance with the RPGs is not required in order for an entity to assert that its financial statements comply with IPSAS. However, compliance with RPGs contributes to good governance. Taking for instance RPG 1; the objective of RPG 1 is to report on the long-term sustainability of a public sector entity's finances. The RPG provides information on the impact of current policies and decisions made at the reporting date on future inflows and outflows and supplements information in the general purpose financial statements. The aim of such reporting is to provide an indication of the projected long-term sustainability of an entity's finances over a specified time horizon in accordance with stated assumptions. Reporting under RPG 1 'Reporting on the Long-Term Sustainability of an Entity's Finance' requirements, could have assisted Greece's government to anticipate the sovereign debt crisis and general financial crisis and take preventive action instead of surveillance and austerity measures.

3. Public Sector Accounting and Financial Reporting in Greece

The current situation of public sector accounting and financial reporting in Greece is analysed below in terms of public sector structure, accounting standards, budgeting process and consolidation process.

⁹ International Public Sector Accounting Standards Board, 2021. Handbook of International Public Sector Accounting Pronouncements, Volumes I, II, III, Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

¹⁰ Deloitte, 2019. International Public Sector Accounting Standards (IPSAS). Available at <www.iasplus.com/en/standards/ipsas> [accessed: 30 January 2022]

According to L.3871/2010¹¹, the term ‘Public Sector’ refers to the General Government and the Public Enterprises. The General Government in Greece consists of the Central Government, the Local Administration Organizations and the Social Security Organizations. The Central Government consists of the Central Administration (Presidency of the Republic, Ministries, Parliament, Decentralized Administrations and Independent Authorities) and other Public Entities. The Local Administration Organizations consist of A’ degree - Municipalities and B’ degree – Regions. The Social Security Organizations consists of Social Security Funds, Health Service Providers and Employment Organizations.

As far as financial reporting is concerned, public sector in Greece does not have common accounting standards for all public sector entities. Each category of entities follows different accounting standards as prescribed by the relevant Presidential Decree (P.D.), they have different chart of accounts and even the accounting basis (accruals basis – cash basis) may be different across the public sector entities’ standards. Central Administration followed, until recently, the P.D.15/2011¹², Legal Entities of Public Law follow the P.D.205/1988¹³, Local Administration Organizations follow the P.D.315/1999¹⁴, Public Healthcare Units follow the P.D.146/2003¹⁵ and Social Security Organizations follow the P.D.80/1997¹⁶. P.D.15/2011 that concerns Central Administration is based on modified cash basis of accounting while P.D.205/1988 that concerns Legal Entities of Public Law, P.D.315/1999 that concerns Local Administration Organizations and P.D.146/2003 that concerns Public Healthcare Units are based on accrual basis of accounting. P.D.80/1997 that concerns Social Security Organizations, has not been actually implemented in practice. Each category of entities has its own chart of accounts that serve its organizational needs and even the structure and the codification of accounts are different (i.e. different number of digits, different information codified in digits, different group of accounts for each element of assets etc). There is fundamental gap between the chart of accounts that each category of public entities uses in the accounting and reporting process.

With regards to consolidated financial statements, the main objective of consolidation process in public sector is to present an overview of the financial position and financial performance of the general government. Consolidated financial statements give to the government an overall view of the public sector finances and therefore they constitute an important tool for decision making, planning and monitoring of public policies. Taking into account the differentiation of financial reporting across public sector entities as described above, it is reasonable to expect that public sector in Greece does not prepare consolidated financial statements.

¹¹ Law 3871/2010. Financial Management and Accountability. Government Gazette 141/A’/17-8-2010. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

¹² Presidential Decree 15/2011. Content and timeline of the adoption of Double-Entry Modified Cash Basis of Accounting. Government Gazette 30/A’/2-3-2011. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

¹³ Presidential Decree 205/1988. Content and timeline of the Chart of Accounts for Legal Entities of Public Law. Government Gazette 163/A’/15-7-1988. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

¹⁴ Presidential Decree 315/1999. Content and timeline of the Chart of Accounts for Local Administration Organizations. Government Gazette 302/A’/30-12-1999. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

¹⁵ Presidential Decree 146/2003. Content and timeline of the Chart of Accounts for Public Healthcare Units. Government Gazette 122/A’/21-5-2003. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

¹⁶ Presidential Decree 80/1997. Content and timeline of the Chart of Accounts for Social Security Organizations. Government Gazette 68/A’/8-5-1997. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

Another integral element of public finances is the budgeting process. Typically, a government or other public sector entity prepares, approves and makes publicly available an annual budget. The approved budget provides interested parties with financial information about the entity's operational plans for the forthcoming period, its capital needs and, often, its service delivery objectives and expectations. It is used to justify the raising of funds from taxpayers and other resource providers, and establish the authority for expenditure of resources. The approved budget is often the basis for setting taxation levels and is part of the process for obtaining legislative approval for spending. Furthermore, the approved budget enables users to compare financial results with the budget which facilitates an assessment of the extent to which a public sector entity has met its financial objectives. Such information promotes accountability and informs decision making in subsequent budgets. Reporting against budget is commonly the mechanism for demonstrating compliance with legal requirements relating to the public finances. Therefore, the State Budget serves a number of objectives such as accountability, management, implementation of economic policies, communication of targets, motivation and evaluation of performance. Accountability relates to the responsibility of management of public entities for proper and effective use of public resources. Management of resources relates to the fact that budget is a tool that defines and quantifies the costs and the anticipated performance results. Implementation of economic policies relates to the fact that budget gives the direction to the economy and reflects the targets to be achieved by the utilization of resources. Furthermore, budget constitutes a tool to communicate the planning and targets to all levels of management and serves as motivation lever of public sector officers. Finally, budget is a measure against which the actual performance of the entity will be evaluated.

In Greece, the Central Government prepares the State Budget which defines the expected income and the expenditure limits of each public sector entity for the forthcoming financial year. The state budget is prepared on a cash basis on which fiscal adjustments are made. General Accounting Systems (G.A.) work in parallel with Public Accounting System (P.A.); the system that monitors the State Budget. The execution of state budget is monitored using double-entry accounting in specific informative accounts that work in pairs in Public Accounting System. It should be noted that the state budget does not include the budget of Public Enterprises, Social Security Organizations, Public Hospitals and Local Administration Organizations which have separate budgets. Except from the cash-based budget, all public sector entities are obliged to maintain a record of expenditure commitments in the Commitments Register in order to inform the General Government on the current liabilities and outstanding payments.

