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From Governmental Accounting into National Accounts: Adjustments Diversity and Materiality with Evidence from the Iberian Countries' Central Governments

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ABSTRACT: In a context where governments around the world acknowledge a need for more informative governmental financial reporting to improve financial sustainability, the European Council is proposing that EU member states adopt International Public Sector Accounting Standards (IPSASs)—which are recognized as also allowing improved reliability of government finance statistics—in all subsectors of the General Government Sector (GGS). Consequently, the Governmental Accounting (GA) role of running and reporting on governments' budgets for purposes of decision-making and accountability is changing to include being part of the EU budgetary and monetary policy, specifically within the Euro zone.

Accordingly, the objective of this paper is twofold. First, it aims to start a debate in the literature about the ability of GA as it stands across Europe to meet the European System of National and Regional Accounts (ESA) requirements concerning GGS data. This assumes particular relevance in a context where the two systems have to coexist, but given that budgetary reporting (GA) is the main input to ESA reporting (NA), reconciliation between the two systems is required. The second objective is of a more technical nature—empirically demonstrating the diversity and materiality of the main adjustments to be made when converting GGS data from GA into NA. This is done by using evidence for Portugal and Spain, focusing on Central Government data for the period 2006–2009 and measuring their quantitative impact on the public (budgetary) deficit.

We conclude that GA systems as they are across EU do not meet ESA requirements, and further alignment is therefore needed to reduce adjustments as much as possible when translating data from GA into NA. Additionally, in the case of Portugal and Spain, the main findings show that the adjustments from GA into NA present great diversity for both of these Iberian countries. As for materiality, their impact is greater in Spain, but still significant in Portugal. Therefore, both the reliability and comparability of final budgetary balances reported by EU member states within the Excessive Deficit Procedures (EDP) requirements may be questionable.

KEYWORDS: Governmental accounting, budgetary reporting, national accounts, central government, budgetary deficit/surplus.

DE LA CONTABILIDAD PRESUPUESTARIA A LA CONTABILIDAD NACIONAL: DIVERSIDAD Y MATERIALIDAD DE LOS AJUSTES CON EVIDENCIA DE LOS GOBIERNOS CENTRALES DE LOS PAÍSES IBÉRICOS

RESUMEN: En un contexto en el que los gobiernos del mundo reconocen la necesidad de reportes financieros oficiales más informativos con el fin de mejorar la sostenibilidad financiera, el Consejo Europeo propone que los Estados miembro de la Unión Europea (UE) adopten las Normas Internacionales de Contabilidad para el Sector Público (NICSP) —reconocidas, además, por permitir mayor confiabilidad de las estadísticas financieras del Gobierno— en todos los subsectores de dicho sector. Por consiguiente, el papel de la contabilidad presupuestaria (CP) de ejecutar y reportar sobre los presupuestos del Gobierno para tomar decisiones y rendir cuentas está cambiando para formar parte de la política monetaria y presupuestaria de la UE, específicamente dentro de la zona euro.

En este sentido, este artículo tiene dos objetivos. En primer lugar, busca empezar un debate en la literatura sobre la capacidad de la CP, tal como existe en Europa, de cumplir con los requisitos del Sistema Europeo de Cuentas Económicas Integradas (ESA, por sus siglas en inglés) respecto a la información del sector público. Esto toma una relevancia particular en un contexto en el cual los dos sistemas tienen que coexistir, pero dado que los reportes presupuestarios (CP) son la información principal usada en los reportes de ESA (CN), es necesario que los dos sistemas estén reconciliados. El segundo objetivo es de naturaleza más técnica: demostrar de forma empírica la diversidad y materialidad de los principales ajustes que deben realizarse al convertir la información del sector público de CP a CN. Tal demostración se hace usando evidencia de Portugal y España, con enfoque en la información del Gobierno central para el período 2006-2009 y midiendo su efecto cuantitativo en el déficit público (presupuestario).

Concluimos que los sistemas de CP, tal como existen en la UE, no cumplen con los requisitos de ESA y, por tanto, se necesita mayor alineación para reducir los ajustes tanto como sea posible al traducir la información de CP a CN. Además, en el caso de Portugal y España, los principales hallazgos muestran que los ajustes para pasar de CP a CN presentan gran diversidad para ambos países ibéricos. En cuanto a la materialidad, su repercusión es mayor en España, sin dejar de ser significativa en Portugal. Por consiguiente, tanto la confiabilidad como la comparabilidad de los saldos presupuestarios finales reportados por los Estados miembro de la UE, bajo los requisitos del Procedimiento de Déficit Excesivo, pueden ser cuestionables.

PALABRAS CLAVE: Contabilidad presupuestaria, informes presupuestarios, contabilidad nacional, Gobierno central, déficit/superávit presupuestario.

DE LA COMPTABILITÉ BUDGÉTAIRE À LA COMPTABILITÉ NATIONALE : DIVERSITÉ ET MATÉRIALITÉ DES AJUSTEMENTS DES GOUVERNEMENTS CENTRAUX DES PAYS IBÉRIQUES

RÉSUMÉ : Dans un contexte où les gouvernements du monde éprouvent le besoin de rapports financiers officiels plus informatifs pour améliorer la soutenabilité financière, le Conseil Européen propose que les États membres de l'Union Européenne (UE) adoptent les Normes Comptables Internationales du Secteur Public (IPSAS en anglais) -reconnues, de plus, car elles permettent une plus grande fiabilité des statistiques financières du Gouvernement- dans tous les sous-secteurs de ce secteur. Par conséquent, le rôle de la comptabilité budgétaire (CB) d'exécuter et de faire un rapport sur les budgets du Gouvernement pour prendre des décisions et rendre des comptes est en train de changer pour faire partie de la politique monétaire et budgétaire de l'UE, en particulier dans la zone euro.

En ce sens, cet article a deux objectifs. Tout d'abord, il cherche à ouvrir un débat dans les publications sur la capacité de la CB, telle qu'elle existe en Europe, de répondre aux exigences du Système Européen des Comptes Économiques Intégrés (SEC) sur l'information dans le secteur public. Cela prend une importance particulière dans un contexte où les deux systèmes doivent coexister mais, étant donné que les rapports budgétaires sont la principale information utilisée dans les rapports SEC (CN), il est nécessaire que les deux systèmes soient réconciliés. Le second objectif est d'ordre plus technique : démontrer empiriquement la diversité et la matérialité des principaux ajustements qui doivent être effectués pour une conversion de l'information du secteur public de CB à CN. Cette démonstration se fait en utilisant l'exemple du Portugal et de l'Espagne, en se centrant sur une information du Gouvernement central pour la période 2006-2009 et en mesurant son effet quantitatif sur le déficit public (budgétaire).

Nous concluons que les systèmes de CB, tels qu'ils existent dans l'UE, ne remplissent pas les conditions requises de SEC et, par conséquent, un plus grand alignement est nécessaire pour réduire les ajustements tout autant qu'il est possible lorsqu'on passe l'information de CB à CN. En outre, dans le cas du Portugal et de l'Espagne, Les principales constatations montrent que les ajustements pour passer de CB à CN sont très différents d'un pays à l'autre. Quant à la matérialité, sa répercussion est plus grande en Espagne mais sans être négligeable au Portugal. Par conséquent, tant la fiabilité que la comparaison des soldes budgétaires finaux reportés par les États membres de l'UE, selon les conditions exigées par la Procédure de Déficit Excessif, peuvent être remises en question.

MOTS-CLÉS : Comptabilité budgétaire, rapports budgétaires, comptabilité nationale, Gouvernement central, déficit/excédent budgétaire.

DA CONTABILIDADE ORÇAMENTÁRIA À CONTABILIDADE NACIONAL: DIVERSIDADE E MATERIALIDADE DOS AJUSTES COM EVIDÊNCIA DOS GOVERNOS CENTRAIS DOS PAÍSES IBÉRICOS

RESUMO: Em um contexto no qual os governos do mundo reconhecem a necessidade de relatórios financeiros oficiais mais informativos, com a finalidade de melhorar a sustentabilidade financeira, o Conselho Europeu propõe que os estados-membros da União Europeia (UE) adotem as normas internacionais de contabilidade para o setor público (NICSP) – reconhecidas, além do mais, por permitir maior confiabilidade das estatísticas financeiras do Governo – em todos os subsetores do mencionado setor. Em consequência, o papel da contabilidade orçamentária (CO) de executar e informar sobre os orçamentos do governo para tomar decisões e prestar contas está mudando para fazer parte da política monetária e orçamentária da UE, especificamente dentro da zona euro.

Neste sentido, este artigo tem dois objetivos. Em primeiro lugar, busca começar um debate na literatura sobre a capacidade da CO, tal como existe na Europa, de cumprir os requisitos do Sistema Europeu de Contas Econômicas Integradas (ESA, por sua sigla em inglês) com relação à informação do setor público. Isto toma una relevância particular em um contexto no qual os dois sistemas têm que coexistir; porém, visto que os relatórios orçamentários (CO) são a informação principal utilizada nos relatórios da ESA (CN), é necessário que os dois sistemas estejam reconciliados. O segundo objetivo é de natureza mais técnica: Demonstrar, de forma empírica, a diversidade e materialidade dos principais ajustes que devem ser feitos ao converter a informação do setor público de CO para CN. Tal demonstração se faz utilizando evidências de Portugal e da Espanha, com enfoque na informação do governo central para o período 2006-2009 e medindo o seu efeito quantitativo no déficit público (orçamentário).

