

The institutionalization of public sector accounting reforms: the role of pilot entities

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Abstract

Purpose – This paper aims at understanding the action of pilot entities, in order to ultimately infer about their role to the overall reform process of public sector accounting (PSA).

Design/methodology/approach – Taking the Portuguese case as a reference, the new institutional theory (isomorphism perspective) and institutional logics are used to explain the action and stance of pilot entities in the implementation process of reforms.

Findings – Pilot experiments are expected to provide feedback on the main difficulties felt in the implementation of a new PSA system, helping to define a global strategy to overcome those problems and to improve the system to be generally and finally put into practice. Nevertheless, entities seem to find it important to be pilots, more for individual advantages than for the common benefit of the reform as a whole. Therefore, in order for them to actually be important actors in the reform process, pilots need to be included in the decision process, better realizing the benefits of the new IPSAS-based system and be provided with the proper technical, human and financial support.

Research limitations/implications – This research suffers from some limitations, namely concerning the use of questionnaires. The findings may, in some points, reflect the perceptions of the respondents and not the actual reality. Additionally, the respondents were not asked about any personal background factors, which may influence their answers. Also, they did not allow relating the new PSA system features with the way pilot entities (re)acted. In regard to the implications for practice, the study points to a need for decision-makers and external support bodies to work more closely with pilot entities in the overall design and implementation of PSA reforms. Pilot entities need to understand the importance and usefulness of changes, and reform authorities need to better recognize their institutional reality and the support they require. Only in this way, the use of pilots can make a difference in the implementation of PSA innovations.

Originality/value – This paper contributes to theory by adding to a better understanding of the role of the ones acting in the development and implementation of PSA innovations, enlightening on how pilot entities can act/react. Despite several studies on PSA reforms, very few so far have addressed pilot entities in particular, their attitude and actual contribution toward PSA reforms, and why. The case of Portugal as a frontrunner in



adopting an IPSAS-based system within the EU helps contribute to that understanding in the setting of European countries.

Keywords Accounting innovations, Implementation strategy, Institutional theory, Institutional logics

Paper type Research paper

1. Introduction

As in business accounting, international harmonization issues have also been raised in public sector accounting (PSA), especially in the last two decades. In the European setting, the financial crisis context, particularly after 2009, has emphasized the need for harmonized public sector accounts, in order to get more reliable data for the purpose of monitoring the fiscal stability required for the Euro currency.

Accordingly, many countries across the world have recently embarked on PSA reform processes, introducing accrual-based accounting, some towards International Public Sector Accounting Standards (IPSAS), to complement traditional budgeting, cash accounting and reporting systems. Within the European context, IPSAS-based European Public Sector Accounting Standards (EPSAS) are being considered, also to meet particular reporting needs (Aggestam and Brusca, 2016).

These processes have followed different implementation strategies, sometimes involving different stakeholders, also. While, in some countries, the reforms have followed a top-down process (e.g. Spain), from central government to state and local governments, in others it has been stepwise, extending to different types of public sector areas and using pilot entities (e.g. Italy). The use of pilot entities allows a government to gain experience on how to deal with the reforms and the problems likely to be encountered and proceed with staff training.

In Portugal, a top-down process was considered, also resorting to pilot entities at both central and local levels of government and embracing several sectors of the Public Administration.

In the institutionalization process of PSA reforms, pilot entities seem to be strategically important to consider in cases where the new system involves significant innovations and complexities to be implemented by multiple and diverse entities at the same time. Because closer assistance often cannot be provided to all, it becomes necessary for some entities to experiment it first to get feedback, leading to eventual adjustments to the system to be finally implemented overall (Christiaens, 2001; Ridder *et al.*, 2005). Pilot experiments ensure the accomplishment of previous conditions to the implementation of the reforms (Peterson, 2001; McLeod and Harun, 2014), so within the pilot group, it is important to consider the representativeness of the diversity of entities in which the new system is going to be applied (e.g. several areas within the public sector, different levels of government, different dimensions, ...).

A strategy for a reform process implementation comprises several stages, namely: recognizing, improving, changing and sustaining (Peterson, 2001). An evolutionary strategy and pilot entities experimenting and giving feedback seem to be the most adequate within this chain.

Although there is a vast literature about PSA reform processes, especially in regard to changing to accrual accounting, and lately on the adoption of the IPSAS (Schmidhuber *et al.*, 2020), studies addressing the implementation of reforms are rare and fewer analyze the use and role of pilot entities in these processes. Therefore, there is still a significant gap in understanding the role of pilot entities, at all, in a successful implementation strategy of PSA reforms.

This paper tries to add to the theory in filling this gap. Framed by the new institutional theory and by institutional logics, it uses Portugal as an illustrative case to discuss the importance of having pilot entities to the institutionalization process of PSA reforms.

According to [Hayes et al. \(2015, p. 8\)](#), an illustrative case is used to “describe a situation or a phenomenon, what is happening with it, and why it is happening,” making it possible to demonstrate a certain behavior of the reality, as intended in this paper. It particularly addresses the perspective of the pilot entities themselves, on the way they have acted towards implementing the new PSA system. Portugal is an interesting example for other countries with upcoming reforms, as it is a frontrunner in the EU context in adopting an IPSAS-based system, mainly from an external imposition.

In particular, the objective of this paper is to take stock of pilot entity behavior (motives, commitments, difficulties, . . .), in order to realize about the role of these entities in the implementation of a new PSA system. It relies on a questionnaire for pilot entities, so as to answer the following research questions (RQ):

- RQ1.* How did pilot entities act (people, procedures, involvement, commitment, criticalities, . . .) in the implementation of the new system?
- RQ2.* What could make the implementation process easier, from the pilot entities' standpoint?
- RQ3.* How did pilot entities see their contribution to the overall implementation of the PSA reform?

Hereafter, the paper is organized as follows. [Section 2](#) addresses the theoretical framework on the new institutional theory and institutional logics. [Section 3](#) presents a brief literature review on PSA reforms and the use of pilot entities. [Section 4](#) introduces the empirical study of the Portuguese case, beginning with a characterization of the recent PSA reforms, then explaining the methodological issues, and finally presenting the main findings. [Section 5](#) offers a discussion and concluding remarks.

2. Theoretical framework

In the last decades, traditional approaches of the institutional theory, essentially following an economics rationality, have developed into new approaches of the institutionalism, based on sociological perspectives.

The new institutional theory (sociological institutionalism) assumes that expectations and values, both inside and outside organizations, as well as the rules of society, play a role in the decision to introduce organizational changes, including accounting reforms, inasmuch as they make up the institutional environment, forming the meaning of concepts such as individual, social action, state and society ([DiMaggio and Powell, 1983](#); [Meyer and Rowan, 1991](#); [Ryan et al., 2002](#); [Carpenter and Feroz, 2001](#); [Carpenter et al., 2007](#)). This sociological stream of the institutional theory has been used to explain how organizations respond to the pressures of their institutional environments ([Carpenter and Feroz, 2001](#); [Carpenter et al., 2007](#); [Chapman et al., 2009](#)). It seeks to identify a series of external factors that can pressurize or induce the process of organizational internal change in order to gain external legitimacy ([DiMaggio and Powell, 1983](#); [Meyer and Rowan, 1991](#); [Lapsley and Pallot, 2000](#)). Within this approach, [DiMaggio and Powell \(1983\)](#) introduced the concept of “institutional isomorphism” as the process by which organizations tend to adopt the same practices and structures over time, in response to institutional pressures, as a self-defense behavior: when facing problems for which they do not yet have their own solutions, organizations tend to behave similarly to others. Accordingly, isomorphic change can occur through three mechanisms: coercive, normative and mimetic isomorphism.

