



**ACCOUNTING, REPORTING, AUDITING AND
PUBLIC ACCOUNTABILITY OF PUBLIC-PRIVATE
PARTNERSHIPS:
THE PORTUGUESE EXPERIENCE**

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I dedicate my effort in the writing of this thesis to my daughter, Filipa, my son, Vasco, and my wife, Vanuza, in recognition of their support, tolerance, encouragement and love throughout the entire PhD program. The thesis is also dedicated to my parents, brothers and sisters for their unconditional love and support.

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Abstract

Public-Private Partnerships (PPPs) have raised new challenges for accounting, external reporting and state audit concerning public accountability (English, 2007; English et al., 2010; Shaoul et al., 2012a). The central objective of this thesis is to study the effects of external reporting and state audit as mechanisms that operate in bringing the transparency necessary to hold the Government accountable before the Parliament in several dimensions. First, we compared the annual report presented by the Government to the Parliament in Portugal and the United Kingdom. The evidence found suggests a lack of transparency in PPPs external reporting and reveals the importance of designing a harmonized international framework for PPPs reporting to assure proper public scrutiny. Second, using the lenses of public choice theory, this thesis demonstrates the debt hidden hypothesis because the evidence found indicates that financial liabilities amounting from 1.96% of GDP in 2010 (3,519 million euros), to 3.99% of GDP in 2014 (6,907 million euros) are excluded from the official debt figures. Third, our results confirm the predictions from resource dependence and institutional theories regarding the role of external institutional pressures and, therefore, demonstrate the effects that *Troika's* intervention had in accounting and external reporting. In accounting, due to renegotiations, the accounting model changed for 11 roads PPPs, notably from the financial asset model to the bifurcated model. For external reporting, the intervention resulted in an increase of 50% in the number of PPP-related disclosures in the annual report. Fourth, under the agency theory explanation for public audit, we found that the Court of Audits provided transparency for enhanced public scrutiny. Regarding stakeholders' opinions, questionnaire results suggest that, in general, they do not recognize these PPP schemes' advantages over traditional public procurement. This affects the legitimacy of involving the private sector in delivering infrastructure-based public services and represents governance challenges in managing the actual contracts and using PPPs as a policy tool in the future.

JEL Classification: H54; H57; H61; H83

Keywords: Accrual accounting; Annual report; Debt hidden hypothesis; Disclosures; National accounts; Public accountability; Public-private partnerships; Transparency; State audit.

Resumo

As Parcerias Público-Privadas (PPP) trouxeram novos desafios à contabilidade, relato externo e auditoria pública, na sua relação com a *accountability* pública (English, 2007; English et al., 2010; Shaoul et al., 2012a). O objetivo central desta tese é estudar os efeitos do relato externo e da auditoria pública como mecanismos que operam na concretização da transparência necessária para que o Parlamento cumpra a sua função de fiscalização do Governo por referência a diferentes dimensões. Em primeiro lugar, efetuamos uma comparação entre Portugal e o Reino Unido do relatório e contas anual apresentado pelo Governo ao Parlamento. Os resultados encontrados sugerem uma falta de transparência no relato externo sobre PPP e revelam a importância da conceção de um modelo de relato sobre PPP harmonizado internacionalmente que assegure um adequado escrutínio público. Em segundo lugar, usando a teoria da escolha pública, esta tese demonstra a hipótese de ocultação de dívida porque os resultados obtidos indicam que passivos financeiros que vão desde 1,96% do PIB em 2010 (3.519 milhões de euros) a 3,99% do PIB em 2014 (6.907 milhões de euros) não constam das estatísticas oficiais sobre a dívida pública. Em terceiro lugar, os nossos resultados, confirmando as previsões das teorias de dependência de recursos e institucional, demonstram os efeitos da intervenção da *Troika* ao nível da contabilidade e do relato externo. No que respeita à contabilidade, devido às renegociações, o modelo contabilístico alterou-se para 11 PPP rodoviárias, principalmente do passivo financeiro para o modelo misto. Em relação ao relato externo, a intervenção resultou num aumento de 50% nas divulgações relativas a PPP efetuadas na Conta Geral do Estado. Em quarto lugar, tendo por base a teoria da agência como explicação para a auditoria pública, encontramos evidência de que o Tribunal de Contas contribuiu para a transparência necessária para um melhor escrutínio público. Relativamente às opiniões das partes interessadas, os resultados do questionário indicam, em geral, que elas não reconhecem vantagens das PPP relativamente à contratação pública tradicional. Isto afeta a legitimidade no envolvimento do setor privado na prestação de serviços públicos baseados em infraestruturas e representa desafios de governação na gestão dos atuais contratos, bem como na utilização de PPP como um instrumento de política no futuro.

Classificação JEL: H54; H57; H61; H83

Palavras-chave: Contabilidade de acréscimo; Relatório anual; Hipótese de ocultação de dívida; Contas nacionais; *Accountability* pública; Parcerias público-privadas; Transparência; Auditoria pública.

List of abbreviations

BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
CAAF	Canadian Audit and Accountability Foundation
CoA	Court of Audits
C&AG	Comptroller and Auditor General
CIPFA	Chartered Institute of Public Finance and Accountancy
CPP	Conventional Public Procurement
DBFO	Design-Build-Finance-Operate
DBOM	Design-Build-Operate-Maintain
EC	European Commission
ECA	European Court of Auditors
ECB	European Central Bank
EPEC	European PPP Expertise Centre
EPSAS	European Public Sector Accounting Standards
ESA 2010	European System of Regional and National Accounts 2010
EU	European Union
GASB	Governmental Accounting Standards Board
GDP	Gross domestic product
GFCF	Gross fixed capital formation
IASB	International Accounting Standards Board
IFAC	International Federation of Accountants
IFRIC	International Reporting Interpretations Committee
IMF	International Monetary Fund
INTOSAI	International Organization of Supreme Audit Institutions

IP	Infraestruturas de Portugal
IPPR	Institute for Public Policy Research
IPSAS	International Public Sector Accounting Standards
IPSASB	International Public Sector Accounting Standards Board
LTICs	Long-Term Infrastructure Contracts
MS	Member-States
NAO	National Audit Office
NPC	Net Present Cost
NPM	New Public Management
OECD	Organisation for Economic Co-operation and Development
PFI	Private Finance Initiative
PPP	Public-Private Partnership
PPPs	Public-Private Partnerships
PSC	Public Sector Comparator
SAI	Supreme Audit Institution
SAIs	Supreme Audit Institutions
SCA	Service Concession Arrangement
SCUT	Sem Custos para o Utilizador
SGP	Stability and Growth Pact
SPV	Special Purpose Vehicle
UTAP	Unidade Técnica de Acompanhamento de Projetos
VfM	Value for Money
WGA	Whole of Government Accounts

Contents

Biographical note	ii
Acknowledgements.....	iii
Abstract.....	iv
Resumo	v
List of abbreviations	vi
List of Tables	xi
List of Figures.....	xiii
Appendix.....	xiv
Annexes	xiv
CHAPTER 1: INTRODUCTION	1
1.1. The context.....	1
1.2. Why study Portuguese PPPs public accountability?	3
1.3. Research gaps.....	5
1.4. Purpose statement and research objectives	8
1.5. Research questions and design.....	9
1.6. Main results and contributions	12
1.7. Thesis structure	13
CHAPTER 2: THEORETICAL AND CONCEPTUAL BACKGROUND	14
2.1. Theoretical background.....	14
2.1.1. Agency theory.....	14
2.1.2. Institutional theory and resource dependence theory: an overview.....	22
2.2. Conceptual background.....	28
2.2.1. Public infrastructure provision.....	28
2.2.2. PPP: A concept with different meanings	29
2.2.3. Public infrastructure procurement models	31

2.2.4.	Affordability and value for money	38
2.2.5.	Public accountability.....	44
2.2.6.	Accounting for PPPs	63
2.2.7.	Public sector auditing.....	85
CHAPTER 3: EMPIRICAL ESSAYS.....		100
3.1.	Essay 1: Disclosure of information and transparency in public-private partnerships: a comparative study between Portugal and the UK	101
3.1.1.	Introduction.....	101
3.1.2.	Theoretical context	104
3.1.3.	Research questions.....	112
3.1.4.	Institutional context, methodology and data.....	114
3.1.5.	Results and discussion	122
3.1.6.	Conclusions.....	131
3.2.	Essay 2: The impact of public-private partnerships on public accounts: The Portuguese roads sector	133
3.2.1.	Introduction.....	134
3.2.2.	Public choice theory and fiscal constraints.....	139
3.2.3.	Methodology and data	140
3.2.4.	Results.....	144
3.2.5.	Conclusions.....	155
3.3.	Essay 3: State audit of public-private partnerships: audit findings, recommendations and government reactions.....	157
3.3.1.	Introduction.....	157
3.3.2.	Theoretical context	162
3.3.3.	Methodology and data	164
3.3.4.	Findings and discussion	169
3.3.5.	Conclusions.....	180

3.4. Essay 4: Stakeholders' perceptions	182
3.4.1. Introduction.....	183
3.4.2. Scope, objectives and research question.....	184
3.4.3. Identification of respondents	184
3.4.4. Questionnaire design.....	189
3.4.5. Data collection	189
3.4.6. Results and discussion	189
3.4.7. Conclusions.....	219
CHAPTER 4: GENERAL CONCLUSIONS	222
4.1. Main results	223
4.2. Contributions.....	225
4.3. Policy implications.....	227
4.4. Suggestions for future research.....	228
4.5. Limitations	230
Appendix - Questionnaire.....	232
References.....	244
Annexes	282

List of Tables

Table 1.1: Research questions and associated empirical essay	9
Table 2.1: Different strategic responses to institutional pressures	26
Table 2.2: Types of accountability according to accountee's nature.....	47
Table 2.3: Types of accountability according to the content	48
Table 2.4: Types of accountability based on the nature of the obligation	51
Table 2.5: Worldviews effects on accountability and transparency notions and relationships	57
Table 2.6: PPPs different accountabilities	61
Table 2.7: PPP's public accountability dimensions.....	62
Table 2.8: Models of operator's compensation	74
Table 2.9: Typology of SAI based on independence dimensions.....	90
Table 2.10: Explanations for state audit	94
Table 3.1: Institutional context	115
Table 3.2: PPPs reporting elements considered necessary for the establishment of a public accountability relationship.....	120
Table 3.3: Reporting elements disclosed by year and set of public accounts.....	123
Table 3.4: Description of the reporting elements disclosed (2016-2017 the UK WGA and 2017 PT State Accounts)	130
Table 3.5: Operator compensation schemes	142
Table 3.6: Phase of the contracts	144
Table 3.7: Distribution of PPPs by IFRIC 12 accounting model.....	145
Table 3.8: Impact of concession contracts on the operator's and grantor's financial statements, and comparison with public payments.....	146
Table 3.9: Classification of contracts for national accounts purposes.....	148
Table 3.10: National accounts impact.....	149
Table 3.11: Financial bailout accounting effects	151
Table 3.12: National accounts and IPSAS 32 impact	153
Table 3.13: Impact of IPSAS 32 on debt as a percentage of GDP	154
Table 3.14: Audits by sector	168
Table 3.15: Audit evidence	172
Table 3.16: Total recommendations by category and sector	174

Table 3.17: The CoA's roles.....	175
Table 3.18: Government reaction	177
Table 3.19: Follow-up audit reports	178
Table 3.20: Reason to include the different types of respondents	185
Table 3.21: Identification of potential respondents	186
Table 3.22: Justification for respondent's choice	187
Table 3.23: Number of respondents by category	190
Table 3.24: Stakeholders' agreement with contracting out public services	192
Table 3.25: Stakeholders' agreement with budgetary constraints as the reason behind the choice of concession contracts.....	194
Table 3.26: Stakeholders' agreement with the need to address local political interests	196
Table 3.27: Stakeholders' agreement with greater private sector efficiency in delivering public services.....	198
Table 3.28: Stakeholders' opinions about PPP advantages as a procurement method.	201
Table 3.29: Stakeholders' opinions about PPP disadvantages as a procurement method	205
Table 3.30: Stakeholders' agreement with information asymmetries	208
Table 3.31: Stakeholders' views about the level of disclosures	210
Table 3.32: Stakeholders' agreement with the expected impact of the accounting framework.....	212
Table 3.33: Stakeholders' agreement with public sector contract management effectiveness.....	214
Table 3.34: Stakeholders' agreement with CoA recommendations implementation ...	216
Table 3.35: Stakeholders' agreement with Parliament's scrutinizing function	218

List of Figures

Figure 2.1: Chain of democratic delegation and the web of agency and accountability relationships	18
Figure 2.2: The political accountability relationship between the government and the parliament	19
Figure 2.3: Possible procurement models for public infrastructure procurement and delivery	33
Figure 2.4: Comparison between conventional procurement and DBFO public-private partnership	35
Figure 2.5: Stylized representation of PPP phases and key activities	36
Figure 2.6: Procurement options expected costs to the public sector	42
Figure 2.7: Public sector auditing structure	87
Figure 3.1: Relationships between PPPs accounting and reporting, transparency and public accountability	111
Figure 3.2: The political accountability relationship forum	119

Appendix

Questionnaire

Annexes

Annex 1 – List of roads concessions and subconcessions in execution (contractual PPPs)

Annex 2 – List of audit reports studied

CHAPTER 1: INTRODUCTION

1.1. The context

Those who are entrusted with public powers should be publicly accountable for their acts and omissions, decisions and policies concerning public assets, liabilities, revenues and expenditures. To be held accountable, transparency mechanisms are a pre-condition for upholding effective public accountability arrangements in public infrastructures, regardless of the form they are procured (Mulgan, 2014b; Organization for Economic Co-operation and Development - OECD, 2012, 2017).

Public infrastructures are a necessary condition for a country's welfare and economic growth. Its procurement could be based on distinct procurement models, one of the models involving the private sector in different project phases (Grimsey and Lewis, 2017). The provision of many of these infrastructures and related public services through Public-Private Partnerships (PPPs) arrangements in the early 1990s, with the advent of the Private Finance Initiative (PFI) in the UK, implied a redefinition of the roles of public and private sectors in the delivery of infrastructure-based services (Institute for Public Policy Research - IPPR, 2001).

One of the reasons for the origin of PPPs was the contentious expectation of better operational and financial management by the private sector, as this is consistent with the New Public Management (NPM) principles supporting the idea that private management models increase the efficiency of public sector management (Lægreid, 2014). Mulgan (2014b) sets out the following essential aspects of NPM: i) priority to accountability for performance with the inclusion of quantitative measurement systems on outputs and outcomes; ii) the adoption of market-style mechanisms, such as contracts involving the private sector in the delivering of public services through PPPs and privatization; iii) entrusted autonomy to public managers by the reduction of traditional hierarchical controls; iv) separation of purchasers and providers of public services along with the creation of independent regulators; and v) citizens are portrayed as customers.

However, a more likely reason for the government's adoption of PPPs is related to budget constraints as they allow projects to be implemented without an immediate increase in

reported spending and debt. Putting it simply, a PPP allows building infrastructures today that citizens want, and pay them later, serving as a "mega credit card", without transparently disclosing the related financial liabilities (Engel et al., 2014; Hodge and Greve, 2010; Opara and Rouse, 2019). When a government directly invests in a specific public asset through traditional forms of public financed procurement, the expenditure related to the investment is recognized while the project is under construction. In contrast, there are no immediate expenses or debt recorded on public sector accounts when a public-private partnership (PPP) asset is under construction because it is privately financed. According to the prevalent statistical rules, it is very likely that the investment will be classified as off-balance sheet (Eurostat, 2019). In this case, the public costs with the asset are recorded in the long execution phase of the contract. This provides an incentive, which one calls PPP bias, to make public investments using PPP contracts as a financing instrument because of a more favourable short-run impact on public finance indicators, even if they offer less value for money (VfM), meaning they are globally more expensive than the traditional public procurement (Engel et al., 2014; Funke et al., 2013; Irwin et al., 2018; Loxley and Loxley, 2010). This bias in favour of PPPs can also lead governments to assume financial commitments that later prove unaffordable for the public budget (Yescombe and Farquharson, 2018, pp. 101-104).

Furthermore, others suggest that PPPs allow the incumbent government to avoid public scrutiny because these structures are protected with commercial confidentiality clauses and the external reporting is based on a corporate governance framework, without due attention to public accountability requirements (Shaoul et al., 2012a; Stafford and Stapleton, 2017).

