KNOWLEDGE MANAGEMENT OF MODERN PUBLIC ACCOUNTING PRACTICE

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Abstract. *Global and national agendas focus increasingly on the harmonization and development of strong principles, directions and policies, not only concerning economical and financial issues, but also regarding accounting and reporting processes. In this context, governments play an important role in securing adequate levels of efficiency and transparency of public funds spending. This paper analyzes the current framework of standards and regulations in different EU member states and their influences on national public accounting systems. New advances in information technology offer both opportunities and challenges for policy makers in their attempt to improve decision-making processes and promote competitiveness. The current paper uses both quantitative and qualitative methods to describe these processes in various EU member states. Results and conclusions of the study are of interest to policy makers and reflect tendencies for developments according to International Public Sector Accounting Standards.*

Keywords: IPSAS; knowledge management; smart digital technologies; reporting standards; public sector.

Introduction

Modern organizations heavily rely on performant information management systems for ensuring optimal performance and efficiency. This reliance is the result of extensive change processes which have affected accounting and finance not only by the introduction of social policies and reforms in the field (EU, EC, Horizon 2020), but also by harmonization of rules and practices as well as the adaptation of international and European accounting standards (IFAC, IPSASB, 2018). Moreover, in Romania these reforms have affected the accounting system (World Bank, 2008), which was, correlated with the economic, legal, social and political changes that occurred. In this context, accounting system is the representative area for the administrative capacity and have an impact to the countries that have most modified their approaches that can be matched realistically to contextual capacities (Moynihan & Beazley, 2016, pp.3-5).

However, this very complex process cannot be completed without the attraction of the newest information technologies that offer the necessary logistic support. This is true for both private organizations and public entities, but is more complicated for the latter, because of (1) the amount of resources managed by any state, and (2) the need for interoperability between the different EU-member states. The economic alignment process between EU-member states is one of the priorities of the European Union, focusing on eliminating discrepancies between some of the members; lesser-developed states need in this context an increased effort and attention in increasing their capacity to structure and manage public funds (Dumitrescu Peculea & Mortelmans, 2017, pp.65-82). In this regard, finance, accounting, and audit are in an interdependent relationship, a series of directives (directive IV and VII) along with recommendations to urgently adopt international standards such as IFRS and IPSAS has been issued (IFAC, IPSASB, 2018, 2011).

Finally, yet importantly, in order to overcome the differences between its members, as well as to successfully carry out the harmonization process, there is a great need for innovation, both technical and social. The innovation and modernization of a state are influenced by public administration rationality, which generates competition between public values and searches new opportunities for efficiency growth (Savulescu, 2015, pp.30-33).

The paper is structured as follows: part two describes the harmonization process of accounting practice throughout the European Union by comparing different European states; part three approaches the issue of cross border knowledge management in accounting, part four discusses innovation issues in the international environment and part five concludes the paper.

European harmonization processes in public accounting

The European Union strives to reform the accounting systems of its member states, one of the main objectives being the insurance of comparability of financial data between states, which is required by several European directives and regulations based on international standards (*International Public Sector Accounting Standards* called IPSAS; *European Public Sector Accounting Standards* are so called EPSAS). Another issue is to make performance data more understandable for accounting and reporting processes and additionally, as Caperchione (2015, pp.1-11) argues that harmonizing at the EU level would allow for the production of good quality data to be used more easy. Nevertheless, the alignment with the European legislation (Council Directive 2011/85/EU and so one) demands great-cumulated efforts by all EU-members and an intense need for increased inter-state communication.

Accounting provides an important competitive advantage for an organization that helps create better decision-making value and provides an integrating perspective to the management's strategic functions (Islam & Kantor, 2005). In order to do this, accounting must meet certain demands like accuracy, sensitivity, malleability, timeliness, completeness and consistency of information, without disregarding the legal constraints that are imposed by its fiscal nature.

A study of the Ernst & Young for European Commission from 2012 regarding accounting and audit arrangements throughout the EU mentions communication problems in states such as Austria, Belgium, Cyprus, Greece, Denmark, Germany, Italy, Spain and the United Kingdom. Authorities take some solutions and adopt mechanisms to be aligned in the future and allowing the connection of macro and micro accounting. For example, in Austria are two instruments available for improving the systems, one is the Austrian Stability Pact and the other is regarding to new reporting regulation (Rauskala &

Saliterer, 2015, pp.12-26). Another analysis of the EC approaching national accounting legislation of its member states concerning the diversity of legal requirements in the accounting systems has concluded that a total of three different accounting laws per state are reasonable for the coverage of the main accounting practices of a country.