This theoretical perspective helps to explain the overall process of reforms in PSA towards accrual accounting and IPSAS. In particular, coercive isomorphism is interesting, because, although countries also use mimetic (seeking for some legitimation) and normative

(following business accounting) approaches, they tend to impose PSA reforms often derived from political decisions and/or requirements from external financiers, as in the case of Portugal.

The concept of institutional logics emerged within the new institutional theory (Friedland and Alford, 1991; Thornton and Ocasio, 2008) and seems to be useful in explaining PSA reforms, especially framing the way certain agents act/react in the reform process. Accordingly, it seems particularly suitable to explain the behavior of entities, when reacting in the process of being pilots and when starting to deal with an imposed new accounting system.

Since the 1990s, the concept of institutional logics has been central in efforts to grade understandings of isomorphism and convergence advocated by proponents of the new institutional theory (Thornton *et al.*, 2012). This grading has involved the idea that organizations are able to navigate or balance multiple institutional logics over time, and therefore there is an increased emphasis on agency and forms of institutional work in the processes, whereby organizations respond to institutional demands (Reay and Hinings, 2009).

Based on this premise, Thornton (2002) perceived that although economic forces influence organizations, as the meaning and consequences of these forces are interpreted by the actors, their repercussion in organizations depends on higher order institutional logics.

DiMaggio and Powell's (1983) analytical distinctions of institutional forces explain the different organizational responses. Forces of external change may also be seen as institutional change, for example, seeing the shift from administrative orientations in the public sector towards managerialism as a shift from an old institutional logic to a new one (Meyer and Hammerschmid, 2006), or transitions to NPM practices as a shift in institutional templates and a change to emergent values and attitudes (Kitchener, 1998).

3. PSA reforms and pilot entities

In recent decades there has been a wave of reforms in government and PSA systems based on the New Public Financial Management framework (NPFM). The modernization efforts focused mainly on implementing accrual-based accounting systems and seeking convergence with the business accounting model (Manes Rossi *et al.*, 2016).

Due to several factors, the framework and the setting up of PSA reforms towards accrual accounting appear to have been diverging (Christiaens, 2001). Recent reform processes have differed in accrual accounting adoption procedures (full or partial), modes and paths across countries (Ridder *et al.*, 2005; Mussari, 2014). Still, it can be noticed a growing common trend in PSA developments towards introducing accrual-based financial accounting and reporting, as a complement to budgeting, especially to cash-based budgeting (Christiaens and Rommel, 2008). More recently, PSA international harmonization seems to be increasing, as there appears to be a raising interest in the IPSAS (Christiaens *et al.*, 2015; Brusca *et al.*, 2018; IFAC-CIPFA, 2018; Jorge *et al.*, 2019), namely in some parts of these standards that may reveal appropriate in developing the national public sector accounting systems (Baskerville and Grossi, 2019; Jayasinghe *et al.*, 2020). Notwithstanding, neither accrual accounting nor IPSAS are consensually accepted in PSA (Brusca *et al.*, 2015).

Despite the generalized trends of PSA reforms across the globe, the academic literature is scarce in studies addressing the implementation processes, either in countries overall or in specific government levels or jurisdictions.

Nevertheless, a few researchers have called attention to the fact that, sometimes, the objectives of PSA are not reached by simply implementing a new system based on what is applied in business accounting (e.g. Brusca and Martinez, 2016; Arnaboldi and Lapsley, 2009; Christensen, 2007; Potter, 2002; Peterson, 2001). McLeod and Harun (2014, p. 240) explain that, "it is important to remind policy makers that improved governance, accountability and

performance of public sector organizations cannot automatically be achieved simply by issuing new laws and private sector-style reporting standards, and producing accrual-based reports.”

Additionally, as explained by [Peterson \(2001, p. 131\)](#), “before more complicated financial “management” reforms can be introduced that focus on outputs and outcomes, the existing “administrative” financial systems which control inputs have to be understood, implemented and improved.”

[Potter \(2002\)](#), in the Australian setting, discussed how the conceptual framework was used as a means of connecting the properties of accrual accounting practices with the reporting and accounting needs of the public sector. This process was described as “institutional thinking,” in that any thinking that was outside the conceptual framework was deemed irrelevant and not considered by those involved in the standard-setting process ([Potter, 2002, p. 70](#)). Accordingly, during the standard-setting process, only certain types of questions were asked, and many important issues were not addressed. Developing, promoting and supporting regulations that impose new accounting practices are affected by this “institutional thinking.”

[Baskerville and Grossi \(2019\)](#) referred to the concept of “glocalization” to explain how IPSAS have been considered and incorporated in New Zealand PSA standards, by a process of making universal standards compatible with local/national standards. In this process based on sociological institutionalism, IPSAS have been adopted, at the same time as national PSA identity and culture have been retained. The authors highlighted how global *vs.* local standards may facilitate PSA reform processes worldwide towards the adoption of accrual accounting and of IPSAS.

Other few studies have addressed how countries or jurisdictions have been implementing PSA reforms towards the introduction of accruals, showing how the “implementation strategy” ([Lüder, 2002](#)) may affect their success ([Argento *et al.*, 2018](#); [ter Bogt and van Helden, 2000](#)). Sometimes, radical solutions may raise even more problems, and it is better to make these reforms stepwise and resort to individual experiences, especially when the innovation is considerable. Some good examples come from developing countries, such as Ethiopia ([Peterson, 2001](#)) and Indonesia ([McLeod and Harun, 2014](#)), underscoring the need for reforms to be implemented in an evolutionary way, prioritizing goals, so as to attain success.

Evidence of some prudence in the implementation of (sometimes) radical reforms was also observed in European countries.

The case of Estonia is interesting to mention because “it offers insights into how a radical accounting change can be smoothly accomplished in the public sector” ([Argento *et al.*, 2018, p. 40](#)). After leaving the Soviet Union and moving to a market economy, Estonia had to develop the public sector and create PSA rules from scratch. The process of PSA reforms comprised several (increasingly complex) stages: stage (1) creating the basic accounting regulation, beginning with cash accounting but allowing future adoption of international standards, and establishing the standard-setting body; stage (2) reforming business accounting conforming with IFRS and adopting accrual accounting along with cash accounting; and stage (3) anticipating the entrance to the EU, full adoption of IFRS or IFRS-based standards for businesses and IPSAS for the public sector, representing full accrual-based PSA. The adoption of IPSAS in Estonia was described by [Argento *et al.* \(2018\)](#) as “smooth – yet gradual,” thanks to the role of key actors performing as “institutional entrepreneurs.” The different stages of the process were accomplished through the activities of important bodies, namely the standard setter and the State Chief Accountant (nominated by the Ministry of Finance in stage 3). [Argento *et al.* \(2018\)](#) underlined that the background in business accounting, personal interests and networking, allowed those actors to deal with the interplay between exogenous and endogenous forces interfering in PSA reforms in the country, making Estonia to be the first country of the EU to adopt the IPSAS.