According to public choice theory, governments seek to win the next election and are not necessarily worried about the allocative efficiency of public resources. In the PPP context and with the current accounting requirements, governments can provide infrastructure services before the next election while deferring expenditures and keeping liabilities off-balance sheet (Boardman and Vining, 2012). This self-interested behaviour is also consistent with agency theory, whereas the government is the agent and the parliament is the principal (Streim, 1994).

In conclusion, NPM ideas provide the theoretical background for PPPs but, as Yescombe and Farquharson (2018, p. 451) suggest, one of the main drivers for the increasing use of PPPs has been the budgetary constraints. However, the PPP model could lead to an affordability issue, in the sense that it can encourage projects today that turns out to be not affordable in the future (Yescombe and Farquharson, 2018, p. 453).

It is relevant to put forward at this moment that PPPs have several meanings (see Subsection 2.2.2) and could be seen through different perspectives using different academic inquiry lines (Hodge and Greve, 2018). The principal aim of this thesis is to study contractual PPPs political accountability by examining two accountability mechanisms (external reporting and state audit) that feed information into the accountability relationship between the government and the parliament. Along with this principal aim, our inquiry also focuses on the stakeholders' perceptions about several aspects associated with the choice of a contractual PPP to deliver roads infrastructures and related services.

1.2. Why study Portuguese PPPs public accountability?

Portugal started in the 1970s to hand over the delivery of public services (water and transport sector) to the private sector. However, in 1995, with the new bridge that crosses the Tagus River in Lisbon (Ponte Vasco da Gama), a new wave of transport infrastructures was procured by PPPs arrangements.

In Portugal, the use of this modality to deliver economic infrastructures had a great deal of attention since 2011, when Portugal asked for financial assistance from international organizations (European Commission - EC, European Central Bank – ECB, and International Monetary Fund - IMF), leading to parliamentary inquiries and several state audits (e.g., Assembleia da República, 2013; S. Azevedo, 2014; Cruz and Marques, 2012; Tribunal de Contas, 2012). As a result, from a public accountability perspective, questions have arisen, notably why PPPs were used to develop infrastructure projects and what institutional conditions facilitated the choice of this procurement modality.

In fact, these PPPs contracts, particularly those of the roads sector,¹ have been subject to a large amount of criticism regarding their governance, financial affordability, public accountability, transparency and VfM, putting at stake the public interest (Cruz and Marques, 2012; Moreno, 2010; Reis and Sarmiento, 2019; Sarmiento, 2010). Furthermore, in its reports, the Portuguese Court of Audits (CoA) has criticized the use of PPPs for "off-budget" reasons rather than efficiency and service quality (Moreno, 2010). Indeed, former government members are now facing criminal investigations over allegations of misconduct, which thus makes PPPs a sensitive contested political issue, with extensive media coverage and general public distrust (SÁBADO, 2019).

Moving to the specific financial relevance of PPPs in Portugal, Cruz and Sarmiento (2019, pp. 530-531) demonstrate that, for the period 1995-2011, it was the country in the European Union (EU) with the highest level of capital investment through PPPs in percentage of the Gross Domestic Product (GDP), up to 14,8%, comparing with 8,2% in the UK and the EU average of 2%.

Finally, according to EC (2011, p. 10):

PPP's have been used extensively in Portugal to finance mainly transport infrastructure but also other projects, such as hospitals. The implicit government liabilities in relation to PPPs – the net present value of the flow of payments in relation to the contracts already signed – are currently estimated at over 14 percent of GDP. These commitments limit the flexibility of government expenditure in the medium term. There seems to have been a lack of adequate central control for creating public-private partnerships **and wrong incentives arising from the fact that they are a way to loosen the budget constraint in the short term as they are recorded, according to existing statistical rules, in the private partners' balance sheets.** (Emphasis added)

Although, a question that was not raised is the accounting treatment of PPP contracts that remained unchanged (cash-based) on central government accounts and what should be the decisions if these contracts were accounted following (accrual-based) International Public Sector Accounting Standards (IPSAS), providing information that enhances transparency and is helpful for decision making and accountability purposes (Chartered

¹ Of a total of 35 PPPs, the road sector accounts for 22. Highway network increased by 700% between 1990 and 2007, similar to Ireland (+900%), and Greece (+500%) (Cruz and Marques, 2012, p. 82).

Institute of Public Finance and Accountancy - CIPFA and International Federation of Accountants - IFAC, 2014; International Public Sector Accounting Standards Board - IPSASB, 2014). This question is explored in Chapter 3, Essay 4.

Additionally, at the European level, there are ongoing discussions on the adoption of accrual accounting and the suitability of IPSAS for Member-States (MS), a process that is being led by the Eurostat under the European Public Sector Accounting Standards (EPSAS) project², regarding the worries about the lack of comparability and transparency of financial information (EC, 2013; PwC, 2014). This will bring tensions between financial reporting and national accounts.

In summary, Portugal offers an interesting environment to study the public accountability of PPP contracts because of governance issues and incentives associated with these contracts and how transparency mechanisms can enhance the function of the political accountability relationship between the government and the parliament. Accountability mechanisms such as accounting, external reporting and auditing release information that can have a positive impact on public accountability outcomes (Bovens et al., 2008).

1.3. Research gaps

Our thesis addresses several research gaps in different PPPs related fields, such as public accountability, governance, risk management, financing, accounting, external reporting and auditing. In the literature, a comprehensive research agenda for PPPs is identified and recently updated (e.g., Andon, 2012; Broadbent and Laughlin, 1999, 2004; Hodge and Greve, 2018; Shaoul et al., 2012a; Wall and Connolly, 2009).

Considering the PPP-related literature, a set of topics need further and more comprehensive research:

- The rationale, political and institutional conditions behind the choice of a PPP as a policy (Broadbent and Laughlin, 1999, 2004; Wall and Connolly, 2009);

² Information about the EPSAS project can be found at: <https://ec.europa.eu/eurostat/web/epsas>

- Lack of studies concerning PPP governance at different project stages for geographic and institutional contexts different from the Anglo-American (Andon, 2012; Broadbent and Laughlin, 2004);
- Disclosure of information for public sector accountability about different PPP phases (Shaoul et al., 2012a);
- Academic inquiry into the *ex post* evaluations of PPPs by means of a public sector audit (Andon, 2012; Broadbent and Laughlin, 2004);
- More research on the post-procurement stage, discussing what are the optimal governance arrangements (Hodge and Greve, 2018);
- Lack of research with potential impact on policy and practice of PPP (Andon, 2012);
- The role of global actors in promoting specific recommendations for PPP (Hodge and Greve, 2018);
- Consequences of the global financial crisis for PPP procurement (Andon, 2012; Wall and Connolly, 2009);
- The financing structure of the projects (Hodge and Greve, 2018; Wall and Connolly, 2009);
- The influence of global PPP market actors, transparency and corruption avoidance (Hodge and Greve, 2018).

When one moves to state audit literature, Johnsen (2019) indicates that literature on public sector audit outside Anglon-American and North European contexts is scarce. In a more specific suggestion, Bonollo (2019) calls for more research on the Napoleonic-model supreme audit institution (SAI). Also, Hay and Cordery (2018) observe that public sector audit is comparatively under-researched. In a more precise way, Cordery and Hay (2021) indicate that it's required more research to understand whether the explanations of the demand for auditing in the private sector are also applicable to the public sector.

Being aware that it is not possible to address all the research gaps related to the PPP phenomenon, we address several of such gaps in four empirical essays set out in Chapter 3, synthesized in the following paragraphs.

Bovens et al. (2008) call for more research in assessing accountability tools and methods, and this thesis contributes to it by analyzing the Portuguese State Accounts in a comparative study with the United Kingdom (UK) Whole of Government Accounts (Essay 1).

To the best of our knowledge, there is a lack of evidence on comparing the reporting of PPPs in different institutional settings. We aim to contribute to filling in this gap and raise new avenues for this type of public sector accounting research by focusing on specific transactions. Our study also responds to the need on how accounting standards based on the decision-usefulness paradigm also serve public accountability information requirements (Ellwood and Newberry, 2016). These research gaps are dealt with in Essay 1.

Another gap in the PPP accounting literature is the lack of evidence uncovering the impact on public accounts of contractual PPPs. In Essay 2 we address this lack of research by taking into account the perspective of the accrual accounting on PPP contracts, based on IPSAS 32, and its relation with transparency and financial accountability (Shaoul et al., 2012a, p. 226)³. Furthermore, our work throughout Essay 2 also contributes to new insights into the relationship between the public sector accounting system and government finance statistics system (national accounts). This issue is receiving increasing attention by international bodies and academia amid the development of harmonized accounting standards at the EU Level under the auspicious of European Public Sector Accounting Standards (EPSAS) project (Dabbicco, 2015; Dabbicco and Steccolini, 2020; EC, 2013; Jesus and Jorge, 2014).

³ According to CIPFA and IFAC (2014, p. 31), “Accountability is about ensuring that those making decisions and delivering services are answerable for them, although the range and strength of different accountability relationships varies for different types of governing bodies. Effective accountability is concerned not only with reporting on actions completed, but also ensuring that stakeholders are able to understand and respond as the entity plans and carries out its activities in a transparent manner. Both external and internal audit contribute to effective accountability.”

There is scarce research on the work of accountability institutions, such as supreme audit institutions (SAIs), noticeably in relation to PPPs, and how they are valuable. In its Essay 3, this thesis contributes to this research by studying PPP audits and how the audit reports enhanced the information in the public domain that could be used for public accountability purposes.

1.4. Purpose statement and research objectives

This thesis has two main aims: i) discuss external reporting and state audit as two accountability mechanisms that operate at the information stage of the accountability relationship between the government and the parliament; and ii) evaluate the perception of stakeholders on issues related to the choice, management, transparency and public accountability of roads PPPs. Our purpose is to increase the knowledge in the field of infrastructure PPPs as a tool for the involvement of the private sector in the delivery of infrastructure-based public services. The specific aims are described in each empirical essay.

Furthermore, the main objectives of our research are:

1. Influence the policy agenda related to the implementation of accrual accounting in the Portuguese public sector based on IPSAS;
2. Contribute to the comparative analysis of political accountability;
3. Assess the transparency of PPP reporting in Portugal;
4. Demonstrate the importance of the quality of accounting for the transparency of public finances, public management and accountability purposes;
5. Assess the impact of the *Troika* on PPPs accounting and transparency;
6. Establish the need for a closer alignment of accrual accounting in the public sector and national accounts (or government finance statistics);
7. Contribute to the debate surrounding the implementation of harmonized accrual accounting across the EU;

8. Analyse the role of the CoA on PPPs policy and how it contributed to PPPs transparency;
9. Identify the government's reaction and compliance to audit findings and recommendations; and
10. Evaluate stakeholders perceptions about several PPP topics.

These objectives determined both the theoretical and methodological approaches described in Chapter 3. Though, the overall theoretical framework is presented in Section 2.1.

1.5. Research questions and design

This thesis addresses different research questions coherently analysed in four empirical essays in Chapter 3. The research questions that are part of our research and the related empirical essay are presented in Table 1.1.

Table 1.1: Research questions and associated empirical essay

Research questions		Essay
RQ 1.1	What is the level of transparency in PPP contracts?	Essay 1: Disclosure of information and transparency in public-private partnerships: a comparative study between Portugal and the UK
RQ 1.2	How do the Portuguese State Accounts compare with the UK WGA in terms of disclosures about PPPs?	
RQ 2.1	What would the impact of PPP contracts be on public accounts if PPPs were to be accounted for according to IPSAS 32?	Essay 2: The impact of public-private partnerships on public accounts: The Portuguese roads sector
RQ 2.2	What are the differences between the national accounts impact of PPPs and the IPSAS 32 impact on public accounts?	
RQ 3.1	What methods did the CoA used to gather evidence?	Essay 3: State audit of public-private partnerships: audit findings, recommendations and government reactions
RQ 3.2	What information was disclosed in the audit reports?	
RQ 3.3	What are the categories and intensity of the CoA's recommendations?	
RQ 3.4	What roles did the CoA fulfil?	
RQ 3.5	How the Government (accountor) reacted to the main audit findings and conclusions and dealt with audit recommendations afterwards?	
RQ 4.1	What are the stakeholders perceptions about different PPP issues in the roads sector?	Essay 4: Stakeholders' perceptions

These research questions guided our choice of the theoretical background and research methods. In this thesis, we used quantitative and qualitative research methods (mixed methods approach).

In terms of gathering information, to accomplish the thesis research objectives, we conducted mixed methods research. There are several definitions of mixed methods research. In broader terms, mixed methods combine qualitative and quantitative tools of gathering evidence to better understand social phenomena (Tucker and Hoque, 2017).

Based on previous studies, Tucker and Hoque (2017) elaborate on the following advantages of mixed methods over a single method approach: i) to draw a complete view by combining information from different data sources; ii) avoidance of biases inherent in a single research method; iii) address the shortcomings of a particular method; iv) to build on the findings by using contrasting kinds of data; and v) as an aid from one method to another (e.g. a questionnaire is used to find potential participants for an interview).

Greene et al. (1989) put forward five purposes for adopting a mixed methods approach:

1. Triangulation. The aim is to get convergence and corroboration of findings from different methods studying the same issue
2. Complementarity. When the objective is elaborate, enhance, illustrate and clarify the results from one method with the results from the other
3. Development. In situations where the findings from one method are used to inform the design of the other method
4. Initiation. To uncover paradoxes and contradictions that could lead to a reformulation of the research questions
5. Expansion. Where the purpose is to extend the scope of the research by using different methods for different research streams

Considering Greene et al. (1989) typology, this thesis uses a mixed methods approach for the purposes of triangulation, complementarity, development and expansion. We have drawn on a triangulation approach to the empirical essays. For this purpose, some

questions in the questionnaire were developed based on the empirical results presented in Sections 3.1, 3.2 and 3.3.

Essay 1 explores PPPs external reporting practices internationally and the implications for developing a reporting framework to facilitate PPPs public accountability. This essay demonstrates that the UK, a country classified as having advanced public sector accounting practices, barely overcomes the number of items disclosed by another country (Portugal) with local cash accounting standards used to prepare the annual report of the State. From the essay, we will also try to develop a reporting framework, considering financial and non-financial information, which is appropriate for operational PPPs transparency and accountability in Portugal or elsewhere (Shaoul et al., 2010).

In Essay 2 we investigate how public accounts would look like in case IPSAS 32 had been used for roads PPPs accounting and reporting. We uncovered evidence that is consistent with the debt hidden hypothesis and public choice theory predictions about politician's behaviour. This essay also contributes to the debate about the alignment between international accrual accounting standards and national accounting.

Being aware that SAIs serves as parliament watchdog and play a critical role in holding the government accountable to the people, in Essay 3 we analysed all the transportation PPPs audit reports published by the CoA until the end of 2018. The essay deals with PPPs audit reports published by the CoA in terms of findings, recommendations, CoA role, government's reactions and audit impact. This essay sheds light on the content of the PPPs audit reports and aims to contribute to the debate regarding the value of public audit (Cordery and Hay, 2019; Hay and Cordery, 2021).

Finally, Essay 4 aims to identify the stakeholders' perceptions on several PPP themes identified in the literature, asking them some questions directly related to the previous essays and expands our inquiry to different PPP research components from those addressed in the remaining three essays.

Our essays have a logical sequence. Essay 1 sets the scene of the level of PPPs external reporting transparency in Portugal and internationally, using the UK as a benchmark. For Portugal, the evidence found in Essay 1 illustrates the lacking of reporting elements

associated with international accrual accounting standards. In Essay 2, we estimated this lack of information by using accounting data from PPPs private partners. Though, this essay uncovers information not publicly available that might justify the political choice of the PPP procurement model because it allows significant off-balance sheet financing, as at the same time improves the government's electoral prospects. Essay 3 analyses the PPP audits done by the CoA as a public accountability institution, with particular focus on audit findings, recommendations, CoA roles, government reactions to audit reports and audit impact. Lastly, based on the evidence from the previous three essays, Essay 4 was conducted to triangulate the three essays results and gain a deeper understanding of the PPPs stakeholders (from the public and private sector) perceptions.

To understand the PPP phenomenon in Portugal, through the research questions presented above, we used an eclectic theoretical approach by framing our analysis with the agency, institutional, resource dependence and public choice theories (Tagesson, 2015).

1.6. Main results and contributions

This thesis contributes to PPPs literature in several ways. First, it highlights the transparency issues associated with current external reporting of operational PPPs contracts in different institutional settings and proposes a set of items be disclosed on the annual report (Essay 1).

