BENEFITS OF ACCRUAL ACCOUNTING IN THE PUBLIC SECTOR
BENEFITS OF ACCRUAL ACCOUNTING IN THE PUBLIC SECTOR
Acronyms and abbreviations ................................................................. 3
Acknowledgements ............................................................................. 4
Preface .................................................................................................. 5
Executive Summary ............................................................................ 6

1. INTRODUCTION - WHAT IS ACCRUAL ACCOUNTING? .................. 7

2. ACCRUAL ACCOUNTING AND FINANCIAL MANAGEMENT REFORMS .. 11

3. BENEFITS OF ACCRUAL ACCOUNTING - FOR WHAT AND FOR WHOM? . 13
   3.1. Analysis of the Benefits in Practice: Literature Review .................. 16
   3.2. Analysis of the Benefits in Practice: Country Examples ............... 19
       Example 1. School infrastructure information for decision-making ... 21
       Example 2. Registration and follow up of grants provided for specific purpose 21
       Example 3. Accrued liabilities for long term loans for accountability and planning purposes 22
       Example 4. Impairment of receivables to reflect recoverable amount ...... 22

4. THE AMBIVALENT ROLE OF TRANSPARENCY .................................. 23

5. ENABLING CONDITIONS FOR ACCRUAL ACCOUNTING IMPLEMENTATION 26

6. THE COSTS OF ACCRUAL ACCOUNTING IMPLEMENTATION ............. 30
   6.1. Types of Cost ............................................................................... 31
   6.2. Additional costs that relate to accrual accounting ....................... 32
   6.3. Reallocation of resources .......................................................... 32
   6.4. Cost savings due to benefits from better decision-making .......... 34

7. CONCLUSIONS .................................................................................. 35
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrual Accounting in Cyprus</td>
<td>37</td>
</tr>
<tr>
<td>Accrual Accounting in Greece</td>
<td>38</td>
</tr>
<tr>
<td>Accrual Accounting in Portugal</td>
<td>38</td>
</tr>
<tr>
<td>Accrual Accounting in France</td>
<td>39</td>
</tr>
<tr>
<td>Accrual Accounting in United Kingdom</td>
<td>39</td>
</tr>
<tr>
<td>Annex 2. Enabling Pillars of Accrual Accounting Implementation</td>
<td>41</td>
</tr>
<tr>
<td>Goal Setting and Processes</td>
<td>41</td>
</tr>
<tr>
<td>Political support and ownership</td>
<td>41</td>
</tr>
<tr>
<td>Implementation plan</td>
<td>41</td>
</tr>
<tr>
<td>Accrual information integrated in decision-making and performance management</td>
<td>42</td>
</tr>
<tr>
<td>Human capital</td>
<td>43</td>
</tr>
<tr>
<td>Training and Educating Public Sector Accountants</td>
<td>43</td>
</tr>
<tr>
<td>Human Capacity</td>
<td>43</td>
</tr>
<tr>
<td>Expert Support</td>
<td>43</td>
</tr>
<tr>
<td>Technical</td>
<td>43</td>
</tr>
<tr>
<td>IT Financial Management Systems</td>
<td>43</td>
</tr>
<tr>
<td>Chart of Accounts</td>
<td>44</td>
</tr>
<tr>
<td>Accounting Standards and Policies</td>
<td>44</td>
</tr>
<tr>
<td>Annex 3. List of References</td>
<td>45</td>
</tr>
</tbody>
</table>
ACRONYMS AND ABBREVIATIONS

CIPFA  Chartered Institute of Public Finance and Accountancy
EFSF  European Financial Stability Facility
EPSAS  European Public Sector Accounting Standards
ESA  European System of Accounts
EU  European Union
IFAC  International Federation of Accountants
IFRS  International Financial Reporting Standards
IPSAS  International Public Sector Accounting Standards
IPSASB  International Public Sector Accounting Standards Board
IT  Information Technology
NPM  New Public Management
OECD  Organisation for Economic Co-operation and Development
PEFA  Public Expenditure and Financial Accountability
PFM  Public Financial Management
PULSAR  Public Sector Accounting and Reporting Program
This knowledge paper focuses on the benefits and value added of accrual accounting in the public sector as compared to cash based accounting and reporting. It is an output of the World Bank’s Governance Global Practice and has been developed by PULSAR, the Public Sector Accounting and Reporting Program.

The authors, Eugenio Caperchione, Sandra Cohen, Francesca Manes Rossi, and Isabel Brusca, led by Iwona Warzecha, seek to identify the main implications of accrual accounting in public financial management. The paper considers the benefits of accrual accounting from different approaches: theoretical analysis and a literature review offer a global perspective of the benefits for different users and different purposes and interviews with country experts and with prominent members of the accounting profession provide evidence of how accrual accounting has been implemented and of its benefits in practice, as well the enablers and challenges of implementation.

The authors would like to thank the following experts who kindly agreed to be interviewed and provided valuable contributions based on their experiences with accrual accounting:

Marie-Pierre Calmel (France), General Secretary of the Public Sector Accounting Standards Council (Conseil de Normalisation des Comptes Publics).

Ian Carruthers, Chair of the International Public Sector Accounting Standards Board and Chair of Standards, Chartered Institute of Public Finance and Accountancy.

Marios Hadjidamianou (Cyprus), Chartered Accountant at the Treasury of the Republic of Cyprus.

Dimitrios Paliouras (Greece), Acting Head of Division of Accounting for General Government, Ministry of Finance, General Accounting Office.

Bernhard Schatz (Austria), Member of the International Public Sector Accounting Standards Board and Senior Manager, PricewaterhouseCoopers.

Luis Viana (Portugal), Member of the Reform Team in the Portuguese Ministry of Finance at the time of the reform and now Counselor in the Court of Auditors (Tribunal de Contas). He is also member of the Portuguese Public Finance Council.

Their contributions were fundamental to including examples of how accrual accounting can improve financial management in practice and to corroborate reflections on enablers and obstacles to the success of financial management reform. We are very grateful for their participation.
The Public Sector Accounting and Reporting Program (PULSAR), launched in 2017, is a regional and country level program in 13 beneficiary countries of Europe and Central Asia. Its objective is to support the enhancement of public sector accounting and financial reporting frameworks in line with international standards and good practices to improve government accountability, transparency, and performance.

The objectives and scope of the PULSAR Program are jointly determined by the PULSAR Partners - Austria, Switzerland, and the World Bank – which provide institutional support for its implementation and mobilize the resources needed for its activities. Beneficiary countries help shape the program through regional cooperation platforms and input to two Communities of Practice, on financial reporting frameworks and on education.

More information about the PULSAR program and its publications is available online at:

www.pulsarprogram.org
This report focuses on the application of accrual accounting in public sector entities. The objective of the study is to illustrate benefits – but also costs – related to the implementation of this accounting system.

Cash accounting, still widely used by the public sectors in PULSAR countries, is based on the recognition of cash inflows and cash outflows. Expenses and revenues are recognized when the payment is made or received. Accrual accounting also records cash transactions but additionally recognizes the effects of transactions and other economic events when they occur. As a result, accrual accounting statements provide a more comprehensive view of the financial performance and position of an entity, with information that could not be tracked under cash accounting.

The benefits of accrual accounting for both internal and external users in terms of decision-making and accountability are discussed. The report draws on analysis of the available literature and from the reform experiences of Cyprus, France, Greece, Portugal and United Kingdom to offer important suggestions and lessons learned for reform in the PULSAR countries. Interviews with experts who have actively participated in the adoption of accrual based accounting provided valuable insight into both the perceived benefits of the reform and the difficulties and resistances experienced in the change. The report highlights that each country can have a different accounting maturity level; indeed, within the same country different public entities may operate different accounting systems, depending on the stage of reforms already adopted.

Transparency is seen as an important advantage related to the adoption of accrual-based accounting systems. However, in order for this advantage to materialize, stakeholders have to gain easy access to reliable accounting information disclosed in an understandable language and widely accessible.

The report considers the “enablers” needed for the successful introduction of accrual accounting, identified in three intertwined pillars: goal setting and processes, human capital, and technical. Interactions among these enablers is discussed, underlining that the combination of different enablers is essential to achieve the expected benefits.

Although accrual accounting brings many benefits hard to measure, its implementation can initially be a costly reform in three main dimensions: time (overall and annual costs), flows (budget flows and accrued costs), and financial sources (government funds or other sources). While these initial costs can be significant, depending on the requirement for new or upgraded IT financial management systems and reskilling or hiring personnel, these should reduce over time and should be seen against the long-term outcome of sounder management of resources and financial benefits of reductions in the cost of delivering services and performing public sector activities.