A great step towards IPSAS adoption was made by the issuance of P.D.54/2018¹⁷ in June 2018. P.D.54/2018 defines the new accounting framework for General Government. The new accounting standards should be implemented no later than 01.01.2023. Furthermore, the P.D.54/2018 defines a common chart of accounts for all General Government Entities. The chart of accounts will be used not only in financial reporting (General Accounting) but in budgetary reporting (Public Accounting) as well in order to ensure comparability of budget with actual results and facilitate the evaluation of performance and decision making. Actually, the chart of accounts in accordance with P.D.54/2018 was obligatory for the preparation of the State Budget for the year ended 2019 while the obligation for the preparation of Financial Statements begins in the year ended 2023. The accounting standards prescribed in P.D.54/2018 use the accrual accounting base for financial reporting and they are

¹⁷ Presidential Decree 54/2018. Specifications and timeline of the Chart of Accounts of the General Government. Government Gazette 103/A'13-06-2018. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

obviously influenced by IPSAS. Furthermore, the P.D.54/2018 provides for the preparation of consolidated financial statements on four management levels; Central Administration, Social Security Organizations, Local Administration Organizations and ultimately General Government.

The new accounting framework provides for a different set of financial statements compared to the previous sectoral accounting standards. According to P.D.54/2018, the public sector financial reports are: a. Statement of Financial Position, b. Income Statement, c. Cash Flow Statement, d. Statement of Changes in Equity, e. Notes and, in addition to the full set of financial statements come the following statements: f. Fiscal Report that presents the financial surplus/deficit and the net financing for the period according to the European System of Accounts (ESA) and g. Statement of Account (Budget versus Actual Statement) that presents the comparison between budgeted and actual results. Previous sectoral standards for Central Administration (P.D.15/2011), Social Security Organizations (P.D.80/1997), Legal Entities of Public Law (P.D.205/1998), Local Administration Organizations (P.D.146/2003) and Public Healthcare Units (P.D.315/1999) implied different accounting principles and different set of financial reports.

As stated by Chytis et al. (2020)¹⁸, the implementation of IPSAS in Greece is at an early stage. The explanatory memorandum on Law 4270/2014¹⁹ states that in recent years, in the context of broader fiscal consolidation efforts, significant reform initiatives have been undertaken to establish fiscal rules and supervisory practices and to safeguard control mechanisms that will assist in the adoption of IPSAS. In particular: Transparency has been enhanced (through the TRANSPARENCY program) as well as the regular, timely and reliable information on the state of the implementation of the budget of the General Government bodies. The digital upgrade of processes and information systems has been promoted in order to meet the new needs of public e-government in relation to monitoring budgetary magnitudes (e.g. SYZEFXIS program, electronic evaluation system, electronic document transfer, digital signatures). The audit procedure was strengthened, and the current system of financial audits was reformed, being adapted to international practice and auditing standards.

All the above-mentioned reforms along with the P.D.54/2018 lead a major transformation of public management in Greece which seems to move progressively to IPSAS adoption. According to Hellenic Accounting and Auditing Standards Oversight Board²⁰, IPSAS are anticipated to improve the reliability, transparency and comparability of public sector financial statements by presenting all transactions, ensure the proper cut-off and separation of accounting periods, provide better information on the allocation and management of public resources, reduce the running costs of public administration, contribute to the fair presentation of public entities net worth by recognizing assets at fair value, lead to rational financial management through matching income and expenses and use of modern accounting tools, allow comparisons with the financial statements of private sector companies, improve asset management and cash management, enhance the confidence of citizens and markets, increase the reliability of the assessments of rating agencies and other users of public

¹⁸ Chytis E., Georgopoulos I., Tasios S. and Vrodou I., 2020. Accounting Reform and IPSAS Adoption in Greece. *European Research Studies Journal*, 23(4), 165-184

¹⁹ Law 4270/2014. Principles of fiscal management and supervision (transposing Directive 2011/85/EU) - public accounting system and other provisions. *Government Gazette* 143/A'/28-6-2014. Available at <<http://www.et.gr/index.php/anazitisi-fek>> [accessed: 30 January 2022]

²⁰ Hellenic Accounting and Auditing Standards Oversight Board, 2013. Implementation of International Public Sector Accounting Standards (IPSAS). Available at <http://www.elte.org.gr/images/files/pdf/DT_6_3_13.pdf> [accessed: 30 January 2022]

financial statements, facilitate the accounting consolidation of public entities' financial statements and lead to a reduction of the impact of political decisions.

4. Assessing the impact of IPSAS adoption in Greece: Benefits and Challenges

The adoption of IPSAS is expected to have significant impact on the financial reporting in Greece due to gap between IPSAS accounting principles and current accounting practices. Greece presents negative (citizens') net assets in the statement of financial position under the current financial reporting regime. This is attributable to a number of accounting issues, which among others, regard the timing of recognition of revenue and expenses using a modified cash basis, the fact that property, plant and equipment (fixed assets) are not presented in the statement of financial position, depreciation not charged against the assets, inventory purchases being expensed in the statement of financial performance instead of being recognized as assets, long term liabilities include the public debt but exclude other accrued liabilities such as liabilities for pensions and other social employees benefits.

P.D.54/2018, which adopted the accruals basis, was implemented for the first time in the preparation of Greece's Central Administration financial statements for the year ended 2019. The equity adjustments amounted to 96.6 bn€²¹. However, in the absence of the necessary accounting records, the Central Administration is currently technically unable to proceed with the recognition and measurement of all assets within its control and therefore presents only part of the assets, as explained in the published financial statements. The presentation of a complete and fair view of public equity will be achieved gradually during the four years transition period.

The objective of the preliminary analysis conducted below, is to assess the impact of IPSAS adoption on public finances of Greece and further discuss the anticipated benefits from the implementation of IPSAS and the difficulties that are expected to arise in the process.

Greece's financial reporting is currently prepared using the modified cash basis of accounting while IPSAS are based on accruals basis. Accrual basis means a basis of accounting under which transactions and other events are recognized when they occur (and not only when cash is received or paid). Therefore, the transactions and events are recorded in the accounting records and recognized in the financial statements of the periods to which they relate. The transition to accruals basis is expected to have significant impact to revenue and expenses recognition and give a fairer view of the financial position and financial performance of Greece. In respect to expenses, Greece monitors the expenses through the execution of budget on cash and commitment basis while under IPSAS expenses would be recorded in the period that they relate. In respect to revenue, IPSAS require revenue to be distinguished into two categories; a. reciprocal or exchange revenues and b. non-reciprocal or non-exchange revenues. That are subject to different accounting treatment. The recognition of revenue in accordance with accruals basis is expected to have significant impact on the financial performance of Greece.