Second, informed by public choice theory, this thesis, in Essay 2, provides a plausible explanation for the political option to deliver transport infrastructures in the face of electoral incentives and gaps in transparency requirements. This is significant because it brings new evidence on the debt hidden hypothesis and how the current accounting treatment may have an impact on the choice of PPPs as a procurement method, even though they are not affordable and do not deliver VfM in comparison to conventional procurement models. Additionally, the essay adds new insights to the discussion over the EPSAS project by using the Portuguese PPP setting, where the treatment in national accounts and financial accounting is different (e.g. Dabbicco, 2015; EC, 2013; Jesus and Jorge, 2014). Together, Essays 1 and 2 show evidence of the impact of the financial assistance from international organizations on PPPs accounting and public disclosures.

Third, Essay 3 helps in gaining more knowledge about several aspects of PPPs public audit. The CoA disclosed relevant information for more comprehensive public scrutiny and political accountability of PPPs and made several recommendations associated with better PPP governance. This essay also brings new evidence about the role of the CoA, the government's reaction and audit impact.

Fourth, throughout Essay 4, stakeholders' opinion was gathered in respect of several topics better described therein, providing new insights about supporting PPPs as a policy, the reasons for the choice of this procurement modality, the perceived advantages and disadvantages over traditional forms of roads infrastructures procurement, transparency, expectations about accounting standards, contract management, audit impact and parliamentary oversight. This essay was also a mechanism to triangulate the results from previous essays.

1.7. Thesis structure

The thesis is divided into three main chapters, and its structure is as follows. Chapter 2, by offering the theoretical and conceptual background, provides the context to the empirical essays that are the content of Chapter 3. This empirical chapter is comprised of four essays aimed at answering the research questions. Chapter 4 draws the main conclusions, contributions, policy implications, suggestions for future research and identifies the thesis limitations.

CHAPTER 2: THEORETICAL AND CONCEPTUAL BACKGROUND

This chapter aims to theoretically and conceptually set out the background for the essays in Chapter 3. In this vein, Section 2.1 elaborates on the broad theoretical perspectives used in the empirical essays. The remaining sections highlight the relevance of public infrastructures, the main PPPs dimensions, public accountability and two accountability mechanisms or tools for the information phase of the accountability relationship: external reporting and auditing.

2.1. Theoretical background

2.1.1. Agency theory

Agency theory is at the foundation of public accountability when the latter is framed as a social relationship that rests upon the availability of information about the agent (accountor in the public accountability relationship) actions. The other theoretical approach is the social contingent model of accountability linked to the social psychology field, with contributions from sociology and behavioural economics (Bovens et al., 2014).

Moe (1984) suggests that developments in the economic theory of organization could be applied to political science and uses the lenses of agency theory to describe democracy and public bureaucracy as a chain of principal-agent relationships in a superior-subordinate type relationship:

Citizens are principals, politicians are their agents. Politicians are principals, bureaucrats are their agents. Bureaucratic superiors are principals, bureaucratic subordinates are their agents. The whole of politics is therefore structured by a chain of principal-agent relationships, from citizen to politician to bureaucratic superior to bureaucratic subordinate and on down the hierarchy of Government to the lowest-level bureaucrats who actually deliver services directly to citizens. Aside from the ultimate principal and the ultimate agent, each actor in the hierarchy occupies a dual role in which he serves both as principal and as agent. The formal apparatus and deductive power of the principal-agent model are applicable to each of these hierarchical stages of Government, and might usefully be employed in investigating even the most basic questions of democratic control and performance. (Moe, 1984, pp. 765-766)

Due to the presence of asymmetry of information in favour of the agent that could be used in its own interests, agency problems unfold in the form of adverse selection - or hidden

information not known before the enactment of the agency relationship - and moral hazard - lack of information about the agent effort towards the principal interests over the period of the agency relationship. To mitigate these effects, bonding costs and monitoring costs should be incurred. Despite that, a residual agency loss will always exist (Broadbent et al., 1996; Mayston, 1993).

Bonding costs are incurred by the agent to convince the principal of its stewardship intentions towards the principal interests. Monitoring costs means the resources the principal commits in obtaining and processing information about the performance of the agent in reaching the principal's objectives. Even though the incurrence of these costs to control the actions of the agent, there will be a residual loss resulting from the agent's decisions and those that would maximize the welfare of the principal (Mayston, 1993; Streim, 1994).

The asymmetry of information and conflict of interests are the tenets of agency theory from which agency costs unfold in the form of bonding costs, monitoring costs and residual loss, being a conflictual theory due to the divergence of interests between the two parties of the relationship, contrasting to the stewardship theory (Schillemans, 2013).

Based on the above arguments, democracy can be described as a chain of delegation of power that starts on the people as the electorate. Whenever delegation occurs, an agency relationship is established. This agency relationship is also a public accountability relationship. More precisely, any form of public accountability (e.g., political, managerial) includes the following elements (Lindberg, 2013; White and Hollingsworth, 1999):

1. An individual or institution whose duty is to render an account (the accountant);
2. An area, responsibilities or domain that determines the scope and content of the account;
3. An individual or institution to whom the accountant discloses, explains and justifies its conduct regarding the scope of the account rendered (the accountee);

4. The accountee has power over the accountor in terms of approval or disapproval of the accountor's conduct.

From a democratic theory perspective, public accountability enables citizens and their elected representatives to make those assuming public powers answer for their actions and consequences. In a parliamentary democracy, the process of delegation of powers along the democratic chain, from citizens to elected representatives, to governments, to public administration, and holding to account could be described as a web of agency and accountability relationships in what could be called as the democratic principal-agent theory (Lupia, 2003; Strøm, 2000, 2003). Particularly, in parliamentary systems, the electorate (voters as principals) delegate sovereign powers constitutionally defined to their representatives in the parliament (agent), which in turn (acting as principal) delegate the execution portion of that powers in the executive government (agent of the parliament). This process of delegation and constitution of agency relationships goes further into the public administration until the civil servants who deliver public services (Brandsma and Schillemans, 2013).

Applied to polity, politicians may shirk because they are not motivated by productive efficiency or the public interest (e.g., maximizing the social welfare) but by electoral objectives such as pleasing interest groups, rewarding donors, avoiding social conflicts, among all activities that increase the probability of winning the next election (Moe, 1984).

The delegation inherent to the structuring of the democratic process in a parliamentary system may generate agency problems in the form of omission – when the agent acts in ways that are not in the interest of principal – or commission (sabotage), when the agent positively acts in opposition to the interests of the principal (Strøm, 2000). These problems provoke an agency loss measured by the difference in the outcome of delegation and the principal's ideal outcome. The agency loss is zero when the agent actions are the same the principal, with perfect information and no resources constraints, would take. Because perfect information and unlimited resources are an ideal state, delegation adds value when the outcome of delegation improves the principal's welfare in comparison to the outcome that would be accomplished if the delegation has not occurred (Lupia, 2003).

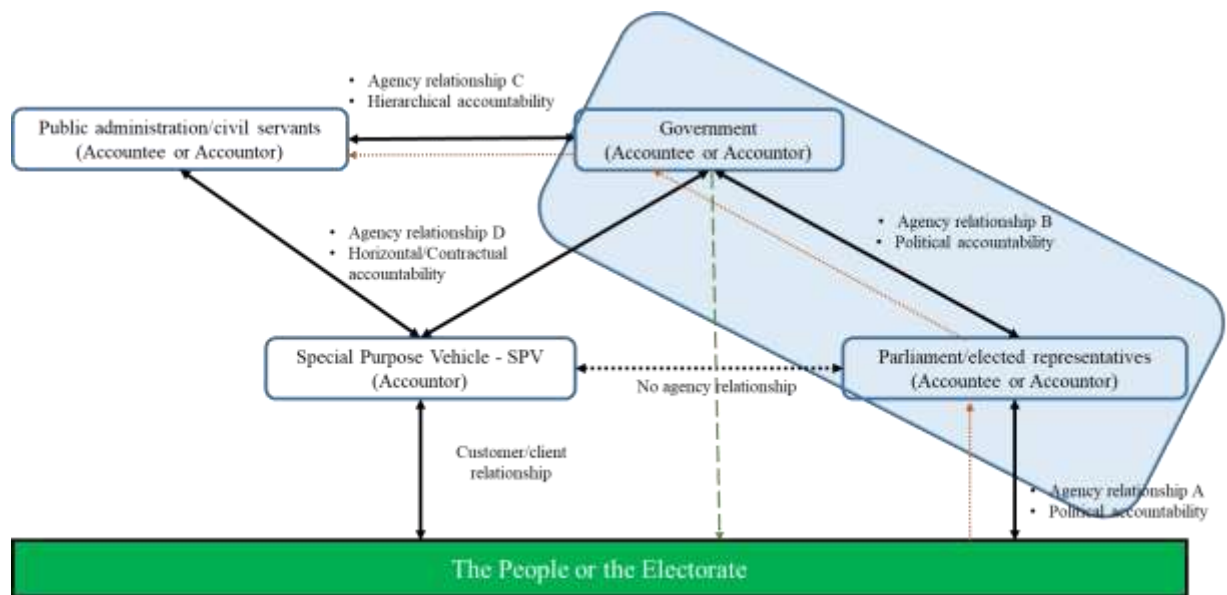
The agency problems of adverse selection and moral hazard and associated costs may be contained by *ex ante* mechanisms and mechanisms that operate *ex post*. The choice of mechanisms depends on the nature of the agency problems (Luppia, 2003; Strøm, 2000).

Contract design and screening and selection of agents are *ex ante* mechanisms. The former pursues to establish shared interests or to prompt incentives coherence by granting the agent a portion of the principal's increase in welfare. The latter deals with the separation of good and bad agents before delegate to them (e.g. how parties help voters in selecting political candidates) and is more relevant when adverse selection is the prevalent agency problem (Strøm, 2000).

Turning to *ex post* mechanisms, monitoring and reporting requirements and institutional checks come into play. These two mechanisms are appropriated when the delegation process may lead to a moral hazard issue. The first imposes to the agent an obligation to file annual reports, to be subject to state audits, to appear before parliamentary committees or to answer oral or written questions. The second, more related to checks and balances systems, such as in presidential government systems, subjects some agent decisions to veto powers of other agent or a third party (Strøm, 2000).

Based on the assumptions of conflict of interests and mistrust between the principal (parliament, which includes the parties supporting the government and the opposition parties) and the agent (government) drawn from the agency theory and taking into account the above considerations, a contractual PPP is surrounded by a web of agency and accountability relationships represented in Figure 2.1.

Figure 2.1: Chain of democratic delegation and the web of agency and accountability relationships



Legend:

- > Represents the chain of the democratic delegation from the people through public administrations/civil servants. From this delegation process, vertical forms of accountability emerge
- > Highlights the circumstance that the executive government is indirectly accountable to the People (prime minister and ministers are not directly elected by and accountable to the People) because there is an indirect delegation of powers from the people to the government through parliament and the government, aware of potential electoral consequences, wants to act with responsiveness to the Electorate expectations (Strøm, 2000)

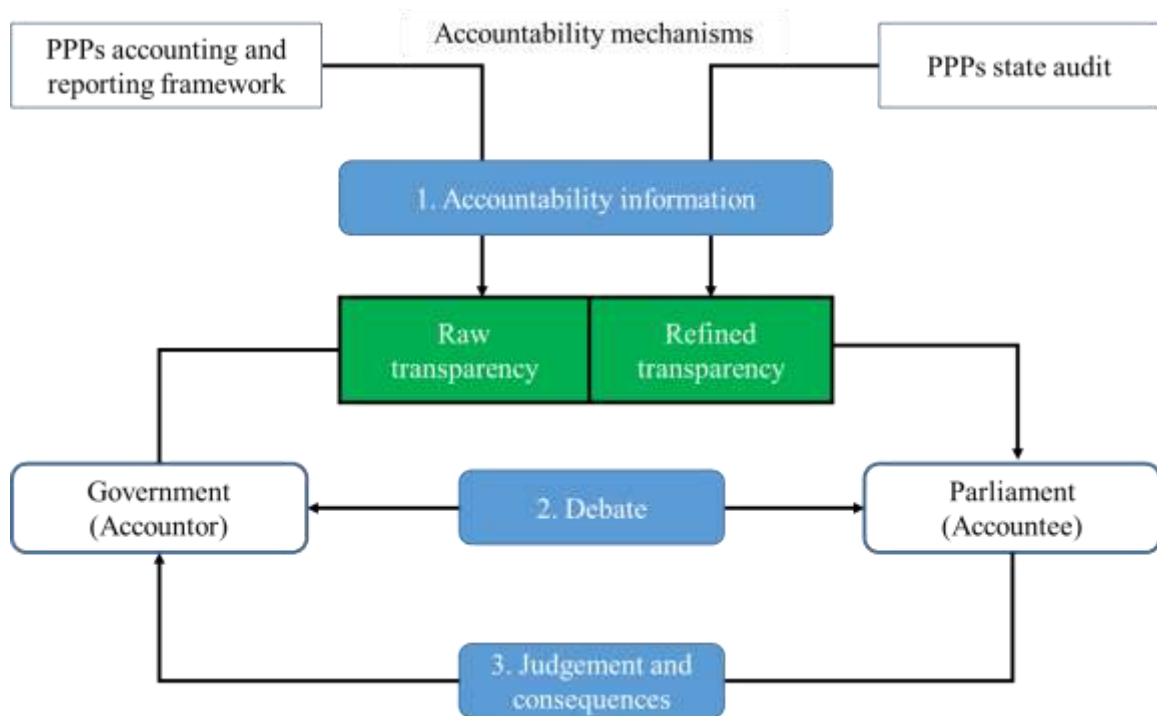
The agency relationship between the government (agent) and the parliament (principal), which is the focus of this thesis (shaded area in Figure 2.1), is compounded by the agency relationship between the special purpose vehicle (agent) and the government (principal).

The figure shows that different agency relationships are hand-in-hand with varying accountability relationships from vertical political accountability (agency relationships A and B) to horizontal contractual accountability (agency relationship D). The diverse classifications of public accountability based on different criteria and perspectives are set out in 2.2.5.2, but political accountability deserves here some comments. It is intrinsic to democratic representation where the People through elections delegates power to politicians, who may have divergent interests, and are subject to democratic mechanisms which empower the People with means to hold to account the decisions made by the politicians in their representation, such as through a subsequent election (Warren, 2014).

Figure 2.1 also presents, from a public accountability perspective, in the PPP setting, that the government is both accountant and accountee. The government is responsible for ensuring the operator performs in accordance with a contract and is the accountee of the private sector entity. In addition to this role, the government is also responsible for providing an account to parliament (the accountee) for the PPP's performance, transparency and affordability (Reeves, 2013).

Moving to the agency and the political accountability relationship between the executive and the legislature, a distinct characteristic prevails in representative democracies. The budget authority rests on parliament by approving government revenue and expenditure plans for financing public policies (Streim, 1994). Therefore, the executive must provide an account to explain and justify the execution of the budgetary resources because this is the expectation of the electorate, the Constitution mandates it and that account should be given transparently. When it comes to PPPs, Figure 2.2 provides a stylized view of that relationship which is the scope of our research.

Figure 2.2: The political accountability relationship between the government and the parliament



Source: Based on Willems and Van Dooren (2012)

The concept of accountability implies the right of the accountee (principal) to scrutinize the actions and decisions of the accountant (agent) by demanding information and answers and also gives the accountee the power to impose consequences (Bovens, 2007; Mulgan, 2003). Public officials – elected or appointed – are granted with power that citizens expected to be controlled through public accountability mechanisms by which the accountant renders an account and the accountee hold to account.

An accountability mechanism is any tool by which an accountee (principal): (a) can obtain information about an accountant's intentions, competencies and behaviour; or (b) can sanction or reward the accountant (agent). Information for an accountability arrangement can be of any kind and could be disclosed by the accountant or a third party. Regarding information mechanisms, in the best scenario, they feed into the accountee what he needs to know. In the worst scenario, they provide misleading information about the accountant intention (the adverse selection problem) or behaviour (the moral hazard problem). For sanction devices, ideally, they steer the accountant to behave consistently with the accountee interests and expectations. At worst, consequences based accountability mechanisms could be ineffective and constrain accountants to follow the outcomes desired by the accountee (Bergman et al., 2003; Bovens, 2010; Schillemans, 2011).

To better define the scope, an accountability mechanism implies a formalized relationship that distinguishes them from accountability practices. Its creation aims to overcome some type of accountability deficit (Mulgan, 2014a; Schillemans, 2011).

In the model above, accountability is the result of account-giving and account-holding. It is a co-production of the relationship between the accountant and the accountee (Busuioc and Lodge, 2016).