The report makes clear that the reform of the accounting system needs to be placed in a context of broader modernization of public financial management (PFM) systems, aimed at increasing accountability and performance of public management. Investments in human resources, information technology (IT) systems, and above all high-level political support for the whole process are key resources in order to produce a stable change. The compilation of high-quality, reliable information under accrual accounting is not an end in itself. The full potential benefits of the reform can only be realized if this information is concretely used by politicians and managers in the decision-making process, and made widely available to the public and other stakeholders to improve transparency and accountability.
INTRODUCTION - WHAT IS ACCRUAL ACCOUNTING?

The discipline of accounting can be dated back to the ancient Mesopotamia. Through the centuries it has evolved, in parallel with human progress, in order to provide suitable means to register, report, and keep track of economic transactions. Contemporary accrual accounting has grown out of the financial needs of the commercial world in 15th century Italy, which gave birth to double entry bookkeeping.

Accounting can be defined as a process of recording, analyzing, and reporting in monetary terms the financial transactions of an entity to both internal and external stakeholders. It has acquired a growing relevance in the last couple of centuries, as money acquired its main role as a medium of exchange and, consequently, as a measure of wealth. Accounting bases, and related principles and rules, have been created to satisfy both accountability and stewardship in any kind of organization.¹

¹ Jones and Pendlebury 2000.
While accrual accounting and comprehensive accounting standards, such as International Financial Reporting Standards (IFRS), became increasingly used (often legally required) by private corporations, accounting in the public sector until very recently relied almost entirely on cash accounting.

Cash accounting is based on the recognition of cash inflows and cash outflows; therefore, expenses and revenues are recognized when the payment is made or received. The main advantages are that it is simple and easy to apply, understand, and verify. These features allow politicians, managers, citizens, and any stakeholder without a specialized background in accounting to understand accounting or budgetary reports. Cash accounting can be both suitable and sufficient in circumstances when cash transactions prevail, i.e., goods and services are purchased and immediately consumed with no other significant non-cash transactions or economic events occurring (e.g., creation of assets). However, most public sector entities execute complex transactions, incur debt, commit to various liabilities or other public service obligations, and own and manage large-scale assets. This requires more complex accounting bases and principles to enable the preparation of financial reports that faithfully represent and quantify in monetary terms these economic phenomena.

Using cash accounting, it is not possible to assess the value of assets and liabilities over time because it records nothing but cash. Furthermore, cash accounting does not account for the costs consumed and revenues earned over a given period (regardless of the existence of cash flows), and consequently it is not fully appropriate for assessing the overall income created by an entity.

**Under accrual accounting, the effects of transactions and other events are recognized when they occur (and not only as cash, or its equivalent, is received or paid) and they are recorded in the accounting records and reported in the financial statements of the period to which they relate.** Accrual accounting also records cash transactions, which are presented in the cash flow statement. As a result, accrual accounting statements allow a holistic view of the financial performance and position of an entity. Thus, the application of accrual accounting does not remove the requirement to present information about cash-related transactions, but enriches it with accrual-based information that makes visible non-cash transactions and economic events spread over time, which could not be tracked under cash accounting.

In the last few decades, under the New Public Management (NPM) wave, and with the encouragement of international organizations (e.g., the International Monetary Fund; the Organisation for Economic Cooperation and Development (OECD); and the World Bank) as well as standard setters and professional accountancy organizations (the International Public Sector Accounting Standards Board (IPSASB) and the Chartered Institute of Public Finance and Accountancy [CIPFA]), accrual accounting has been progressively introduced in different countries and applied in multiple public entities, especially for reporting purposes. The main reasons for the move from cash to accrual accounting basis can be identified in the additional information that accrual data makes available, together with accounting processes that are supporting financial and operational performance of public sector entities. In fact, accrual accounting makes it possible to better determine a government’s financial situation, since it covers not only outflows and inflows during the year, but also assets, payables, and receivables. Furthermore, it allows consideration of long-term liabilities, as well as provisions that need to be created to cover risks and expenses deriving from operations during the year. Assets, both tangible and intangible, can be better valued as accrual accounting principles make it necessary to consider amortization and depreciation, as well as provisions related to future maintenance costs. Complete accrual accounting processes also have to identify and assess risks to disclose contingent liabilities relating to future events and commitments – this in turn can support active risk management to avoid or minimize potential future outflow of resources. Furthermore, financial assets (such as receivables or investments to other entities) can be valued at the end of the year taking into account their value in the market. Because of this greater precision in identifying assets and liabilities, accrual accounting better identifies net assets and trends in time.

---

2. According to Pollitt and Bouckaert (2011, p. 10), the NPM is a “doctrine that the public sector can be improved by the importation of business concepts, techniques, and values”. See Caperchione 2006 for an analysis of the consequences of NPM on finance practitioners.

3. An analysis of the European and worldwide situation is provided by Brusca et al. 2015; Christiaens et al. 2015; International Federation of Accountants (IFAC)-CIPFA 2021.

---

1. Introduction - What is Accrual Accounting?
Costs and revenues are assigned to the relevant financial year in accordance with their occurrence, rather than with the related cash flow. This kind of recognition is able to quantify not only the amount of resources consumed by an entity in a given year but also to determine the full cost of services produced, and provides detailed figures in the management accounting system. In doing so, accrual accounting ensures relevant information is available, enabling managers and politicians to take informed decisions (e.g. make-or-buy, setting up fees for services, etc.). Furthermore, on the revenues side, accrual accounting also includes revenues that come with service obligations (e.g. subsidies subject to specific restrictions) or that are not related to cash flows (e.g. increase in the value of investments). In addition, a more precise assessment of the overall performance of public sector entities can support a better consideration of intergenerational equity.4

Undoubtedly, there are also some drawbacks related to the adoption of accrual accounting. It requires specific greater knowledge of accounting principles and standards, either national or international. The complexity of accrual accounting requires core staff to determine adequate accounting policies, make reasonable judgments and accounting estimations (e.g. in the case of depreciation), and choose among different measurement methods and evaluation criteria, thus creating room for discretion, error, and even manipulation. Other staff may require knowledge of new systems and processes, and training, so as to understand and interpret the much richer data provided through accrual accounting.

This report seeks to illustrate the benefits – and the costs – related to the implementation of accrual accounting in public sector entities, including for internal and external users in terms of decision-making, accountability, and transparency. It points to the enabling conditions needed for successful introduction of accrual accounting (section 5 and Annex 2), as well as to the related costs (section 6).

The paper is focused on general accrual accounting concepts and principles, rather than on a specific set of standards, as each country can set its own national principles. However, the International Public Sector Accounting Standards (IPSAS) are used as a common reference point, which many countries choose to adopt directly or use as a basis to develop national standards.5

---

Table 1. Main Features of Accrual vs. Cash Basis Accounting

<table>
<thead>
<tr>
<th>Principles and standards</th>
<th>Accrual basis</th>
<th>Cash basis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National or international accounting principles and standards.</td>
<td>Cash based standards for the registry of inflows and outflows.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of transactions reflected by accounting basis</th>
<th>Accrual basis</th>
<th>Cash basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>All economic transactions including complex non-cash transactions and other economic phenomena such as deferred payments or delivery of agreed obligations, creation and consumption of resources, etc.</td>
<td>Only the cash component of the transactions, with no deferred payments or consumption, assets or liabilities.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application</th>
<th>Accrual basis</th>
<th>Cash basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>More complex (requires specific relevant knowledge, education, standards, IT systems).</td>
<td>Simpler.</td>
<td></td>
</tr>
</tbody>
</table>

---

4 Intergenerational equity is a principle of fairness amongst all generations in the use and conservation of both monetary and natural resources. For a detailed discussion on the implementation of accrual accounting in public sector organizations, see Burth and Hilgers 2014; Cavanagh et al. 2016; Christofzik 2019; Metcalfe and Sanderson 2020.