Concluímos que os sistemas de CO, tal como existem na UE, não preenchem os requisitos da ESA e, portanto, é necessário maior alinhamento para reduzir os ajustes tanto quanto for possível ao traduzir a informação de CO para CN. Além disso, no caso de Portugal e da Espanha, os principais achados mostram que os ajustes para passar de CO para CN apresentam grande diversidade para ambos os países ibéricos. Quanto à materialidade, a sua repercussão é maior na Espanha, sem deixar de ser significativa em Portugal. Em consequência, tanto a confiabilidade quanto a comparabilidade dos saldos orçamentários finais informados pelos estados-membros da UE, sob os requisitos do procedimento do déficit excessivo, podem ser contestáveis.

PALAVRAS-CHAVE: Contabilidade orçamentária, relatórios orçamentários, contabilidade nacional, governo central, déficit/superávit orçamentário.

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Introduction[1]

As EU member states, countries have to report on the convergence criteria of the Stability and Growth Pact.

According to what has been politically decided within The Maastricht Treaty concerning budgetary discipline, those criteria should be public deficit and debt (art. 104). Furthermore, the Excessive Deficit Procedures (EDP) Protocol, which defines the assessing and monitoring procedures associated with the Treaty, clarified that public deficit and debt should relate only to public administrations, corresponding to sector S.13 (General Government Sector, or GGS) of the National Accounts system (ESA95)[2].

Governmental accounting has always aimed fundamentally at building and running the government's budget, recording all transactions regarding this purpose for accountability and decision-making at the micro level (individual and aggregated accounts for government units). Therefore, it would seem reasonable that the EU convergence criteria should be assessed based on this system. But in order to compare those ratios of deficit and debt between countries, a certain degree of international standardization of definitions and procedures is required, and governmental accounting across EU countries has not met these harmonization requirements yet, either in concepts or in practices (European Commission, 2013a, 2013b; Jones, 2003; Lüder, 2000). Furthermore, convergence is particularly required under a single currency where a common monetary policy must be established at macro level, supported by National Accounts aggregates.

These reasons led us to use National Accounts (macroeconomic) aggregates to assess and monitor the governments' performance concerning budgetary discipline.

The main purpose of National Accounts—to determine the macroeconomic indicators for evaluating national economies as a whole and to make comparisons between countries (Bos, 2008)—might not be so adequate for assessing a government's micro performance, especially in a worldwide context where investors in capital markets require more informative financial reporting in order to assess a government's risk and sustainability. However, it seems the most appropriate system to support macroeconomic and monetary policy and it is already harmonized (ESA95) and commonly used by all EU member states to report to EUROSTAT. Accordingly, using this system assured the required comparability.

Nevertheless, National Accounts have to get GGS data from GA, especially from budgetary reporting systems, where the problem of lack of harmonization remains, both within and between countries, compromising data reliability and comparability. Another issue relates to the relationship between GA and NA, considering that NA, while accrual-based, is essentially a statistical system and therefore conceptually different from GA, which is an accounting system, hence implying adjustments when translating data from one system to another. Such adjustments may compromise the reliability and comparability of the aggregates that sustain the financial decisions of EU member states (Lüder, 2000; Sierra Molina *et al.*, 2005).

In the context of the current financial crisis, the EU parliament and the International Federation of Accounts (IFAC) recently issued documents with strong recommendations for EU member states to adopt GA standards based on IPSASs, in order for accrual-based accounting to be applied in a comprehensive and consistent way, covering all subsectors of GGS (European Commission, 2013a, 2013b). This point of view is a direct consequence of a lack of transparency and accountability in the public sector, which has increased both the risk for capital markets and global financial instability (EU Parliament, 2011; IFAC, 2011).

Taking all this into account, especially the coexistence of two reporting systems that need reconciliation, this paper has two objectives.

Theoretically, it starts a debate in the literature about the ability of GA, as it is across Europe, to meet ESA95 requirements concerning GGS data, considering the diversity of accounting bases in GA (especially in budgetary reporting)

[1] Some accounting concepts frequently addressed by this paper, although widely known by accounting scholars, are worth revising. They essentially relate to criteria for recognition of transactions both in budgetary and financial accounting—*e.g.* accrual basis, cash basis, modified cash basis and modified accrual basis. According to the (full) accrual basis regime, transactions are recorded when the economic value is created, transformed or extinguished, regardless of their payment or receipt, while in a cash basis regime, transactions are recorded only when they are paid or received. Modified cash basis means that revenues and expenditures are recognized when the associated administrative decisions have been taken, regardless of the moment when the transactions associated with them occur; under this regime, time adjustments to cash transactions may also be considered. Modified accrual basis means that not all assets are recognized, particularly some fixed assets such as infrastructure, cultural assets and defense equipment (Montesinos & Vela, 2000).

[2] National Accounts systems such as SNA2008 and ESA95 comprise five institutional sectors: non-financial corporations, financial corporations, General Government, households and non-profit institutions. According to §2.17 of ESA95, the General Government Sector – GGS (S.13) includes all governmental entities and is divided into the following subsectors: S.1311—Central Government; S.1312—State Government; S.1313—Local Government; and S.1314—Social Security.

and the consequent harmonization problems. This is done by identifying and discussing, from a conceptual point of view, the main divergences between GA and NA, which relate to users' needs, purposes and objectives, and recognition and measurement criteria. Additionally, it is argued that greater GA harmonization (*e.g.* using accrual-based budgeting and accounting at all levels of government in every EU member state) would allow GA itself to become a more informative and reliable reporting system both for micro purposes, and as data provider for government finance statistics (NA).

The second objective, of a more technical nature, is to analyze the main adjustments to be made when converting GGS data from GA into NA, particularly in regards to budgetary execution and reporting. The paper takes extracts from and analyzes official publications (EDP tables and Inventory of Sources and Methods) from Portugal and Spain, which disclose each country's adjustments in the context of EDP reporting. The analysis focuses on the sector Central Government (S.1311) and the period 2006-2009. The purpose is to demonstrate that a great diversity of adjustments categories exists, indicating that the adjustment procedures to for getting the budgetary deficit/surplus when passing from GA into NA are not harmonized (even though ESA95 system is), thus putting data reliability at stake. Additionally, the quantitative impact analysis aims to show how materially relevant these adjustments are compared to Central Governments' deficit/surplus. Reliability and materiality are important starting points in highlighting the need for a common framework to deal with these adjustments when moving from GA into NA, and this must be learned by policy-makers, especially those of GA standard-setting committees and statistical offices.

Portugal and Spain are two countries sufficiently similar but different enough to justify the comparison. In fact, they are both Continental European countries that have endured similar reform processes in GA; both have accrual-based financial accounting and reporting, but Spain adopted IPSASs in 2010 while Portugal is currently starting the process, and neither uses accrual-based budgets. However, when reporting to EUROSTAT following ESA95, Portugal starts from a cash-based budgetary deficit in GA, while Spain starts from an already accrual-based budgetary balance, meaning that some modifications might be made in GA deficit/surplus before GA-NA adjustments are reported under the EDP.

The paper is organized as follows. Section 2 addresses GA issues, namely its role as a reporting system for governmental entities, recent reforms, and EU harmonization. Section 3 deals with NA and discusses subjects similar to Section 2. Section 4 examines the relationship and main differences between GA and NA. Section 5 illustrates the Iberian countries' cases, first briefly addressing the methodology and sources used, next describing GA-NA adjustments made by each country, and finally presenting an analysis of the quantitative impact of those adjustments on the final deficit/surplus reported by both countries. The paper finishes by summarizing the main conclusions.

Governmental Accounting: a Reporting System Aimed at Harmonization

GA has always been aimed at running and reporting on one government's budget, for purposes of financial management and accountability. It has evolved as governments (broadly seen as including all governmental entities) have, and as additional governmental information has revealed the necessity within new contexts.

Accordingly, within the context of traditional public financial management, only cash-based budgetary information was important. In recent decades, due to New Public Management (NPM) trends, new information is required of GA, which has therefore undergone considerable reform processes worldwide. The main common feature of this reform has been the introduction of the accrual basis with a progressive approach to business accounting, particularly that which concerns financial accounting subsystems, thus bringing GA and NA closer together, since the latter is already accrual-based (Benito & Brusca, 2007; Brusca & Condor, 2002; Vela Bargues, 1996).

Nowadays, GA generally comprises two different subsystems: i) Budgetary accounting and reporting; and ii) financial accounting and reporting. Budgetary subsystems support budgetary decisions regarding countries' fiscal options, directly affecting policy-making, and they report on budgetary achievements. Financial subsystems are related to governmental entities' reporting in order to evaluate their performance and financial position.