Furthermore, it is constituted by three phases: i) information; ii) debate; and iii) judgement and consequences that are presented in a logical order. Although Brandsma and Schillemans (2013) warn that the consequential view of an accountability relationship may not happen in the real world, the three phases may coincide or in the reverse order. The authors argue that a sequential idea is a tool to locate potential accountability deficits in the three phases: lack of transparency on the accountant actions and consequences, absence of suitable discussion or the inability to impose consequences.

Flyvbjerg et al. (2003) consider transparency as an instrument of accountability. Information is essential for the outcomes of the different accountability relationships and external reporting and auditing will improve the content of that information. In the same line of reasoning, Funnell (2003) suggests that transparency is essential for accountability. Still, it does not ensure accountability because the accountee may not comply with its function of holding to account, or there is an absence of accountability mechanisms associated with the consequences phase.

Barton (2006, p. 260) suggests that the proper function of the democratic system over the long run depends on the public availability of information and the establishment of government's accountability arrangements, compared with the role of competitive markets in a market-based economy.

Therefore, any accountability arrangement needs information to ensure it functions correctly. The information can be disclosed by the accountor or through the work and audit reports delivered by SAIs (De Fine Licht, 2019). The provision of appropriate information by the government (accountor) to the parliament (accountee) is essential to the political accountability relationship between them. Barton (2006, p. 260) argues that in the public sector, accountability plays the role of the competitive markets ("invisible hand") for the capitalist economic system, noting:

[w]here all the information, including cost information, is provided to parliament and the public, then parliamentary committees, opposition parties and the media can highlight areas of bad management and inefficiency and place pressure on the government to take appropriate remedial action. The publicly available information and acceptance by the government of the responsibility for accountability are thus the lubricants which enable the democratic system to function successfully over the long term.

That said, for the purpose of the model depicted in Figure 2.2, "transparency is defined as the availability of information about an actor allowing other actors to monitor the workings or performance of this actor" (Meijer, 2014, p. 511). Also, Hood (2010, p. 989) defines transparency as "the conduct of business in a fashion that makes decisions, rules and other information visible from outside."

This definition views transparency as an instrumental value for accountability in two directions: i) the accountant is incentivized to behave correctly because the consequences of its actions will be disclosed; ii) the accountee will possess the needed information to hold to account according to the set of expectations of a given public accountability relationship. Transparency is necessary for political accountability, but it is not sufficient because it is one aspect of it, as Figure 2.2 illustrates (Pollit and Hupe, 2011).

In the context of accountability information, we disaggregate transparency into raw transparency and refined transparency. Raw transparency is the information disclosed voluntarily by the accountant, and refined transparency is the information disclosed through state audit reports (De Fine Licht, 2019; Porraz-Gómez, 2020). The accountant (government) has the duty to give visibility to its actions and provide explanations whenever asked by the accountee (parliament). This implies disclosing information by itself through accounting and reporting processes (raw transparency) or a third party enhances the transparency (refined transparency), such as the SAI disclosing of information through the audit reports relevant to that accountability relationship.

Figure 2.2 conveys the idea that the PPPs accounting and reporting framework, which operationalizes the concept of raw transparency, and PPPs state audit, creating refined transparency, are mechanisms that help parliament holding government to account for its use of PPPs as a procurement mode to deliver infrastructure-based public services.

2.1.2. Institutional theory and resource dependence theory: an overview

Firstly, institutional theory (also called neo-institutional or new institutional theory) aims to explain how pressures from the external environment force organizations within a particular organizational field towards homogenization in terms of socially accepted structures, norms and practices, associated with legitimacy, mobilization of resources and uncertainty (Adhikari and Gårseth-Nesbakk, 2016; DiMaggio and Powell, 1983, 1991; Tagesson, 2015).

Secondly, resource dependence theory explains organizational survival as a function of its interactions with the external environment to acquire and maintain resources from others who control those resources, which are not always cooperative. Thus,

organizations are not autonomous actors pursuing their objectives, are subject to external constraints, uncertainties, competing demands, interdependencies and may use their power strategically to influence the external environment (Pfeffer and Salancik, 2003; Oliver, 1991).

Therefore, institutional and resource dependence theories could be complementary in explaining conformity to institutional pressures and expectations (Oliver, 1991). To secure their legitimacy, public organizations, or the government as a whole, should be responsive to external demands and expectations (Frumkin and Galaskiewicz, 2004).

DiMaggio and Powell (1983) coined the process by which the organizations tend to adopt the same structures and practices as isomorphism and identified three institutional isomorphic pressures for change: normative, mimetic and coercive.

Carpenter and Feroz (2001, p. 566) describe isomorphism as:

A process that causes one unit in a population to resemble other units in the population that face the same set of environmental conditions. Because of isomorphic pressures, organizations will become increasingly homogeneous within given domains and conform to expectations of the wider institutional environment.

Scott (1987) argues that increased legitimacy, resources and survival prospects are behind the option taken by organizations or countries to conform - become isomorphic - to institutional pressures for change.

In the context of this thesis, only coercive pressures are considered relevant for change in accounting and reporting practices.

According to DiMaggio and Powell (1983, p. 150):

Coercive isomorphism results from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function. Such pressures may be felt as force, as persuasion, or as invitations to join in collusion.

Consequently, coercive isomorphism is associated with power and resource dependency. Collin et al. (2009, p. 151) state that "organizations can put pressure on the focal organization to behave and to structure itself in a certain way; otherwise the focal

organization will not gain the needed resources or will suffer from sanctions". Thus, coercive pressures for change can be exerted by those who provide resources to an organization or country or have the power over them, through legislation or other enforcement mechanisms.

Coercive isomorphism concerns the ways in which pressures are exerted on an organization by another party upon which it is dependent or from more general cultural expectations (Carruthers, 1995). One form of coercive isomorphism results from external pressures on the public sector from national or international bodies upon which they are financially dependent. This form is consistent with the resource dependence theory explanation.

Following Pfeffer and Salancik (2003), who developed the resource dependence theory, organizations depend on their external environment to access the resources needed for survival. The authors identified a set of conditions that make more likely the control of one organization (A) over another organization (B). These conditions are as follows (pp., 44, 260):

- The possession of some resource (e.g., financial) by A;
- The importance of the resource to B, in the sense of its criticality for operations and survival;
- The inability of B to obtain the resource from another source;
- Organization B does not control resources that are critical to A operations' and survival;
- The ability of A to communicate its preferences to B;
- The actions of B are visible and can be evaluated by A whether they comply with its demands and expectations;
- The activities of B that are consistent with A demands and expectations are not in contradiction with the demands and expectations of other organizations upon B's depends on obtaining other critical resources;
- Organization B has the capacity of developing actions that correspond to A requirements; and

- Organization A has the discretion over the allocation, access and use of the resource.

Despite their divergence in some points, Oliver (1991, p. 147) argues that both institutional and resource dependence theories share the following assumptions:

- Organizational choice is constrained by multiple external pressures;
- Organizational environments are collective and interconnected;
- Organizational survival depends on responsiveness to external demands and expectations;
- Organizations seek stability and predictability;
- Organizations seek legitimacy; and
- Organizations are interest driven.

Therefore, institutional theory, more specifically coercive isomorphism, in combination with resource dependence theory, have been used as complementary in understanding accounting and reporting practices (Carpenter and Feroz, 2001). The argument is that organizations need to conform to their external environment and different institutional pressures lead to change, in organizations' search for legitimacy and survival (DiMaggio and Powell, 1983, 1991; Pfeffer and Salancik, 2003).

Furthermore, DiMaggio and Powell (1983, p. 150) state that "organizations are increasingly homogeneous within given domains and increasingly organized around rituals of conformity to wider institutions." These institutions, depending on the context, can be national or supranational, such as the *Troika*.

As the pressures from international organizations grow upon one country that depends on access to finance, countries are led to find ways either to diffuse or cancel this pressure by changing their practices according to the legitimate practices suggested by those international organizations (Cohen and Karatzimas, 2018). We may suggest that a country experiencing difficulties in accessing financing (dependent on external economic resources) is more vulnerable to external coercive pressures, seeking survival and legitimacy by conforming to coercive institutional pressures.

As in previous studies, we used institutional theory (coercive isomorphism) and resource dependence theory to explain variations in external reporting practices (Carpenter and Feroz, 2001; Cohen and Karatzimas, 2018). More precisely, in Essay 1, the *Troika's* influence as a pressure from the institutional environment over PPPs external reporting practices is analysed by employing institutional and resource dependence theories in a complementary way.

In another dimension, Oliver (1991) contributed to the institutional theory by proposing a more active role of organizations in the context of external pressures to conformity, instead of passively conforming to them through isomorphic processes. In this regard, organizations could adopt five different strategic responses, which of them with diverse tactics, in the face of pressures from the external environment: i) acquiesce; ii) compromise; iii) avoid; iv) defy; and v) manipulate. Table 2.1 describes each one of the strategic responses to institutional pressures.

Table 2.1: Different strategic responses to institutional pressures

Strategic response	Description
Acquiescence	The organization conform to institutional pressures by using three possible tactics: habit, imitation and compliance. Habit refers to taken-for-granted rules or values. Organizations instinctively adhere to practices of the institutional environment that have become the acceptable way of doing things. Imitation is similar to the concept of mimetic isomorphism, whereby organizations, due to uncertainty, copy those institutional practices that are seen as legitimate. Compliance is the conscious adoption of institutional practices. It is more active than habit and imitation, to the extent that there is a deliberate choice to comply with institutional pressures which seem as bringing benefits to the organization.
Compromise	When organizations are exposed to conflicting institutional demands or in a situation where those demands are in contradiction with organizational objectives, balancing, pacifying or bargaining could be used as compromise tactics. Balancing tactics refer to the accommodation of constituent demands in response to institutional pressures in an attempt to achieve an equilibrium between the external demands and internal interests. Pacifying tactics also implies partial conformity to institutional pressures but the organization devotes resources to pacify the institutional pressure or pressures it has resisted. Bargaining tactics is more active than pacifying because the organization makes an effort to obtain some type of concession from an external constituent in its demands or expectations. The difference to acquiescence is that institutional compliance is only partial and organizations are more active in achieving their own objectives.

(continued)

Table 2.1: (continued)

Strategic response	Description
Avoidance	As a response to institutional pressures, avoidance means the organization's effort to prevent the necessity of conformity by using the tactics of concealing, buffering or escaping. Concealment tactics are used to give an illusion of conformity with institutional pressures. Buffering tactics represent and attempt to reduce external opportunities for scrutiny or evaluation. When escaping tactics is employed, the organization exits the domain within which it is exerted or changes its goals or activities to avoid the necessity of conformity to the institutional pressures. In contrast to acquiescence, which is a response of conformity to institutional pressures, and compromise, which is partial conformity to those pressures, the objective of avoidance is to circumvent the conditions that make conformity to the institutional pressures necessary.
Defiance	It is an active form of resistance to institutional pressures through the tactics of dismissal, challenge and attack. Dismissing tactics occurs when the organization ignores institutional pressures because the perception of external enforcement is low or where internal objectives are in conflict with those institutional pressures. Challenge tactics mean that organizations adopt an active departure from the institutional environment's rationalized norms or collective rules, challenging the institutional pressures for conformity. Attacking tactics represent an aggressive response to constituents that are the source of institutional pressures. This strategy represents an outright rejection of institutional demands and expectations and is more likely to occur when the costs of nonconformity are perceived as low, when internal interests are in sharp opposition with external demands, when the organization believes that it can demonstrate the adequacy of its practices, or when the organization is convinced that there is nothing to lose in demonstrating the antagonism towards the constituents that exert pressures on it.
Manipulation	Manipulation has the objective to change or exert control over the content of the external pressure or its source, being co-optation, influence and control the associated tactics. Co-optation tactics as a response to institutional pressures aim to neutralize the source or pressure and enhance legitimacy. Influence tactics search to shape values and criteria in the institutional environment. Controlling tactics represent efforts to gain power and dominance over the external constituents that are the source of the institutional pressures on the organization. Under this strategy, institutional pressures are not considered a constraint against which several degrees of conformity could be adopted. Otherwise, organizations actively seek to change or control the pressures or even the constituents that impose them.

Source: Based on Oliver (1991)

As we will see in Essay 3, this typology was adapted to interpret the auditees' reaction to SAIs' audit reports, since they are conceived as a tool of external pressure on the auditee for conformity used by the CoA.

2.2. Conceptual background

2.2.1. Public infrastructure provision

Economic growth and access to public services in an equitable manner and according to desirable quality standards depends upon proper economic and social public infrastructures. Besides, poor infrastructure governance may result in negative consequences, such as time delays, increased costs and difficulties in achieving service delivery objectives. To avoid these negative consequences, countries should have in place a governance framework over the whole investment project cycle, from prioritizing to regulation (OECD, 2017).

The distinctive nature of a public infrastructure rests on its economic and social policy nature rather than public ownership of the infrastructure facilities. Through public infrastructures, public goods are provided, which competitive markets alone undersupply. The availability of public infrastructures enables the realization of positive externalities, such as more comprehensive economic benefits, being met the needs of society at a reasonable public cost (Grimsey and Lewis, 2004, 2017).⁴

With the advent of NPM ideas, such as the marketization of the public sector, along with budgetary constraints that prevent the issue of new public debt and shortening the infrastructure gap, public infrastructures become commercially oriented by handing over to the private sector certain activities carried out previously by the public sector and the recourse to private finance to build or refurbish public facilities (Broadbent and Laughlin, 2004; Grimsey and Lewis, 2004, 2017).

⁴ Because public infrastructures are to a certain extent public goods (non-rival and non-excludable) there is a market failure in the sense that the market mechanisms alone cannot achieve economic efficiency by under provision of such infrastructure (HM Treasury, 2018a).

Except for the rare situation where the public sector builds and operates the facility, public infrastructure can be procured in several ways, with different private sector level of participation in its design, construction, finance, operation and maintenance (Grimsey and Lewis, 2017).

2.2.2. PPP: A concept with different meanings

There is no unanimous definition of a PPP. Depending on the country, the term PPP can cover a variety of relationships where the private sector is given the right to operate, for an extended period, a service usually provided by the public sector. It ranges from relatively short term management contracts, with little or no capital expenditure for the public sector, through concession contracts which may encompass the design and construction of substantial capital assets, the provision of a range of services and the financing of the entire construction and operation. The definition also covers joint ventures, where the ownership of the assets is shared between the public and private sectors, an arrangement coined by the EC (2004, p. 18) as “institutionalized PPPs”. In general terms, PPPs fill a space between public sector typical procurement and complete privatization of a public service (IPSASB, 2008, p. 8; OECD, 2008, pp. 16-17).

As suggested in the previous paragraph, there are several definitions of a PPP, some of them broader and others narrower in scope. Regarding the former, Hodge and Greve (2007) define PPPs as governance tools for the collaboration between the public and private sector. The authors classify PPPs into five groups: i) institutional cooperation for joint production and risk sharing; ii) long-term infrastructure contracts (LTICs); iii) public policy networks; iv) civil society and community development; and v) urban renewal and downtown economic development.

Considering the narrower definition, a PPP is an infrastructure procurement and delivery modality, in which the private sector has the responsibility for design, finance, build, operate and maintain the infrastructure asset to deliver public services in accordance with the contract made with government. At the end of the contract, the infrastructure is handed back to government, which thereafter is directly responsible for the delivery of the public service and manage the infrastructure (Yescombe and Farquharson, 2018). This definition fits into the LTICs family identified by Hodge and Greve (2007).

Another conceptual distinction can be made between the categories of institutional and contractual PPPs. Under the category of institutional PPPs, the public and private sectors create a distinct legal entity such as joint-venture arrangements to deliver and provide infrastructure based public services (Agyenim-Boateng et al., 2017; EC, 2004; Ortega et al. 2016).

The contractual form is defined by Engel et al. (2014, p. 2):

As an agreement by which the government contracts a private company to build or improve infrastructure works and to subsequently maintain and operate them for an extended period (for example, 30 years) in exchange for a stream of revenues during the life of the contract. Sometimes, as in the case of a toll road, revenues accrue mainly from user fees. In other cases, as with hospitals, users are not charged and the government makes periodic payments. More generally, the concessionaire is remunerated with a combination of user fees and government transfers. In all cases, at the end of the contract the asset reverts to government.