In reforming accounting standards, some studies referred to the use of pilot entities. For example, when analyzing the convergence of the accounting reforms in Flemish welfare and day care centers with the municipal standards in the late 1990s, [Christiaens \(2001\)](#) highlighted the use of pilot entities, increasing the number from one year to the other, during the testing phase. [Ridder *et al.* \(2005\)](#) also referred to the use of pilot entities in the accounting reform process in German municipalities, underlining their importance in the changing process dynamics. The authors explained that pilot entities were selected with a twofold purpose: “first, to gain experience in the suitability of accrual accounting and output-based budgeting for local government in order to determine their efficiency; second, to identify the dynamics of change during the process of implementation, that is, expectations, change management, opposition and conflicts” (p. 444).

In governmental accounting reforms in Norway, pilot entities were invited to participate in the development of standards in order to ensure the relevance of the standards for the accounting work ([Bourmistrov, 2006](#)).

[Pitulice \(2013, p. 68\)](#), in regard to the reform design in Romania, warned of the fact that “for the pilot entities there was not any public informing whether the project was a success or not.”

[Rossi and Trequattrini \(2011, p. 145\)](#) referred in the description of the design of the reform process in Italy that the “implementation phase provides for the start-up of pilot projects to test the hypothesized course on local governments and central administrations, with the consequent redefinition of the accounting model, the redesign and reengineering of processes/procedures and organizational innovation measures (development of adequate skills with respect to human resources, realization of the functionalities of the information systems) in the pilot entities.”

[Ridder *et al.* \(2005\)](#) and [McLeod and Harun \(2014\)](#) additionally explained that, besides the relevance of pilot entities in identifying difficulties related to the implementation process, it would be expected that their experience would eventually lead to additional guidance and/or corrective measures provided by the standard setter, which would affect the system finally adopted. In the German case, the implementation in pilot municipalities allowed the adaptation of the accounting practices to the new accrual regime and created an opportunity to incorporate the changes in the new legislation, in due time.

In the above literature, it was observed the recourse to pilot entities in the design and implementation of reforms taking place in some countries, but no research was found analyzing the performance of those entities as a contribution to PSA reforms. This research makes an attempt to fill in such gap.

4. Empirical study

Public sector organizations in Portugal, despite the NPM, are still rooted in a prevailing bureaucratic logic, which determines their reaction to reforms ([Araújo, 2002](#)). While large and significant reforms, like the one in the accounting system, are often legally and centrally imposed (centralization tradition), the entities know that they are usually not implemented at once ([Araújo, 1999](#)), but are generally postponed in relation to the initially established starting date. Therefore, the legal approval for a reform does not necessarily imply immediate action or reaction by organizations.

In light of this fact, many entities may not act proactively but instead expect to be instructed on how to proceed, sometimes via other detailed regulations. When given broad instructions, entities sometimes nominate working groups to study the subject, but the commitment for the change is not very serious ([Araújo and Branco, 2009](#)), especially when change is imposed and there is no clear explanation of its usefulness for the entity’s management; they tend to claim lack of time and resources, inadequate expertise, in particular.

In the following sections, these issues become evident in the reforms of public sector accounting.

4.1 Public sector accounting reforms in Portugal

Portugal started introducing accrual accounting in the public sector in the 1990s. Financially autonomous public sector entities were required to apply a financial accounting system similar to business accounting, along with a budgetary accounting system that remained cash-based. In 1997, the first Public Sector Accounting Plan (POCP) was approved by law, embracing cash-based budgetary accounting together with accrual-based financial and cost accounting, including budgetary and financial statements in the annual accounts, and using a chart of accounts (Jorge *et al.*, 2007).

Given the lack of experience in the public sector, the whole process of implementing (double entry) accrual-based financial accounting and particularly the POCP, was unhurried and careful. The standard setter provided some guidelines, specifically stating that the first stage of the POCP would be implemented using a sampling of entities that, by their condition, would be presented as ready, the selection being made by the Ministry of Finance. That condition was assessed through a questionnaire answered by entities that supposedly had already had some experiment with accrual accounting; the selection was made after a meeting between the standard setter and the heads of those entities. From this process, 13 entities were selected and finally approved by the Ministry of Finance as pilots to experiment with POCP beginning in 1999. At this stage, the whole implementation process was followed by the standard setter, who gave the pilot entities, in particular, the necessary support to facilitate the implementation of the new accounting system. From these experiments, two interpretative standards were issued on technical matters in 2001, but the law originally passed was never changed.

From the “mother” POCP, several plans were derived for different sectors within the Public Administration – local government (POCAL), health (POCMS), education (POCE) and social security (POCISSSS) entities.

The POCP and the sectorial plans that followed were derived from the existing business accounting plan, which was replaced when Portugal adopted an IFRS-based system in 2009 (the SNC). From that period, the PSA system based on the POCP lost its conceptual basis, becoming increasingly out of date, fragmented and inconsistent. In recent years, there have been entities within the Portuguese public sector adopting the IFRS directly, others adopting the business accounting system IFRS-based or non-for-profit accounting standards, and others still using the five different PSA plans. This fragmentation raised inconsistencies, creating difficulties in consolidated accounts within the organizations and as a whole (Decree-law 192/2015, preamble).

In this context, Portugal was seriously affected by the economic and financial international crisis of 2009, forcing it to ask for financial assistance from the *Troika* (International Monetary Fund, European Central Bank and the European Commission) in 2011, and to sign a “Memorandum of Understanding” on specific economic policy conditionality. The lenders, among other things, also pressured for better accountability regarding public sector financial management and accounts, including the reforming of the existent PSA system in favor of the adoption of the IPSAS (Law 64C/2011).

In mid-2012, a new governance regime for the accounting standard-setting commission was passed (Decree-law 134/2012), holding the same entity responsible for both business and public sector accounting, but clearly including a separate committee for PSA standards (CNCP), whose main task would be to create the new IPSAS-based System of Accounting Standards for Public Administrations (SNC-AP). The development of this system began in

2013 and was passed as law in September 2015 (Decree-law 192/2015). It is to be applied to all sectors of the public administration, including local government.

SNC-AP comprises a conceptual framework, a chart of accounts and 27 accounting standards (25 IPSAS-based addressing financial accounting and reporting, 1 for budgetary accounting and reporting and 1 concerning management accounting). The conceptual framework is a translation of that of the IPSASB; the standards related to financial accounting and reporting are translated from IPSAS, with slight adaptations; the chart of accounts and the financial statements models were adapted from those of the IFRS-based business accounting (SNC).