With regard to financial position, there are several elements that have to be adjusted to comply with IPSAS while the recognition of certain assets may be difficult for a number of reasons. In accordance with IPSAS 17²², when an entity adopts accrual accounting for the

²¹ Ministry of Finance, Financial Reports. Available at: <<https://www.minfin.gr/apologismos-isologismos-kai-loipes-chrematooikonomikes-katastaseis>> [accessed: 30 January 2022]

²² International Public Sector Accounting Standards Board, 2021. Handbook of International Public Sector Accounting Pronouncements, Volumes I, II, III. Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

first time in accordance with IPSAS it shall initially recognize property, plant, and equipment at cost or fair value. For the purpose of subsequent measurement after recognition, IPSAS provide for a choice of two accounting models that must be applied uniformly to the entire class of property, plant and equipment: (a) cost model or (b) revaluation model. The determination of cost and fair value both at the stage of initial recognition and subsequent measurement may be proved a significant challenge due to lack of necessary data and records especially taking into account that Greece does not have a complete asset register in place. As a first step, it is necessary to record its assets and prepare and maintain an asset register that includes all assets controlled by the public sector. The initial cost of these assets needs to be determined in accordance with IPSAS requirements which could be a costly and time-consuming process. In addition, depreciation should be charged systematically over the asset's useful life. The assessment of the useful life and the residual value of the assets represent accounting estimates that require professional judgment and therefore it should be performed by experienced professionals with thorough knowledge and understanding of IPSAS. The same applies for impairment testing of cash generating units and non-cash generating units.

Greece is a country rich in heritage assets. Heritage assets include assets of cultural, environmental or historical significance such as historical buildings and monuments, archaeological sites, conservation areas and nature reserves, and works of arts. The measurement of such assets is politically sensitive issue and there is no international agreement on accounting treatment of such assets. IPSAS do not require or prohibit the recognition of heritage assets. Since, Greece has significant heritage assets, the accounting treatment of these assets will have significant impact of its financial statements. Similarly, to heritage assets, are the collectables. Collectables include rare books, works of art, historical objects that may be invaluable and constitute the most significant asset of certain entities such as public libraries, universities, museums. The accounting treatment for these assets in the statement of financial position of these public entities is an important issue to these public sector entities.

Further to the above, the recognition and measurement of infrastructure assets and specialist military equipment will have a great impact on the financial statements. Infrastructure assets do not have a universally accepted definition but usually they are part of a network, they are specialized in nature and do not have alternative uses, they are immovable and may be subject to constraints on disposal. Examples of such assets that are significant to the public sector are road networks, sewer systems, and communication networks. Infrastructure assets are of significant value to public sector Both the recognition and subsequent measurement of such assets require thorough understanding of IPSAS while historical cost and fair value data that may be proved difficult to obtain and it may be difficult to assess the useful life of such assets. Specialist military equipment include assets that are used for defensive purposes such as military equipment, aircrafts, warships, submarines, tanks, which will normally meet the definition of property, plant and equipment and shall be recognized as assets. The useful life of such assets may change radically due to political or technological changes. Furthermore, certain military assets may be consumed immediately in times of war. On top of the above, the presentation and full disclosure of these information in the financial statements conflict with matters of military secrecy.

Another category of assets that is expected to impact Greece's accounts is inventory. Under current reporting standards, inventory is being expensed as purchased. However, in accordance with IPSAS, inventories are assets in the form of materials and supplies to be consumed in the production process, in the form of materials or supplies to be consumed or distributed in the rendering of services, assets held for sale or distribution in the ordinary

course of operations and assets in the process of production for sale or distribution. Public sector has special inventories such as ammunition, strategic stockpiles (e.g., energy reserves or medicine), stocks of unissued currency, stamps, work in progress such as educational/training course materials and other special categories of inventory. These inventories should be physically counted at year end and measured with FIFO or weighted average cost. The inventories should be presented in statement of financial position at the lower of cost and net realizable value.

In respect to liabilities, public entities in Greece monitor the execution of budget and therefore authorized expenditure in the Commitments Register while provisions are not recorded. According to IPSAS, liabilities should be recorded in the period to which they relate and provisions should be recorded when there is a present obligation as a result of a past event that it is probable to require an outflow of economic benefits to settle the obligation, and reliable estimate of the amount of the obligation can be made. A major liability that will impact Greece's accounts are post-employment benefits and specifically, pensions to public sector employees. According to IPSAS, a public sector entity recognizes a liability when an employee has provided service in exchange for employee benefits to be paid in the future and an expense when the entity consumes the economic benefits or service potential arising from service provided by an employee in exchange for employee benefits. The underlying principle of IPSAS 25²³ is that the cost of providing employee benefits shall be recognized in the period in which the benefit is earned by the employee, rather than when it is paid or payable. In Greece, the salaries of public servants are usually lower than salaries in the private sector for a similar position. This is usually balanced by higher pension in retirement earlier in time compared to private sector. Greece does not recognize the defined benefit obligation and related expense in the financial statements. In order to comply with IPSAS, an actuarial study should be conducted which requires considerable amount of data for all public sector employees and actuarial assumptions that have to be appropriately supported in order to recognize the liability. The accounting treatment of public servants' pensions will have an impact on the financial position taking into account that public sector employees in Greece represents approximately 24% of country's work force²⁴. Except from the above, there are specific categories of public sector entities that under IPSAS, would have to recognize liabilities that were not recorded under previous standards. According to IPSAS, certain public sector entities, taking for instance landfills, have a legal obligation to avoid, constraint and rectify the environmental damage they cause. Landfills generate economic benefits during the period that receive refuse (estimated to be over 30-40 years) and incur significant closure and fulfilment costs in the post-closure period (estimated to be over 20 years after closure of landfill). Therefore, the landfills should recognize a liability equal to the present value of fulfilment costs that will be incurred over an extended post-closure period of time.

4.1 Benefits of IPSAS adoption

The adoption of IPSAS in public sector GPFRs is expected to benefit the public management, enhance the quality of financial reporting and facilitate the auditing of public sector. Reporting in accordance with IPSAS will enhance the qualitative characteristics of relevance, reliability, understandability, timeliness, comparability and verifiability. Therefore, the adoption of IPSAS is expected to provide higher quality financial information to governors

²³ International Public Sector Accounting Standards Board, 2021. Handbook of International Public Sector Accounting Pronouncements, Volumes I, II, III. Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

²⁴ Hellenic Statistical Authority, Employment Report. Available at <<https://www.statistics.gr/en/statistics/-/publication/SEL21/-%20Employment>> [accessed: 30 January 2022]

and public sector managers which will lead to better decision making and ultimately to the achievement of public sector objectives.