Many international studies have shown that most countries that have adopted accrual basis in their GA have not introduced it comprehensively, specifically embracing budgetary systems; that is, budget preparation and reporting of budgetary performance still remains cash or modified cash-based (Bastida & Benito, 2007; Bastida & Moreno, 2006; Benito & Bastida, 2009; Benito, Lüder & Jones, 2003; Sterck *et al.*, 2006; Sterck, 2007; Yamamoto, 2006). Only very few countries, like Australia, New Zealand and the United Kingdom, have introduced full accrual basis in both subsystems (Martí, 2006; Montesinos & Brusca, 2009; Sterck *et al.*, 2006), giving them the status of leaders for convergence between the GA and NA reporting systems (Broadbent & Guthrie, 2008). In most Continental European countries, *e.g.* Italy, France, Portugal, Belgium and Spain, budgets and budgetary execution and reporting are based on the cash or modified cash principle and hence both types of information (cash and accrued) coexist in GA (Montesinos & Brusca, 2009).

Jones and Pendlebury (2000) underline that one important feature of GA reforms in the UK has been the introduction of accrual basis in the budgetary accounting system, leading to the so-called 'Resource Accounting and Budgeting (RAB)'. Following this trend, Cortés (2003, 2005) also explains that preparing resource-based budgets implies the adoption of accrual principles and the preparation of financial statements for the annual budget, such as the estimated Balance Sheet and Statement of Financial Performance. According to these authors, a better convergence with NA would be possible because the estimated Balance Sheet would incorporate all assets, financial and physical, as well as all liabilities, even the contingent liabilities that are governmental responsibilities.

Groot and Budding (2008) also highlight that one of the most relevant characteristics of NPM was replacing traditional cash-based accounting with accrual-based accounting for the purposes of financial reporting, in order to achieve better transparency and accountability. However, they underline, as does Paulsson (2006), that within GA systems accrual accounting is mostly used for assessing performance and control of governmental entities and is adopted less for budgetary decisions and policy-making.

In the same vein, Montesinos & Brusca (2009) argue that, despite accrual-based financial statements in GA, cash or modified-cash budgetary reporting information is still often preferred to manage public entities. Thus, in spite of NPM principles and methodology clearly directed at decision-making and evaluating the efficiency and effectiveness of public sector entities, accrual-based statements are not yet the most important source of information for managerial decisions.

One important discussion that has emerged recently concerns the additional introduction of the accrual basis in budgetary accounting and reporting subsystems in GA. Sterck *et al.* (2006) and Yamamoto (2006) stress that the main reason for resistance to introducing accrual basis in budgets might be the general thinking that the preparation of accrual-based budgets may be a risk for budgetary discipline. Nevertheless, the situation currently seems to be changing in the EU—despite the major importance of budgetary cash control, accrual basis (both in budgetary and financial subsystems) has been acknowledged as better for improving the quality and reliability of financial and budgetary information, as well as the reporting transparency of governments. Therefore, adopting accruals in budgetary accounting and reporting subsystems within GA is particularly relevant in the context of this paper, inasmuch as what is at stake are the materiality and diversity of the differences between the budgetary (cash or modified cash-based) reported balance in GA and the same budgetary balance that is already accrual-based in NA.

Hoek (2005) stresses that despite a general trend among industrialized countries to move from cash to accrual basis in GA, a distinction must be made between budgetary and financial reporting subsystems, since that trend has not extended to the former. Additionally, financial reporting systems have been changing to modified or full accrual basis, with different practices and degrees of implementation in several countries (Hoek, 2005; Lüder & Jones, 2003; Torres, 2004). Consequently, the lack of harmonization is a great problem with regards to GA systems, between different countries and even between different government levels in the same country, because it hinders comparability. This situation is particularly relevant among EU member states because it may compromise the reliability of information reported by these countries, namely affecting political decisions under the convergence criteria assessment in the Euro zone.

This situation was underlined by Lüder and Jones (2003) in their seminal comparative study of government accounting in Europe. They concluded that there was a great diversity in GA systems in the European space. As these authors emphasize, GA in Europe "is diverse, between countries and—at different levels of government—within countries" (p. 5). Likewise, the European Commission's recent reports refer to a great lack of harmonization across GA systems: "Member States' public sector accounting practices shows that they are very heterogeneous. No two countries have the same system or apply the same standards. Moreover, within many Member States, different accounting regimes may apply for different types of government entities" (European Commission, 2013a, p. 43). The same reports also explain that: "Although accruals or modified accruals public accounting data is available in these Member States, in many cases, parallel cash accounting systems are also maintained, and with few exceptions, budgeting is conducted on a cash basis" (European Commission, 2013a, p. 42).

Adam *et al.* (2011) stress that the need for harmonization in GA is very relevant, as it is essential for achieving economic convergence. This necessarily means accrual-based accounting.

Lüder and Jones (2003) suggest that this harmonization could be achieved by adopting the IPSASs, as Benito *et al.* (2006) have also underlined.

More recently, considering the present global financial crisis, the International Federation of Accountants (IFAC) sent some recommendations for the G-20 Nations, oriented towards the meeting of November 2011 (IFAC, 2011). According to these recommendations, the lack of transparency and accountability in the public sector increases the risk for capital markets and global financial instability. Thus there is an urgent need for high-quality, internationally consistent, relevant, and reliable financial information from all sectors. In the public sector in particular, IFAC (2011) recommends the adoption of accrual-based accounting by governments at all levels and likewise by public sector institutions, which is also important for monitoring government debt and liabilities and their true economic implications; moreover, IFAC's document points to the adoption and implementation of IPSASs, so that accrual-based accounting will be achieved in the public sector.

The European Commission has recently expressed its support for the implementation of public sector accrual-accounting standards across EU member states, providing the information needed to compile ESA-based data for all subsectors of general government. ESA-based government finance statistics need to be of high quality, since they are the basis for budgetary surveillance. "The implementation of uniform and comparable accruals-based accounting practices for all the sectors of General Government...can help ensure high quality statistics" (EUROSTAT, 2012, p. 2).

EU Council Directive n. 2011/85/EU, of November 8, 2011 (on requirements for budgetary frameworks of the member states), in article 3 (accounting and statistics), n.1, established that all member states should apply the accrual basis of accounting in a comprehensive and consistent way, covering all subsectors of GGS and "containing the information needed to generate accrual data with a view to preparing data based on the ESA95 standard". Moreover, this directive started an assessment process regarding the adoption of IPSASs across member states, as it is stated in art. 16, n.3, that "By 31 December 2012, the Commission shall assess the suitability of the International Public Sector Accounting Standards for the Member States". This led to the report issued by the European Commission on

March 6, 2013 (European Commission, 2013b), which contained important conclusions towards harmonization of GA systems across EU countries:

> "On the one hand, it seems clear that IPSAS cannot easily be implemented in EU Member States as it stands currently. On the other hand, the IPSAS standards represent an indisputable reference for potential EU harmonized public sector accounts... most stakeholders agree that IPSAS would be suitable as a reference framework for the future development of a set of European Public Sector Accounting Standards, referred to below as EPSAS" (p. 8).

In this context, perhaps the most relevant GA accounting reform in decades is about to happen, with relevant implications regarding the GA role expected for budgetary policy in the EU, within the Euro zone.

National Accounts: a Harmonized Supranational Reporting System

National Accounts (NA) is a harmonized accounting system, aiming to calculate the key aggregate indicators (*e.g.* gross domestic product, volume growth, national income, disposal income, savings, and consumption) so that the whole national economy can be evaluated, and compared with other countries' aggregates (Bos, 2008).

This system highlights transactions between national institutional sectors (non-financial corporations, financial corporations, general government, households, and non-profit institutions serving households) and between them and other nations, for the purposes of external supranational accountability and decision-making at political and macro level (Cordes, 1996; Vanoli, 2005).

Accordingly, NA are not a true accounting system in the sense it is understood in business accounting, *i.e.*, it does not allow recording and reporting on each governmental entity's (separately or as a group) budgetary, financial and economic performance and position, as GA does, especially if one considers that the latter has started to follow business accounting principles and techniques, providing information for purposes of control, accountability, and (micro) decision-making (Jones, 2000). In any case, NA compute macro aggregates for a nation as a whole and by institutional sectors, including the GGS. The source for these data is naturally the accounts at micro level, hence the relationship between the two systems and the need for a certain alignment, at least in basic principles (Jones & Lüder, 1996; Jones, 2000, 2003; Lüder, 2000).

The establishment of a system of NA was not made possible until World War II, when for the first time issues regarding an internationally harmonized system were raised, leading to the first United Nations System of National Accounts in 1953, followed by revisions and new editions from 1960 to 1993 (Jones, 2000; Vanoli, 2005). In 2008 an updated edition of the System of National Accounts (SNA2008) was issued, considered as a statistical framework that provides a comprehensive, consistent, and flexible set of macroeconomic accounts for policy-making, analysis, and research purposes. SNA2008 is intended to be applied by all countries, having taken into account different needs of countries at different stages of economic development.

At European level, the NA system settled in the European Council Regulation nº 2223/96 (and subsequent amendments[3]) obliges all member states to adopt the European System of National and Regional Accounts (ESA95) in preparing their NA, so that since April 1999 all the information to be sent to the European Statistical Office (EUROSTAT) must conform to this system. Additionally, according to ESA95 §1.04, one of the specific purposes of this system is to support control of European monetary policy, namely monitoring the national aggregates such as GDP, deficit and debt.