5 See IFAC-CIPFA 2021.
### 1. Introduction - What is Accrual Accounting?

<table>
<thead>
<tr>
<th></th>
<th><strong>Accrual basis</strong></th>
<th><strong>Cash basis</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understandability</strong></td>
<td>Requires understanding of specific principles and key standards applied.</td>
<td>Easier as it involves only cash transactions.</td>
</tr>
<tr>
<td><strong>Comparability</strong></td>
<td>Improved when the same set of accounting standards are applied and quality of financial reports is achieved.</td>
<td>High for basic elements.</td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td>Reported when they are earned.</td>
<td>Reported when they are received in cash.</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>Reported when resources are used or when they match revenues.</td>
<td>Reported when cash is paid.</td>
</tr>
<tr>
<td><strong>Cost of services</strong></td>
<td>Can be calculated for each product/process.</td>
<td>Limited to cash flows related to each service.</td>
</tr>
<tr>
<td><strong>Receivables</strong></td>
<td>Reported as assets.</td>
<td>Not reported.</td>
</tr>
<tr>
<td><strong>Payables</strong></td>
<td>Reported as liabilities when they are incurred.</td>
<td>Not reported.</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td>Valued at their acquisition cost minus amortization, depreciation, and impairment, or at their current value at the end of the reporting period.</td>
<td>Not reported - accounted when cash is paid as a form of expense.</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td>Reported also considering possible future events (e.g. provisions).</td>
<td>Not reported.</td>
</tr>
<tr>
<td><strong>Net assets</strong></td>
<td>Identified as difference between total assets and total liabilities.</td>
<td>Not reported.</td>
</tr>
<tr>
<td><strong>Surplus or deficit</strong></td>
<td>Result based on revenues earned and expenses occurred in the financial year.</td>
<td>Cannot be estimated - only the difference between cash balances, inflows, and outflows.</td>
</tr>
</tbody>
</table>
Public sector accounting reforms are usually embedded in broader modernization of public financial management, aimed at increasing accountability and performance of public management (Pollitt and Bouckaert 2011). The implementation of accrual accounting as part of these reforms produces financial reporting that can be made publicly available and used to improve decision-making (internal use) and accountability (external use). Accrual accounting is required in the framework of modern public financial management models, assuming that the information can support the objectives of the new models (Carlin 2005).
The literature shows evidence of important differences among countries in the level of success and achievements of NPM reforms in general, and of accrual accounting in particular, which are justified by differences within the administrative, cultural, and political contexts (Pollitt and Bouckaert 2011). The introduction of accrual accounting through different routes can impact its benefits (Pollitt and Bouckaert 2011). There is consensus in the literature that successful implementation requires the completion of a number of phases that progressively move forward and scale up the reforms in order to achieve overall objectives and make their benefits evident (Cavanagh et al. 2017).

**Accrual accounting is a tool to achieve the aims of the reforms but not an end in itself.** To be successful, it needs to be part of a wider project including:

- Clear definition of the objectives of the reform and a framework to redesign operational activities and organization, enhance monitoring systems, and reform IT systems so as to change the processes and flow of information (for example asset inventories are important) (Metcalfe and Sanderson 2020; The World Bank PULSAR 2020a).

- An implementation plan and a guide for the transition. Since the introduction of accrual accounting requires time, gradual improvements in the quality, timeliness, and relevance of financial information can be sought (The World Bank PULSAR 2021a). The use of pilot entities can also be good practice (Jorge et al. 2021).

- Re-education and training of professionals, both preparers of financial statements and users, especially managers, policy-makers, macroeconomists, fiscal statisticians, and other stakeholders, making them aware of the benefits of accrual data for decision-making. This requires a cultural change in the organization, so that financial information is embedded in decision-making processes (Hepworth 2003). The support of managers and politicians becomes essential in the process of change.

- Changes in the administrative and legal framework, so that the focus for decision-making and for accountability is on accrual information. This is a problem for some administrations, which use cash accounting for the budget and accrual accounting for financial statements. If cash accounting remains central for legal control and monitoring of entities then managers and politicians, more worried by the legal issues than by the content and potential value of accrual data, do not take full account of accrual accounting information.

All the above are discussed in more detail in Section 5.
The increasing adoption of accrual accounting is evident both in the literature and in practice. This section will consider the benefits of accrual accounting implementation, focusing on the achievement of broader financial management objectives that expand beyond the preparation of accrual based financial statements and the availability of accrual accounting information.

There is consensus in accounting literature and by conceptual accounting frameworks that accounting information in the public sector should be focused on two purposes:

- accountability to stakeholders and
- supporting decision-making (van Helden and Reichard 2019).
From a normative perspective, the focus is on the users and use of the information. The IPSASB Conceptual Framework (2014) defines the objectives of financial reporting at the core of their structure, making clear that the information is not an end in itself. This is in fact one of the problems in practice. Too often the focus is put on obtaining the information rather than how it is then used, considering it as the final aim of the process rather than only the first step.

In accordance with the IPSASB (2014, 13), “the objectives of financial reporting by public sector entities are to provide information about the entity that is useful to users for accountability purposes and for decision-making purposes”. This requires the definition of users of financial reporting. The Conceptual Framework summarizes stakeholders as “service recipients and resource providers”, that is mainly an external users’ perspective, justified by the public availability of financial reporting. It refers to citizens as the “primary users”, while also considering other users, such as donor agencies, lenders, or international organizations. The potential interest of other non-primary users are recognized: regulatory and oversight bodies, macroeconomic statistics compilers and users, audit institutions, subcommittees of the legislature or other governing bodies, central agencies and budget controllers, entity management, rating agencies, and, in some cases, lending institutions. Despite this focus on external users, the Conceptual Framework does recognize internal users, such as managers and politicians, who are key decision makers, as potential users. Figures 1 and 2 summarize the benefits of accrual accounting for the potential users based on this differentiation between internal and external users.

Accrual accounting per se will not solve the financial issues, it will rather highlight them. Benefits from transitioning to accruals will be substantiated only when the financial problems are understood and actions are taken to address them.

— Marios Hadjidamianou

Although the IPSASB Conceptual Framework puts transparency for citizens at the core of the financial reporting, the full financial statements can be difficult to understand for non-accounting experts.

— Ian Carruthers

In accordance with the IPSASB (2014, 13), “the objectives of financial reporting by public sector entities are to provide information about the entity that is useful to users for accountability purposes and for decision-making purposes”. This requires the definition of users of financial reporting. The Conceptual Framework summarizes stakeholders as “service recipients and resource providers”, that is mainly an external users’ perspective, justified by the public availability of financial reporting. It refers to citizens as the “primary users”, while also considering other users, such as donor agencies, lenders, or international organizations. The potential interest of other non-primary users are recognized: regulatory and oversight bodies, macroeconomic statistics compilers and users, audit institutions, subcommittees of the legislature or other governing bodies, central agencies and budget controllers, entity management, rating agencies, and, in some cases, lending institutions. Despite this focus on external users, the Conceptual Framework does recognize internal users, such as managers and politicians, who are key decision makers, as potential users. Figures 1 and 2 summarize the benefits of accrual accounting for the potential users based on this differentiation between internal and external users.
Figure 1. Benefits of Accrual Accounting for External Users

**ACCOUNTABILITY**
- Informs on the use of resources
- Informs about performance management
- Accounts for fiscal and financial sustainability
- Facilitates public scrutiny
- Provides fiscal credibility
- Informs about cost of services and creates responsibility
- Informs electoral decisions
- Reduces corruption

**EXTERNAL USERS**
- Citizens and their representatives
- NGOs
- Donor agencies
- Lenders and creditors
- Rating agencies
- International organizations
- Regulatory and oversight bodies
- Audit institutions
- Subcommittees of the legislature
- Budget controllers

**DECISION MAKING**
- Decisions about the use of services
- Electoral decisions
- Granting of financial aid
- Lending financial resources
- Contracting out, outsourcing
- Public-private partnerships
- Monitoring the application of legislation and budget rules
- Monitoring financial and fiscal sustainability

Figure 2. Benefits of Accrual Accounting for Internal Users

**ACCOUNTABILITY**
- Accounts for responsibilities within the hierarchy in the organizations (e.g. managers towards political supervisors)
- Discharges financial responsibilities
- Provides credible data to fiscal statistics
- Supports anti-corruption tools
- Accountability of performance management

**INTERNAL USERS**
- Accountants
- Internal Control / Internal Audit
- Managers
- Governing bodies
- Politicians
- Fiscal statisticians
- Macroeconomists

**DECISION MAKING**
- Facilitates analysis and a focus on performance and achieving value for money decision-making
- Drives efficiency of public resources
- Provides information for budgeting and planning process
- Supports fiscal decision
- Financial sustainability decision making
- Managing debt and liabilities and identifying fiscal risk
- Reducing fiscal illusions and improving incentives
- Supporting long-term thinking and decision making
- Sound management of assets
- Intergenerational equity decisions
3. Analysis of the Benefits in Practice: Literature Review

Table 2 summarizes the literature reviewed, which points to generally positive findings. The benefits are differentiated between the two main objectives of financial reporting: accountability and decision-making.

There is, though, debate in the literature about the benefits and achievements of accrual accounting in practice, especially in trying to identify who is using the information and the level of usefulness (van Helden and Reichard 2019).