According to these studies, the countries with the most complicated accounting arrangements are federal states. On the other hand, countries such as Hungary, the Czech Republic, Lithuania, Estonia, Slovakia, Slovenia or Romania have a unique accounting standard, which is applied uniformly throughout the public administration.

In addition, the same studies have determined the accounting models used by the EU-member states (Bellanca et al., 2015, p.25; PwC, 2013):

- Cash accounting – transactions are recorded at the moment of payment;
- Modified cash accounting – a variant of cash accounting which also takes into account unpaid or outstanding accounts;
- Accrual accounting – transactions are recorded at the moment of their occurrence, and not at the moment of payment;
- Modified accrual accounting – a variant of accrual accounting, which records, completed accruals and omits some asset and liability classes.

According to PWC Global survey on accounting and financial reporting by central governments (PwC, 2013) it can be observed that “many countries initiating accounting reforms and moving to the more sophisticated end of the government accounting spectrum”.

In addition, the EC acknowledges a fifth model, a hybrid between cash and accrual accounting, since there are cases of public institutions that use both models such as Italy, or there are cases of different public institutions that use different models despite being administratively linked to each other such as in Denmark (as we can see from the figure 1).

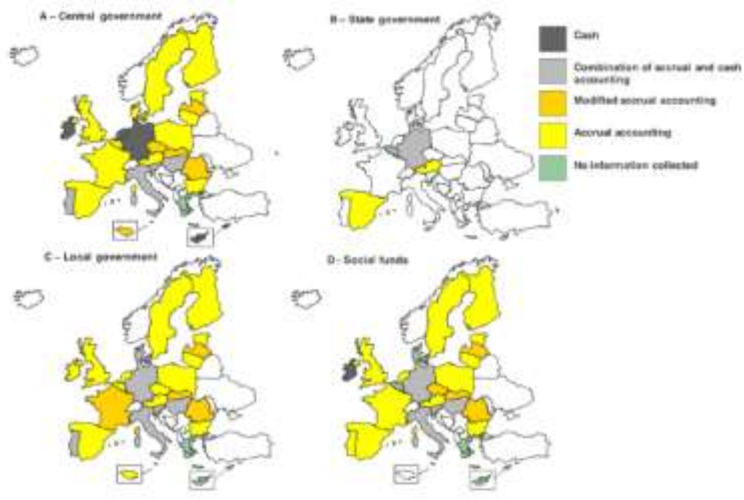

Figure 1. Accounting models throughout the EU
(Ernst & Young, 2012, date based and correlated with ec.europa.eu/Eurostat)

According to numerous studies reveals that Scandinavian states tend to adopt accrual accounting (Falkman & Tagesson, 2008), while central and southern European states more often use cash accounting. Austria, Germany and Spain show combinations of the aforementioned models.

IT-based accounting systems part of knowledge management processes

The exploitation of IT-based resources for accounting practice has several advantages on operative levels as well as on strategic levels, leading to both an efficiency and efficacy increase in accounting operation as well as to an enhanced portability and compatibility of accounting data in the strategic plane. Also, by the intensive and extensive use of such systems, knowledge management processes can be introduced to the entity. Figure 2 shows the main components of organizational knowledge management.

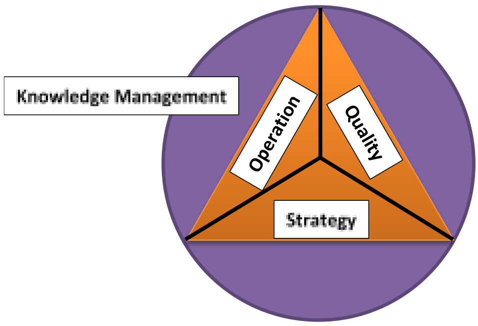

Figure 2. Components of organizational knowledge management (Authors' interpretation)

In this regard, the positive influence of IT-based systems can be observed on the same three components of knowledge management (operation, quality, strategy), as shown in figure 3.