Public sector entities that keep their accounts in accordance with IPSAS may choose to use either accrual accounting or cash accounting. The IPSASB has decided to issue only one standard on the cash basis of accounting - the Cash Basis IPSAS. All other IPSAS are developed exclusively on the accrual basis of accounting - in line with the accounting concept applied in IFRSs. This documents the IPSASB's preference for this basis of accounting. This preference seems to be more and more reflected by the accounting reality²⁵. The preparation of GPFs under the accrual basis of accounting would contribute to greater transparency and accountability due to the fact that the accounting events are presented in the year that they concern and that would give a fair view of the financial situation and performance of the public management.

An important aspect of accountability and transparency is achieved through setting the annual financial budget and reporting actual financial results against the budget. As stated by Aggestam and Andernack (2016)²⁶, the budget is a key tool for financial management and control and is the central component of the process that provides for government and parliamentary oversight of the finances of public sector operations. The reporting and disclosure of actual results against such approved budget is an essential part of the accountability process. IPSAS 24²⁷ requires a comparison of budget amounts and the actual amounts arising from execution of the budget to be included in the financial statements of entities which are required to, or elect to, make publicly available their approved budget. The standard also requires disclosure of an explanation of the reasons for material differences between the budget and actual amounts. Compliance with the requirements of this standard will ensure that public sector entities discharge their accountability obligations and enhance the transparency by demonstrating compliance with the approved budget for which they are held publicly accountable. Furthermore, entities that prepare the budget and the financial statements on the same basis will be able to evaluate their financial performance in achieving the budgeted results. The comparison of actual and budget amounts helps to monitor the execution of budget and enforces the transparency and accountability.

Taking into consideration the requirements of IPSAS, it appears that it would be beneficial for a public sector entity to prepare the state budget under the same accounting basis with the financial statements following a common chart of accounts instead of making adjustments for reporting purposes. For many European countries, the budget remains the principal tool of the accounting system. This culture is present in Belgium, France, Germany, Greece, Portugal, Spain, Italy and Switzerland (Bellanca, 2014)²⁸. In this line, the results of Tiron-Tudor et al. (2019)²⁹ study, confirm that a high level of convergence between budgetary and national accounts (statistical reporting) at central governments must be in line with the accounting basis (financial reporting). Countries like Austria or the UK, which use the same reporting

²⁵ Berger, T., 2012. *IPSAS Explained: A summary of International Public Sector Accounting Standards*. John Wiley & Sons Ltd, United Kingdom.

²⁶ Aggestam-Pontoppidan, C. and Andernack, I., 2016. *Interpretation and Application of IPSAS*. John Wiley and Sons Ltd, United Kingdom.

²⁷ International Public Sector Accounting Standards Board, 2021. *Handbook of International Public Sector Accounting Pronouncements, Volumes I, II, III*. Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

²⁸ Bellanca, S., 2014. Budgetary transparency in the European Union: the role of IPSAS. *International Advances in Economic Research*, 20(4), 455-457.

²⁹ Tiron-Tudor, A., Nistor, C.S. and Stefanescu, C.A., 2019. "United in diversity" public sector financial, statistical and budgetary reporting in the European Union. *International Journal of Public Sector Management*, 33(2), 265-283.

basis, offer a high degree of accounting / budgetary / statistical information. The empirical results reveal the need for a harmonised and comprehensive referential for statistical, budgetary, accounting and financial reporting purposes.

The preparation of budget under the accrual accounting basis contributes to better planning for the future by improving the accuracy of forecasts. Better forecasts imply being ready and taking measures to address risks. In addition to the above, the preparation of budget under the accrual accounting basis would facilitate the monitoring and auditing of budget execution as all economic events would be presented in the financial reporting. Effective audit would result in strengthening the accountability of those responsible to manage the budget. The audit of public finances would become more efficient as the accounting events would be recognized in the period that they concern instead of being deferred in future years.

An important aspect of IPSAS is that they provide for the consolidation of financial statements of public sector entities. IPSAS 6³⁰ sets out requirements of the preparation of consolidated financial statements of an economic entity under the accrual basis of accounting. Consolidated financial statements are generally required to include all controlled public sector subsidiaries in the group of consolidated entities. IPSAS elaborate how control should be interpreted in the public sector and in which cases control exists for financial reporting purposes. Consolidated financial statements must be prepared using uniform accounting policies for similar or identical transactions and other events in similar circumstances while intercompany balances, transactions and revenue and expenses between entities must be eliminated. The consolidated financial statements provide governors an overview of public finances of all public sector entities combined and allows them to make optimal decisions to the public interest.

The preparation of the budget and financial statements of public sector entities (standalone and consolidated) harmonized with a commonly accepted accounting framework, such as IPSAS, enhances the understanding of accounting figures by the interested parties and leads to better international comparability through uniformity. The enhanced understandability and comparability brought by the adoption of IPSAS would result in broader economic and social advantages.

A key driver for IPSAS adoption is the importance of attracting ongoing inward investment into the public sector. Financial statements prepared in accordance with IPSAS provide confidence and comparability for investors at an international level. Foreign investment would benefit the broader economy in terms of job positions, better infrastructure, social welfare to the public and societal improvement.

Furthermore, enhancing lenders' confidence through credible financial statements that are understandable and comparable attracts new capital and reduces the country's borrowing costs in international markets. According to Ball (2015)³¹, there is a widespread and pervasive misunderstanding of Greece's real fiscal position. While Greece's debt is commonly cited as being 175–180% of GDP, it is increasingly being acknowledged that this number is incorrect and indefensible, because it is based on the face value of Greece's debt. Calculated on an IPSAS basis, the debt burden would be very significantly lower. However, as pointed out by Caruana J. (2016)³², what Ball I. (2015) describes as 'an incorrect and

³⁰ International Public Sector Accounting Standards Board, 2021. Handbook of International Public Sector Accounting Pronouncements, Volumes I, II, III. Available at <<https://www.ipsasb.org/publications/2021-handbook-international-public-sector-accounting-pronouncements>> [accessed: 30 January 2022]

³¹ Ball, I., 2015. Debate: Would IPSAS help Greece?. *Public Money and Management*, 35(6), 397-398.