Moreover, contractual PPPs have the following key features (Yescombe and Farquharson, 2018, p. 9):

- A long-term contract between the private-sector party and the public-sector party;
- Private-sector party has the contractual responsibility for the design, construction and operation of a public facility, usually social or economic infrastructure;
- Private capital from lenders and shareholders is used to finance all or a considerable part of the facility's construction;
- Payments over the duration of the contract to the private sector for the facility utilization are made by the public sector (availability-based or demand-based payments) or by the facility users through service fees or by both;
- The facility remains in public-sector ownership or is handed back to the public sector at the end of the contract for no or insignificant cost;
- Risks are shared between the public and private partners; and
- The service provided with the facility is public.

In summary, PPPs are long-term contracts between the public and private sector, in which the private entity acquires or builds an asset, commonly infrastructure facilities, operates it for a period according to specifications set in the contract, and, at the end of the contract, hands the asset over to the public sector. These schemes are classically described as Private Finance Initiative (PFI) or Design, Finance, Build, Operate (DFBO) arrangements. PFI is an expression used in the UK to describe PPPs whereby the private sector designs, builds, finances and operates the assets, and the public sector pays to cover both the capital cost and services delivered by the private sector.⁵

PPP contracts can be structured with different specifications regarding issues such as the disposition of the assets at the end of the contract, the required operation and maintenance of the assets during the contract, price, quality, and volume of public services provided through those assets (e.g. Grimsey and Lewis, 2017).

2.2.3. Public infrastructure procurement models

The decision about how a project is best procured is separate from the decision about what project to procure. After the choice to deliver a certain infrastructure project, Grimsey and Lewis (2017) suggest that the procurement model to be chosen depends on several factors, such as services to be provided, risks, comparative advantages of bundling activities, the existence of similar projects, national and internationally, and market expectations.

The choice of infrastructure provision modality occurs in a broad spectrum of possibilities ranging from conventional procurement to outright privatization. Under conventional procurement the private sector is contracted for limited deliverables and for a short-term period. Privatization became popular in the UK and in the United States during the 1980s and 1990s on ideological and efficiency arguments (Grimsey and Lewis, 2017; Savas, 2000).

Putting privatization aside, public infrastructure can be procured as either conventional (or traditional) procurement or based in one of several variants of the PPP model. PPP is a form of procurement that bundles in one contract several phases of the project cycle.

⁵ In the literature, PFI is used interchangeably with PPPs (Broadbent and Laughlin, 2004).

The adoption of the PPP procurement route should be grounded advantages comparatively to conventional public procurement (CPP).

International organizations issued several guidelines on how to prepare, launch, implement, manage and disclose information about PPPs (e.g., European PPP Expertise Centre - EPEC, 2011; OECD, 2012; World Bank, 2016). These guidelines present a PPP as a procurement option for infrastructure along with more traditional forms of public infrastructure procurement.

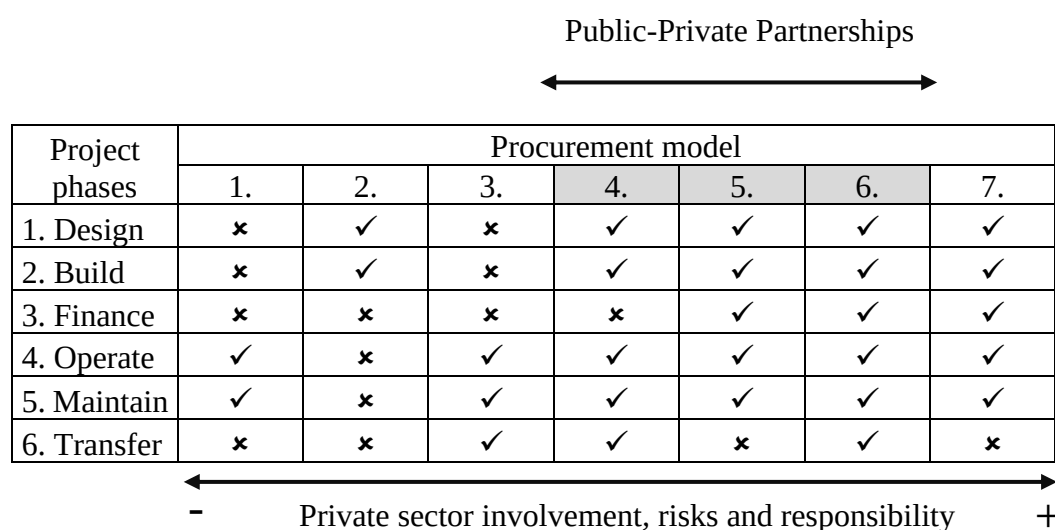
Under traditional public procurement, the contracting authority sets out the specifications and design of the infrastructure, calls for bids on the basis of the specifications and design made and pays with public funding from revenues or borrowing for the construction of the facility by a private sector contractor. The contracting authority has to fund the full cost of construction and may undertake facilities management itself or contract out these services to a private sector company under a separate contract (Yescombe and Farquharson, 2018).

As said before, public infrastructures are needed to satisfy social and economic objectives. There are several models to procure public infrastructure, part of them labelled as PPPs. *Per se*, PPPs can be viewed either as a tool of governance with several families of arrangements or as a language game, a situation coined by Hodge and Greve (e.g. 2009, 2010) as the “PPP phenomenon”.

In this thesis, we focus on contractual PPPs for public infrastructures or, according to Hodge and Greve (2007) classification of PPPs, LTICs.

Therefore, the objective of Figure 2.3 is to give a summarized idea of the spectrum for infrastructure procurement options in contractual terms (see, for example, Grimsey and Lewis, 2017, Chapter 7, for a far more comprehensive account).

Figure 2.3: Possible procurement models for public infrastructure procurement and delivery



Legend and notes:

Procurement model	Description
1. Outsourcing (management and services contract)	Private contractor operates and maintains a public facility under a management contract with the public partner.
2. Conventional (or traditional) public procurement (Design-Build or Design-Bid-Build)	The private partner is responsible for designing and building the facility in accordance with public partner requirements. The construction of the facility is publicly financed through debt or taxes and the private partner usually assumes the construction risk. In a Design-Bid-Build model the public sector designs the facility and contracts out to the private sector the construction on its behalf.
3. Operations concession	The public sector grants to the private sector the right to provide public services using an existing facility according to public sector performance requirements in exchange of an upfront payment or a series of payments from the private sector.
4. Design-Build-Operate-Maintain (DBOM)	The private sector entity designs, builds, operates and maintains the facility, which is constructed using public sources of financing, returning it back to the public sector at the end of the arrangement for a null or symbolic amount. The private partner bears the construction risk along with the operations and maintenance risks.

(continued)

Legend and notes (continued):

Procurement model	Description
5. Design-Build-Finance-Operate-Maintain (DBFOM) or Design-Build-Finance-Operate (DBFO)	The private partner designs and builds the facility, finances its construction and provides the associated services of operation and maintenance, returning the facility's management to the public sector at the end of the contract for free or at a nominal cost. To the construction, operations, and maintenance risks, to the private partner is added the financing risks. The private partner has access to the infrastructure to provide the contracted services but the ownership remains public. Is also known as classic PPP or labelled as Private Finance Initiative in the United Kingdom (Boardman et al., 2016; IMF, 2004). This model is also known as DBFO (Acerete et al., 2019).
6. Build-Own-Operate-Transfer (BOOT)	The private sector entity owns the facility until the end of the arrangement bearing, along the risks associated with a DBFO scheme, the risks related to property ownership.
7. Build-Own-Operate (BOO)	The contractor assumes the responsibility for the design, financing, construction, operation and maintenance of the facility during the contract period (concession period). At the end of the arrangement, the original contract may be extended or renegotiated or the facility may be acquired by the government in a commercial basis. In substance, it is the privatisation of public services because the ownership of the facility is transferred to the private sector.

✓ It is included in the procurement model as a responsibility of the private partner

✗ It is not included in the procurement model as a responsibility of the private partner

The cells in grey are for PPPs.

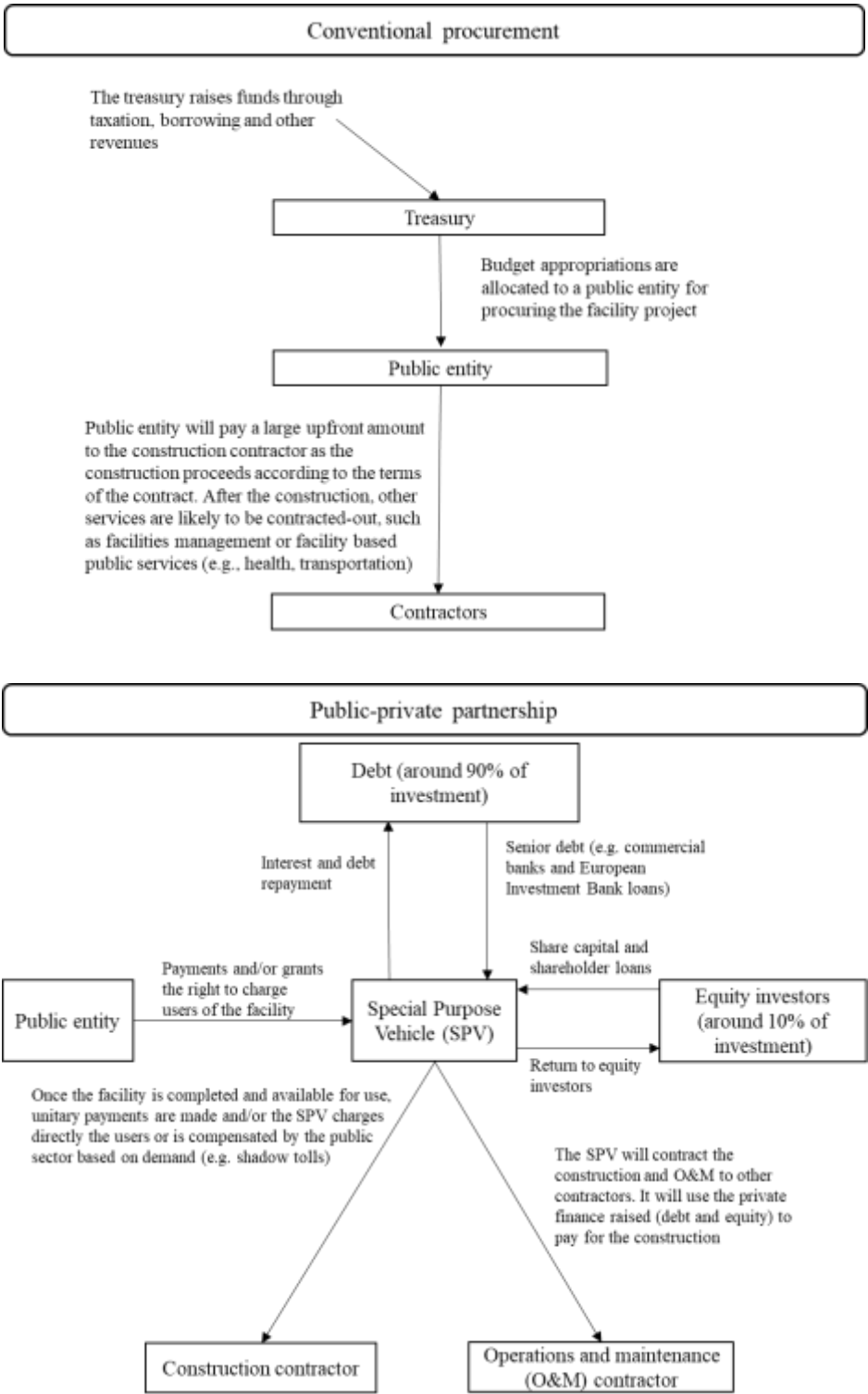
Source: Based on Grimsey and Lewis (2017, pp. 178-229); IPSASB (2008, pp. 10-16); Siemiatycki (2010, p. 45); and Yescombe and Farquharson (2018, pp. 20-22)

In comparison to CPP, bundling of different project phases related to construction and operation of the public infrastructure into a single private sector party responsibility through a contract and the handover of ownership or infrastructure management to the public sector at the end of the arrangement are the defining characteristics of a PPP.

2.2.3.1. The prevailing PPP model

DBFO/PFI (Model 5. in Figure 2.3) is the prevalent PPP option in several jurisdictions (e.g. Acerete et al., 2019; Grimsey and Lewis, 2017; Siemiatycki, 2010), and Figure 2.4 better illustrates its comparison to conventional public procurement.

Figure 2.4: Comparison between conventional procurement and DBFO public-private partnership



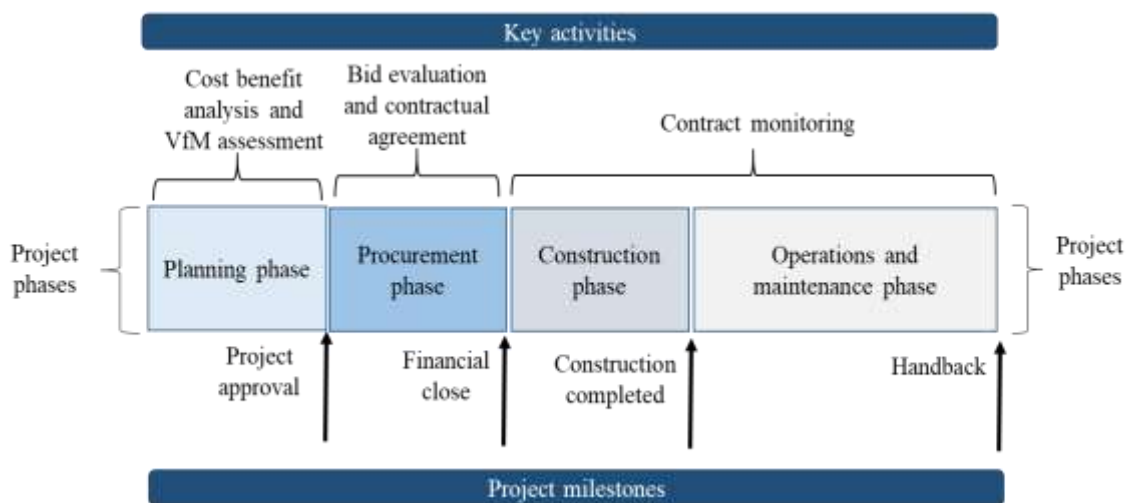
Source: Based on National Audit Office - NAO (2018) and Yescombe and Farquharson (2018)

In a DBFO model, the sponsors' consortium (e.g., constructions firms and banks) of the infrastructure project establish a Special Purpose Vehicle (SPV) in which they jointly held a controlling interest through equity instruments ownership. Any sponsor has a controlling stake in the SPV in order to not fully consolidate the SPV in group accounts. As a separate legal entity, the SPV signs a concession contract with the public sector and subcontracts the construction and facility operations and maintenance. These two subcontractors are, in general, also controlled by the project sponsors (Grimsey and Lewis, 2004, 2017).

Equity represents a small fraction (around 10%) of the capital structure to finance the infrastructure project and providers of debt rely exclusively (non-recourse) on project cash flows for debt servicing according to a project finance structure (Cruz and Sarmiento, 2019; Stafford and Stapleton, 2017; Yescombe and Farquharson, 2018).

A DBFO procurement model has the following main features in chronological terms:

Figure 2.5: Stylized representation of PPP phases and key activities



Source: Adapted from Canadian Audit and Accountability Foundation - CAAF (2015)

The distinctive economic characteristics of this model are: i) bundling into a single concession contract signed with a consortium of firms represented by a specific legal entity (an SPV) different project phases; ii) risk transfer to the SPV; and iii) private finance is part of the arrangement to develop a public facility. We now turn to a brief explanation of the economic rationale for these distinct characteristics.

2.2.3.1.1. Bundling

The combination of activities into a single contract that would be otherwise contracted out separately by the public sector is known as bundling. The assumption is that when two separate firms undertake construction and operation phases, or even if one entity only assumes the construction phase, there are no incentives to invest in design and innovation during the construction phase to optimize whole-of-life costing.

On theoretical grounds, bundling gives incentives to the private sector to take a whole of life approach to the project by searching for efficiency gains that could lower overall costs (Engel et al., 2014). When a SPV undertakes both the construction of a public infrastructure and its subsequent operation for an extended period of time (e.g. 30 years), it has an incentive to make investments in the construction phase in order to reduce cost over the operation phase, thereby improving overall cost-efficiency and, assuming a competitive procurement phase, this will bring down costs for the public sector.

Burger and Hawkesworth (2013) point to a trade-off in the sense that bundling may facilitate the realization of economies of scale and scope, reducing life-cycle costs, but higher levels of bundling may lead to less competition for the PPP contract.