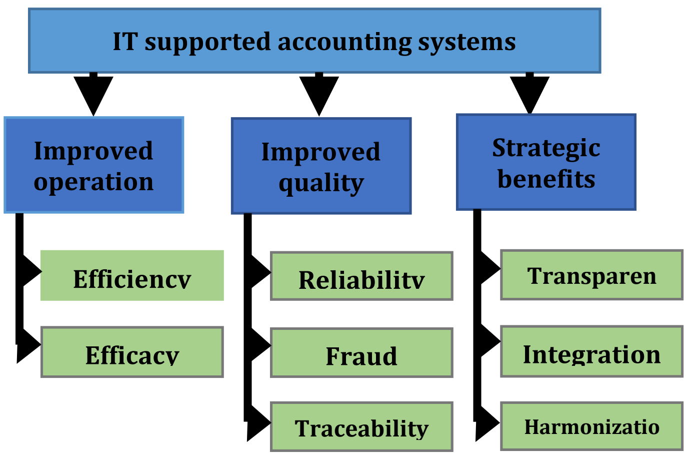

Figure 3. Knowledge management elements of IT based accounting systems (Authors' interpretation)

The European Union encourages the use of modern accounting systems based on accrual accounting (see also Milosavljević et al., 2014), which allow for increased transparency levels and are able to deliver complete, reliable and integrated information, in order to improve the quality of management decisions and the accountability of decision makers at all levels of government. In addition, in this regard, the World Bank has launched a strategy for the period of 2012-2015 called "ICT for Greater ICT Impact" for supporting of innovative systems in key fields of public administration activity such as healthcare, education, agriculture, justice, energy and others.

Thus, the implementation of ICT technologies in accounting processes is of vital importance being a sine qua non condition for national and international competitiveness by reducing transactional costs and overcoming geographical and territorial constraints (Yeboah & Oppong, 2014). Also, as underlined by the World Bank, the introduction of such system will lead to economic growth and better delivery of public services and accounting information systems have revolutionized the accounting world (Miller et al., 2016, pp.265-270).

Innovation of accounting processes in the EU

The transition to knowledge based accounting and to performant knowledge management processes is a lengthy and innovation intensive process. Countries that show the greatest innovation levels also are the ones with the greatest HDI and the lowest corruption levels. Innovation leaders such as Sweden, Denmark, Finland, the Netherlands, the UK or Germany also have the most efficient and effective public administrations, as opposed to those that show moderate or even modest innovation rates. Figure 4 shows a multilevel comparison between these countries.

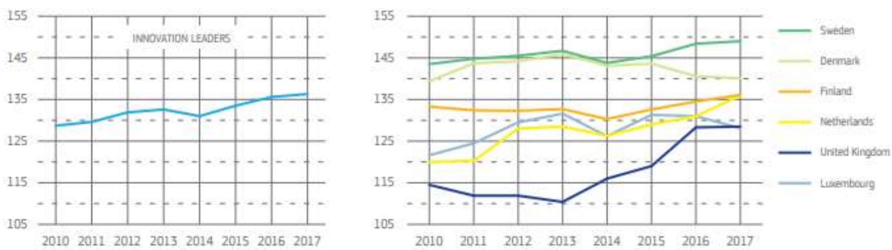

Figure 4. Performance Innovations Leaders (EU, European Innovation Scoreboard, 2018)

For Moderate and Modest Innovators, performance has increased. Figure 5 shows a picture for some countries.

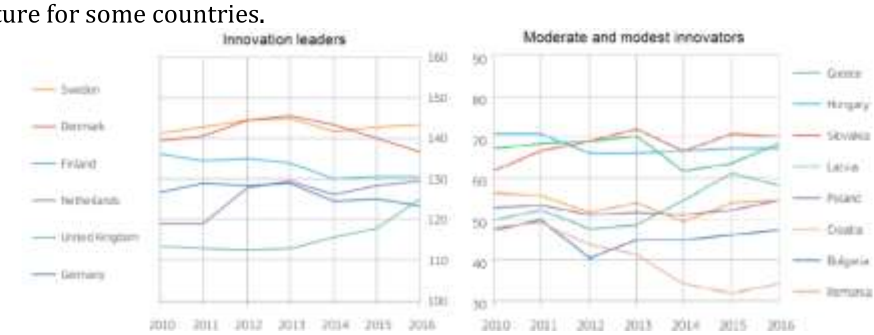

Figure 5. Innovation levels for leading, moderate and modest innovators (EU, European Innovation Scoreboard, 2017)