³² Caruana J., 2016. Debate: Would IPSAS help Greece? Or would they be the Emperor's New Clothes?. *Public Money and Management*, 36(3), 161-162.

indefensible figure' is in fact the computation of Greek debt according to the EU standard (ESA 2010) applied for reporting debt and deficit and therefore adopting IPSAS would not change the way debt is reported. Therefore, IPSAS can help Greece to reveal its current financial position. But, as stated by Caruana J. (2016), adopting IPSAS is not a guarantee of this, as there are more important institutional changes to that are needed to lead the Greek government towards the required respectability.

As far as public management is concerned, financial reporting based on IPSAS offers to public sector managers and governors a complete and higher quality overview of financial situation and performance of the state which would assist to exploit opportunities and address weaknesses in order to achieve value for money. The 3E's concept (Economy – Efficiency - Effectiveness) is particularly important to public sector entities. Financial reporting that reflects total costs instead of cash outflows alone, would provide more meaningful information to decision makers in order to improve the cost accounting and cost-related decisions. The objective of reducing cost is of great importance in the public sector.

Assets management is another area of interest to public sector. IPSAS require the recognition and subsequent measurement of assets in order to be presented in the financial statements. Therefore, an assets registry should be prepared that concentrates all public sector assets that meet the recognition criteria. The assets registry should include military equipment and infrastructure assets such as road networks, sewer systems and communication networks that may have a certain degree of difficulty to recognize and measure at an appropriate amount. Furthermore, IPSAS provide the option to recognize heritage assets. Despite the difficulties that may arise in the process of preparing a complete and accurate asset registry, the registry will be proved a significant tool to more effective management and utilisation of public property through asset management.

Reporting under IPSAS should be accompanied by a reform of the reporting process and system. The standardization of the financial reporting process and underlying data through the use of modernized accounting systems can lead to the reduction of administrative costs by reducing bureaucracy and identifying opportunities for process automation.

The transition to IPSAS and the consequent changes that have to be made to support their implementation, promote good corporate governance practices and encourage the preparation of financial reports that reflect future planning in order to ensure the long-term sustainability of the country's finances. The country's financial planning includes fiscal figures such as public spending on goods and services, public revenue and public debt.

Human resources consist a critical factor to public sector. The general culture change brought about by the implementation of IPSAS has the potential to make the public sector an attractive choice for highly qualified professionals with increased knowledge and skills and upgrade the 'professionalisation' of the finance function and accounting across the public sector.

Government may be benefited by reporting under IPSAS. The adoption of IPSAS, enhances the stability of government by reflecting all economic figures in financial statements and documenting to citizens and stakeholders the need for specific tax, fiscal and policy measures, legislative reforms and decision-making on specific issues supported by data analysis. In other words, adoption of IPSAS can support policy makers in explaining, and generating support for, their plans for government. Reforms brought about through IPSAS can help create a more stable government, leading to a better investment climate, more jobs and higher incomes. Furthermore, the reporting and consolidation process brings together all

stakeholders in the reporting supply chain while fairer reporting and greater disclosure, lead to more engagement from stakeholders and service users.

The adoption of IPSAS contribute to the effectiveness of audit function. The implementation of IPSAS and the implied general reform in information systems and general culture, facilitates the work of the audit mechanisms through uniformity of all public sector entities in respect to the processes that are in place to serve the implementation of the standards. Furthermore, the modernised systems will be able produce the necessary financial data and information timely, accurately and in standardised format. This standardisation and uniformity would further strengthen the internal control system.

4.2 Challenges of IPSAS adoption

The adoption of IPSAS in public sector GPFs is expected to bring significant benefits to public management, enhance the quality of financial reporting and auditing but also face significant challenges in the transition process.

The implementation of IPSAS will raise the need to modernize the information systems to support the accounting function. The existing technology and data structures may not be able to facilitate the collection of the necessary financial data for the reporting process. IT systems is likely to require replacement or adaptation while focus should be given to the intercommunication of public sector IT systems and data structures of related public sector entities. The modernization of IT system could be costly and require expert consultants to support configuration, training of users and time to transfer the data and return to business as usual.

Public sector entities may not have people with necessary skills and competence or the staffing level needed to adopt the IPSAS. Implementation requires a training programme to enhance the knowledge of IPSAS and raise the skills to use the updated IT systems. It is likely that the public sector will need to recruit and retain qualified staff to support the implementation of IPSAS while balance between external consultants/experts and internal public sector employees should be retained.

The abovementioned changes are accompanied with considerably high cost. The cost of implementation (both financial and in terms of required resources) should not be underestimated from both a finance and audit perspective. Costs will be incurred for training, the use of external consultants, IT upgrades and the development of appropriate guidance materials and translation tools of IPSAS in Greek language. Adequate financial resources should be devoted to targeted stakeholder engagement and for other engagement and awareness activities. Most countries adopted IPSAS in conjunction with a wider public financial management improvement programme, which requires additional investment³³.

Apart from the significant cost, the transition to IPSAS should be followed by legislative reforms in order to be incorporated in a country law system which can be complex and time-consuming process. The IPSAS implementation process may take significant time to reach the full adoption milestone and requires commitment of those involved in the project.

The level of awareness and understanding of the IPSAS framework is low among people who do not have specific financial/accounting knowledge such as politicians and the general

³³ Association of Chartered Certified Accountants, 2017. IPSAS implementation: current status and challenges. Available at <<https://www.accaglobal.com/pk/en/professional-insights/global-profession/ipsas-implementation-current-status-and-challenges.html>> [accessed: 30 January 2022]

public. As stated by Jorge et al. (2019)³⁴, some literature suggests that politicians lack the necessary expertise for using highly technical and complex accounting information, namely financial accrual accounting. Consequently, they underestimate its value for the political activities (Olson and Shalin-Andersson, 1998; Guthrie et al., 1999; Ezzamel et al., 2005; Liguori et al., 2012). As a result, politicians tend to use this type of information selectively (Paulsson, 2006; Buylen and Christiaens, 2015; Grossi and Reichard, 2016), or symbolically (Liguori et al., 2012). IPSAS adoption requires the understanding, education and engagement of key stakeholders including politicians, ministries, auditors, accountants, banks and strong political will that will drive change.

Public sector entities, key stakeholders and the general public are accustomed to cash accounting principles. GPFs based on the accrual accounting base may make it easy for public executives to manipulate results through accounting policies and accounting estimates that leave open space for creative accounting. The need to raise awareness over the new standards is imperative in order to prevent such issues.