Most empirical studies focus on internal users, as they are considered to have more knowledge of financial reporting, but they are sometimes asked about the external users, mainly from an accountability perspective. As there has been less study of external users, only a limited number of papers refer to the external perspective.

Results about the use of accrual accounting information can be diverse and contradictory, with differences between countries. While much of the research supports its benefits and advantages, others challenge the suitability of accrual accounting systems used in the private sector for the public sector. Conclusions and findings can also be affected by the timing of the research. Some of the more negative views include that the information is complex, not understood by some users, not relevant for budgetary reporting, and that it is not used in development debates. It is interesting to note however, a tendency towards a more precise perception of the benefits of accrual accounting over time, once the reform has advanced and users have acquired some experience (Jagalla et al. 2011).

The benefits of accrual accounting come with the use.
— Bernhard Schatz

Simplified information available for citizens is needed. It is important both to inform voters and for legitimacy purposes. Citizens need to understand who the best political candidate is to manage financial resources, ensure better services, and achieve financial sustainability.
— Luis Viana
<table>
<thead>
<tr>
<th>Country / level of government</th>
<th>Method of analysis / author</th>
<th>Users analyzed</th>
<th>Benefits for decision-making</th>
<th>Benefits for accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek municipalities</td>
<td>Survey - Cohen et al. (2013)</td>
<td>Financial department officers.</td>
<td>Provides information to rationalize the organization's actions. Enhances efficiency measurement.</td>
<td>Provides information for resource allocations accountability and legitimizes the organization's actions.</td>
</tr>
<tr>
<td>Country / level of government</td>
<td>Method of analysis / author</td>
<td>Users analyzed</td>
<td>Benefits for decision-making</td>
<td>Benefits for accountability</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>New Zealand - public administrations from several sub-sectors</td>
<td>Survey - Laswad and Redmayne (2015)</td>
<td>Chief executives, chief financial officers, and other finance staff.</td>
<td>Useful information for planning and forecasting, analyzing trends and budgets, and to formulate fiscal policies.</td>
<td></td>
</tr>
<tr>
<td>Country / level of government</td>
<td>Method of analysis / author</td>
<td>Users analyzed</td>
<td>Benefits for decision-making</td>
<td>Benefits for accountability</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Portugal - local government</td>
<td>Survey - Gomes et al. (2021)</td>
<td>Chief financial officers.</td>
<td>Planning and management control. Measure and evaluate performance and strategic decisions.</td>
<td>To inform stakeholders of the use of resources.</td>
</tr>
<tr>
<td>Netherlands and Italy - two projects developed by public administration in each case</td>
<td>Media reports, minutes of meetings, interviews - van Helden et al. (2021)</td>
<td>Key actors for development of the projects.</td>
<td>Use of information by financial creditors to support the project or not. Use of information to justify the projects.</td>
<td></td>
</tr>
<tr>
<td>Malaysian federal government</td>
<td>Survey - Ismail (2022)</td>
<td>Malaysian federal government accountants.</td>
<td>Assist in managing departments’ assets and liabilities, to assess the cash flow needs of a department, and for departmental resource allocation decisions.</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2 Analysis of the Benefits in Practice: Country Examples

For a willing reformer it can be beneficial to take on board the experiences of other countries, especially those with a similar size, administrative system, or accounting tradition, to better understand their successes and better prepare for possible challenges.

> Learn the lessons from others, both what worked and what didn’t.
> — Ian Carruthers
For this paper, public officials from Cyprus, Greece, France, and Portugal and sponsors of accrual accounting were interviewed on the benefits of accrual accounting. These countries were selected as they are comparable in size with PULSAR beneficiaries, and all have adopted or are in the process of adopting accrual accounting. France introduced accrual accounting in public sector entities from 1962 and Portugal in 1997. Greece and Cyprus are in transition to accrual accounting for the central government. The common message from these countries seems to be that reform is possible and that it can offer many benefits. These are not to be taken for granted, though, as they require work and dedication by many of the involved parties. Importantly, all interviewees agreed that the actual use of the accrual data is fundamental, in order to have concrete benefits.

**Box 1** provides a summary of the benefits gathered through the interviews.

The examples on the following pages highlight the tangible benefits of transitioning to accrual accounting.

### BOX 1 Practical Insights: Benefits of Accrual Accounting

- Accrual accounting can bring accurate, reliable, timely, and complete information on assets and liabilities in the public sector. Non-cash transactions are recorded and recognized for the first time.
- Accrual is an enabler for improvements in financial management permitting disciplined management and rigorous follow-up, as well as accountability.
- Accrual fosters better allocation and use of public resources, especially long-term assets for better service provision and overall improved asset management.
- Accrual accounting improves reporting, as there are checks and balances.
- Thanks to accrual accounting, supervising and oversight authorities will have better information to perform more effective and targeted control and audit.
- Accrual allows foreseeing long-term effects connected to plans, activities, and the anticipation of risks; presenting the economic substance of the transactions, as well as the effects of different options, and inducing politicians to reflect on them.
- Risks coming from financial instruments, contingent liabilities, foreign currency, climate change, and public private partnerships are recognized or disclosed with accrual accounting. Impairment of financial assets (e.g. receivables), and assessment of the cost of financial strategies with the use of financial instruments, become evident.
- Accruals promote intergenerational equity, as they allow better understanding of how the public sector should be organized. For example, loans for the creation of assets should not be extended beyond the life of the assets themselves.
- Accrual accounting provides better information on costs.
- IT facilitates the production of more reliable national accounting data also for the purpose of fiscal statistics. Accruals make it easier to communicate improvements in the administration of financial affairs in the Eurostat and the European Union (EU), and to be compliant with EU regulations and fiscal rules.
- Accrual accounting benefits are different for different users. The emphasis put on the information disclosed in the statements depends on their role and the responsibilities of the user, types of information sought, as well as on the circumstances (e.g. COVID-19, financial crisis). So, the benefits depend on the perspective of the user.
3. Benefits of Accrual Accounting - For What and For Whom?

Part of the procedures undertaken to make the transition to accruals accounting was to identify, register, and measure the value of all public buildings, including offices, schools, and other public buildings. The Ministry of Education has been able to scrap the old and incomplete registers it used for the school infrastructure and put in place the new one developed under the accruals accounting transition. The new fixed assets register is an electronic one, which includes exact location, full specifications, year of construction, size, even photos of the assets involved. The Ministry is hoping to use the new Register in their everyday management of the schools, including:

- Identifying maintenance needs (current and projected) of the buildings.
- Improving projections of the equipment needed in each school.
- More efficient use of areas within schools, not being fully utilized.
- More efficient allocation of students to different schools that might be over or under loaded.
- Better use of school buildings, especially those with only a few students in rural areas. It has already been examined whether some buildings can be used as museums, or local authority’s offices, or even as cultural centers.

Example 1.
Cyprus
Marios Hadjidamianou

School infrastructure information for decision-making

Under the new accounting policy adopted on grants, if the government provides a grant to an entity or an individual for a specific purpose, we keep these entities or individuals under our “Receivables” in the Balance Sheet, until they fulfil their performance obligation, i.e. we verify that they spend the money for the purpose it was provided. In this way, we keep real time accounting records on whether government’s policies are actually implemented through these grants; otherwise, the government will ask the money back from the entities or individuals failing to fulfil their performance obligations. Thus, we make sure that there is an appropriate and effective way of using public resources (in this case the grants), in accordance with the government’s policies.

Example 2.
Cyprus
Marios Hadjidamianou

Registration and follow up of grants provided for specific purpose
Under the Master Financial Assistance Facility agreement (2012) between the European Financial Stability Facility (EFSF) and the Hellenic Republic as beneficiary Member State, that was part of the second package of financial assistance for Greece, EFSF disbursed 10-year loan tranches to Greece. The majority of these loan tranches had interest, which was due at the end of the repayment of the loan tranches. Through the accrual accounting we were recognizing our accumulative liability every year (accumulative interest would be differed and paid with the amortization at the end of the loans), helping us in accurate reporting and supporting us for accountability purposes. If we didn't have accounting in accrual basis we wouldn't have any information about this liability and suddenly at the end of the life of the financial instrument we would face a liability and probably our plans would be derailed.

Note: The EFSF was created as a temporary crisis resolution mechanism by the euro area Member States in June 2010. The EFSF provided financial assistance to Ireland, Portugal, and Greece. This task was subsequently performed solely by the European Stability Mechanism.

Example 3.