ESA95 is therefore the harmonized conceptual framework for the NA of EU member states and is used to get accurate values for the ratios established in the EU Treaty and required by the Protocol on the EDP for assessing and monitoring the budgetary discipline of EU member states under the EMU (Benito *et al.*, 2006; Benito & Bastida, 2009; EUROSTAT, 1996; Lüder, 2000).

ESA95 (NA) was chosen as the system to monitoring those indicators because it is a fully harmonized reporting system compulsorily applied to all European space, assuring data comparability, despite the great diversity of political and social systems. Additionally, NA seems to be the most adequate system to support convergent macroeconomic budgetary and monetary policies, specifically underlining the Euro currency (sustaining the European Monetary Union), since it provides comparable government finance statistics (Barton, 2007; Hoek, 2005; Keuning & Tongeren, 2004; Lüder, 2000; Sierra Molina *et al.*, 2005).

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3 Council Regulation nº 448/98; Commission Regulation nº 1500/2000; Parliament and Council Regulation nº 2516/2000; Commission Regulation nº 995/2001; Parliament and Council Regulation nº 2258/2002; Commission Regulation nº 113/2002. The European System of National and Regional Accounts (ESA) is currently under review to bring it into line with the SNA2008; 'ESA2010' is expected to come into force in 2014.

Governmental Accounting and National Accounts: Relationship and Main Differences

As the recent report from the European Commission underlines (European Commission, 2013b), EU governments report two kinds of information: Government finance statistics (NA) for fiscal policy purposes (including statistics for the EDP), and financial and budgetary reports for accountability and decision-making purposes relating to individual entities or groups of entities (GA). The relationship between the systems providing these two types of reporting is important, in terms of both transparency (explaining to users the differences between the data in the respective reporting) and efficiency (GA budgetary systems are generally the main source of data for compiling government finance statistics—NA).

One question that might be raised is whether the current GA systems in the EU countries, especially budgetary accounting and reporting systems, are able to meet ESA95 requirements, in relation to the data provided by the governmental sector. As explained, this is Sector S.13—GGS, following the definition of institutional sectors in ESA95 (§2.17).

Therefore, in the relationship between GA and NA, the main problem concerns GGS data in NA, since they are obtained from GA budgetary information, and diversity and divergences from macro accounting systems may compromise the reliability and comparability of the aggregates that underpin the financial decisions of EU member states (Benito & Bastida, 2009; Lüder, 2000; Sierra Molina *et al.*, 2005).

To achieve these qualities it is important to develop a real harmonization of the "new" governmental accounting systems, including budgetary reporting (within and between countries), and also a convergence between them and ESA95 requirements, so that the macroeconomic aggregates may be credible and comparable.

Consequently, the study of the relationship between the two systems is very relevant for several reasons, already mentioned and summarized as (Benito *et al.*, 2006; Cordes, 1996; Jones & Lüder, 1996; Keuning & Tongeren, 2004; Lüder, 2000; Montesinos & Vela, 2000; Sierra Molina *et al.*, 2005) the search for possible alignment, given that the aggregates of NA relating to the governmental sector are based on GA budgetary reports; the adoption of full accrual basis for the majority of transactions is compulsory for all EU member states for preparing NA, while for GA it is still an option, and budgetary reporting is cash-based for most countries.

Several authors, such as Cordes (1996), Jones and Lüder (1996), Montesinos and Vela (2000) and Jones (2003), emphasize the following main differences between the two systems:

- Divergences related to the definition of the reporting entity under the concept of "governmental sector", which is larger in GA than in NA, since the latter only includes public entities engaged in producing non-market goods and services;
- Differences related to the moment of recognition of transactions, that occur in a full accrual basis in the NA perspective and in a modified cash basis or modified accrual basis in the GA perspective;
- Divergences related to the scope of the recorded transactions, particularly the ESA95 requirement of recognizing non-cash transactions, such as fixed asset value and depreciation, including infrastructure; and
- Differences related to the measurement of recognized transactions that NA considers being market value while in GA historical cost is preponderant[4].

Keuning and Tongeren (2004) emphasize the necessary adjustments to figures provided by GA budgetary reporting concerning the governmental sector, due to different valuation criteria of assets and liabilities, reducing the reliability of macroeconomic aggregates. These authors highlight some steps that must be considered when taking data sources of the governmental sector to NA, such as: The transformation of cash-based (GA) to accrual-based data (NA); identifying the proper asset and transaction category; consolidating some internal flows; and adjusting time of recognition of taxes, interest payments on Central Government debt, and payments in advance.

The differences between GA and NA might be identified from a conceptual point of view relating to different users' needs, which imply different objectives of the information provided by both systems.

Table 1 compares, for GA and NA, the main users and users' needs, as well as the goals and objectives that both must reach to satisfy their specific information needs.

[4] Market value and historical cost are both possible criteria to be considered when measuring transactions recorded in accounting systems. Market value might be defined as the amount for which an asset could be exchanged, or a liability settled, between parties, generally in an active and orderly market. Historical cost implies that assets are initially reported at the cost incurred on their acquisition/production, including transaction costs; liabilities are valued at the cash amount correspondent to the counterpart received. The main difference between the two is that the latter does not reflect changes in prices that might follow the initial recognition.

TABLE 1. GA *versus* NA: Users' Needs, Information Objectives, and Recognition and Measurement Criteria

Issue	Governmental Accounting	National Accounts
Users	Governments, international organizations, taxpayers, members of the legislature, creditors, suppliers, media, employees, and general public	European community institutions, governments, fiscal policy analysts and decision-makers, and other social and economic agents
Users' Needs	Information about financial position, performance, and cash flows of an entity that is useful to users in making and evaluating decisions about resources allocation	Aggregated data for economic analysis, decision-making, and policy-making
Goals	Management analysis Financial and budgetary reporting	Economic analysis Fiscal policy decision-making
Objectives	Accountability Decision-making	Analysis and evaluation Providing information for preparing, implementing, and monitoring European Monetary Union's economic policies
Recognition	Budgetary accounting—cash basis or modified cash basis Financial accounting—cash basis or accrual basis (modified or full accrual basis)	Full accrual basis for all transactions (monetary and non-monetary)
Measurement	Historical cost—purchase price or production cost	Market value (main reference)

Source: Own elaboration using information from EUROSTAT (1996).

Therefore, each system (GA and NA) presents different criteria for transaction recognition and measurement. Nevertheless, the ESA95 general recognition criterion was later modified regarding taxes and social contributions[5], allowing member states to recognize these according to three different methods, thus becoming an exception to the accrual basis regime:

- Accrual basis—recognition when the tax generating factor occurs (*e.g.* in the year income taxes relate to);
- Modified cash basis—recognition of taxes under cash basis sources, considering, when possible, a time adjustment so that the amounts received can be attributed to periods when the economic activity generating the fiscal obligation occurred; and
- Cash basis—when it is not possible to apply any of the other methods.

With respect to differences between GA and NA, Lande (2000) emphasizes that NA collect micro data from several institutional sectors that follow different accounting principles and criteria, so some adjustments must be made in order to harmonize the moment when transactions are recorded, and the measurement criteria that must be applied to those transactions. She suggests the need to harmonize the conceptual framework of the accounting systems of all sectors of activity, including governmental accounting systems, where adjustments to be made on preparing NA emerge related to the definition and scope of the reporting entities and are also linked to differences in classification, recognition dates, and valuation methods.

[5] By EU Parliament and Council Regulation (EC) nº 2516/2000.

Indeed, these effects imply making adjustments and corrections based on GA budgetary reporting data to determine the macroeconomic ratios, like deficit and debt, and this has consequences for their reliability and comparability. Therefore, international harmonization in GA becomes increasingly urgent, above all in relation to the basis of accounting, the definition of the reporting entity, the recognition and measurement criteria for assets and liabilities, and the consolidation approach (Lüder, 2000).

With regards to the relationship between GA and NA, the International Public Sector Accounting Standards Board (IPSASB) developed a working program concerning the convergence of IPSASs with the NA systems, and in January 2005 it issued a Research Report (IPSASB, 2005) with the purpose of identifying differences in financial reporting provided by the statistical-based accounting systems (NA) and the financial information reported under the IPSASs (GA). In that report, emphasis was given to the adjustments that must be made to figures provided by GA concerning the governmental sector due to different measurement criteria of assets and liabilities, and which reduce the reliability of macroeconomic aggregates. This document, based on IPSASs issued until June 2004, also made recommendations in order to reduce or eliminate divergences between the two accounting systems wherever possible (IPSASB, 2005).

Table 2 shows the main issues and problems identified within IPSASB's convergence project as key differences between the accounting and statistical basis of financial reporting as at June 30, 2004 (IPSASB, 2005).