The initial target for starting implementation was January 2017. During 2016, it would be tested for implementation in a group of pilot entities selected by the Ministry of Finance; other entities wanting to participate in the piloting experiments should send a request. A list of pilot entities under the Ministry of Finance was published by the Directorate-General of the Budget in April 2016, being completed by the Directorate-General of Local Government to include municipalities.

Meanwhile, the standard setter CNCP was to provide close guidance to those entities, namely answering questions on a web portal and preparing an Implementation Manual. Initial training would also be given to professionals, with the support of the Portuguese Institute of Certified Accountants (OCC). These procedures went into effect in mid-2016.

The Ministry of Finance, however, which was ultimately in charge of the PSA reforms, decided to postpone the implementation of SNC-AP to January 2018 (Decree-law 85/2016), acknowledging that the appropriate technical, legal and institutional conditions for public sector entities to be able to prepare the first annual accounts according to SNC-AP were not yet in place. This decree established that during 2017 any entity could voluntarily start experimenting with the new system. An implementation and dissemination strategy at the national level, for 2017, was finally published as law in April (Order 128/2017). However, these instructions were very broad, specifically in regard to the need for: generalized staff training (a global training plan would be prepared by the Ministry of Finance, involving professional institutes and higher education institutions); the adaptation of IT systems (there would be supporting mechanisms for the entities to adapt their IT systems, specifically their integration into the general system of the Ministry of Finance); continuous support to clarify issues related to the accounting standards, through the use of a web portal run by the standard setter CNCP; and the establishment of a technical group to monitor the SNC-AP implementation overall (UniLEO). There were no further references to pilot entities, neither in legislation nor in other public reports, the last one being in a report from the Court of Auditors in March 2017, about the overall state of implementation of SNC-AP, highlighting that, after one year of experimentation, “pilot entities did not actually work as such” ([Tribunal de Contas, 2017](#), p. 23).

At the beginning of 2019, one could observe that the SNC-AP implementation strategy was not being duly accomplished, namely regarding the global training plan and the IT adaptations to report from entities to supervising authorities; also, the monitoring process by UniLEO was not effectively put in practice ([Tribunal de Contas, 2019](#)). Meanwhile, the implementation of SNC-AP in the local government was postponed to 2020 (Decree-law 84/2019).

The postponements, as well as the non-accomplishment and revision of the implementation strategy, appear as signs of difficulties to deal with a PSA new system that overall, and despite previous experience with accrual accounting, was revealing to endure a high level of complexity. Such was clearly stated by the Minister of Finance: “. . . in any process with this scope and complexity one cannot exclude the need for revision of certain aspects” ([Tribunal de Contas, 2019](#)).

4.2 Methodology

This study is based on a quantitative research approach, relying on a survey using a questionnaire sent to the pilot entities directly. This method was considered because: (1) it is the most suitable way to gather attitudes, perceptions and behaviors, in the scope of a sample, which allows the generalization of the results for the population studied; and (2) it allows a large number of individuals to be surveyed, over a wide geographical area (Hill and Hill, 2008).

The questionnaire contained several specific questions related to the process of implementing SNC-AP and the Portuguese situation. In particular, a set of questions was prepared considering the above-described process, to allow gathering information so as to answer the RQ presented in Table 1 [1].

Most of the questions were “closed questions,” based on a multiple choice five-point Likert-type rating scale. This typology provided information about the degree of importance, satisfaction, implementation, difficulty, effort or commitment and impact in relation to various aspects under study. The analyses are based on frequency tables and correlation coefficients.

The questionnaire was applied online during February and March 2017, to all 53 pilot entities finally selected for experimenting with the implementation of SNC-AP. These entities, according to the selection criteria, were distributed through different sub-sectors and were using different IT systems and seven accounting references or plans (Table 2). The survey was addressed to the heads of the financial and accounting departments/services usually in charge of implementing accounting and reporting procedures. 35 valid responses were obtained, with one of the entities explaining it had asked to leave the group of pilot entities (Table 3).

Research questions	Topics addressed in specific questions in the survey
RQ1: How did pilot entities act (people, procedures, involvement, commitment, criticalities, etc.) in the implementation of the new system?	<ul style="list-style-type: none"> Difficulties encountered in starting implementing SNC-AP Entity's degree of effort in the transition process (commitment) from the current system to SNC-AP The reasons leading the entity to be a pilot in the implementation of SNC-AP Departments and number of people involved in the process of implementing SNC-AP Changes occurring in the organization due to the implementation of SNC-AP Degree of implementation of a set of procedures developed with a view to facilitating SNC-AP Type of external support the organization has had and the level of satisfaction with this
RQ2: What could make the implementation process easier, from the pilot entities' standpoint?	<ul style="list-style-type: none"> Type of support the entity considers important for improving the conditions and/or overcoming the difficulties encountered in implementing SNC-AP Type of impact the entity anticipates SNC-AP may have on its management How the implementation of SNC-AP should be carried out
RQ3: How did pilot entities see their contribution to the overall implementation of the public sector accounting reform?	<ul style="list-style-type: none"> Pilot entity's opinion about its contribution to the successful general implementation of SNC-AP

Table 1.
Topics surveyed in the questionnaire

Table 2.
Population

	Accounting system							Total
	POCP	POCAL	POCE	POCMS	POCISSSS	SNC	IFRS	
Central Administration	15	0	9	3	0	7	2	36 67.9%
Local Administration	0	14	0	0	0	0	0	14 26.4%
Regional Administration	1	0	0	1	0	0	0	2 3.8%
Social Security	0	0	0	0	1	0	0	1 1.9%
Total	16 30.2%	14 26.4%	9 17.0%	4 7.5%	1 1.9%	7 13.2%	2 3.8%	53 100.0%

Table 3.
Sample

	Accounting system							Total
	POCP	POCAL	POCE	POCMS	POCISSSS	SNC	IFRS	
Central Administration	9	0	6	1	0	3	2	21 60.0%
Local Administration	0	11	0	0	0	0	0	11 31.4%
Regional Administration	1	0	0	1	0	0	0	2 5.7%
Social Security	0	0	0	0	1	0	0	1 2.90%
Total	10 28.6%	11 31.4%	6 17.1%	2 5.7%	1 2.9%	3 8.6%	2 5.7%	35 100.0%

4.2.1 Sample characterization. The decree approving SNC-AP anticipated the use of pilot entities, in order to facilitate the transition process to the new accounting system. To comply with this instruction, 56 entities, representing different areas and IT systems within the Public Administration were invited to participate (Tribunal de Contas, 2016). The final list, forming the target population, included only 53 (3 municipalities declined the invitation), divided according to Table 2.

There was a real concern that the group of pilot entities should include all sub-sectors of Public Administration (Central, Local and Regional Administration and Social Security), as well as the different accounting plans (POCP, POCAL, POCE, POCMS, POCISSSS, SNC and IFRS). The largest proportion belong to Central Administration (67.9%), followed by those of Local Administration (26.4%); the accounting plans used most were POCP (30.2%), POCAL (26.4%) and POCE (17.0%). 13.2% of the entities were using the business accounting system SNC, which was not of the nature of public sector accounting. However, they were about to be included within the PSA scope, due to requirements of the National Accounts. Considering that 35 answers were obtained, the sampling is distributed as in Table 3.