Greece
Dimitrios Paliouras

Accrued liabilities for long term loans for accountability and planning purposes

Receivables of nominal value of €105 billion had to be measured at the recoverable amount, i.e. the amount that is reasonably expected to be collected, for financial reporting purposes under accrual accounting. At the reporting date, impairment was calculated on the accounts receivable, so that they would be adjusted to the amount that would be reasonably expected to be collected. To assess the recoverable amount, a new policy was applied so as the impairment for these claims to be calculated on the basis of the floating average of the collection rates of the last five reporting periods. The result of applying this policy was a huge amount of impairment, €101 billion. Thus, accrual accounting principles helped to disclose the true and fair value of receivables in our financial reports.
THE AMBIVALENT ROLE OF TRANSPARENCY

Changes in our society, and the increasing role assigned to citizens as co-producers of public services, call for new accountability requirements. The public expect more transparent (and open) government. Citizens are stakeholders, interested in understanding 'where money goes' and whether promises made by politicians have been maintained. Public sector entities need to provide accessible financial and non-financial information on how public resources have been used and what results have been achieved, above all in terms of improvement in quantity and quality of public services. The use of information and communication technologies can support public entities in satisfying these information needs, in line with public

6 Citizens can be considered co-producers of public services when they provide in-depth and systematic suggestions in the creation and management of public services.
financial management pillars. To this end, it is important to identify ‘how’ information should be disclosed and ‘how much’ information should be provided.

**Increased accountability and transparency are considered among the main advantages of adopting accrual accounting based systems.** They calculate the costs of delivering government programs and services more precisely, and allow citizens and other external stakeholder to assess whether efficiency requirements have been achieved and whether the entity can meet its short- and long-term financial obligations. Of course, in order to serve the accountability function, financial data have to be reliable and provided in an orderly and clear manner. Possible issues to be aware of with greater transparency include that it may encourage opportunistic behavior by managers and politicians: for instance, managers can selectively use or manage performance indicators to claim higher salaries and bonuses or obtain larger budgets; government opponents can use information to criticize or seek to influence public opinion by focusing on ‘sensitive’ topics. These issues can only be tackled with education and awareness raising amongst various users of accrual financial information.

Each entity has to find the right trade-off between transparency and the cost of providing information, as well as a balance between releasing useful information and causing an information overload. The selection of information requires taking into account the different needs of internal and external stakeholders. The aim is to provide sound information and avoid information overload which might have some counterproductive effects, e.g. to focus on non-relevant data, or include too much internal and technical information that may discourage further reading. This dilemma however is not public sector specific. The private sector faces similar challenges to reduce excessive and irrelevant boilerplate financial information and disclosures, which distract users from understanding significant and value relevant accounting information.

---

**Figure 3:** The Ambivalent Role of Transparency

<table>
<thead>
<tr>
<th>TRANSPARENCY CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of data disclosure</td>
</tr>
<tr>
<td>Information overload</td>
</tr>
<tr>
<td>Level of technical jargon used</td>
</tr>
<tr>
<td>Distracting non-relevant data</td>
</tr>
<tr>
<td>Potential opportunistic behavior</td>
</tr>
</tbody>
</table>

---

**TRANSPARENCY CONDITIONS**

Information should be:

- Accessible
- Reliable
- Timely
- Orderly
- Clear
- Understandable
- Appropriate to user information needs
- Available through proper communication channels

---

This transparency dilemma requires that public entities design their information systems and the reports that can be produced from them to ensure that each category of stakeholder can access information that is relevant to them. It becomes necessary to use communication tools that fit the information needs of all interested parties and channels of communication able to ensure that relevant information reaches the right groups of stakeholders. This need is reflected in the set of qualitative characteristics of financial reporting defined by the main international accounting standard setters (IPSASB) in which reporting entities are required to provide accounting data that meets both accountability and decision-making function needs. Consequently, top managers responsible for accounting data are required to focus their disclosure on key financial information and key performance indicators.

Recently, a trend has emerged to prepare specific reports for citizens (e.g., popular reports using storytelling and visualization techniques), which should be better understandable, so meeting their information needs. They can then choose if they wish to drill down to more detailed information using IT tools. This is a benefit of the system, as accrual accounting can produce financial reporting more easily understood by citizens, but at the same time more complete.

Box 2 provides a summary of the challenges related to accrual accounting and transparency highlighted during interviews for this paper.

**Box 2: Practical Insights: Accrual accounting and transparency**

- Financial reports need to be simplified, more “popular”, and to be effectively communicated to citizens. Then the information will become useful for them and they will be persuaded about the necessity of the reform. This needs dialogue with stakeholders and consultation.

- The more informed the citizen, the better for equity and justice in the country. The citizens become more responsible, and in this way, they care about the future and the intergenerational equity; at the same time, they can hold government accountable for its actions.

- The press (mass media) can play an intermediary role to translate and interpret the accounting numbers for citizens.

- Attention should be paid to avoid overloads. Accountants have to exercise some judgment: not everybody needs to know all the details. Public scrutiny should concentrate on the issues that matter most.

- Standard reporting and financial statements should be visualized and made easily accessible on web sites.

- Full disclosure is especially challenging when liabilities exceed assets, so that the government reports a negative net worth: citizens and other users must be helped to interpret what this means and what the implications are. As a matter of fact, a negative net worth does not mean the same as in the private sector (i.e., financial distress), nor does it necessarily imply that the financial condition of the public sector entity is bad. The negative value can derive, for example, from the missing consideration of some categories of assets.

- The increased transparency of full accrual financial reports helps disclose information that is unfavorable and uncomfortable to politicians, who should be held accountable for the results of their decisions using effective accountability mechanisms. The level of financial literacy of politicians affects the way they understand the implications of their own decisions and actions, which will also be reflected in accrual accounting information, especially in a long-term horizon.

---

3 The qualitative characteristics defined in the IPSASB Conceptual Framework (2014) are: relevance, faithful representations, understandability, timeliness, comparability, verifiability, materiality, cost benefit, balance between the qualitative characteristics.
The implementation of accrual accounting in the public sector relies on a set of parameters. When they facilitate implementation, they are usually described positively as "enablers" or "facilitators" of the process. When they hinder the implementation, they are usually called "obstacles". The lack of an enabler often corresponds to an obstacle. In essence, the enablers are the necessary building blocks for the successful implementation of accounting reform and they must exist in a sufficient quantity-capacity ratio and for the necessary time span, as reforms are a long-term undertaking.
Enablers can be classified as technical and non-technical, or as internal and external,\(^9\) but the overall appetite for change is a key factor. The literature proposes several drivers for the successful introduction of accrual accounting (see Figure 4 and Annex 2). Reform is a considerable change for a public administration in which customarily budgeting and cash accounting prevail. This change may be envisaged with reluctance and resistance as it threatens the status quo which feels comfortable and familiar. Some are less willing to leave their comfort zone. Addressing the behavior and the attitude of everyone involved, whether producing the accounting information or using it for decision-making and performance measurement, is essential. In this sense, behavior can be a distinctive obstacle, apart from other reform issues concerning leadership, project management, and resources, and can be challenging to deal with.

**Political support and ownership of the reform play a key role.** Successful reforms require a well-conceived and well-managed plan and high-level leadership to orchestrate the necessary human and financial resources, mobilize and motivate all involved towards implementation, and address the challenges and obstacles.\(^{10}\)

**Public sector accounting reform implementation challenges can be divided into ten groups.** Noting the interconnectedness among them, Gourfinkel (2021) classifies these as: (1) political support and willingness of the key stakeholders to initiate and carry out the reform; (2) agreement on a reform strategy and feasible implementation timeline; (3) establishment of proper reform coordination and management arrangements; (4) availability of required resources, including financial and human; (5) amendment of legal and regulatory frameworks; (6) definition of the structure of the new public sector accounting system; (7) definition of risk management and mitigation mechanisms; (8) development of change management and capacity-building strategy; (9) integration between different PFM functions and upgrading the existing integrated financial management information system or developing a new one; (10) establishment of monitoring and evaluation arrangements.

The enablers of accrual accounting can be grouped into three intertwined pillars: 1) goal setting and processes, 2) human capital, and 3) technical (see Figure 4 and Annex 2). The interactions among the enablers of successful accrual accounting implementation are shown in Figure 5. This illustrates that the three elements belonging to ‘goal setting and processes’ are intertwined with each other, and no implementation plan can be successful without the appropriate human capital (in terms of knowledge and ability of both member staff and experts) and the availability of appropriate tools, such as IT financial management systems, a suitable chart of accounts, and a set of comprehensive accounting standards and policies for implementing them.

---

\(^9\) The World Bank, PULSAR 2021a, pp. 9-10.

\(^{10}\) Ibid.