TABLE 2. GA *versus* NA: Main Issues Identified by IPSASB for Analysis and Recommendations

Topics	Categories	Issues
Reporting entity	The scope of the reporting entity and sector reporting	▪ The boundaries of the reporting entities according to each accounting model ▪ Reporting component sector of the public sector, namely General Government Sector (GGS) ▪ Accounting for controlled entities
Recognition	Outsiders' ownership relationships	▪ Outsiders' equity interests ▪ Determination of net assets/equity and contributions from owners for commercial government operations ▪ Distributions payable to owners and distributions receivable from controlled entities
	Recognition of assets, except financial instruments	▪ Definition of assets, liabilities, revenue, expenses and equity ▪ Specific issues, such as costs associated with research and development, other intangible assets, extractives industries, and defense weapons ▪ Tax credits, tax gap, and moment of recording tax revenue ▪ Public-private partnerships
	Counter party/symmetry and recognition	▪ Provisions arising from constructive obligations ▪ Decommissioning/restoration costs ▪ Tax effect accounting ▪ Employed stock options
	Financial Instruments	▪ Moment of recording considering different definitions of this item in each model
Measurement	Measurement of assets, liabilities and net assets/equity	▪ Several different criteria for valuation of each item, such as impairment of non-financial assets, transaction costs, low-interest and interest-free loans, inventories, investments in associates, and biological assets
	Financial Instruments	▪ Different valuation criteria considering different definitions of this item in each model, such as debt assumption, debt cancellation, debt rescheduling, and securitization
Disclosure	Time series	▪ Accounting reporting period for adjustments of revisions, change in accounting policies, and change in estimates
	Financial statements for the reporting entity (and/or sectors)	▪ Format and presentation of financial statements disclosures by each accounting model

Source: Adapted from IPSASB (2005).

Later, the IPSASB issued a Project Brief titled *Alignment of IPSASs and Public Sector Statistical Reporting Guidance*. This document was intended as the starting point for updating the 2005 Research Report, and aimed to identify the main issues regarding relevant differences between IPSASs (considering those issued after 2004) and the recently updated System of National Accounts (SNA2008) and consequently updated Government Finance Statistics Manual (GFSM). It emphasized the importance of statistical reporting as a critical issue for the public sector (IPSASB, 2011).

More recently, a Consultation Paper was prepared (IPSASB, 2012) in order to achieve convergence between statistical reporting systems and the IPSASs. This document classifies the differences as being resolved if countries adopt updated IPSASs (*e.g.*, GGS reporting is solved by IPSAS 22). Other issues are considered as opportunities to reduce the differences (*e.g.*, reporting entity definition, inventory measurement, presentation of financial statements, including classification and aggregates, measurement of assets, liabilities, and net assets/equity). And some differences are treated as issues to be managed between the two systems (*e.g.*, recognition criteria, measurement of assets/liabilities, particularly market value *versus* historical cost).

In short, literature review and other documental sources help identify major specific issues related to the relationship between GA and NA that need to be studied more deeply. These issues are:

- The definition and scope of reporting entity under GA and NA;
- Preparation and disclosure of consolidated financial statements—accounting treatment of the outside equity interests;
- Recognition criteria, specifically concerning recognition of taxes and social contributions—tax credits, tax gap, and moment of recording tax revenues; and

- The relationship between government and government business enterprises—privatizations, capital injections, government and government-owned enterprise debt (notions of income and dividends).

The Cases of the Iberian Countries

The Iberian countries, Portugal and Spain, are sufficiently similar but different enough to justify a comparison. They are both Continental European countries that followed similar GA reform trends common to EU countries, gradually introducing accrual basis in their financial systems, although neither uses accrual-based budgets. However, while Portugal reports budgetary execution in cash basis, Spain reports it in accrual basis.

Administratively, in Portugal there are two tiers of government: Central government, embracing entities with administrative autonomy only, and entities with administrative and financial autonomy (Autonomous Services and Funds)[6]; and local government, which includes municipalities and parishes. Additionally, there are two Autonomous Regions—the archipelagos of Azores and Madeira—also with two levels of government: Regional governments and municipalities and parishes, as in the mainland.

In Spain, there are three levels of government: Central government (comprising entities with and without financial autonomy); regional government (Autonomous Communities); and local government (municipalities and parishes).

GA changes in Portugal started at the beginning of the 1990s and the landmark of the reform was the *Plano Oficial de Contabilidade Pública* (POCP), a business-type accounting system, based on a chart of accounts for public sector accounting. It was published in 1997 and was "a fundamental step in the financial management and governmental accounting reform" (Law-decree 232/97, September 3, Preamble, 1).

Nevertheless, the POCP accounting system has not been completely implemented yet and uses two bases of accounting simultaneously: Modified cash basis for budgetary accounting (cash basis with commitments for expenditures) and accrual basis for financial accounting. This is a clear divergence from the NA system, ESA95, which requires a full accrual basis, except for taxes and social contributions, as explained previously (Caiado & Pinto, 2002; Jesus & Jorge, 2010).

[6] Autonomous Services and Funds (exceptional regime) are those with property, budgetary, treasury and borrowing autonomy, as opposed to Services that are merely Administratively Autonomous (general regime), with only administrative autonomy.

The GA reform process in Spain also started with the Spanish *Plan General de Contabilidad Pública* (PGCP), published in 1994, which similarly followed international trends; its implementation is complete with respect to the adoption of accrual basis for all public sector entities (Montesinos & Vela, 2000). Recently, the Spanish governmental accounting system has been adapted to IPSASs, with the issuance of a new *Plan General de Contabilidad Pública*, applied since the beginning of 2011 (Orden EHA/1037/2011, April 13, updated by Orden EHA/3068/2011, November 8). The extension of this new system to local government is expected from 2015 onwards.

The main difference between Portugal and Spain is the degree to which accrual accounting has been implemented in the GA system, specifically in relation to Central Government entities. In Portugal, POCP has been implemented almost exclusively in entities with administrative and financial autonomy, while those with administrative autonomy only have essentially applied a modified cash-based budgetary accounting system (CNCAP, 2007). Since 2011, POCP has been extended to all Central Government entities, regardless of their autonomy regime. Consequently, cash-based budgetary reporting coexists with accrual-based financial reporting and therefore, when translating central government's budgetary balance (GA data) into NA, the starting point is supported by the cash-based budgetary GA system (EUROSTAT, 2010a).

In Spain, accrual basis is used in GA in all entities covering the three levels of government (Montesinos & Brusca, 2009), although the budgetary accounting and reporting subsystem is still cash-based. However, when reporting to EUROSTAT, GA budgetary balance is already accrual-based (EUROSTAT, 2010b), meaning some GA-NA adjustments are made before the reporting procedure and consequently fewer adjustments are required *a posteriori*.

In short, both Portugal and Spain have generally followed the main trends of other European countries regarding the GA reform process, moving from cash to accruals in financial reporting systems but not in budgetary ones. However, Portugal's reform process is not yet concluded, particularly in terms of implementing accrual basis, while in Spain the same process is already complete, including moving closer to international standards. This might be seen as an important step for convergence with NA requirements.

Methodology and Sources

This research essentially follows a qualitative methodology, since the purpose is to describe, analyze, and compare accounting practices, focusing on a particular context and

TABLE 3. Adjustments Relating to Differences in Accounting Basis

<table>
<tr><th rowspan="2">Issues</th><th colspan="2">Adjustments</th></tr>
<tr><th>Portugal</th><th>Spain</th></tr>
<tr><td>Taxes on tobacco, petrol and alcoholic beverages</td><td>[Cash-based revenue of year (N)
+
Revenue of year (N) received in January of year (N+1)
–
Revenue of year (N-1) received in January of year (N)]</td><td rowspan="2">▪ The amounts accrued in each fiscal year, recognized in GA based on fiscal entitlements (liquidation time), are deducted from annulments and cancellations that occurred during the fiscal period
▪ The amount to be collected at the end of the fiscal year is identified, adding amounts of uncertain collection, estimated based on an econometric model (system of accumulated averages)</td></tr>
<tr><td>Value Added Tax (VAT)</td><td>[Cash-based revenue of year (N)
+
3/4 of cash revenue of January and February of year (N+1)
–
3/4 of cash revenue of January and February of year (N)]</td></tr>
<tr><td>Primary expenditures (current and capital)</td><td>[Modified cash-based expenditures of year (N)
+
Expenditures of year (N) in debt for year (N+1)
–
Expenditures paid in year (N) related to commitments of previous years]</td><td>▪ There is no cash/accrual adjustment regarding primary expenditures, since they are already recognized under the accrual basis in GA
▪ For capital expenditures whose contract establishes a single payment at the time of completion of the project, it is necessary to make an adjustment in order to consider at year N the payment related to the asset recognized</td></tr>
<tr><td>Interest</td><td>[Interest paid on year (N)
+
Interest generated in year (N) to be paid in year (N+1)
–
Interest paid in year (N) generated in year (N-1)]</td><td>▪ The interest revenues and expenditures are recorded when the corresponding administrative acts are completed
▪ There is no adjustment unless there are pending administrative procedures, which must be detailed in the income statement
▪ Accrual basis is already adopted under the General Public Accounting Plan (PGCP) for all public sector entities</td></tr>
</table>

Source: Inventory of Sources and Methods (INE, 2007; EUROSTAT, 2009).

pursuing a systematic, integrated, and broader approach (Miles & Huberman, 1994; Ryan *et al.*, 2002).