2.2.3.1.2. Risk allocation

The alleged economic advantages of procuring an infrastructure project as a PPP results from the optimal risk transfer to the private partner (OECD, 2008, p. 50). The process of transferring risks from the public to the private sector is the factor that influences whether a PPP is a more efficient alternative to CPP investment and public provision of the related services, demonstrating VfM (IMF, 2004; OECD, 2008; Opara, 2018; Siemiatycki and Farooqi, 2012).

Accordingly, different types of risks associated with different PPP phases should be allocated to the party that is best prepared to manage them, by minimising the overall expected cost of the identified risks. For this purpose, a risk matrix should be elaborated and for that it is necessary to identify, classify, evaluate the impact, ascribe probabilities and define mitigation measures for each risk (Cruz and Marques, 2012).

Yescombe and Farquharson (2018, p. 139) emphasize that in a PPP risks are associated with the uncertainty of outcomes that have a direct impact either on the provision of public services or the financial viability of the SPV. The value of the project risks is also important for assessing the affordability of the project and the VfM of the PPP procurement option.

2.2.3.1.3. Private finance

The introduction of private finance to build public infrastructures by using a PPP scheme accelerated in the UK during the 1990s with the advent of the PFI initiative, a form of PPP, and was followed internationally by other jurisdictions (Edwards et al., 2004; Hodge and Greve, 2017b).

The use of private finance in such projects could be justified upon political and economic arguments. From a political point of view, private finance allows the governments to address public infrastructure needs when facing legal binding limits on debt levels or simply when its use is a matter of policy preference. Furthermore, using private finance along with user charges levied directly on the end users (user-pay schemes) allows the absence of any public funds for the construction and operation phases of the public facility. The economic and more legitimate arguments associate private finance with the delivery of infrastructure on time, on budget and appropriate risk allocation, leading to a more efficient delivery of public infrastructure (Hodge and Greve, 2017b).

Engel et al. (2014) associate the use of private finance as part of a PPP for infrastructure with the development of project finance, where the cash flows of the SPV are expected to cover debt service, and that the nature of the private finance evolves with the different phases of the project, with bank loans more associated with the construction phase and bonds, replacing bank loans through refinancing arrangements, associated with the operation phase.

2.2.4. Affordability and value for money

Affordability and VfM are widely accepted as decision criteria to *ex ante* assess public investment. The consideration of affordability and VfM should be present as decision criteria in any public infrastructure project, regardless of the procurement option, in the

sense that any project should only be implemented if it represents *ex ante* VfM and is affordable (Burger and Hawkesworth, 2013; OECD, 2008, 2017; Shaoul, 2005; Yescombe and Farquharson, 2018).

The choice of the PPP method should be explained and justified with full transparency against the traditional public procurement method and this is being interpreted as demonstrating VfM according to an established methodology. Thus, VfM is the economic argument to choose the delivery of infrastructure-based services as a PPP against the CPP and financing option. Without *ex ante* assessment of VfM using some sort of technology as the public sector comparator (PSC) is not possible to evaluate *ex post* the achievement of VfM.

2.2.4.1. Affordability

Conceptually, from the public budget perspective (budget affordability), “affordability is about whether or not a project falls within the intertemporal budget constraint of government. If it does not, then the project is unaffordable” (OECD, 2008, pp. 37-38). Projects that are deemed unaffordable are not procured due to their lack of financial viability (Burger and Hawkesworth, 2013; HM Treasury, 2018a). From the users of the public facility (users’ affordability), affordability means the willingness and ability of users to pay the charges levied by using the mentioned facility (OECD, 2017; Yescombe and Farquharson, 2018).

According to OECD (2008, p. 43), “a PPP project is *affordable* if the expenditure it implies for the government can be accommodated within the current levels of government expenditure and revenue and if it can also be assumed that such accommodation will be available in the future.” More recently, OECD expanded the concept to include contingent liabilities and users’ affordability, as follows:

A project and portfolio can be said to be affordable if the expenditure and contingent liabilities it entails for the government can be accommodated within current levels of government expenditure and revenue, including user charges, and if it can also be assumed that such levels can be sustained. An asset is affordable for users if they are willing and able to pay for it. (OECD, 2017, p. 29)

Focusing on budget affordability, any infrastructure project should be affordable, regardless of the delivery modality. Affordability means that actual and potential financial

obligations associated with the project fall under the budgetary expenditure limits, are consistent with fiscal objectives and do not crowd out other public expenses.

2.2.4.2. Value for money

There are different definitions of VfM. OECD (2017, p. 29) defines *value for money* as “what a government judges to be an optimal combination of quantity, quality, features and price (i.e., cost), expected over the whole of the project’s lifetime.” Public expenditure delivers VfM if there is economy, efficiency and effectiveness in the acquisition and use of public resources. Economy is the minimization of input costs, efficiency means the maximization of outputs for a given level of inputs and effectiveness refers to the impact of policy, whether or not the outputs produced delivered the intended outcomes or objectives (Burger and Hawkesworth, 2011).

VfM can be measured in absolute or relative terms. In absolute terms, a cost-benefit analysis of a public investment project is done as a way to assess the net benefits that the project will generate for the society. VfM in relative terms is used when the objective is to compare different public investment delivery options. In this situation, certain procurement options may improve VfM for the society compared to other options, depending on a set of factors, such as the public and private sector capabilities and the allocation of risks to the private partner (Burger and Hawkesworth, 2013; OECD, 2017).

In the context of public financial management, VfM means achieving economy, efficiency and effectiveness in the use of public resources. Though, when it comes to PPPs, VfM takes a specific meaning (Shaoul, 2005). In the PPP context, VfM is used to make a procurement decision, to select the procurement model for the infrastructure project and should be assessed in qualitative and quantitative terms (NAO, 2013; Yescombe and Farquharson, 2018).

Qualitative assessment is used to evaluate whether the PPP option will meet the objectives of the project and is a suitable delivery route for the project under consideration and it is not used in comparison to CPP. It is operationalized through questions related to viability, desirability and achievability of the PPP option for a specific project (NAO, 2013). It takes into consideration all aspects of a project that cannot be quantified in monetary

terms, such as the characteristics of the market and the capabilities of the private and the public sectors (Morallos and Amekudzi, 2008).

The quantitative assessment is made by comparing the costs of a conventional procured infrastructure and services delivery by the public sector to the PPP alternative. This comparison is done through the PSC, which we now turn to explain its functioning.

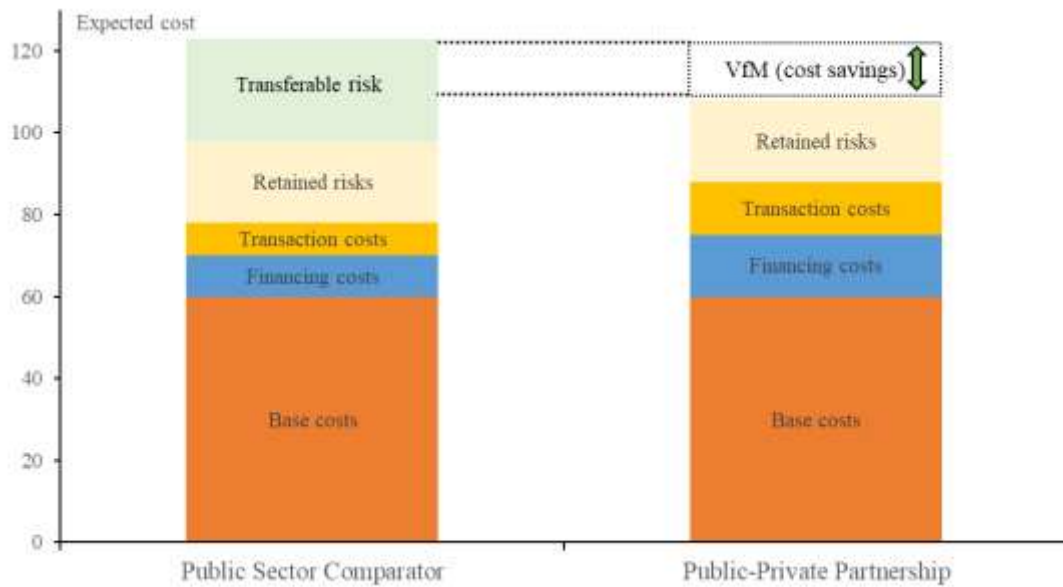
2.2.4.2.1. Public sector comparator

A PPP VfM is usually justified in the form of lower discounted costs over the life of the infrastructure project when compared with the hypothetical discounted costs of CPP measured by the PSC, which represents the costs of direct public provision, and should be comparable in terms of service output and infrastructure asset management (HM Treasury, 2018a).

With this methodology, it is possible to compare the net present cost (NPC) to the public sector of two procurement options and choose the one with lower NPC. PSC is a quantitative methodology to compare the cost of public investment and public sector provision of services with the cost of providing the services through a PPP.

Accordingly, PSC is generally accepted as the benchmark to evaluate the merits of a PPP as an alternative to CPP (e.g. Grimsey and Lewis, 2017; OCDE, 2008; Yescombe and Farquharson, 2018). There are different models for calculating the cost of the PSC, although some common principles prevail (NAO, 2013; Morallos and Amekudzi, 2008). In general terms, PSC comprises the cost elements presented in Figure 2.6 compared to the same cost elements when a PPP is considered as a procurement option.

Figure 2.6: Procurement options expected costs to the public sector



Source: Based on Grimsey and Lewis (2005), Opara (2018) and Siemiatycki and Farooqi (2012)

This schematic presentation illustrates that the present value of CPP is higher than the present value of using a PPP to deliver a project with the same quantity and quality requirements and also with equal duration. That difference is the VfM of the PPP option over CPP.

Let's now turn to a brief description of the elements included in the financial appraisal. Base costs (or raw PSC) are the costs of resources (inputs) and are similar in both options. These include: construction costs spread over the construction period and lifecycle costs of maintaining and operating the infrastructure (Grimsey and Lewis, 2005; NAO, 2013; Yescombe and Farquharson, 2018). The present value of financing costs is lower in CPP than in PPP, reflecting the higher cost of private finance (e.g. equity, bank loans, corporate bonds) compared to the same public-financed project. This difference has been labelled as the "PPP premium" (Engel et al., 2014; Hodge and Greve, 2017b, 2019; Yescombe and Farquharson, 2018). A PPP is a complex form of procurement and contracting out of public services and, as such, the present value of transaction costs are higher (Boardman et al., 2016; Edwards et al., 2004; Hodge and Greve, 2019).

The higher cost of private finance over public finance along with higher transaction costs of the PPP option can result in VfM if its benefits, such as the value of the risks transferred to the private partner, outweigh these higher costs. The allocation of risk to the party that

is best placed to manage it establishes the main rationale for public procurement through PPPs (CAAF, 2015; ECA, 2018).

All material risks across the project phases should be identified, its consequences quantified, probabilities of occurrence for each risk estimated, priced and the desired allocation established.

Figure 2.6 above shows that risks affecting the project should be priced. The price of each risk is the amount the public sector is willing to pay to be relieved of and the private sector accepts that price to assume transferable risks (IMF, 2006). It also indicate that only after the valuation of the risks transferred to the private partner, not being retained by the public sector, does the PPP option have a net present cost advantage over CPP, as represented by the PSC option.

Consequently, the risk transferred to the private partner is the crucial element in assessing the *ex ante* VfM because is it that allows a PPP to have a cost advantage over CPP and there are grounds to critical view the risk allocation and measurement process (Shaoul, 2005).

Risks associated with design, construction, finance, operation and maintenance of the public facility include those which public sector would bear under CPP but probably will be transferred to the private sector (transferable risk) and those which will remain under public sector management (retained risk) (Grimsey and Lewis, 2005; Morалlos and Amekudzi, 2008). The value of transferable risk in the PSC appraisal measures the present cost the public sector expects to incur for that risk over the length of the project. Retained risks are the same in both procurement options because they are the risks the public sector would be exposed to regardless of the procurement option (Morалlos and Amekudzi, 2008).

2.2.5. Public accountability

2.2.5.1. Defining public accountability

Accountability is a cultural keyword with many meanings, types, dimensions and has evolved over time (Day and Klein, 1987; Dubnick, 2014; Sinclair, 1995; Shaoul et al., 2012a). There are two stylized approaches to public accountability definition. The first, a normative conception, defines accountability as a virtue, serving as an umbrella concept to study the behaviours' of actors in account-giving position according to ethical and moral expectations. The second, a prescriptive conception, defines accountability as a mechanism, a social relationship between two actors, one serving the role of account-giver (accountor) and the other is in charge of holding to account (accountee), and the outcomes of this relationship depend upon a set of accountability arrangements with associated mechanisms (Bovens, 2010).

Other authors labelled accountability as a "magic concept" based on the following characteristics (Pollitt and Hupe, 2011, p. 643): i) broadness, by its wide scope and connection with many other concepts; ii) normative attractiveness, because of its positive connotation; iii) consensual, because it obscures the existence of conflicting logics; and iv) globally fashionable, being part of policy documents, the theme for academic conferences, frequently used in titles of academic work. One of the risks of a "magic concept" is it to become analytically useless because of the difficulties associated with its operationalization (Pollitt and Hupe, 2011).

Behn (2001, p. 196) captures the complexity of the concept by raising several questions:

What is accountability? Is it answerability – the public official's duty to explain and justify actions? Is it rules – a mechanism for preventing public officials from violating the public interest? Is it punishment – our collective need to penalize violations of the rules? Is it saluting – the faithful implementation of orders from hierarchical superiors? Or might it be responsibility – the moral obligation to work collectively with public employees, collaborators from nonprofit and for-profit organizations, and citizens in pursuit of the public interest?

However, there is no unanimously accepted definition of accountability. Gray and Jenkins (1993, p. 55) describe accountability as a relationship where one party has an obligation to present an account and answer for the execution of responsibilities to those who

entrusted those responsibilities and are in a position for the allocation of praise and blame, reward and sanction, so often seen as the tenets of accountability in action.

In this thesis, we consider Bovens' (2007, p. 450) definition of public accountability, enhanced by Willems and Van Dooren (2011, p. 509) as:⁶

a relationship between an accountant and an account-holder [accountee] in a particular public forum, in which the accountant has an obligation to explain and to justify his or her conduct, the account-holder [accountee] can pose questions and pass judgment, and the accountant may face consequences.

This definition views accountability as a mechanism as it is usually associated with executing different types of responsibilities and being answerable for them. The public forum represents the context in which a specific accountability relationship evolves and it may be of a different nature.

Accountability as a mechanism essentially consists of three elements: information provided by the accountant to the accountee; a debate between them; and judgment, eventually with consequences imposed by the accountee on the accountant. It can also be seen as a process with three stages: i) provision of information; ii) discussion in the public sphere; and iii) consequences for the accountant imposed by the accountee (Mulgan, 2003).

According to this perspective of accountability, each accountability phase is served by different mechanisms. For instance, accounting, reporting and auditing are mechanisms for the information phase, which is crucial for the other phases' operation and their associated mechanisms (Schillemans, 2011).

Building on Stewart (1984), establishing a public accountability relationship implies the accountant to give information to the accountee and a relationship of power between the parties, the accountant who has to provide information, explanations and justifications and

⁶ In Portugal (as in other countries such as France, Spain or Italy), there is no exact equivalent word for accountability, being sometimes referred as “render accounts” or “responsibility” (Bovens, 2005; Steccolini, 2004).

the accountee, to whom the accountant must give account and has the right to demand such an account (Mulgan, 1997).

To qualify a social relationship as an accountability relationship, we must have: i) a relationship between an accountant and an accountee in a particular public forum; ii) the former is obliged to explain and justify his conduct to the latter according to a specified set of expectations associated with that forum; iii) the latter can pose questions and pass judgment by the allocation of praise or blame; and iv) the accountant may face consequences, not necessarily legal sanctions (Bovens, 2007, p. 453; Willems and Van Dooren, 2011, 2012). In addition, public accountability relationships encompass stewardship because the accountant is entrusted with resources that belong to others.

2.2.5.2. Public accountability typologies

Several typologies for public accountability emerge from different perspectives and dimensions (Bovens, 2005, 2007; Mulgan, 2003; Romzek and Dubnick, 1987; Sinclair, 1995; Willems and Van Dooren, 2012). These typologies are constructed around specific elements that are part of any accountability relationship which are described in the following paragraphs. More precisely, each public accountability relationship can be classified based on the following questions: i) "who is accountable?"; ii) "to whom is the accountant accountable?"; iii) "for what is accountable?"; iv) "by which standards?"; and v) "why is accountable?" that lead to different typologies (Bovens, 2007; Bovens et al., 2014).