The innovation of the international accounting conceptual framework struggles in front of national accounting frameworks. Users of accounting information such as experts, creditors, investors, and managers have requested out of necessity an innovative approach to modern accounting practices. The European Union has tried to implement such approaches by issuing numerous regulations ad directives, however, the best theoretical basis for the normalization of the accounting profession proves to be the IPSA Standards. Also, the same IPSAS proved in many countries to be the best for the transition from cash to accrual accounting. This lengthy, complex and slow process has proven to be most effective when approached step by step, since it reduced the risk of financial system unbalance.

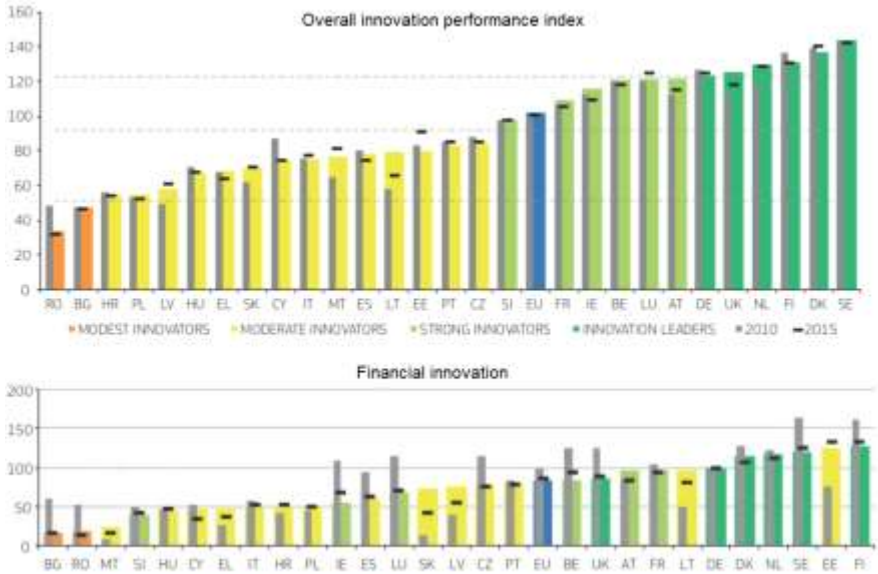

Figure 6. Overall and financial innovation levels for EU member states (EU, European Innovation Scoreboard)

In addition, countries recording the highest levels of innovation show the most efficient and effective processes of financial innovation. By studying figure 6, the high correlation between these is obvious. According to literature, the relationship between these two dimensions is bidirectional, meaning, that high overall innovation levels lead to high financial innovation levels and vice versa.

Conclusions

The integration of public accounting systems throughout EU-member states is crucial for the future developments of the European Union and is carried out on three levels: (1) harmonization and standardization, (2) intensive and extensive use of ICT opportunities, and (3) high performance innovation processes. However, while concerning harmonization and use if ICT the gaps between countries are not that great, regarding innovation levels the differences are substantial.

The findings of this paper are especially useful to policy makers, in the formulation of alignment strategies to actual and future standards of European accounting. Starting from accrual accounting, processes have to be developed which can ensure the smooth transition to an integrated accounting system. There are at this time no unitary rules of application of such integrated accounting systems for the public administration, and in countries like Romania, Bulgaria, the Czech Republic, Estonia, Finland, Hungary, Italy, Lithuania, Malta, Poland, Slovenia, Slovakia and Sweden public entities can choose freely wat system they use. Additionally, "the key to enhancing adoption of consistent accounting policies within a reporting entry by all controlled entities is regarding to central guide" (ISASB, 2018).

The reliability and transparency of accounting information are vital and this is the reason why numerous studies have been conducted on the importance of public sector transformation (Lapsley & Wright, 2004; Askarany, 2016). By recommendation of the EC this is to be achieved by implementation of "Bookkeeping System", an integrated accounting and financial information storage system. However, EU member states do not have regulations on how to implement such a system. Future developments in the field include the institutionalization of knowledge management processes, and further exploitation of ICT opportunities.

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