---

"Accrual accounting reform is a difficult path to follow; you need constantly to take the thorns out of the path.

— Dimitrios Paliouras"

"There must be an investment in accrual accounting transition for the benefit of the country. Politicians will receive appropriate and comprehensive financial information for better decision making and for better management in the government. Accruals accounting is a necessity for a country that wants to be part of the modern world.

— Marios Hadjidamianou"
5. Enabling Conditions for Accrual Accounting Implementation

**Figure 4.** Enablers of Accrual Accounting

**GOAL SETTING AND PROCESSES**
- Political support and ownership
- Implementation plan
- Accrual accounting integrated in decision-making and performance management

**HUMAN CAPITAL**
- Training and educating public sector accountants
- Human capacity (Adequate number of qualified staff)
- Expert support

**TECHNICAL**
- IT financial management systems
- Chart of accounts
- Accounting standards and policies

**Figure 5.** Interactions among the enablers of accrual accounting implementation
Interviewees were asked about the enabling conditions necessary for successful implementation of accrual accounting. The following is a summary of their views based on their experiences.

- **Political support**, especially from the ministry of finance, is a prerequisite for a political reform to be successful. Political support secures human resources and other necessary resources for the reform.

- A dedicated reform team with skills and vision is absolutely necessary. The reform needs very good project management, and a clear plan.

- **Terminology** in accounting is important, and not everybody understands accounting. Both preparers and users should understand the accounting language. Training and awareness raising activities are therefore necessary, and academics can assist the training process.

- The **IT system** needs to embed the changes related to the accrual accounting processes.

- **Civil service culture and mentality** are mainly attached to cash basis; unless this is altered, there will be resistance to change.

- The new logic can attract professionals with fresh views who understand modern financial management, costing, and performance management. Private sector experts in financial accounting may also support public sector entities in the transition to accrual accounting.

- **Embedding accrual in PFM**. This includes the introduction of rules and incentives to work with accruals, analyzing problems and decision-making using accrual data, alignment of performance measures with accruals, embedding accruals in the fiscal rules, key performance indicators, and demand for accrual information from supervisory bodies and auditors.

- The use of accrual budgeting could be also considered, at a more advanced stage.
Although accrual accounting brings benefits its implementation can be a costly reform. Costs largely depend on the accounting maturity of the public sector, the availability of IT systems, and the size of the government. A recent study about the total cost of European Public Sector Accounting Standards (EPSAS) implementation in all general government subsectors (central, state, local, and social funds) across the EU-27 Member States and the UK ranges between €0.8 billion and €6 billion, which represents an average cost ranging from 0.006% to 0.045% of gross domestic product (PwC 2020, p. 3). It should be noted, however, that the estimated cost of EPSAS implementation is expected to be spread over several years, and would therefore have a more limited impact on annual government expenditure (PwC 2020, p. 18). As a result, spread over five years, the cost per inhabitant (under the most expensive scenario in the analysis) would be less than €1 per year for more than two-thirds of the 28 countries covered (PwC 2020, p. 25).
6.1 Types of Cost

The total costs related to accrual accounting reform include non-IT costs (referring to policies, processes, and people) and IT-costs. Both groups could be split into two categories: the additional costs to implement accrual accounting, and those that refer to the reallocation of resources devoted to other financial management activities, now flowing to accrual accounting. Moreover, the sounder management of resources, allowed by accrual accounting information, is expected to lead to a reduction in the costs incurred to perform public sector activities and deliver services. These (unrecorded) cost savings should not be neglected in the analysis. The quantification of the net cost of the accrual accounting reform (i.e. the total cost minus the cost savings) should also be calculated (Figure 6). This net cost is therefore reliant on the actual use of the accrual accounting information for the benefit of public administration and management.

Cost appears to be objective, but in reality, it is subjective. It depends on how it is framed and what it includes. It is challenging to articulate the benefits, and measuring them is even harder.

— Ian Carruthers

If you see the accrual accounting reform as a mechanism to change the central system, to change everything, it is very expensive. Counting only on consultants drives the costs higher and may bring resistance to change. However, some investments are already in place, for example entities already have software and functionalities, and a chart of accounts that is centrally managed.

— Luis Viana
6. The Costs of Accrual Accounting Implementation

6.2 Additional costs that relate to accrual accounting

These costs refer to the cost incurred in order to set up and implement accrual accounting over and above the costs that would take place without it. They relate to personnel training, expert and consulting fees, and the cost of new IT financial management systems or upgrade costs of the existing ones, the hiring of new personnel, etc. These costs are closely linked to the accounting maturity level of the country (e.g. whether the transition is from cash accounting, modified cash, or modified accrual basis), the capacity of the existing IT systems, the complexity of the transactions of the entities, and the scope of the reform.

6.3 Reallocation of resources

These costs refer to resources that would otherwise be either idle or used in other areas of PFM. They may include expansion of the responsibilities of public sector accountants to include accrual accounting, use of existing IT financial systems, and commitment of resources to develop new laws, accounting standards, policies, guidelines, etc. This cost is highly related to the accounting reform but is not easy to identify, unless a cost accounting system is in place. This cost may not affect the budgets of public sector entities.

The overall cost of an accrual accounting reform results from adding up the additional costs and the reallocated resources. In order to keep the cost of the accounting reform under control the costs should be budgeted both on a yearly basis, as well as on a project basis (i.e. accrual accounting introduction), and should be monitored.

---

Adapting current systems to integrate additional modules, necessary to capture accrual accounting transactions, can prove as costly as the introduction of a completely new financial management information system (PULSAR 2018).
Expenses are high in the beginning, but the benefits last for many years, 10-15 years probably.
— Marie-Pierre Calmel

The costs of introducing accrual accounting will not be stable throughout time, as investments and operating expenses will vary depending on the stage of the project. There is also a difference between the outflow of financial resources and the cost of the project measured through accrual accounting. For example, the financial outflows for acquiring new IT financial management systems may happen early, while the depreciation cost of the IT could be split evenly over a given time period. The accrual accounting implementation plan should include a clear analysis of the necessary resources and costs throughout the process. The means of financing the necessary resources must be clear from the start (e.g. European funds, grants, government sources, etc.), as budget constraints can hinder accounting reforms (Figure 7).

Figure 7: Dimensions for Cost Considerations

<table>
<thead>
<tr>
<th>TIME</th>
<th>FLOWS</th>
<th>FINANCIAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project cost</td>
<td>Budget flows</td>
<td>Government funds</td>
</tr>
<tr>
<td>Annual costs</td>
<td>Accrued costs</td>
<td>Other sources</td>
</tr>
</tbody>
</table>
6.4 Cost savings due to benefits from better decision-making

The total implementation costs of accrual accounting reform can sometimes be assessed by referring to the accounts. However, the use of accrual accounting information for decision-making is expected to improve an entity’s efficiency and effectiveness. Thus, it can eventually decrease the cost that would have been incurred by the entity, if this information set were not available. Earlier studies support that accrual accounting information outperforms cash-based accounting information for resource allocation decisions. Cost savings are difficult to measure and quantify as they are not separately registered in accounting books. Still they correspond to benefits that should not be ignored. The more accrual accounting information improves decision-making, the higher the chance for these savings to become material.

Therefore, the net cost of accrual accounting is the difference between the total costs that relate to accrual accounting minus the (unrecorded) cost savings due to better decision-making.

Respondents in some studies even find that the benefits associated with the implementation of accrual accounting outweigh the costs (Kober et al. 2010).

There is a cost for educating civil servants in terms of accrual accounting. Nevertheless, as the activities of the government have become more demanding and more complicated during the last years, civil servants should undergo major training for their everyday work, in one way or another. This would need to happen irrespectively of the accrual accounting implementation. The same holds true for IT systems.

— Marios Hadjidamianou

**Interviewees were asked about the cost of accrual accounting implementation. The following is a summary of their views based on their experiences. These views clearly show the complexity of the cost estimation challenge.**

- The lifetime cost should be considered and not just the cost of the next budgeting period.
- The relation between cost and benefits is also relevant to the time frame of the analysis. The benefits occur over time, while the investment must be made upfront.
- Changes in IT systems are usually the most expensive part. The costs correspond not only to accrual accounting systems, they refer to PFM systems including accrual accounting.
- There is no need for a lot of new staff. The existing human resources will be used for accrual accounting. However, there is a significant cost for training.
- There is also a cost for communicating the reform to citizens and cost for external consultants.
- As to the relation between cost and benefit, most of the benefits of accrual accounting and PFM will be evident in the next day when the information is available and it is properly used.
The objective of this knowledge paper was to present the benefits of accrual accounting, but also its costs, and to pinpoint the enablers for accrual accounting implementation. It used the available literature and targeted interviews to achieve this.