The adoption of IPSAS should be accompanied by a general reform of the accounting procedures of all public sector entities. Fundamental changes may face resistance by public servants. The financial reporting should adopt a common chart of accounts that covers the needs of all public sector entities and will facilitate the implementation of IPSAS, the accounting and auditing function and the budget and consolidation process.

In addition, IPSAS implementation requires the initial recognition and measurement of all balance sheet items. The opening balances of certain elements may be difficult to be measured due to lack of data. For instance, an assets registry should be prepared that includes all public sector assets and that could be time and cost consuming process if a country does not have up to date record of its assets. The process of initial recognition and measurement of tangible and intangible assets, receivables and payables under the accrual accounting base and certain other elements of the balance sheet may present significant difficulties when determining the opening balance. For instance, the recognition of property, plant and equipment presupposes that there is available a complete asset register of state property. Greece is in the process of recording the state assets. The preparation of an asset register is a challenge and can be a costly and time-consuming process.

IPSAS may present several technical difficulties especially during the first-time adoption and require deep understanding and qualified staff to apply standards appropriately in practice. The successful transition to the new standards requires a general change in public sector culture that will embrace the change. The adoption of IPSAS represents a challenging project that necessitates effective project management in the framework of change management and commitment of those involved in this demanding project.

5. Prior Research regarding IPSAS in Greece

Greece is at a very early stage of implementing IPSAS. Research regarding the implementation of IPSAS in Greece appears to be limited. A review of previous studies in this field and their results are described in this section.

³⁴ Jorge, S., Jesus, M., and Nogueira, S.P., 2019. The use of budgetary and financial information by politicians in parliament: a case study. *Journal of Public Budgeting, Accounting and Financial Management*, 31(4), 539-557.

Cohen and Karatzimas (2016)³⁵, examined the standard setting process in Greece. Their findings indicate lack of effective monitoring of the standard setting process by politicians and external lenders and an outcome that favoured bureaucrats and consultants involved. The study provides evidence that the reform was aiming to comply with the demand to follow international best practice rather than to satisfy accounting information needed to improve public financial management.

Further to the above, Cohen and Karatzimas (2017)³⁶, assessed the accounting information quality and decision usefulness of governmental financial reporting in Greece under the modified cash basis of accounting as an interim step after cash accounting and before accrual accounting implementation in Greece. As stated, the objective of financial reporting in the public sector is to provide information that is useful to users for decision-making and accountability purposes. The findings of the research revealed several indications that the transition to modified cash basis consists a reform with moderate results regarding the quality of the provided accounting information.

Stamatiadis (2009)³⁷, investigated the perception of accounting and finance employees of public hospitals in Greece regarding the application of accrual accounting by the Greek National Health System. Results showed that the adoption rate was satisfactory, without however an adequate adoption rate of accrual-based accounting system. Furthermore, the research suggested that the transition to accruals accounting contributed in producing adequate information regarding the overall financial picture to users and stakeholders, the evaluation of hospital performance, the real level of liabilities, the determination of full costs of service delivered, improvement in hospital fixed assets management and the decision-making process. On the other hand, according to this research, the most important difficulties that were identified during the implementation process were the adequacy of resources, the employees' shortage on knowledge on accrual accounting principles and standards, the employees' resistance to change, the lack of adequate training and the absence of financial incentives for the adoption of accrual basis of accounting.

Cohen et al. (2015)³⁸, proceeded to a comparison between Greek Governmental Accounting Standards (GGAPs) that follow a modified cash basis and accrual based IPSAS in providing useful information in privatising state-owned property decisions. The findings suggest that even though GGAS seem to be influenced in several cases by IFRS, and therefore present similarities with IPSAS, they do not sufficiently account for information relevant to privatisation decisions while IPSAS appear to be significantly more informative.

Liapis and Spanos (2015)³⁹, examined public sector budgeting and controlling process in Greece using modern analytical tools that allow the transformation of public budget statements to cash flow statements in order to be comparable with the requirements of accrual based accounting system. This method creates a same basis of comparison among countries that follow different public accounting systems. The research uses financial data of Greece

³⁵ Cohen, S. and Karatzimas, S., 2016. Modernizing government accounting standards in Greece: a case of 'garbage can' decision-making. *Public Money & Management*, 36(3), 173-180.

³⁶ Cohen, S. and Karatzimas, S., 2017. Accounting information quality and decision usefulness of governmental financial reporting: Moving from cash to modified cash. *Meditary Accounting Research*, 25(1), 95-113.

³⁷ Stamatiadis, F., 2009. Investigating the Governmental Accounting Reform of Greek National Health System (ESY): Some preliminary evidence. *International Journal on Governmental Financial Management*, 9(2), 73-97.

³⁸ Cohen, S., Karatzimas, S. and Venieris, G., 2015. The informative role of accounting standards in privatising state - owned property: comparing Greek Governmental Accounting Standards and IPSAS. *Global Business and Economics Review*, 17(1), 51-62.

³⁹ Liapis, K. and Spanos, P., 2015. Public accounting analysis under budgeting and controlling process: the Greek evidence. *Procedia Economics and Finance*, 33, 103-120.

over an extensive 50-year time period and connects them with key historical facts which reflect the evolution of Greek public finance withing different governmental policies.

Toudas et al. (2013)⁴⁰ in their study, make a critical review of global adoption of IPSAS and raise questions about the feasibility and desirability of countries having a harmonised set of public sector accounting standards such as IPSAS. The paper suggests that further research is needed on the diversity and the differences between accounting standards of public and private sector, focusing on the private sector's accounting techniques that are most suitable for use in the public sector.

Loumiotis (2014)⁴¹ sets out the ten perquisites for the successful implementation of IPSAS as follows: 1. Translation of IPSAS in Greek language, 2. Development of a culture in the government and public sector in general that IPSAS to serve the public interest, 3. Training of public sector employees on accounting standards, 4. Staffing of public sector entities with sufficient and appropriate staff with knowledge, expertise and experience in accounting and public sector accounting standards, 5. Preparation of complete records of all public sector assets and liabilities at the transition date (opening balances), 6. Preparation of a complete fixed asset register of public property, 7. Design and implementation an effective internal control system (e.g. COSO) that will contribute to the efficient operation of the public sector entities, support the appropriate preparation of financial statements and detect and prevent mismanagement and frauds, 8. Design and implementation of modern information systems that will contribute to the accounting organization and the provision of timely and reliable information to management, 9. Financial statements be subject to external audit by independent auditors which makes the more transparent and reliable and 10. Allocation of the required funds to cover the cost of the first implementation of IPSAS in public sector.