Different accountees demand diverse information and use various criteria and mechanisms in evaluating the accountant conduct or behaviour, which leads to different types of accountability according to the nature of the accountee or to whom the accountant renders an account. Based on previous academic work, we designed Table 2.2 describing the mentioned types (e.g. Bovens, 2007; Bovens et al., 2014; Grossi and Thomasson, 2015; Romzek and Dubnick, 1987; Sinclair, 1995; Willems and Van Dooren, 2011, 2012).

Table 2.2: Types of accountability according to accountee's nature

Accountee	Type of public accountability	Features
Elected representatives, Political parties and noters	Political	Accountability is exercised along the chain of principal-agent relationships. Voters delegate their power to elected politicians who, in parliamentary democracies, delegate to a government (cabinet of ministers). The ministers delegate many of their responsibilities to public administration entities with some degree of autonomy. The mechanism of political accountability is an upward one, right in the opposite direction of delegation. In countries like Portugal and the UK, public officials are accountable to the minister, who in turn is accountable to parliament. At election time, the elected politicians render a political account to the citizens-voters.
Organizational superiors and minister	Bureaucratic or managerial	There is a chain of command up to the responsible minister, and there are codes and norms to comply within the bureaucratic context. This is also called hierarchical accountability, where relationships are vertical in nature.
Courts	Legal	It's accountability to the courts by politicians, public managers and civil servants in cases covered by the scope of the judicial system. Can be civil courts (UK) or specialized administrative courts (Belgium, France and Portugal). In severe instances, penal courts. It's the most unambiguous type of accountability because legal scrutiny is based on specific laws and regulations. Countries with Napoleonic tradition also have a Court of Audits (e.g. France and Portugal).
Auditors, Inspectors and Controllors	Administrative	Quasi-legal forums by executing administrative and financial control. Control the probity, legality, efficiency and effectiveness. Financial and administrative scrutiny is based on specified laws, regulations and norms.
Professional Peers	Professional	Codes with ethical standards for acceptable practice that are binding for all members. Monitoring and enforcement of standards by committees composed by professional peers.
Interest groups, Charities and other stakeholders	Social or horizontal	Accountability relations between public sector organizations and clients, citizens and civil society organizations. Public entities and managers feel obliged to account for their performance to civil society organizations or to the public at large, considering that the rise of the Internet has given new avenues of this form of accountability. Social accountability practices are associated with account-giving behaviour in the absence of any formal obligations, which may be related to reputation concerns on the accountor (Busuioc and Lodge, 2016).

Source: Based on Bovens (2007), Bovens et al. (2014) Grossi and Thomasson (2015), Romzek and Dubnick (1987), Sinclair (1995), Willems and Van Dooren (2011, 2012)

Table 2.2 shows that the type of accountability is dependent on the nature of the accountee to whom the accountor is required to render an account. The forums that emerge from these parties typically need diverse types of information and apply different criteria in passing judgment (Bovens, 2007).

Moving to about what is the accountor "accountable for", about which aspect of its conduct is obliged to explain and justify different questions helps us to frame the scope of the content for the accountability relationship: is public accountability for proper behaviour, for compliance with laws and regulations, for improving performance or for addressing the broad expectations of society? Bearing in mind these different dimensions, a typology emerges in Table 2.3 according to the accountability relationship's content (Behn, 2001; Bovens et al., 2014; Funnell et al., 2012; Mulgan, 2003).

Table 2.3: Types of accountability according to the content

Content	Type of public accountability	Features
Fairness	Compliance accountability	Rules, procedures and standards enact some processes that, if followed, ensure that public officials acted according to fairness and equity expectations codified in those norms. The scope is the adherence to proper procedures in compliance with ethical values and democratic norms. It is also labelled as process accountability. There is a concern with norms of conduct and behaviour of those entrusted with public power and resources. Records should be kept for the processes executed and subject to administrative and judicial review in case of any suspicion related to lack of propriety in terms of public officials' behaviour.
Finances	Financial accountability	Public money should be used in accordance with authorizing legislation and established rules and procedures. These form the expectations for how public officials will handle public resources with stewardship. There is a creation of rules, procedures and standards that set out the expectations about how public officials (elected, appointed, or civil servants) will handle public resources. The rules, procedures and standards are the codification of the values that must be upheld, such as regularity and legality. Reporting mechanisms are created to demonstrate that the rules, procedures and standards have been followed, and a separate audit function has the role in checking whether those rules, procedures, and standards have been implemented. The process of creating accountability for finances has many similarities with the process of creating accountability for fairness.

(continued)

Table 2.3: (continued)

Content	Type of public accountability	Features
Performance	Performance accountability	This type of accountability is concerned about the consequences of public sector intervention in terms of what public purposes are being accomplished. Accountability for fairness and finances reflect concerns about how public processes are carried out. In contrast to accountability for fairness and finances, expectations about performance could not be codified in rules, procedures and standards. The results to be produced have to be specified with some sort of objectives, indicators and targets, against which the performance will be assessed. According to this type, it should be disclosed information about what is being accomplished. It should be demonstrated adherence to the expectations of citizens in terms of results. It relates to accountability for the economy, efficiency, and effectiveness in the use of public resources. Policies evaluation and performance audits usually are the instruments to verify the execution of this type of accountability. It is also labelled as outcome accountability.

Source: Based on Behn (2001), Bovens et al. (2014), Funnell et al. (2012) and Mulgan (2003)

Behn (2001) suggests that accountability for fairness and finances share the common objective to control those acting as representing the citizenry regarding the use and abuse of power, reflecting concerns about how public funds are used and the fair treatment of all citizens. The author argues that attempting to address the three types of accountability simultaneously may create dilemmas in terms of a trade-off between accountability for process (fairness and finances) and performance. The author also suggests that there is an accountability bias towards accountability for fairness and finances because: i) it's easier to verify the proper application of rules, procedures and standards; and ii) expectations about accountability for performance are more loosely defined and subjective.

Based on the content or object (the "what" question) of a public accountability relationship, some authors portray accountability as different levels that seem like a ladder where the first level of accountability supports the following one and so on up to the final level. For each level, also called dimensions of accountability, should be disclosed different information (Funnell et al., 2012; Laughlin, 2008; Stewart, 1984). According to this perspective, there is a chain of accountability levels where each one overlaps and reinforces preceding and following ones. At the bottom of the chain is the concern with meeting the processes' requirements, associated with accountability for

fairness and finances. At the top should be demonstrated the effectiveness of policies and programs, with a political nature and associated with broader society's expectations.

In terms of standards by which the conduct of the accountant is to be evaluated by the accountee, in their seminal paper, Romzek and Dubnick (1987) put forward that accountability is about managing different expectations about the accountant's decisions and behaviour, sometimes conflicting ones. Some of these expectations are translated into laws, regulations, or standards, and others are occasionally diffuse and intricate. Though, the evaluation of the conduct of the accountant in the accountability forum needs to be standardized. For this purpose, there are standards on the content, role, context and nature of the accountee, and they act as expectations associated with different types of accountability as described above. Accordingly, such expectations can be based on hierarchies and deference to organizational or political superiors (bureaucratic accountability); legal norms or rules (legal accountability); codes of ethics, professional norms and standards (professional accountability); or political demands (political accountability).

The last question is, "why would an actor (accountant) render an account to another actor (accountee) in a public forum?" The nature of the obligation between the accountant and the accountee can be legal, where the accountant is forced to discharge it, or voluntary, in case the accountant chooses to enter in an accountability relationship, rendering an account. Based on the nature of the obligation, three types of accountability are identified (Bovens, 2007; Bovens et al., 2014), summarized in Table 2.4.

Table 2.4: Types of accountability based on the nature of the obligation

Obligation's nature	Type of public accountability	Features
Mandatory	Vertical accountability	The accountee formally exerts power over the accountor. That power's present in hierarchical accountability. This type is also present in political accountability arrangements, which are based on the delegation of principals to agents. Also, in most cases of legal accountability, the accountee, based on laws and regulations, has the authority to ask the accountor to render an account. Finally, the above-mentioned power exists in professional accountability, where disciplinary committees may call the accountor to explain its conduct and actions.
Voluntary	Horizontal accountability	There is no hierarchical relationship between the accountor and the accountee and no latter's power to call the former to explain and justify his/her conduct. Giving accounts to various stakeholders in society occurs voluntarily. It also occurs when the government shares responsibilities with the private sector in the delivery of public services, such in the case of PPPs
Indirect	Diagonal accountability or quasi-voluntary forms of accountability	This type lies in between the other two. Administrative accountability accountees have no direct power over the accountor but normally report to the minister or to the parliament, having a somewhat indirect power over the latter.

Source: Based on Bovens (2007) and Bovens et al. (2014)

2.2.5.3. Public accountability consequences

Public accountability refers to the public sector and underpins democratic governance because democracy cannot exist if those acting on behalf of the citizens (e.g. politicians and public managers), cannot be held accountable in public for their actions, omissions, decisions, policies and expenditures. The account rendered on a public accountability relationship should be open and accessible to citizens and their representatives (Bovens, 2005).

Nevertheless, it's not taken for granted that public accountability is only associated with positive consequences, as Warren (2014, p. 44) states that “any system of accountability will have inflection points at which accountability degenerates into mutual suspicion and

intrusive surveillance, undermining the very agent capacities that would be held to account."

Halachmi (2014) points to cases where arrangements to secure public accountability in its various forms could become dysfunctional when good intentions end up in accountability pathologies.

2.2.5.3.1. Positive consequences

Some authors (Bovens, 2005, 2007; Bovens et al., 2008; Schillemans, 2011) argue that public accountability has positive consequences because it serves functions of democratic control (democratic perspective), enhances the integrity of public governance, by preventing the concentration of power (constitutional perspective) and improves performance (learning perspective). Along with these direct functions, Bovens (2007) identifies legitimacy and public catharsis as indirect ones. Each of them is now tackled in turn.

According to the democratic perspective, accountability mechanisms enables democratically legitimized principals in the chain of delegation mentioned before to monitor and evaluate the agents in that chain, and whether they also follow the democratic principals' preferences. Under this perspective, correct, timely and relevant information should be available to voters, parliament, and other representative institutions about the executive power's conduct (Bovens, 2010; Bovens et al., 2008).

When it comes to the constitutional perspective, the main consequence of accountability is preventing corruption and power abuse by setting up accountees with clear mandate and resources to control the executive power in terms of adherence to the rule of law. To realize this consequence, accountees should be independent of the executive and have legal investigative powers to reveal corruption and prevent abuses of public powers. The associated sanctions system should be strong up to the point that it prevents those negative behaviours (Bovens, 2010; Bovens et al., 2008).

Finally, in terms of direct consequences, accountability mechanisms may also be designed to provide innovation and learning incentives in public governance and management (Aucoin and Heintzman, 2000; Schillemans, 2011). This learning

perspective for accountability is related to the presence of accountability mechanisms that induce reflection and learning by both accountors and accountees towards more effectiveness in achieving prescribed outcomes, efficiency and responsiveness to citizens aspirations (Bovens et al., 2008; Schillemans, 2011).

Moving to the indirect consequences of accountability, firstly, accountability mechanisms assure that accountors remain on a virtuous path, which makes a contribution to the legitimacy of those to whom public powers and resources were entrusted (Bovens, 2007, 2010). Secondly, in tragic situations, such as major accidents, political wrongdoing, processes of rendering accounts in public through courts or parliamentary inquiries may have a purifying function in the sense that accounts create an opportunity for redress, penitence and forgiveness, which could provide public catharsis in terms of social and political accommodation (Bovens, 2007, 2010).

2.2.5.3.2. Negative consequences

Although public accountability is generally seen as positive, there are also possible negative consequences or dysfunctions resulting from the so-called accountability overloads or excesses (Bovens et al., 2008; Halachmi, 2014). Authors like Bovens (2005) and Bovens et al. (2008) have identified rule-obsession, proceduralism, rigidity, politics of scandal and scapegoating as adverse effects of public accountability. If it is pursued too strictly, it may lead accountors to avoid risk-taking, not innovate, support costs with red-tape, behave in a blame avoidance manner, or pass responsibility to another person or organization.

Halachmi (2014, p. 561) offers us a synthesis of pathologies resulting from accountability overloads identified in the literature. High costs dedicated to accountability activities, excess of audits, less innovation, risk-aversion, focus on short term success, gaming, blame games and multiple accountabilities that could invoke conflicting expectations are illustrations of dysfunctional pathologies of accountability overloads.

There is public accountability literature suggesting that there is an accountability paradox in the sense that more accountability arrangements and mechanisms do not contribute to the positive consequences of accountability (e.g., Bovens, 2005; Bovens et al., 2008;

Dubnick, 2005; Halachmi, 2014). Bovens et al. (2008, p. 229) argue that some characteristics of an accountability regime – seen as the web of accountability arrangements surrounding the accountor – could lead to dysfunctions. Therefore, an accountability regime is more likely not to reach its purposes if: i) imposes account-giving demands on accountor which are beyond reasonable, considering time and resources limitations; ii) contains several expectations about the conduct of the accountor that are inherently conflicting; and iii) is based on performance standards highly sophisticated and conducive to defensive behaviour and goal displacement.

2.2.5.4. Accountability and transparency

The main objective of this point is to explore the relationship between accountability and transparency. Subsection 2.1.1 provides a definition of transparency, portraying it as an instrumental value, as a mechanism for public accountability rather than a substantial intrinsic one, as a virtue, such as being a human right (Birkinshaw, 2006; Heald, 2006a, 2012; Meijer, 2014).

Heald (2003) argues that transparency is not necessarily good because it can lead to less effectiveness in terms of achieving policy objectives, suggesting an optimal level of transparency that is lower than complete transparency. Metaphorically, the author suggests that transparency has the positive effects of sunlight (acting as a disinfectant) and dysfunctional effects from over-exposure, meaning that transparency has limits imposed by other values such as confidentiality, privacy and anonymity (Heald, 2003, 2006a).

When it comes to the conceptualization of transparency, Heald (2006b; 2012; 2016) elaborates on transparency's directions and varieties. Considering directions, transparency has vertical and horizontal dimensions. In the vertical dimension, transparency can be classified as upwards or downwards. Upwards vertical transparency is enacted in terms of hierarchical (or principal-agent) relationships, in circumstances where the hierarchical superior (also a principal) has information or can observe the behaviour and results of the hierarchical subordinate (or agent). Downwards vertical transparency occurs when the hierarchical subordinate (or agent) can observe or has information about the behaviour of the hierarchical superior (or principal). In a

democratic setting, this means that the rulers should be transparent towards the ruled. Where the two forms of transparency are present, there is symmetrical (or reciprocal) vertical transparency. When we look at the horizontal dimension, transparency can be classified inwards or outwards. Inwards transparency is whether governments' activities and effects are visible from the outside. Outwards transparency is necessary for public officials to understand and navigate their external environment. Also, there is symmetrical horizontal transparency when the two forms are present and the author concludes that fully symmetric transparency is presented when the four directions coexist.

Moving to the varieties of transparency, Heald (2006b; 2012; 2016) identifies three dichotomies: i) event and process; ii) nominal and effective; and iii) in retrospect and in real-time.

Event transparency is associated with the disclosure of information about inputs, outputs and outcomes, assuming that these are measurable. These events are linked by processes in which transparency is disaggregated into procedural and operational components. The procedural component relates to the public disclosure of rules, procedures and standards adopted. The operational component of process transparency is associated with the release of information about the work effectively done inside the organization by applying the adopted rules, procedures and standards.

The difference between nominal transparency and effective transparency is what Heald (2003) calls the transparency illusion. The nominal transparency may be increasing according to some index, but the underlying reality may be different. For transparency to be effective, there must be users capable of processing, interpreting, disseminating and using the information that transparency made available.

Transparency in retrospect means that the information is released after which an account is prepared and rendered in public, opening an accountability window in which the agent is held accountable by the principal or principals. The accountability window lasts for some time, and afterwards, the agent concentrates on its operational activities. In transparency in real-time, the accountability window never closes, and the internal processes are continuously disclosed. The expectation is that transparency in real-time is

more dysfunctional and costly and more likely to lead to unintended negative consequences (Heald, 2018).

Opposing with the idea that underpins some disclosure indexes, where more disclosures enhance transparency, which is beneficial *per se* (transparency as a value in its own right), Heald (2016) argues that the ways transparency is constructed by the combination of directions and varieties have differential results and induce contrasting behavioural responses.