The main benefit of accrual accounting was identified as the additional information it provided that could be used for decision-making and for accountability. This information adds value by supporting informed decision-making, including by providing more granular financial information that can improve cost management and be used for resource allocation decisions; assessing department and program performance; managing assets and liabilities; determining costs for goods/services; and informing asset acquisition decisions and rationalization of activities. It can be used for planning and forecasting, analyzing trends and budgets, achieving value for money, debt management, project management, and the formulation of fiscal policies.
Accrual accounting can enhance accountability by increasing the transparency of the cost of goods and services and the management of assets and liabilities. This improves fiscal credibility and allows for greater stakeholder scrutiny, including by citizens if information is made accessible. Although more transparency must not be allowed to tip into an information overload: stakeholder groups should be identified and helped to grasp the essentials of the financial reports through the availability of easily read and understood material.

The transition to accrual accounting is often a gradual process. Reform enablers were identified, divided among three intertwined pillars: goal setting and processes, human capital, and technical. The first focused on high-level ownership and support, well planned implementation, and integration of accrual accounting into decision-making and performance management. The second on training accounting staff and engaging external support for the process as needed. And the third on establishing the appropriate IT systems, tools, and legislation/guidance.

Cost was found to be a significant parameter in accrual accounting implementation. Up-front costs such as IT systems and staff retraining could be significant. But, as with many investments, after high initial costs benefits were then spread over the following years.

The literature and interviewees all point to accrual accounting having the potential to provide interested parties with better information, that is reliable, focused, and complete. This could contribute to more rational and more effective decision-making; and increase entities’ accountability. But this is not a guaranteed outcome: the data must be used for its benefits to become apparent. The time and cost of reform would only be exceeded by the benefits if supported by governments and politicians who make use of the resulting financial information (even when it does not bring good news).

Finally, as there is a general agreement on the fact that accrual accounting can be beneficial for citizens, the reform implementation must aim at reaching them, with specific basic documents, targeted on their needs, and easily readable; and offering at the same time the possibility to obtain detailed information, by querying the open data bases.
Accrual Accounting in Cyprus

Cyprus decided in 2016 to change the accounting basis of the central government from cash to accrual as part of a PFM reform and adopt IPSAS. The adoption of the accrual accounting basis in the public sector is expected to strengthen the trustworthiness and credibility of the Government’s financial statements and support the decision-making centers through the provision of comprehensive financial and other information. The country expects considerable benefits of this reform in the medium- and long-run. It is expected that the transition to accrual accounting will, among other things, enable Line Ministries to identify and utilize their assets, to know in real time who their debtors and creditors are (thus improving the collectability of funds owed to the government), and enable more effectively and timely management of significant risks via providing useful economic information pertaining to contingent liabilities. Additionally, the presentation of the true and fair financial situation of each Line Ministry as well as of the whole of the government will be reinforced. In the same vein, the new accounting basis will form a valuable tool at the disposal of each Line Ministry for the assessment of the latter’s performance and accountability, since the decisions to be taken will have to be supported by the true economic facts applicable to them. The relevant actions of the project are underway. Apart from making the underlying change, one of the central axes of the Public Financial Management Reform is the change in the mentality of all the parties involved, including the top management and other personnel that work for the government, in order to achieve better financial management of all public resources available. The timing of the transition to the accrual basis of accounting coincides with the initiative of many countries in Europe and internationally to produce more trustworthy and useful financial information. The current plan is that the implementation of IPSAS will take place within the next couple of years. To this end, a number of accounting policies have already been issued and approved by consultants for their compliance with IPSAS,
and draft financial statements of the central government corresponding to the transition period have been developed. An Enterprise Resource Planning System covering the functional areas of accounting, budgeting, human resource management, and payroll/pensions is expected to become operational soon, to enable the accrual accounting implementation process. Most of the public sector in Cyprus already implements IFRS and is planned to transition to IPSAS in 2024. Cyprus aims at developing consolidated financial statements based on IPSAS for the whole public sector (including entities controlled by the government) in 2024. There will be a common chart of accounts only for the central government. The entities of the wider public sector will use specific templates (under development) to provide the necessary information for the purposes of consolidation.

**Accrual Accounting in Greece**

Greece passed a law in 2018 for all public sector entities to adopt a new accrual accounting framework for the general government from 2023 as part of large-scale PFM reform. The main goals of introducing accrual accounting were to increase transparency and accountability in government accounting and PFM. Accrual accounting adoption would make possible the production of better information for national accounts and would improve financial management at the micro level. The framework is inspired by IPSAS. A new chart of accounts consistent with European System of Accounts (ESA) 2010 and Government Finance Statistics Manual (GFSM) categorizations has been developed (and is already being used for budgeting purposes at the central administration level) and accounting policies have started to be issued. The Greek central administration will move from modified cash accounting to accrual accounting, while local governments, public hospitals, social security funds, and other public entities will adapt their existing accrual accounting systems. A new IT system for PFM in the central administration funded by the EU Recovery and Resilience Facility will support the process. The incorporation and the recording of all workflows will facilitate accrual accounting and will allow for better monitoring of accounts and arrears.

**Accrual Accounting in Portugal**

In Portugal, accrual accounting was introduced in 1997 through the Public Sector Plan of Accounting, which contained an integrated system with three subsystems: budgetary (modified cash), financial (accrual), and cost (accrual) accounting. The system was set to provide information for monitoring budget accomplishment, assets and liabilities (and their evolution), and the costs of public services and activities. In 2013, the Government embarked on reform of public sector accounting to adapt it to the IPSAS, part of a wider reform with the objective to link the accounting system with government financial statistics and PFM instruments. The reform included accrual budgeting, performance measurement, and reporting. The new System of Accounting Standards for Public Administrations was passed in 2015, although the whole reform was not completed due to a pause in 2018 and the budget continued being prepared with modified cash accounting. Momentum returned in 2020 due to the COVID-19 crisis, when the National Recovery and Resilience Plan under the EU Recovery and Resilience Facility again made the reform a priority.

One advantage is that the accrual accounting system provides reliable information about national accounts and some indicators from the consolidated system, aimed at supporting sound fiscal management, including the ability to identify and face fiscal risks. As for the use of the information, there are differences between different levels of government. In local government, accrual accounting reporting is used for decision-making in public-private partnership and leasing and there is a benchmarking process that encourages governments to improve financial sustainability, management, and efficiency. There are also rules that require the use of accrual accounting, such as control of the level of debt or assets management.

Accrual Accounting in France

France has a long tradition of accrual accounting in the public sector, dating back to 1962. The most recent reforms, e.g. the Loi Organique des Lois de Finances in 2001, modified the functions and organization of public sector accounting, at both central and local level. The accounting reform emphasizes links among the three main accounting systems: budgetary accounting, financial accounting, and management accounting. For all three systems, an annual report has to be prepared. The Public Sector Accounting Standards Council, established in 2008, has an important role in the reform process, in charge of setting the accounting standards of all entities with non-market activity. The central government and government organizations, territorial authorities, local public agencies, and social security organizations all fall within the jurisdiction of the Council. France has kept public sector accounting as close as possible to the business model: the Central Government Accounting Standard 1 “sets out the structure and form for financial statements using business accounting as a model, with due consideration for the specific features of the central government”.

Accrual Accounting in United Kingdom

Accrual accounting was introduced gradually across the UK public sector at different times, with government departments among the last to adopt accrual accounting in preparation for the introduction of accrual-based budgeting from 2001/02 onwards.

Until the 1990s, central government departments planned and reported their expenditure on a cash basis. Accrual accounting was introduced ‘piecemeal’ in the parts of departments run separately as ‘executive agencies’ as these were created. In each case, to allow time for the systems and processes required to support accrual accounts to be introduced, ‘dry-run’ (unpublished) accounts were prepared. The dry-run accounts were reviewed by the National Audit Office (NAO), and when it was satisfied that accounts of auditable quality could be prepared, an ‘accounts direction’ was issued requiring the agency to produce GAAP-compliant accrual accounts. A similar approach was adopted for the introduction of accrual-based departmental accounts. All departments were required to prepare dry-run accounts for 1998/99. The first audited accrual accounts to be laid before Parliament were in respect of 1999-2000. The scale of the changes required meant that there were a number of problems with the first sets of accounts, but the quality of the accounts significantly improved over the following years.

As a result of the time required to resolve the accounting issues, accrual budgeting was introduced in two stages, with the first accrual-based Parliamentary appropriations for 2001-02. These excluded charges for depreciation, cost of capital, and provisions, which were subsequently included in the appropriations for 2003-04.