Central and Local Administration entities correspond to 91.4% of the sample. As in the population, the majority of entities in the sample were using POCP (28.6%) and POCAL (31.4%).

This sample represents 66.0% of the population (35 out of 53 entities), thus the questionnaire response rate is considered acceptable. Additionally, it comprises the majority of entities (in some cases, even all entities) in all subsectors. Therefore, the representativeness of pilot entities is ensured and so the results can be extrapolated with relative confidence.

4.3 Main findings

The next sections present findings relating to RQ1, taking stock of the pilot entities' behavior in the implementation of the SNC-AP; RQ2, about what could facilitate this implementation, from the pilot entities' standpoint; and RQ3, on the entities' perspective about their contribution to the overall implementation of the PSA new reform.

4.3.1 Difficulties and commitment in the process of implementing SNC-AP. The implementation of a new PSA system may involve several difficulties. It is crucially important for the reform success that these problems be previously identified, so that the relevant entities responsible for the reform implementation can define a set of actions to minimize or overcome them. A reform process with pilot entities, as highlighted in section 3, can therefore contribute to a better identification of the possible difficulties, eventually improving the system to be finally implemented.

These issues were taken into consideration, and those in charge of implementing SNC-AP in the different pilot entities were asked about the degree of difficulty they experienced in relation to various aspects, on a scale of 1–5 (where 1 is *Very Low* and 5 *Very High*). Their answers are summarized in Table 4.

The greatest difficulty pointed out relates to unsuitable software, with an average of 3.42. In this aspect, 25.7% of the entities answered having a very high degree of difficulty and 22.9% quite high. The second greatest difficulty concerns the lack of human resources with suitable qualifications in terms of the new standards of PSA (an average of 3.30); about 46% of the entities indicated a quite high and very high degree of difficulty on this.

Also related to this topic are other more specific difficulties presented as moderate: insufficient knowledge of the new accounting system was noted, as entities experienced significant difficulties in understanding the accounting concepts and principles (average of

	Very low	Quite low	Average	Quite high	Very high	No answer	Average
Insufficient human resources with appropriate qualifications regarding the new standards of public sector accounting	4 11.4%	6 17.1%	7 20.0%	8 22.9%	8 22.9%	2 5.7%	3.30
Financial restrictions	9 25.7%	3 8.6%	11 31.4%	7 20.0%	3 8.6%	2 5.7%	2.76
Unsuitable software	4 11.4%	5 14.3%	5 14.3%	8 22.9%	9 25.7%	4 11.4%	3.42
Leaders' resistance to change/innovation	14 40.0%	5 14.3%	10 28.6%	2 5.7%	–	4 11.4%	2.00
Operational staff's resistance to change/innovation	12 34.3%	7 20.0%	7 20.0%	4 11.4%	1 2.9%	4 11.4%	2.19
Operational staff's difficulty in understanding the new accounting concepts and principles	6 17.1%	5 14.3%	13 37.1%	8 22.9%	1 2.9%	2 5.7%	2.79
Difficulties in interpreting and applying the recognition criteria of the standards of public sector accounting	6 17.1%	3 8.6%	13 31.1%	10 28.6%	1 2.9%	2 5.7%	2.91
Difficulties in interpreting and applying the measurement criteria of the standards of public sector accounting	6 17.1%	3 8.6%	13 31.1%	10 28.6%	1 2.9%	2 5.7%	2.91

Table 4. Difficulties in the process of implementing SNC-AP

2.79) and in interpreting and applying the recognition and measurement criteria of the new PSA system (each with an average of 2.91).

Finally, considering that 60% of entities indicated a significant degree of difficulty (average of 2.76), financial restrictions were also indicated as hindering the process of implementing SNC-AP.

The relevant organizations, such as the standard setter (CNCP), the Directorate-General of the Budget (DGO), the Directorate-General of Local Government (DGAL), ... [2], were supposed to support and monitor the whole implementation process in pilot entities, in order to minimize the impact of the difficulties referred to. Accordingly, those bodies would also assess pilot entities' efforts, in order to understand whether the difficulties indicated were genuine or related to a certain lack of commitment.

In this respect, pilot entities were asked to classify their commitment (on a scale of 1–5, where 1 is *No Commitment* and 5 *Very High Commitment*) in the transition process from the current system to SNC-AP. The answers pointed to a positive commitment but slightly below what would have been expected, given the average of 2.94. It stands out that no entity answered to have a very high commitment and only 22.9% answered having a high commitment. A considerable percentage (28.6%) replied that their commitment was low, something which should be considered by the relevant authorities, taking into account that this can jeopardize the usefulness of pilots, and ultimately the SNC-AP implementation process.

To understand whether the difficulties felt by pilot entities are related to their degree of commitment, the *Spearman Correlation Coefficient* was calculated. The results (not tabulated) lead to the conclusion that the degree of difficulty in relation to the different aspects studied (see Table 4), does not differ according to the entity's commitment (at a 5% statistical significance level).

4.3.2 Reasons for being pilots in the implementation of SNC-AP. The reasons leading entities to be pilots in implementing SNC-AP can influence their action during the whole process. According to the Court of Auditors (*Tribunal de Contas, 2016*), 12 entities volunteered to be pilots, and the remainder were invited. Irrespective of these circumstances, all were asked to identify the degree of importance (from 1 *Not at all important* to 5 *Very Important*) of the reasons leading them to be pilots.

As shown in Table 5, 80% of the entities replied (considerably important and very important) that by being a pilot they would adapt more quickly to the new procedures proposed by SNC-AP; this reason presented an average importance of 4.17.

The possibility of training human resources in a timely manner, with an average importance of 4.14, was another of the most frequently mentioned reasons, followed by the possibility of benefiting from more personalized technical support from the standard setter and supervising entities (4.00).

Collaboration/partnership with software houses was also considered by 80.2% of entities as a major reason (3.94). Finally, it stands out that entities seem to show little concern about contributing to the global process of SNC-AP implementation, since the least mentioned reason (average importance of 3.31) was the possibility of contributing, with the experience gained, to implementing SNC-AP in other entities.

4.3.3 Organizational involvement and changes. At the organizational level, pilot entities involved their administrative-financial departments in implementing SNC-AP. On average, 21 people were working in these departments. The number of people involved in the process of implementing SNC-AP varied according to the entity's characteristics. Only one entity stated that more than 10 people were involved, while 85.8% of entities (30) mentioned that 1 to 6 people participated in the process. The frequency with which these people met varied greatly, with 37.1% of entities saying this happened monthly, 11.4% weekly and 5.7% every two weeks, three months or every six months. Some entities said meetings were held

	Not at all important	Of little importance	Important	Considerably important	Very important	No answer	Average
The experience gathered, in the entity, in implementing SNC-AP could contribute to implementation of SNC-AP in other entities	3 8.6%	5 14.3%	11 31.4%	10 28.6%	6 17.1%	–	3.31
Quicker adaptation to the new procedures proposed by SNC-AP	–	4 11.4%	3 8.6%	11 31.4%	17 48.6%	–	4.17
Possibility of training human resources in a timely manner	–	1 2.9%	6 17.1%	15 42.9%	13 37.1%	–	4.14
Collaboration/partnership with software houses	1 2.9%	3 8.6%	2 5.7%	19 54.3%	9 25.9%	1 2.9%	3.94
More personalized technical support from standard setters and supervising entities	1 2.9%	1 2.9%	6 17.1%	16 45.7%	11 31.4%	–	4.00

Table 5.
Reasons leading entities to be pilots

sporadically whenever justified and others said they never occurred. These findings somehow reflect the abovementioned acknowledged low commitment.