Ball (2015)⁴² explained that Greek financial crisis is a good reason for the public sector to adopt IPSAS as means of producing high-quality financial reports. With IPSAS, Greece's debts would not have been overstated and Greece's real fiscal position would have been better understood. Further, Ball argues that high-quality public sector reports enable tighter fiscal control and that the transparency associated with IPSAS-based financial statements leads to a better-informed electorate and a more accountable government. In such a context, government accounting is an essential element of a well-functioning management system, enabling decision-makers to measure and monitor performance, and creating incentives for them not to take decisions that impact negatively on either efficiency or intergenerational equity. However, as stated by Caruana (2016)⁴³, adopting IPSAS is not a guarantee of this as there are more important institutional changes that are needed to lead the Greek government towards the required respectability, and adoption of financial reporting standards, be they IPSAS or something else, are at the bottom of the list.

⁴⁰ Toudas, K., Poutos, E. and Ballios, D., 2013. Concept, regulations and institutional issues of IPSAS: A critical review. *Public European Journal and Social Sciences*, 2(1), 43-54.

⁴¹ Loumiotis, B., 2014. International Public Sector Accounting Standards, a first IPSAS approach. *Accountancy Greece*. Available at <<https://www.accountancygreece.gr/%CE%BC%CE%B9%CE%B1-%CF%80%CF%81%CF%8E%CF%84%CE%B7-%CF%80%CF%81%CE%BF%CF%83%CE%AD%CE%B3%CE%B3%CE%B9%CF%83%CE%B7-%CF%84%CF%89%CE%BD-ipsas-international-public-sector-accounting-standards/>> [accessed: 30 January 2022]

⁴² Ball, I., 2015. Debate: Would IPSAS help Greece?. *Public Money and Management*, 35(6), 397-398.

⁴³ Caruana J., 2016. Debate: Would IPSAS help Greece? Or would they be the Emperor's New Clothes?. *Public Money and Management*, 36(3), 161-162.

Finally, the most recent study on IPSAS adoption in Greece conducted by Chytis et al. (2020)⁴⁴, examined the level of acceptance and preparation of the Local Administration Organizations regarding the adoption of International Public Sector Accounting Standards (IPSAS) in Greece. The results show that even though the officers and employees of the finance department of municipalities are not familiar with IPSAS, there is a wide acceptance of the need to implement them. It is believed that IPSAS will primarily contribute to the convergence of the accounting monitoring of General Government entities, as well as to better control of the financials of municipalities and an improvement of the quality and reliability of financial statements. It was also concluded that municipalities in Greece are not prepared for the accounting change and the adoption of IPSAS. Municipalities do not have staff with sufficient experience in implementing IPSAS, the current institutional framework needs to change in order to be harmonized with the new standards while ‘change’ is important factor in the mindset of public sector employees, regarding the impact of the implementation of standards on transparency of transactions and accountability.

6. Conclusions

The adoption of IPSAS is gaining momentum across the world. Greece has initiated a general financial management reform program which includes the transformation of the financial accounting. In respect to financial reporting, public sector entities in Greece do not have common accounting standards and procedures. Each category of entities follows different accounting standards as prescribed by the relevant Presidential Decree (P.D.), has separate chart of accounts and even the accounting basis may be different across the public sector entities’ standards. Taking into account the differentiation of financial reporting across public sector entities, it is reasonable to expect that public sector in Greece does not prepare consolidated financial statements. The state budget is prepared on a cash basis on which fiscal adjustments are made. General Accounting System (G.A.) work in parallel with Public Accounting System (P.A.); the system that monitors the State Budget. The execution of state budget is monitored using double-entry accounting in specific informative accounts that work in pairs in Public Accounting System.

The public sector in Greece adopted IPSAS-based standards with the issuance of P.D.54/2018 in June 2018. P.D.54/2018 defines the new accounting framework for General Government. Furthermore, the P.D.54/2018 defines a common chart of accounts for all General Government Entities. The transition from modified cash accounting to accruals accounting brings the country one step closer to IPSAS adoption. The accounting standards prescribed in P.D.54/2018 use the accrual accounting base for financial reporting and they are obviously influenced by IPSAS. Furthermore, the P.D.54/2018 provides for the preparation of consolidated financial statements on four management levels; Central Administration, Social Security Organizations, Local Administration Organizations and ultimately General Government. The new IPSAS-based accounting standards should be fully implemented on a 5-year transition horizon.

P.D.54/2018, which adopted the accruals basis, was implemented for the first time in the preparation of Greece’s Central Administration financial statements for the year ended 2019. The transition from modified cash accounting to accruals accounting resulted in material adjustments on the state accounts. However, in the absence of the necessary accounting records, the Central Administration is currently technically unable to proceed with the

⁴⁴ Chytis E., Georgopoulos I., Tasios S. and Vrodou I., 2020. Accounting Reform and IPSAS Adoption in Greece. *European Research Studies Journal*, 23(4), 165-184

recognition and measurement of all of its assets and liabilities. Greece has set a five-year transitional period to comply with the recognition, measurement, presentation and disclosure requirements and assert full compliance with IPSAS-based standards by the year ended 2023.

The objective of this paper is to assess the impact of IPSAS on financial reporting and public management in Greece and discuss the anticipated benefits from the implementation of IPSAS and the difficulties that are expected to arise in the process.

The results of this study indicate that Greece is at a premature stage regarding IPSAS adoption while research regarding the implementation of IPSAS in Greece appears to be limited. The adoption of IPSAS is expected to have significant impact on the financial reporting in Greece due to gap between IPSAS accounting principles and current accounting practices. Public sector entities that currently record revenue and expenses transactions on a cash basis, would have a material effect on their financial performance should revenue and expenses had to be recorded in the accounting period to which they relate following the accruals principle. Furthermore, IPSAS require public sector entities to recognize all assets and liabilities in their financial position. Therefore, several elements of significant value would have to be recognized for the first time in the opening financial statements of Greece such as land and property, infrastructure assets and specialist military equipment, special inventories as energy reserves and other assets. The same applies for liabilities that were not previously being accounted such as provisions and pensions to public sector employees.