The introduction of accrual accounting and budgeting required new primary legislation in the form of the Government resources and Accounts Act 2000 (the Act). This also included legislation to enable the preparation of consolidated Whole of Government Accounts (WGA), eventually to cover the whole of the UK public sector. The WGA program started in early 1999 with the creation of a new project team to lead the development and implementation of the necessary processes and systems, as well as the gradual convergence of accrual accounting policies across the UK public sector, as well as the transition of the accounts for taxation, central debt and currency reserves, and public sector employee pensions onto an accrual basis.

The UK Government Financial Reporting Manual (FReM) sets out the core guidance for preparing accrual-based government annual reports and accounts in the United Kingdom. It is prepared under the oversight of the independent Financial Reporting Advisory Board (FRAB) which reports annually to the UK Parliament and Devolved Governments. Under the Act, the accounts must be prepared under IFRS subject to those adaptations necessary in the context of public sector accounts. In practice this means that the accounts are largely
IPSAS-compliant. The FReM applies directly to all public sector reporting entities other than: local government, some state-owned enterprises, and NHS Trusts, NHS Foundation Trusts and Clinical Commissioning Groups.

These groups of bodies have their own sets of accounting guidance, which are consistent where appropriate with the FReM, and are also overseen by the FRAB.

WGA coverage was gradually expanded in two stages, from central government initially, to the whole of the UK public sector, with a series of data collection ‘milestones’ and dry-runs used to develop and test the necessary systems and processes. Following a change in government in 2010, the first WGA were published in November 2011 for the year ended 31 March 2010.

Alongside the development of WGA, and building on their implementation, a number of further initiatives have been implemented in order to build on these reforms to strengthen PFM through the use of accrual-based information:

- Introduction of professionally qualified board-level Chief Financial Officers in all government departments, supported by strengthened, centrally coordinated government finance profession;
- Implementation of an integrated central financial data system, bringing together three legacy systems, covering departmental appropriations, budgets, in-year data and end of year data, as well being used for WGA preparation;
- Increased alignment of the government appropriation, budgeting, financial reporting and statistical accounting framework to provide more consistency for financial control and planning; and
- Increased role for balance sheet information in government budgetary and fiscal frameworks, as well as strengthened central management of contingent liabilities and guarantees.
ENABLING PILLARS OF ACCRUAL ACCOUNTING IMPLEMENTATION

Goal Setting and Processes

Political support and ownership

Clear and stable political support and ownership is a key factor for successful implementation of the reform. This is usually related to a clear understanding of the benefits of accrual accounting by top-level politicians, who prioritize the reform and commit to devote the necessary resources. Political ownership can be affected by externally imposed reforms and changes in governments with different agendas.

Implementation plan

A well thought out, pragmatic plan with milestones for clear outcomes and budgeted deployment of the necessary human capital, technical tools, and financial resources is a significant enabler. Not all countries have the same starting point and therefore the plan is country specific. The plan should be closely followed up and adjusted to changes faced through the process, both time-wise and budget-wise. International experience suggests that flexibility is necessary as not all challenges can be predicted from the outset, and it will be necessary to revisit and adjust or revise many roadmap details during implementation. Risk management is therefore important. There should also be structures for regular

---

Footnotes:

16 The World Bank, PULSAR 2018.
17 The World Bank, PULSAR 2018.

As the reform usually takes more time that the term of a government, continuous political support is necessary.

— Dimitrios Paliouras
Dialogue is needed, from the very beginning, with the Supreme Audit Institution, to ensure its agreement and its continuous support.
— Marie-Pierre Calmel

dialogue with different stakeholders and ministries. The use of pilot entities can provide important input in the process before full-scale implementation. Political support and ownership materially affect efficient project management.

Accrual information integrated in decision-making and performance management

Accrual accounting implementation can become just a ceremonial reform if use of the resultant information is not embedded in public administration decision-making and performance measurement. Accrual accounting implementation should be accompanied with the development of processes where accrual accounting information is a component for management and policy decisions. This not only requires changes in legislation but also in behavior and processes. Training of public administrators in accrual accounting to understand its information content and acquire the necessary skills and knowledge is an important enabler.

The existence of a collaborative process may be a determinant for the success of the implementation of the reform (Gomes et al. 2015).

Pilot experiments are expected to provide feedback on the main difficulties felt in the implementation of a new public sector accounting system and therefore help to define a global strategy to overcome the problems identified and to improve the system to be generally and finally put into practice (Jorge et al. 2021).

There is a frequent mismatch between the needed accounting and performance measurement information for internal and external purposes assessed on the basis of the administrative system in place and the accounting information and performance measurement information required by the law for decision making and accountability (Cohen et al. 2019).
Human capital

Training and Educating Public Sector Accountants

Public sector accountants involved with budgeting and national accounts reporting are not always familiar with accrual accounting. This can lead to reluctance and resistance as they face something unknown and different. Vocational training and continuous professional development are the foundation for a highly professional workforce, a critical precondition for public sector accounting reforms. Training and education are needed to understand not only the accrual accounting technicalities but also its information content and relevance for decision-making and performance measurement. Traditional and on-line training modes can be adopted with both general and customized training syllabi for different groups. Training should take place in tandem with the adopted accrual accounting standards, accounting policies, the chart of accounts, and the IT financial management systems in place. Key accounting personnel should be certified in public sector accounting. Staff in supreme audit institutions also need to be trained in accrual accounting. Training initiatives could be supported by experts from the profession and academia.

Human Capacity

Based on the accrual accounting implementation plan, the necessary human resources in terms of qualified accounting staff should be deployed. Understaffed accounting departments are unwilling to assume additional responsibilities to those they already perform. The existence and the development of sophisticated and well developed IT financial management systems may affect the necessary staffing.

Expert Support

The set up and planning of accrual accounting reform should be supported by experts with experience of similar projects worldwide. Experts and consultants can assist with project management, consult on technical tools’ sequencing and content, and provide training support. Moreover, the assistance of academia is considered important in both training, standard setting, and policy formation.

Technical

IT Financial Management Systems

Accrual accounting reform is also technical. A massive amount of financial information and new registries (e.g. for fixed assets, financial instruments, provisions) need to be set up. IT financial management systems should be able to facilitate the accounting registry process without duplication of work. They must simultaneously produce information for budgeting, accrual accounting, and national accounts reporting purposes and be able to communicate with other IT systems for information retrieval and data exchange. IT systems should be flexible enough to accommodate future needs (e.g. cost accounting). Proper IT financial management systems can be a significant enabler for accrual...
accounting implementation. Their lack can jeopardize the accrual accounting reform. All PULSAR countries have recognized the value and importance of modern financial management IT systems as a precondition for a successful public sector accounting reform process.²²

Chart of Accounts

The chart of accounts is a technical tool of high importance. It should accommodate the needs for accounting, budgeting, and performance as well as the needs for reporting under the ESA 2010 or GFSM. It should also be properly structured to serve consolidation purposes. Setting up an operational chart of accounts for accrual accounting that fits well in the IT financial management system is a significant enabler of the reform.²³

Accounting Standards and Policies

While different countries adopt different variations of accrual accounting standards for a variety of reasons,²⁴ increasingly most use IPSAS directly, indirectly, or as a common point of reference.²⁵ Accounting standards involve judgments about depreciation, impairment, provisions, write offs of receivables, measurement of pension liabilities, evaluation of financial assets and financial liabilities, etc. Specific guidelines and instructions issued in laws or ministerial decisions or other administrative documents on how the accounting standards and the accounting policies are to be implemented in practice are needed. These directions should be also used to train people on how to implement accrual accounting. The chart of accounts should be properly developed to account for the application of standards and accounting policies. First time implementation of accrual accounting may need extra guidance and significant time to be concluded. Experts can provide support and help to translate public sector accrual accounting standards into practice.

²³ Charts of accounts have been the subject of considerable interest and discussion in EPSAS Working Group meetings and an Issue Paper has been developed for this purpose. PricewaterhouseCoopers 2017.
²⁴ Manes Rossi, Cohen, Caperchione, & Brusca 2016.
²⁵ IFAC-CIPFA 2021.


PricewaterhouseCoopers. 2017. *Member States' approaches to harmonising charts of accounts for national purposes with a view to financial reporting requirements under the future European Public Sector Accounting Standards (EPSAS).* Available at: https://circabc.europa.eu/sd/a/54519783-fa35-41f6-b60f-dd0d9510faa9/issue%20paper%20on%20chart%20of%20accounts.pdf