In relation to the organizational changes that were happening in the entities, these were very incipient. The creation of a working group to deal with the implementation of SNC-AP was clearly the most significant alteration, mentioned by 60% of entities. Also standing out was the recourse to external consultants, carried out by 22.9%. The provision of additional financial and human resources was residual, considering that only 8.6% of entities replied having hired new expert staff in the area, and only 14.3% said they already allocated a budget for expenses associated with the implementation of SNC-AP.

Additionally, organizational changes did not seem to be related to the different sub-sectors of Public Administration the entities belong to, more specifically Central and Local Administration [3]. At a 5% statistical significance level (results not tabulated), none of the organizational alterations indicated is influenced by the sub-sector that pilot entities belong to (Central or Local Administration), i.e. the same type of main changes occurred overall across entities in these two levels of government.

The level of commitment of pilot entities in the transition process from the current system to SNC-AP, as previously observed, was rather weak. This observation is sustained by the still relatively low degree of implementation (1 is *Little Implemented* and 5 *Greatly Implemented*) of various procedures in order to facilitate the adoption of the new SNC-AP, as can be seen in Table 6.

	Little implementation	Almost implemented	Average implementation	Considerably implemented	Greatly implemented	No answer	Average
Holding preparatory meetings, periodically, with those most directly involved	8 22.9%	8 22.9%	7 20.0%	7 20.0%	4 11.4%	1 2.9%	2.74
Promoting the participation of human resources in training actions, seminars and conferences on the SNC-AP	2 5.7%	6 17.1%	9 25.7%	12 34.3%	6 17.1%	-	3.40
Consulting CNCP whenever a doubt arises that the entity is unable to resolve	8 22.9%	6 17.1%	10 28.6%	7 20.0%	3 8.6%	1 2.9%	2.74
Adaptation of software	10 28.6%	7 20.0%	7 20.0%	10 28.6%	1 2.9%	-	2.57
Simulation of records of some accounting operations	14 40.0%	3 8.6%	7 20.0%	9 25.7%	1 2.9%	1 2.9%	2.41
Simulations of financial and budgetary statements	16 45.7%	7 20.0%	3 8.6%	8 22.9%	-	1 2.9%	2.09

Table 6.
Implementation of
procedures facilitating
SNC-AP

The procedure with the highest degree of implementation was the promotion of human resources' participation in training actions, seminars and conferences on the SNC-AP, with an average of 3.4; 12 of the 35 entities in the sampling responded that this procedure was considerably implemented. Another procedure with an implementation degree around the middle of the scale was related to software adaptation, with an average of 2.57; 10 out of 35 entities stated this was considerably implemented. This is consistent with the difficulties entities acknowledged (see [Table 4](#)).

On the other hand, the entities' implementation of the various procedures might be related to the reasons leading them to be pilot entities. For example, it would be plausible that the degree of implementation of the procedure "Promoting the participation of human resources in training actions, seminars and conferences on the SNC-AP" would be related to the importance given to the reason of "Possibility of training human resources in a timely manner." However, the results of the *Spearman Correlation Coefficient* (p -value = 0.592), not tabulated, do not corroborate that idea. There is no statistically significant evidence allowing us to conclude that the degree to which entities engaged in promoting human resources training relates to the importance they were giving to that possibility as a reason for being pilots.

In the same line of reasoning, it could also be expected that the implementation of the procedure "Adaptation of software" might also be related to the importance given to the reason of "Collaboration/partnership with software houses." Again, the results of the *Spearman Correlation Coefficient* demonstrate that it was not statistically significant (p -value = 0.417), so it means the degree to which entities were adapting their software to the new accounting system was not related to the importance they gave to "Collaboration/partnership with software houses" as a reason for becoming pilots.

Finally, the degree of implementation of the procedure "Consulting CNCP whenever a doubt arises that the entity is unable to resolve" could also relate to the reason of "More personalized technical support from standard setters and supervisory entities." Also in this case, the results of the *Spearman Correlation Coefficient*, not tabulated, (p -value = 0.429) showed there is no statistically significant evidence to prove a relationship between the implementation of the procedure of consulting CNCP for eventual doubts and having access to this more personalized support as being a reason for becoming a pilot.

All in all, one notes some decoupling between the reasons pointed to for becoming pilots and the actions of the entities related to the same issues. As explained, especially in the Central Administration, there is a prevailing behavior of entities to usually expect they will be provided with more detailed instructions as well as means, and not to be so proactive in the implementation of new procedures. Accordingly, whereas they were expecting that as pilots they would be given close instructions and support, namely regarding personnel training and IT reinforcement, such did not happen; as explained, only very broad indications were given in the implementation and dissemination strategy, but this was not published before April 2017. Therefore, by the time the survey was conducted, entities were pretty much on their own. In the next section, findings regarding the support from external entities also somehow reflect this.

4.3.4 Support from external entities. One of the reasons leading entities to be pilots, as referred to above, was the possibility of benefiting from more personalized technical support from the standard setter and supervisory bodies. Pilot entities were then asked about this aspect, in order to understand whether they had benefited from that expected support and their degree of satisfaction with it.

As shown in [Table 7](#), the external bodies indicated as having offered the most support to pilot entities were: OCC (74.3%), CNCP (68.6%), software houses (62.9%) and DGO (42.9%). The remainder were said to have provided very sporadic help. Generally, support was of a technical nature.

Table 7. Support provided by external entities

	Yes	No	Financial	Technical
Institute of Certified Accountants (OCC)	74.3%	25.7%		Yes
Public Sector Accounting Standards Committee (CNCP)	68.6%	31.4%		Yes
Entity of Shared Services of Public Administration (ESPAP)	20.0%	80.0%		Yes
Software houses	62.9%	37.1%	Yes	
Ministry responsible	8.6%	91.4%		Yes
Directorate-General of Local Government (DGAL)	8.6%	91.4%		Yes
Directorate-General of the Budget (DGO)	42.9%	57.1%		Yes
Court of Auditors (TC)	0.0%	100.0%		
Institute of Certified Auditors (OROC)	2.9%	97.1%		Yes
Other: Regional Office of Finance and Public Administration of the Autonomous Region of Madeira	2.9%	97.1%		Yes

Regarding the degree of satisfaction (on a scale from 1 *Very Unsatisfied* to 5 *Completely Satisfied*) with the individualized support supposedly offered from each external body, this was found to be generally low (Table 8). The bodies giving the most support to pilot entities are the ones they express the most satisfaction with. Here, the only ones presenting a positive