The move towards IPSAS in the public sector has the potential to radically change the practice of accounting and financial reporting in the sector. IPSAS could benefit Greece by promoting transparency, accountability and better decision making based on high quality financial reporting. The enhanced understandability and comparability brought by the adoption of IPSAS would result in broader economic and social advantages. A key driver for IPSAS adoption is the importance of attracting ongoing inward investment into the public sector, which could be achieved by enabling comparability of financial statements. Furthermore, enhancing lenders' confidence through credible financial statements that are understandable attracts new capital and reduces the country's borrowing costs in international markets. Reporting under IPSAS should be accompanied by a reform of the reporting process and system. The standardization of the financial reporting process and underlying data through the use of modernized accounting systems can lead to the reduction of administrative costs by reducing bureaucracy and identifying opportunities for process automation. Financial reporting that reflects total costs would provide more meaningful information to decision makers in order to improve the cost accounting and cost-related decisions. Furthermore, reporting in accordance with IPSAS would highlight areas such as asset management that need to be reformed in order to achieve effective utilisation of public property. The general culture change brought about by the implementation of IPSAS has the potential to make the public sector an attractive choice for highly qualified professionals with increased knowledge and skills and upgrade the 'professionalisation' of the finance function and accounting across the public sector. In addition, the changes that have to be made in public management in order to support the implementation of IPSAS, promote good corporate governance practices. IPSAS contribute to government stability through financial reports supporting the government actions and encourage the preparation of financial reports that reflect future planning in order to ensure the long-term sustainability of the country's finances.

Nevertheless, it appears that the implementation of IPSAS has to overcome considerable challenges in order to be successful and utilise these benefits. The implementation of IPSAS will raise the need to modernize or even replace the information systems to support the

accounting function. The modernization of IT system requires expert consultants to support configuration, training of users and time to transfer the data and return to business as usual. Public sector entities may lack people with necessary skills and competence or the staffing level needed to support the transition to IPSAS. It is probable that an extensive training programme will be required wild it is probable that public sector will need to recruit and retain qualified staff to support the implementation of IPSAS. The abovementioned changes are accompanied with significant cost (both financial and resource based). Further to the above, the transition to IPSAS should be followed by legislative reforms in order to be incorporated in a country law system which can be a complex and time-consuming process. The level of awareness and understanding of the IPSAS framework in Greece should be raised. Public sector entities, key stakeholders and the general public are accustomed to cash accounting principles. Therefore, the need to educate public sector and general public in IPSAS should be taken into account. The adoption of IPSAS should be accompanied by a general reform of the accounting procedures of all public sector entities. Fundamental changes may face resistance by public servants. In addition, IPSAS implementation requires the initial recognition and measurement of all balance sheet items. The opening balances of certain elements may be difficult to be measured due to lack of data. IPSAS may present several technical difficulties especially during the first-time adoption and require deep understanding and qualified staff to apply standards appropriately in practice. The successful transition to the new standards requires a general change in public sector culture that will embrace the change. The adoption of IPSAS represents a challenging project that necessitates effective project management in the framework of change management and commitment of those involved in this demanding project.

This study provided useful insights on the transition to IPSAS for all the parties engaged in public administration reform as well as to countries that are in process or planning to adopt IPSAS. It would be useful to conduct a future study following the implementation of IPSAS in order to evaluate the impact of IPSAS adoption on financial reporting and public management. It would also be of interest to conduct research assessing whether the expected benefits arising from the implementation of IPSAS realized in practice and effective options to overcome the difficulties encountered in the transition process.

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Appendix

IPSAS	Pronouncement	Based on
IPSAS 1	Presentation of Financial Statements	IAS 1
IPSAS 2	Cash Flow Statements	IAS 7
IPSAS 3	Accounting Policies, Changes in Accounting Estimates and Errors	IAS 8
IPSAS 4	The Effects of Changes in Foreign Exchange Rates	IAS 21
IPSAS 5	Borrowing Costs	IAS 23
IPSAS 6	Consolidated and Separate Financial Statements — superseded by IPSAS 34-38	IAS 27
IPSAS 7	Investments in Associates — superseded by IPSAS 34-38	IAS 28
IPSAS 8	Interests in Joint Ventures — superseded by IPSAS 34-38	IAS 31
IPSAS 9	Revenue from Exchange Transactions	IAS 18
IPSAS 10	Financial Reporting in Hyperinflationary Economies	IAS 29
IPSAS 11	Construction Contracts	IAS 11
IPSAS 12	Inventories	IAS 2
IPSAS 13	Leases	IAS 17
IPSAS 14	Events After the Reporting Date	IAS 10
IPSAS 15	Financial Instruments: Disclosure and Presentation — superseded by IPSAS 28 and IPSAS 30	IAS 32
IPSAS 16	Investment Property	IAS 40
IPSAS 17	Property, Plant and Equipment	IAS 16
IPSAS 18	Segment Reporting	IAS 14
IPSAS 19	Provisions, Contingent Liabilities and Contingent Assets	IAS 37
IPSAS 20	Related Party Disclosures	IAS 24
IPSAS 21	Impairment of Non-Cash-Generating Assets	IAS 36
IPSAS 22	Disclosure of Financial Information About the General Government Sector	N/A
IPSAS 23	Revenue from Non-Exchange Transactions (Taxes and Transfers)	N/A
IPSAS 24	Presentation of Budget Information in Financial Statements	N/A
IPSAS 25	Employee Benefits — superseded by IPSAS 39	IAS 19
IPSAS 26	Impairment of Cash-Generating Assets	IAS 36
IPSAS 27	Agriculture	IAS 41
IPSAS 28	Financial Instruments: Presentation	IAS 32
IPSAS 29	Financial Instruments: Recognition and Measurement	IAS 39
IPSAS 30	Financial Instruments: Disclosures	IFRS 7
IPSAS 31	Intangible Assets	IAS 38
IPSAS 32	Service Concession Arrangements: Grantor	IFRIC 12
IPSAS 33	First-time Adoption of Accrual Basis IPSASs	N/A
IPSAS 34	Separate Financial Statements	IAS 27
IPSAS 35	Consolidated Financial Statements	IFRS 10
IPSAS 36	Investments in Associates and Joint Ventures	IAS 28
IPSAS 37	Joint Arrangements	IFRS 11
IPSAS 38	Disclosure of Interests in Other Entities	IFRS 12

IPSAS	Pronouncement	Based on
IPSAS 39	Employee Benefits	IAS 19
IPSAS 40	Public Sector Combinations	IFRS 3
IPSAS 41	Financial Instruments	IFRS 9
IPSAS 42	Social Benefits	N/A
Cash Basis IPSAS	Financial Reporting under the Cash-Basis of Accounting	N/A
	The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities	N/A
RPG 1	Reporting on the Long-Term Sustainability of an Entity's Finances	N/A
RPG 2	Financial Statement Discussion and Analysis	N/A
RPG 3	Reporting Service Performance Information	N/A

Table 1: Overview of the IPSAS and the underlying IFRS