A case study approach has been used, since this allows us to describe the accounting systems and to analyze techniques and procedures in their practical setting, as this is fieldwork applied to a particular country instead of an organization (Ryan *et al.*, 2002; Yin, 2003).

Qualitative studies sometimes use qualitative and quantitative data together (Miles & Huberman, 1994), as this research does. In relation to the former, several sources and research techniques have been used, such as analysis of documents and archival records, following the research lines designed by Yin (2003) for a descriptive case study.

The main documental source is, for both countries, the respective EDP Consolidated Inventory of Sources and Methods (INE, 2007; EUROSTAT, 2009). This document presents a description of sources and methods to be used in the preparation of the EDP Notification Tables.

With regards to quantitative data, they were collected from the April 2010 Notification (1st Notification to EUROSTAT), particularly from Table 2A, which provides data explaining the transition between Central Government's budgetary balance in GA and the same balance in NA (S.1311). This Notification includes planned data for 2010, estimated data for 2009, half-finalized data for 2008 and final data for both 2007 and 2006 (EUROSTAT, 2010a and 2010b)[7].

Adjustments from GA into NA

Due to differences in accounting criteria, there are several data adjustments from GA into NA, identified while analyzing the Inventories of Sources and Methods. The main adjustment categories are related to: (1) Cash/accrual adjustments for taxes, social contributions, primary expenditures, and interest; and (2) reclassification of some transactions, namely capital injections in state-owned corporations, dividends paid to GGS, military equipment expenditures, and EU grants (INE, 2007; EUROSTAT, 2009).

Some adjustment categories are the same in Portugal and Spain, namely accounting basis adjustments for taxes and social contributions, interest, and primary expenditures, as shown in Table 3.

7 According to the Excessive Deficit Procedure requirements, EU member states are obliged to prepare the Reporting of Government Deficit and Debt Levels twice a year: 1st Notification in April (N) and 2nd Notification in October (N), covering planned data (year N), estimated data (year N-1), half-finalized data (year N-2) and final data (years N-3 and N-4).

TABLE 4. Adjustments Relating to Reclassifications of Some Transactions (both countries)

Operations type	Adjustments
Capital injections in state-owned corporations	• Each transaction is analyzed in order to decide whether it meets the requirements of a financial transaction (not considered in the deficit calculation) or of a non-financial transaction—capital transfers—considered in the deficit calculation, according to the rules of ESA95 Manual on Government Deficit and Debt (MGDD) • It is necessary to analyze whether state-owned corporations are profitable in order to decide whether GGS can expect to obtain future income (financial transaction) or whether a capital injection was made to cover accumulated losses (capital transfer)
Dividends paid by government-owned business entities to GGS	• According to ESA95 MGDD, each transaction is analyzed in order to determinate whether the whole amount received from dividends can be considered as an income with positive impact on the deficit • As stated in ESA95 MGDD, dividends are payments from a unit to government, which are derived from the unit's income; therefore, dividends do not apply to payments derived from asset sales, capital gains, or reserves accumulated over several years. This part of the dividend amount must be treated as withdrawals of equity, with no impact on deficit
Military equipment expenditures	• Adjustments refer to the time difference between paying for military equipment (time of recording in the government budget) and delivering military equipment (recording moment in NA, following ESA95 rules)
EU grants (neutrality of the Community grants)	• A survey is carried out for all units in order to assess expenditures financed by EU grants, which are adjusted as follows: Increased if revenues are lower than expenditures, and decreased in the opposite case, so that the direct effect of EU grants is neutral for the deficit

Source: Inventory of Sources and Methods (INE, 2007; EUROSTAT, 2009).

As can be observed, in Spain cash/accrual adjustments are rare and are only related to particular situations, because accrual basis (IPSASs-based standards) is broadly used across all GA entities, especially in financial accounting and reporting.

There are also adjustments common to both countries relating to occasional reclassifications of some transactions as displayed in Table 4, which require complementary information not available in the accounting records.

Besides these reclassification adjustments, in Spain there are also specific adjustments linked to off-budget creditor transitions, such as: Capital gains of the Central Bank; FAD (*Fondo de Ayuda al Desarrollo*) operations capturing transactions undertaken by the Development Aid Fund; export insurances guaranteed by the state (risks covered by *Compañia Española de Seguros de Crédito a la Exportación)*; and advances to *Comunidades Autónomas* and *Corporaciones Locales* (EUROSTAT, 2009).

In conclusion, the above analysis shows the existence of several adjustment categories in both countries, implying a vast number of procedures that bring into question the reliability of the deficit finally reported in NA. Adding to this diversity, there are also different accounting treatments each country makes while translating data from GA into NA, specifically due to the fact that they use a different accounting basis in budgetary accounting and reporting in GA.

Impact of Adjustments

The quantitative impact of the accounting differences between GA and NA on the budgetary deficit/surplus reported by Portugal and Spain, relating to Central Government, is evaluated from Table 2A, which provides data explaining the transition from GA into NA of the budgetary deficit/surplus. Data from the 2010 1st Notification were used, containing final data for 2006 and 2007, half-finalized data for 2008, and estimated data for 2009[8].

For every country, EDP Reporting Table 2A is based on Central Governmental budgetary deficit/surplus (GA), designated as "working balance", which represents the balance between all executed revenues and expenditures. This Table shows data adjustments made to reach the final deficit/surplus—net borrowing/lending of Central Government (S.1311), according to NA requirements.

For both Portugal and Spain, EDP Reporting Table 2A is based on Central Government budgetary execution deficit/surplus (working balance) to the State subsector (S.13111), and the deficit/surplus of other central government entities is disclosed as a whole in a separate issue[9] (INE, 2007; EUROSTAT,

8 Data from 2010 were not analyzed, since they were still reported as planned.

9 Central Government includes the State subsector (S.13111) and Other entities / Central Government autonomous bodies (S.13112). The EDP Reporting TABLE 2A starts displaying figures related to

2009). However, as explained, while the "working balance" in the Portuguese Central Government is cash-based in reports, in Spain's case it is already reported under the accrual basis (EUROSTAT, 2010a, 2010b).

Table 5 describes the adjustment categories shown in Table 2A, highlighting differences and similarities between the two countries.

TABLE 5. Adjustment Categories from Central Government "Working Balance" in GA into Central Government Deficit/Surplus in NA

Categories	Portugal	Spain
Financial transactions included in the working balance	X	-
Non-financial transactions not included in the working balance	-	X
Accounting basis adjustments	X	X[a]
Balance (net borrowing or net lending) of other Central Government (CG) entities[b]	X	X
Other adjustments[c]	X	X

[a] Only accounting basis adjustments related to interest are disclosed.

[b] As explained, budgetary balance of other entities not included in the State subsector is reported for the whole of those entities and is added to the State deficit/surplus (working balance).

[c] These adjustments are related to reclassification of some transactions, as mentioned in Section 4.2, such as capital injections, military equipment expenditures and dividends paid to GGS.

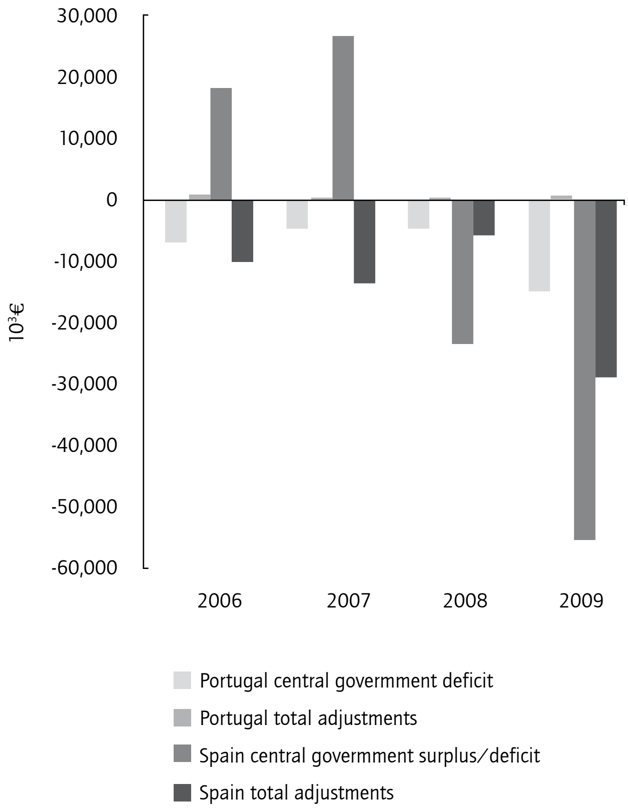
Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

"Financial transactions" must be deducted from the state budgetary execution deficit (GA) since in NA they represent balance sheet accounts, and are thus not considered in the EDP deficit/surplus (INE, 2007; Jesus & Jorge, 2010). However, the Spanish EDP report does not include these adjustments, since the working balance is calculated after the elimination of those transactions (EUROSTAT, 2009). This does not mean they do not exist, only that they are not reported in Table 2A due to previous eliminations (EUROSTAT, 2010b).

Data for Spain show the category "Non-financial transactions not included in the working balance", not reported by Portugal. This category discloses adjustments associated with off-budget creditors' transitions, not recorded in data regarding the State subsector, but that must be classified as non-financial transactions in NA, with an impact on the deficit/surplus (EUROSTAT, 2009).