	Very unsatisfied	Quite unsatisfied	Satisfied	Quite satisfied	Completely satisfied	No answer	Average
Institute of Certified Accountants (OCC)	3 8.6%	3 8.6%	9 25.7%	9 25.7%	2 5.7%	9 25.7%	3.15
Public Sector Accounting Standards Committee (CNCP)	–	4 11.4%	11 31.4%	8 22.9%	1 2.9%	11 31.4%	3.25
Entity of Shared Services of Public Administration (ESPAP)	3 8.6%	1 2.9%	1 2.9%	2 5.7%	–	28 80.0%	2.29
Software houses	1 2.9%	5 14.3%	6 17.1%	9 25.7%	1 2.9%	13 37.1%	3.18
Ministry responsible	1 2.9%	1 2.9%	1 2.9%	–	–	32 91.4%	2.00
Directorate-General of Local Government (DGAL)	2 5.7%	–	1 2.9%	–	–	32 91.4%	1.67
Directorate-General of the Budget (DGO)	4 11.4%	1 2.9%	8 22.9%	1 2.9%	1 2.9%	20 57.1%	2.60
Institute of Certified Auditors (OROC)	–	1 2.9%	–	–	–	34 97.1%	2.00
Other: Regional Office of Finance and Public Administration of the Autonomous Region of Madeira	–	1 2.9%	–	–	–	34 97.1%	2.00

Table 8. Satisfaction in relation to support from external entities

degree of satisfaction, albeit low, are OCC (3.15), CNCP (3.25), software houses (3.18) and DGO (2.60). The fact that only 5 entities replied they were very satisfied is noteworthy, and overall, there were significant percentages of no answer.

There seems to be some evidence that pilot entities basically highlighted the support of OCC, CNCP and software houses, which is consistent with the technical difficulties they have indicated they were experiencing: human resources training, supported by the Institute of Certified Accountants (OCC); specific technical doubts regarding the new accounting system, to be clarified by the standard setter CNCP; and software and IT adaptations by the software providers. However, when pilot entities were also asked if they found that the performance of the monitoring entities overall had helped in the implementation of the SNC-AP – a modest majority of 68.6% gave a positive answer.

4.3.5 Factors facilitating the process of implementing SNC-AP. RQ2 addresses issues that could make the implementation process easier. Regarding this matter, pilot entities were asked about the type of support they considered important to overcome the difficulties (multi-optional question). They highlighted as fundamental to making the reform process easier the offer of support regarding (in order of frequency):

- (1) More precise orientation from DGO, DGAL and/or other supervising organizations;
- (2) More precise orientation from CNCP (the standard setter);
- (3) Training actions by external entities, directed to the specificities of each type of entity (e.g. health sector, education, local authorities, reclassified public entities, . . .);
- (4) The possibility of hiring more accounting professionals;
- (5) Provision of an open forum where all pilot entities could share their doubts; and
- (6) Joint meetings with the entities responsible for the SNC-AP and the pilot entities.

It also stands out that various entities referred to the need to develop specific software, as well as the respective certification.

Pilot entities were also questioned about the type of impact (positive or negative) they anticipated SNC-AP would have on their management. They considered there might be a positive impact in relation to: decision-making support; the financial management process; budgetary and financial reporting; transparency; financial and budgetary performance; the process of budget management; and internal control. On the other hand, they indicated there might be a negative impact on administrative expenses and on the complexity of administrative processes. Within the scope of RQ2, while the former may be facilitators, the latter are factors capable of hindering the implementation of reforms.

As to the implementation process, pilot entities seemed to agree with what was decided for SNC-AP. 77.1% considered that both creating a transitory period and resorting to pilot entities facilitates the implementation process, disregarding the immediate application to all entities. Additionally, entities did not find it important that progressive implementation, by sector of activity or level of government, would necessarily facilitate the process.

4.3.6 Pilots' contribution to the overall implementation of the reform. RQ3 assesses how pilot entities saw their own contribution to the overall implementation of the PSA reform.

The evidence presented above, where entities did not find it very important to become pilots so as to contribute, with the experience gained, to implementing SNC-AP in other entities (see Table 5), was corroborated by the answer to the question: "On a scale of 1–5, where 1 is *Not at all important* and 5 is *Very important*, how do you consider your pilot entity's contribution to a successful general implementation of SNC-AP?" Only 5.7% of the entities considered this individual contribution as very important, and the average answer was 3.31.

Therefore, it appears evident that pilot entities overall did not see themselves as making a difference in the reform process, i.e. they acknowledged not having such an important role.

5. Conclusion and discussion

This paper addressed the importance of using pilot entities in the institutionalization of a reform in PSA, by analyzing the behavior and actions of pilots themselves in the process. Ultimately, it sought to understand whether the use of pilot entities can in fact make a difference, as in theory it would be expected, especially when innovations are complex.

The research considered Portugal and the recent reform towards an IPSAS-based system (SNC-AP), as an illustrative case. It provides interesting insights to be pondered in the implementation processes of other countries, including in the EU, which may be considering similar reforms towards IPSAS or EPSAS.

In contexts such as the one in Portugal, where a PSA reform IPSAS-based was imposed as a whole, resulting from a political decision, and essentially following recommendations by the lenders, in a careful and legitimating attitude, the change is explained by the new institutional theory, particularly within the (coercive and normative) isomorphism framework (DiMaggio and Powell, 1983). Accordingly, a small group of entities were forced to become pilots (top-down selection process, whereas for the POCP it had been bottom-up); exceptionally, a few cases gladly accepted the invitation and, in a more voluntary spirit, wanted to be frontrunners applying for the experience. Decision-makers promised closer support to all of them, and in return, they were expected to give some feedback, providing important contribution to the overall final implementation of the new system.

However, as this research showed, this imposition did not have the desired effect, given the institutional logics (Friedland and Alford, 1991; Greenwood and Hinings, 1996; Thornton, 2002; Thornton and Ocasio, 2008; Thornton *et al.*, 2012) affecting the behavior of Public Administration entities overall, where a bureaucratic logic still prevails and entities are used to waiting for specific instructions and not taking much initiative for reforms, including those introducing accounting innovations (Araújo 1999; Araújo and Branco, 2009).

Moreover, the benefits of these reforms and of SNC-AP in particular (IPSAS-based, private sector inspired and deemed complex) were not explained to the entities, who were not involved in the decision, many did not have organizational structures prepared for such a complex accounting system and were not given the support they were expecting – namely reinforced human resource accounting qualification, adequate IT systems and specific financial means. These handicaps, acknowledged by the entities surveyed, have been highlighted in the literature (e.g. ter Bogt and van Helden, 2000; Potter, 2002; Ridder *et al.*, 2005; Connolly and Hyndman, 2006; Nor-Aziah and Scapens, 2007; Rahaman, 2009; Hyndman and Connolly, 2011; Harun *et al.*, 2012; McLeod and Harun, 2014) as factors capable of hampering PSA reforms in general. Therefore, this study calls for an alert to the relevant authorities in charge of the reform implementation to be very aware of the difficulties felt by the pilot entities, while noting that these difficulties are not dependent on the commitment of each one but are quite generalized.

The stance and actions of the pilot entities as they start with the reform reveal how the new PSA system was firstly dealt with in practice. Within the institutional logics molding actors' practices and expectations (Thornton and Ocasio, 2008), pilot entities faced (and reacted to) the change according to their internal dynamics, proper to Public Administration entities, and to the way the new PSA system was perceived by the internal organizational actors. Imposition of an IPSAS-based system (which relevance may not be properly recognized) *versus* bureaucracy and insufficient preparation, allied to the fact that the entities were neither directly consulted regarding the PSA reform nor provided with the expected support, made it more difficult for them to understand the benefits over the costs of such

process, justifying the overall lack of commitment. Pilot entities did not feel prepared to engage in the reforms, in spite of being seen as main actors by reform decision-makers.

Ridder *et al.* (2005) call attention to the consequences of the non-involvement of the human resources in the development and implementation of a new PSA system, leading to indifference and to the possible introduction of inadequate new accounting practices, jeopardizing the objectives of the reform.

Adding to the overall low commitment, in initiating the implementation of the new PSA system respondents in this research acknowledged that no significant organizational changes were happening in the pilot entities. Subsequently, the degree of implementation of procedures to facilitate the introduction of SNC-AP was generally very low. The new accounting system appears to have been faced by pilots as an element disturbing the regular functioning and routines of the organization, not ultimately so useful, but as another external requirement to comply with. Entities saw in being pilots an opportunity to have the proper support, creating conditions to accomplish with the new obligations. Therefore, legitimating self-interest behavior seems to be more important than contributing to the general implementation of the new PSA system. In fact, this research showed that entities did not consider it very important to become pilots in order to contribute to the overall implementation of SNC-AP. They find it important to be pilots more for individual benefit ("selfish attitude") than for the "common good," i.e. for the reform of the PSA system in general. Within the institutional approaches, this may reflect the market logics, whereby entities are mainly concerned with individually accomplishing what is required by law and the hierarchy, not caring much about the collective behavior. Those happy to accept undergoing the experience appeared to want to be seen as good examples, following some legitimation strategies; those not recognizing the benefits did not become very involved.

In spite of the compulsory selection, considering that pilots could also be voluntary, this research additionally allowed understanding why entities wanted to be pilots and how they saw their own contribution to the PSA reform process overall. The main reasons indicated as leading entities to become pilots, yet again, evidence issues for self-benefit of the entity regarding human resources and technical support. Ridder *et al.* (2005), referring to the accounting reform in German municipalities, emphasized that, being selected as pilots allowed entities to benefit from resources, consulting and training, so as to cope with the new issues and the increase in the usual administrative tasks. This is a great advantage when the reforms become generalized, considering that other entities would be in an unfavorable position. Accordingly, in the present study, pilot entities clearly valued being pilots, expecting to benefit from closer support from the standard setter, as well as from supervising and monitoring organizations, in the implementation of the SNC-AP. This fits again in with institutional logics, relating to the recognized needs to improve professional knowledge and IT systems (Thornton and Ocasio, 2008), and to legitimation attitudes. However, as evidenced, these expectations were not accomplished.

Considering the expectations regarding the support by oversight bodies, evidenced by what entities pointed as main reasons for becoming pilots, there was understandably a certain degree of disappointment, which is probably reflected in a lower dedication to the reform process. Even the rare cases of those entities that are more driven by market logics, which may have wanted to serve as example and benefit from having closer support than others, ended up reflecting the same disappointment and level of dedication.

Institutional logics may also justify that the way pilot entities act regarding PSA reform also depends on the type of impact they expect innovations to have on their management. Several positive and negative effects were anticipated, respectively seen as facilitators of and hindrances to the implementation of reforms. Nevertheless, this recognition did not seem to have had any consequences on the effective role of pilot entities in the process of the reform implementation.

Regarding the implementation process of such an innovative accounting system, this research also showed that, despite pilot entities recognition of have not making a difference in the current PSA reform in Portugal, they agree with the consideration of a transitory period and the use of pilot entities in the process, as generally facilitating the transition from the previous system to the new one. However, they also emphasized that the process should be improved with the provision of better support by, and meetings with, the relevant authorities (accounting standard-setter and the government directorates). These considerations are aligned with [Ridder et al. \(2005\)](#), who explain that the selection of entities with similar characteristics and the close cooperation between them, the ministry responsible for the reforms, and consultants, led to efficacy in developing and implementing the new accounting system.

In summary, this research evidences that the role of pilot entities for the reform process of PSA is rather weak, or even null, in accounting reforms as that happening in the public sector in Portugal. Indeed, pilot entities do not make a difference in reforms implementation in cases where: (1) there is as imposition of a new system across Public Administrations overall, without these being involved or consulted; (2) the system imposed is rather complex, IPSAS-based and private sector inspired; (3) pilot entities are mostly compulsorily selected and are not particularly explained about the usefulness and benefits of adopting the news system; and (4) the support they have been promised and so eagerly expected, is finally not duly provided.

In order to actually be important actors in the reform process, pilots need to be more committed and move from an “individualist” to a more “collectivist” attitude. This may only be reached if enough compensation is offered. Entities need to be consulted and more involved in the process, so as to understand the reasons and implications of the changes (i.e. usefulness of the new PSA system) and increase their commitment. In the Portuguese case, to have made a real difference in the reform implementation, pilots should have been given the right conditions, namely the appropriate resources, and reform decision makers should have provided further explanations on the interest and importance of such reforms for the public sector financial management and, in general, should have worked closer with the entities, in order to better understand their institutional reality when adopting the new accounting system. Only in this way, PSA reform pilot experiences can generate useful feedback.

As acknowledged by [Peterson \(2001\)](#), a public financial management reform, including public sector accounting, embraces several innovations and solutions, becoming a challenge for any government. To be successful “it takes political commitment, administrative capacity and significant financial and human resources. It also takes a long time” (p. 145).

Despite relevant contributions to reform process decision-makers, this research suffers from some limitations. One regards the use of questionnaires. The findings might therefore reflect the perceptions of the respondents, and not the actual reality. Additionally, the respondents were not asked about any personal background factors, which may influence their answers. A way to overcome these limitations in future studies might be to use case studies with fieldwork in pilot entities to be carried out *in loco* on what is being done in respect to PSA reforms. This will also make it possible to move from a descriptive and exploratory approach to a more explanatory one in the study of the role of pilot entities in the process.

Furthermore, the findings do not allow to conclude whether the entities’ low commitment is due or not to the intrinsic characteristics of the new PSA system, namely its proximity to IPSAS or, instead, to the national accounting culture. The questionnaire did not address this issue; interviews would be needed to explore this.

A comparative-international perspective with other countries, specifically in Europe, that are already using or considering the use of pilot entities in the same type of reform could also better inform the findings in this study.

Notes

1. The questionnaire (in Portuguese) can be made available upon request.
2. It should be noted that UniLEO, the unit created also to monitor the implementation of the SNC-AP, was created on April 2017, only after this survey had been applied.
3. Regional Administration and Social Security were not included in this analysis, considering that the size of these groups in the sample is too small to come to meaningful conclusions.

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