Figure 1 compares, for both countries and over the years analyzed, the total adjustments against the "working balance" (Central Government budgetary deficit/surplus) from the State subsector, before the adjustments themselves[10].

FIGURE 1. Total Adjustments *versus* Central Government Deficit/Surplus (Portugal and Spain)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

Total adjustments were much greater in Spain than in Portugal. Although in both countries total adjustments reached their peak in 2009, in Spain the amount was approximately €29,801M, while in Portugal it was approximately €1,225M—significantly lower.

The impact on the budgetary balances of each country was also different. In Spain the adjustments always had a negative impact on that balance, but while in 2006 and 2007 they contributed to decreasing the surplus (-61.5% and -54.8% respectively), in 2008 and 2009 adjustments increased the GA deficit, leading to a higher deficit in NA (-26.2% and -53.1%). Portugal registered a deficit every year, but while adjustments reduced GA budgetary deficit in 2006 (+10.4%), 2008 (+1.2%) and 2009 (+7.8%), they

the State subsector. The Other entities / Central Government autonomous bodies' data are reported on the same TABLE in a separate line considering all entities as a whole.

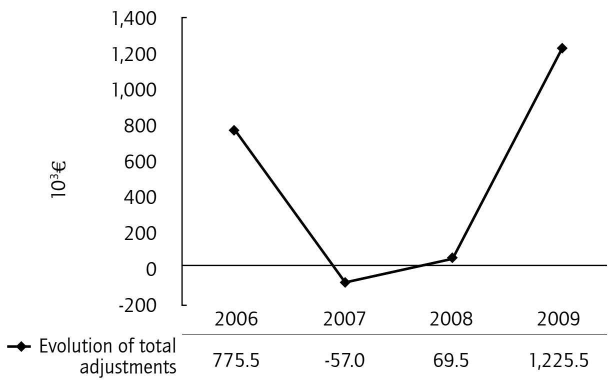
[10] Portugal always reports governmental deficits, while Spain reported a surplus in 2006 and 2007 and deficits in the years after (EUROSTAT, 2010a, 2010b).

contributed to a slight increase (-1.1%) in 2007, leading to a higher deficit in NA.

Consequently, it might be noticed that adjustments were much more materially relevant in Spain than in Portugal, inasmuch as they significantly absorbed or aggravated the initial GA balance to get the final NA balance (deficit/surplus).

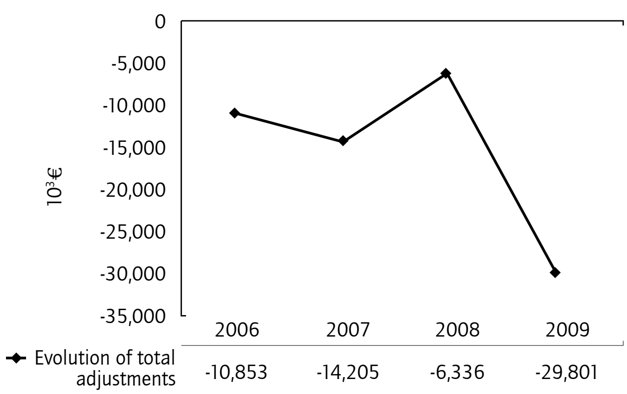
Figures 2 and 3 illustrate the evolution of adjustments from 2006 to 2009, for Portugal and Spain, respectively.

FIGURE 2. Evolution of Total Adjustments (Portugal)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

FIGURE 3. Evolution of Total Adjustments (Spain)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

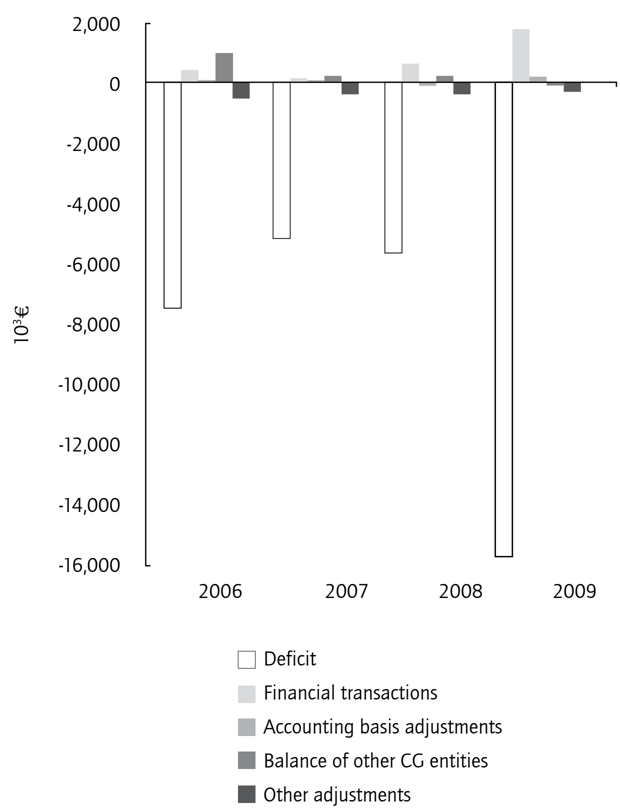
Regardless of the sign of the impact on the GA budgetary balance, in Spain there was a noticeable general trend for total adjustments to increase (the total adjustments amount was three times higher in 2009 than in 2006), while in Portugal there was no such trend in this period. On the contrary—in Portugal the amount fell from approximately €775M in 2006 to close to €60M in 2006 and 2007, and increased again to above €1,200M in 2009.

A more detailed analysis of adjustment categories is presented in the following figures.

Figure 4 compares the amount of each adjustment category against the Portuguese GA budgetary balance (before adjustments).

The "accounting basis adjustments" were the least significant, regardless of the sign of the impact on the GA budgetary balance. Meanwhile, "other adjustments" and those related to "financial transactions included in the working balance" were the most significant, the latter especially in 2008 and 2009. As for the sign of the impact, while the "other adjustments" had a negative impact in the years from 2006 to 2009, thereby increasing the final deficit in NA (about -8% between 2006 and 2008), the adjustments of "financial transactions included in the working balance" had a positive impact in the period analyzed, thus reducing the final deficit (about +10% in 2008 and 2009).

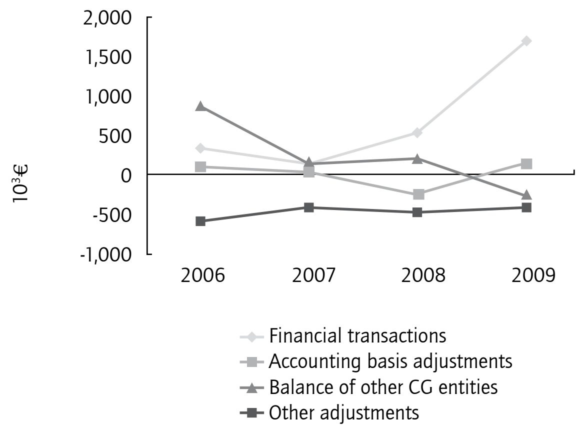
FIGURE 4. Total Adjustments by Category *versus* Central Government Deficit (Portugal)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

Figure 5, also relating to Portugal, illustrates the evolution of each adjustment category, regardless of the sign of the impact on the GA budgetary balance. While the "other adjustments" and "accounting basis adjustments" categories were relatively stable through the period (with a slight increase of the latter in 2008 to €234M), adjustments in the category "balance of other CG entities" decreased from €883M in 2006 to €247M in 2009. Adjustments for "financial transactions included in the working balance" greatly increased from about €350M in 2006 to €1,700M in 2009.

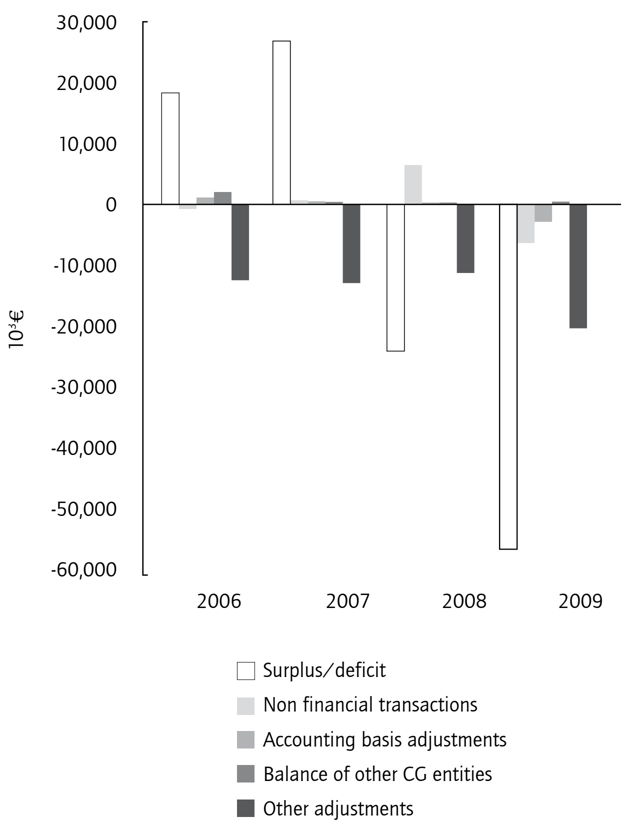
FIGURE 5. Evolution of Adjustments by Category (Portugal)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

Figure 6 allows a detailed analysis of each adjustment category compared to the budgetary execution balance of the Spanish Central Government (before adjustments).

FIGURE 6. Total Adjustments by Category *versus* Central Government Deficit (Spain)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

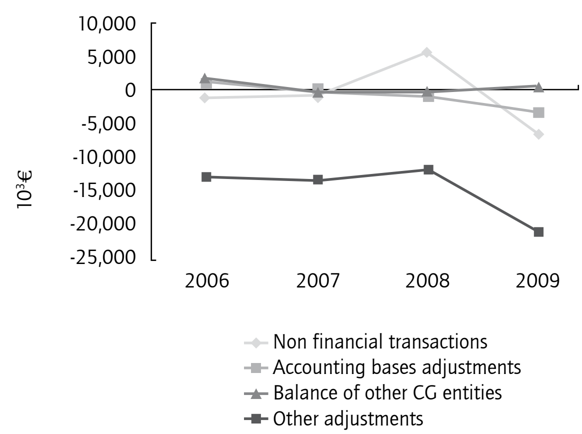
As explained previously, Spanish EDP Notifications, unlike the Portuguese Notifications, do not disclose adjustments regarding "financial transactions included in the working balance". Furthermore, the "accounting basis adjustments", only related to interest as mentioned in Table 5, like the "balance of other CG entities", presented very insignificant amounts. There is an exception for the latter in 2006, when the amounts reached €1,784M, with a positive impact on the GA surplus of approximately +10%.

The "other adjustments" category stands out as having a greater impact on the budgetary balances reported, decreasing the surplus in 2006 and 2007 (by about -73% and -51% respectively), and increasing the deficit in 2008 and 2009 (by about +48% and +39% respectively).

The category "non-financial transactions not included in the working balance", non-existent in Portugal, also showed a significant impact both in 2008 and 2009, of approximately +€5,800M and -€6,500M (*i.e.*, 24% positive impact on the deficit in 2008 and 12% negative impact in 2009).

Figure 7 shows the evolution of each adjustment category for Spain.

FIGURE 7. Evolution of Adjustments by Category (Spain)



Source: Own elaboration using data from EDP Tables 2A (EUROSTAT, 2010a, 2010b).

Regardless of the sign of the impact on the GA budgetary balance, the categories "balance of other CG entities" and "accounting basis adjustments" were relatively stable during the period (with a slight increase of the latter in 2009 to approximately €3,240M), while categories relating to "other adjustments" and "non-financial transactions not included in the working balance" showed different trends: The former increased from €12,900M in 2006 to €20,700M in 2009, after slightly decreasing to €11,600M in 2008; the latter increased from €1,000M in 2006 to €6,500M in 2009, after decreasing in 2007 to approximately €770M.

A general comparison between the two countries allows the following conclusions:

- On the whole, adjustments were more material in Spain than in Portugal, as they allowed for more significant differences between GA and NA budgetary balances, absorbing a great part of the GA surplus or aggravating the deficit;
- For both countries the category "other adjustments" was the most material;
- The second most material adjustment category in Portugal was "financial transactions included in the working balance", while in Spain it was "non-financial transactions not included in the working balance"; and
- With regards to the evolution of the adjustment categories, in both countries "accounting basis adjustments" were relatively stable during the period, while the evolution of the "other adjustments" was quite different, since they tended to be stable in Portugal but oscillated in Spain, significantly increasing in 2009.

All in all, adjustments materiality is an issue that must be a concern, since they impact on the GA budgetary balance, allowing for significant changes in the deficit/surplus amounts when passing from GA into NA, and hence jeopardizing the reliability of the deficit/surplus reported within the EDP. Therefore, adjustments must be reduced as much as possible, in the search for the most appropriate convergence between GA and NA, *i.e.,* governmental accounting systems (micro) and government finance statistics systems (macro). IPSASB's consultation paper, *IPSASs and Government Finance Statistics Reporting Guidelines* (IPSASB, 2012), is an effort towards achieving this.

Conclusions

In regards to the first objective, this paper theoretically debated the relationship between GA and NA, highlighting, based on some literature, that GA across EU member states does not meet ESA95 requirements concerning GGS data, mainly because GA systems, including budgetary accounting, are not harmonized between countries, or even between different levels of government within each country. Moreover, there are different accounting bases applied to financial accounting systems (generally accrual-based) and to budgetary accounting systems (usually modified cash-based) and budgets are still cash-based in the majority of EU countries. Recent recommendations of the IPSASB and EU aim to reduce this problem, suggesting that EU member states adopt IPSASs-based EPSAS for all levels of government and all public sector entities.

Issues concerning the lack of harmonization in GA supported the political decision to make NA the compulsory and harmonized reporting system adopted by the EU member states, and the framework used to provide information for preparing, implementing and monitoring EMU policies, specifically in determining the aggregates established in the EU Treaty in order to accomplish the budgetary discipline criteria.

However, the convergence problem still remains, since GGS data for NA are obtained from GA budgetary reporting, in which the diversity and materiality of divergences from NA have been identified and analyzed, raising questions about the reliability and comparability of those aggregates.

Subsequently, the paper identified, from a conceptual point of view, the main divergences between GA and NA, namely relating to users' needs, purposes and objectives, and recognition and measurement criteria. The main divergences concern the accounting principles, such as recognition (cash basis *versus* accrual basis) and measurement (historical cost *versus* market value) criteria. Differences were also found in several specific issues, such as: scope of the reporting entity, preparation of consolidated financial statements, and transactions between government and state-owned companies.

In relation to the second objective, this paper showed, using data from the Iberian countries and Central Government as examples, that GA-NA differences imply several and diverse categories of adjustments when translating GA budgetary data into NA. Adding to the diversity, an analysis of those adjustments demonstrated non-harmonized procedures for determining the final NA budgetary balance, indicating problems with reliability and comparability.

By analyzing data for each country reported in Table 2A of April 2010 EDP Notification, covering years 2006 to 2009, the paper also demonstrated that adjustments are materially relevant in terms of their impact on each country's deficit/surplus.

The analysis showed adjustments as a whole were more material in Spain than in Portugal. Detailed findings demonstrated that the "other adjustments" category was the most material in both countries, but while in Portugal the amount of adjustments in this category was relatively stable, in Spain it oscillated, increasing significantly in 2009. As these adjustments mainly represent reclassifications of some transactions with different treatment in GA and NA, special attention should be given to these situations in order to align their recognition and measurement in both systems.

Adjustments to "financial transactions included in the working balance" are only present in Portugal, while "non-financial transactions not included in the working balance" are disclosed only by Spain. For both countries these were the second most material adjustment categories.

In both countries, the "accounting basis adjustments" category was one of the least material. While existing in both countries, in Spain it regards only to interest (and even so, only in exceptional situations when there are pending administrative procedures) because this country reports GA budgetary balance as already accrual-based.

The magnitude of the adjustments, as well as their diversity, raises questions about the reliability and comparability of the final budgetary balances reported by EU member states under EDP requirements.

In summary, the convergence between GA and NA has been increasingly important, inasmuch as the former supplies important inputs to the latter. The reliability of government finance statistics therefore depends on the quality of GA information, where budgetary reporting is particularly important. The quality of NA information also depends on the diversity, materiality, and consequent treatment given when translating data from GA into NA. The adjustments done must be reduced as much as possible, as well as harmonized across EU countries, so as not to compromise comparability.

Accrual accounting and especially accrual budgeting seem to have an important role to play in this convergence process. In fact, accrual-based financial and budgetary reporting would allow for aligning recognition and measurement criteria for transactions in both GA and NA (avoiding or reducing adjustments from one system into the other), and the better alignment would thus contribute to increase the quality of the information that underpins monetary and budgetary macroeconomic policy-making.

Accruals would also contribute to a better micro GA system, both improving financial and especially budgetary accounting and reporting, allowing for significant progress towards a harmonized GA system, more appropriate for the purposes of financial performance assessment, *e.g.* by capital markets.

GA international harmonization, taking accrual accounting and budgeting as a reference, would therefore allow for better comparability of financial and budgetary reports from the investors' side (micro decision-making), as well as better alignment with NA, contributing to improved information for the purposes of assessing EU budgetary discipline and convergence.

It seems EU bodies are starting to realize this, with the recent proposals acknowledging that IPSASs-based EPSAS shall be adopted by all member states under the new budgetary framework in progress, so GA systems become harmonized.

Given that this process is still at an initial stage, we believe that, in the meantime, a common framework has to be prepared to harmonize the accounting treatment to be adopted when translating GA data into NA. This framework is almost imperative in spite of the actual EDP Consolidated Inventory of Source and Methods each county discloses, because these Inventories merely explain each country's particular and dissimilar accounting treatments and procedures. Policy-makers, especially those of statistical offices, should therefore work on a common model as a crucial step to achieve reliability of informative outputs for both micro and macro perspectives.

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