A stream of the literature analysed the relationship between transparency and accountability (e.g., Ferry et al., 2015; Hood, 2010; Meijer, 2014; Mulgan, 2014b). Notably, Hood (2010) developed a framework for analyzing the relationship between transparency and accountability according to different worldviews. There is a general consensus that the two concepts are associated with good public governance⁷, and their relationship might be seen as: i) they are considered the same thing (“Siamese twins”); ii) they are separate values that positively complement one another, working in parallel in the achievement of good public governance, where transparency is considered a necessary condition for accountability (“matching parts”); and iii) sometimes there are tensions between them, not being complementary concepts and are in conflict with each other under specific circumstances (“awkward couple”). For example, De Fine Licht (2019) notes that transparency may lead to a “box-ticking” mentality rather than true answerability by the accountor towards the accountee. In this view, transparency may be simply an exercise of data dissemination without improving accountability or governance because the accountee does not have the capacity and time to process, analyse and use that data (Ferry et al., 2015).

⁷ For CIPFA and IFAC (2014, p. 8), in the public sector “governance comprises the arrangements put in place to ensure that the intended outcomes for stakeholders are defined and achieved.”

IIA (2012, p. 5) distinguish corporate and public governance as follows: “Governance is defined as the combination of processes and structures implemented by the board to inform, direct, manage, and monitor the organization’s activities toward the achievement of its objectives. In the public sector, governance relates to the means by which goals are established and accomplished. It also includes activities that ensure a public sector entity’s credibility, establish equitable provision of services, and assure appropriate behavior of government officials - reducing the risk of public corruption.”

Furthermore, Hood (2010) used the grid-group cultural theory's insights to demonstrate that no universal answer about the relationship between transparency and accountability exists. Indeed, four fundamental worldviews - or ways of life in Hood's words -, are identified and they encapsulate competing views of accountability and transparency, which affect the relationship between those concepts. Accordingly, Table 2.5 briefly describes each worldview perspective, how accountability and transparency mean from each perspective and their associated relationship.

Table 2.5: Worldviews effects on accountability and transparency notions and relationships

Worldview perspective	Type of accountability	Transparency regime
Hierarchist Social interactions are governed by explicit rules, and the group absorbs the individual. The authority is objectively allocated to collective social actors.	Vertical and upwards towards bureaucratic or political principals. Accountability is concerned with the proper implementation of the rules defined by the relevant authorities.	Specific rules govern the disclosure of information based on the needs of each established authority. To achieve accountability in the hierarchy line, appropriate information is gathered to overcome principal-agent issues. At the outset, there is no need for general transparency. Transparency is conceptualized as an instrumental value (matching part) for accountability.
	Relationship: Matching parts. Also, the possibility for an awkward couple where transparency requirements may lead to defensive and one-way communication rather than true answerability towards the accountee.	
Egalitarian Social interaction is less governed by explicated rules and the group, as in the hierarchist perspective, dominates the individual.	Vertical and downwards towards the people or community as a collectivity. Accountability means answerability in which everyone's conduct is available for the scrutiny of everyone's else.	Full transparency without limitations according to the level of authority or suitability of the information for a certain purpose. General transparency is the norm, with blurred lines between public and private life. Transparency is conceptualized as a human right rather than a mechanism for achieving other objectives.
	Relationship: Siamese twins.	

(continued)

Table 2.5: (continued)

Worldview perspective	Type of accountability	Transparency regime
Individualist There is no group dominance over the individual and social interaction is not approached by a set of explicit rules. In contrast with hierarchists and egalitarians, collective needs are not considered above individual ones.	Horizontal accountability through contractual relationships and no reliance on accountability to collective bodies. For an individualist, accountability is ultimately to oneself, where the collective element is minimized.	Transparency is limited by rights to privacy, intellectual property and commercial confidentiality. The information to be disclosed is one that facilitates the individual's choices or entering into contracts. Transparency is viewed as a way to attain accountability from an individualist perspective.
	Relationship: Matching parts. It could be an awkward couple if the information disclosed is inadequate for the purpose in the sense that is contrary to the individualist way of life.	
Fatalist The only certainty in life is that there is no certainty. The social world is seen as predominately uncertain, indeterminate and capricious.	Unpredictable, in a haphazard mixture of all the types of accountability. There are no prior expectations for accountability.	Transparency happens as a product of the circumstances. Unintended consequences are the norm and no results about the role of transparency are anticipated.
	Relationship: Any of the three relationships. There is no reliable connection between transparency and accountability. It's hard to determine which type of relationship is likely to come out because of the lack of predictability in human and social affairs.	

Source: Based on Ferry et al. (2015) and Hood (2010)

Meijer (2014) proposes a different approach to the transparency-accountability relationship by the identification of direct, indirect and inverse relations between transparency and accountability. Transparency is considered to directly impact horizontal accountability by providing citizens, the press, civic associations, and other stakeholders with better access to information. The indirect impact of transparency on accountability is that it strengthens vertical accountability to hierarchical superiors by acting as a fire alarm for formal accountees. In this situation, the disclosure of information, usually by putting raw data in machine-readable format into the Internet, increases transparency that provides the stakeholders an opportunity to scrutinize the public sector, and any wrongdoing will be made public, creating an opportunity for formal accountees to intervene. Finally, an inverse relationship may occur when transparency reduces the need for accountability, when the latter is narrowly conceived as answerability (Hood, 2010, p. 990). In this case, there is no need for the existence of potential formal sanction upon the accountor because transparency is considered itself to act as a sanction, as a tool for public disapproval (or approval). Transparency is a sufficient instrument to assure that

accountors abide by the expectations, rules and standards imposed on them, reducing the need for accountability for this purpose.

As a sort of conclusion for this point is somewhat consensual that at the heart of any accountability relationship is the availability of information which, in turn, depends on the level of transparency. Transparency is subsidiary to accountability (Pollitt and Hupe, 2011; Mulgan, 2014b).

2.2.5.5. Public accountability of PPPs

PPPs, due to their hybrid nature, face specific issues and challenges because the traditional model of public accountability that assumes a vertical chain of accountabilities throughout different layers, and public services being delivered by public servants does not hold (Demirag and Khadaroo 2013; Demirag et al., 2004; Forrer et al., 2010; Grossi and Thomasson, 2015; IPPR, 2001; Skelcher, 2005; Shaoul et al., 2012a; Willems and Van Dooren, 2011).

Grossi and Thomasson (2015) pointed out that the questions “who is accountable to whom” and “for what is accountable” are more difficult to answer in the case of hybrid organizations. For the first question, unlike the traditional view that accountability was secured through vertical arrangements (traditional bureaucracies), there is the need also to ensure horizontal accountability in the relationship between the elected representatives of the citizens and the hybrid organization, and in the customer relationship between the citizens and the hybrid organization. Regarding the second question, hybrid organizations may face a conflict of interests because they also expect to behave in a market fashion, with a profit motive. What is assumed is that the new two relationships brought by hybrid organizations (horizontal accountability relationship and customer relationship) are accountable through market mechanisms that focus mainly on financial performance, not on the creation of public and democratic values, which is the focus of the public sector.

Therefore, one could ask whether market mechanisms are sufficient to secure public accountability. On the one hand, some research (e.g. Agyenim-Boateng et al., 2017; Shaoul et al. 2010) suggests that the PFI and the Local improvement Finance Trust (two different PPP schemes used in the UK) paved the way to increasing lack of transparency

and accountability for public spending because there are reporting problems that create the potential for opacity and mismanagement. On the other hand, Grossi and Thomasson (2015) argue that there is no problem with the structures of accountability for hybrid organizations and that the problem lies in the implementation process for securing public accountability. In general, as stated in Rainey and Chun (2005), to some extent, PPPs blurred the boundaries between the private and the public sector, raising new transparency, accountability and governance issues given the difficulty of having a clear distinction between the private and public sectors.

Shaoul et al. (2010) recall that there are two long recognized accountability streams in the public sector: an upward, that is ultimately to the parliament and the electorate; and a downward, to the citizens as users of the public services. PPPs imply a third and horizontal stream, from the private sector providers of public services to the public procuring entity. They criticize the public sector accountability framework given the adoption of private sector governance practices that privilege upward accountability, based on agency theory, at the expense of both downward and horizontal accountability.

As mentioned in Chapter 1, one of the NPM doctrine objectives is the private sector's involvement in delivering and managing infrastructure-based public services, and contractual PPPs is a policy tool to achieve it. As Figure 2.1 shows, PPPs imply establishing a new accountability stream, from the private sector service provider to public sector institutions, along with vertical streams to parliament and the general public (Shaoul et al., 2008; 2012a).

In order to address multiple expectations, PPPs are surrounded by different public accountability arrangements which are connected to different stages of the project (Demirag et al., 2004). These accountability arrangements constitute various types of interrelated accountabilities, which are expected to have an impact on the project outcomes, as summarized in Table 2.6.

Table 2.6: PPPs different accountabilities

Type of Accountability	Description	Mechanisms	Outcomes
Contractual	Translate in contract clauses the expectations agreed with stakeholders, standards of performance, revisions and enforceability.	Output specifications. Penalties. Legal system.	Fulfilment of the stakeholders' needs and clarification of expectations and objectives.
Managerial	Structures and contract management capabilities are in place.	Operational and strategic review meetings involving all interested parties. Performance reporting.	Assessing the suitability of the PPP in meeting the needs, expectations and objectives.
Communal	Responsiveness to the needs of stakeholders (e.g. users, local communities, interest groups).	Consultation process during the procurement and implementation stages.	Legitimacy about the policy of choosing a PPP over conventional public procurement.
Political	Parliament, which represents the public interest, scrutinizes the policies pursued by the Executive government.	Public audits. Annual reports. Parliamentary committees.	Audit recommendations, identification of best practices and lessons to take into consideration in policy development.

Source: Based on Demirag et al. (2004) and Demirag and Khadaroo (2011, 2013)

Forrer et al. (2010) argue that to assess and improve a PPP's public accountability, six dimensions should be considered, and each of them suggests different issues to address, as Table 2.7 describes.

Table 2.7: PPP's public accountability dimensions

Accountability dimension	Rationale	Accountability issues
Risk	A major argument for entering into a PPP contract is the shift of risks (and costs) traditionally retained by the public sector to the private partner.	Project risks are identified and allocated to the party that is in the best position to manage them. What risks should be retained by the public sector.
Costs and benefits	In order to determine which project is appropriate to follow as a PPP, a comprehensive system of cost-benefit analysis should be in place.	All the costs and benefits are considered in evaluating the PPP option to deliver public services, including the estimated costs over the length of the contract. Contingent plans to protect the public interest are in place to address unforeseen circumstances in terms of cost-benefits realization.
Social and political impact	The services provided should meet stakeholders expectations, and the socio-economic impacts should be considered at the early phase of the project. Without considering stakeholders expectations, political consequences may unfold.	The different impacts are identified, discussed and negotiated with the relevant stakeholders.
Expertise	The expertise that the private sector will bring into the arrangement should be clearly specified, and the public sector need to have absorption capacity of the private sector experience and knowledge.	The expertise is effectively specified in the public procurement process and the contract has enforcement clauses that assure expertise monitoring and transfer.
Partnership collaboration	For PPP outcomes to be reached, it is necessary effective leadership, clear communication between the contracting parties and towards stakeholders, effective project management and a culture of trust.	Contract clauses should leave room for flexibility, promote coordination and innovation. Devise a strategy for developing and sustaining open and candid communication among stakeholders.
Performance measurement	The definition of a set of performance measures related to the project's implementation and outcomes can help ensure the overall PPP performance.	Performance measures are agreed at the outset by the parties to the contract and should demonstrate how the private partner is performing against the public sector and stakeholders' expectations. Responsibility for monitoring and evaluating performance data should be assigned.

Source: Based on Forrer et al. (2010)

IPRR (2001) notes that all public service providers – including PPPs – should be subject to the same standards of accountability. The development of a framework to make PPPs accountable should be underpinned by the principles of transparency, responsibility and

responsiveness. For transparency, the same standards of disclosure should apply to all public service providers, and arguments of commercial confidentiality should not be used to restrict transparency. Responsibility means that there are no doubts about who is responsible for what, allowing citizens to know where they should go for the purpose of redress, whether they have concerns about the service they received as users or have more general issues as citizens. Finally, responsiveness is associated with public service providers adaptation to reflect citizens' needs, priorities and expectations. These principles are meant to inform the different web of accountabilities surrounding a PPP project in all its phases.

Regarding the PPPs, one could suggest that accountability for finances and performance encompasses showing that they deliver VfM and are affordable (Behn, 2001; Yescombe and Farquharson, 2018). Disclosure of information through the external reporting system is a paramount requirement to achieve public accountability in its various types (Shaoul et al., 2012a).

2.2.6. Accounting for PPPs⁸

PPPs raise specific public sector accounting issues. This subsection aims to provide a general overview of the accounting treatment of PPPs according to the National Accounts framework and to the public sector financial accounting international standards. As described in the next points, the central issue is the treatment of PPPs in the balance sheet, which can be assessed using two different methods, both discussed below: the risks and rewards method, associated with the National Accounts, and the control method, related to financial accounting. A third method for the balance sheet treatment that differs from the above-referred binary approach, where the service concession asset is on or off the government balance sheet, is the rights and obligations approach (IMF, 2006) that is referred to in the last part of this subsection and it proceeds as follows. The next point describes the treatment of PPPs and concessions for National Accounts purposes, based

⁸ The following publication was based on this section: Viana, L., Moreira, J. A., and Alves, P. (2018), "Accounting for Public-Private Partnerships", In A. Farazmand (Ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance* (pp. 98-113). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-20928-9_2290.

on risks and rewards method. Then, the financial accounting and reporting of service concessions arrangements (embracing both PPPs and concessions), on the grantor's perspective, is addressed; the control method is considered instead of the risks and rewards approach. Finally, the last point concludes with a brief discussion, in a comparative perspective.

PPP accounting has been at the centre of a heated debate and has changed during the last years. The accounting regulation of PPPs and concessions has evolved through the years and has been subjected to lobbying (Hodges and Mellett, 2012). The main question under discussion is in which balance sheet the PPP assets should be reported and which criteria should be followed to evaluate the National Accounts and financial accounting treatment (Hodges, 2013).

The discussion regarding accounting and reporting for PPPs is of paramount relevance, as an inappropriate accounting and reporting system: i) reduces fiscal transparency and hampers accountability when the assets and the related debt are off the public sector balance sheet; ii) will not disclose fiscal risks, like contingent liabilities; and iii) impairs the decision making process, leading to an ineffective allocation of public resources because of incentives associated with the accomplishment of fiscal targets and not with VfM of the PPPs against the PSC, a device to compare PPPs with traditional public procurement. As mentioned in point 2.2.4.2.1, PSC is used to assess the VfM of PPPs against traditional public procurement, providing information for the decision whether to use traditional procurement or a PPP to provide public services (OECD, 2008). Before taking the PPP route, a government should demonstrate that, compared with traditional procurement, a PPP delivers better VfM.

The way PPP transactions are accounted for and reported in the public sector accounts is an important factor that can either strengthen or mitigate the above mentioned bias in favor of using PPPs. Countries with pure cash accounting and reporting may underestimate fiscal costs and risks from PPP transactions, particularly during the construction phase of the public asset. In this case, the main fiscal aggregates - fiscal deficit and debt - do not fairly portray the level of risk undertaken by the public sector. Cash accounting tends to induce a bias that pushes governments to underwrite PPP contracts for reasons rather than the public interest. On the contrary, countries with more

sophisticated accounting and reporting, using accounting standards like the IPSAS, are required to record PPPs in a way similar to other projects with public funding, and, therefore, these countries and their governments, may be less exposed to such a bias, adopting PPPs as a financing instrument only in cases where such partnerships offer VfM and are affordable in the short and long term.

In PPP contracts, it is the control of the assets that determine the accounting treatment and not the legal ownership. Such accounting treatment is defined through one of two methodologies: i) the risks and rewards method, associated with the National Accounts; and ii) the control method, associated with the international accounting standards. The following point discusses the macro accounting treatment of PPPs according to the National Accounts system, and the subsequent point addresses the micro accounting treatment under IPSASs requirements, underlying the government financial accounting.

2.2.6.1. National accounts

The European System of Regional and National Accounts 2010 (ESA 2010), approved by Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013, is an internationally compatible framework for the systematic and detailed description of an economy, its components and its relations with other economies. There are other international frameworks for national accounts that are consistent with ESA 2010, such as the System of National Accounts 2008, issued by the EC, IMF, OECD, United Nations, and World Bank, or the Government Finance Statistics Manual 2014, issued by the IMF. ESA 2010 is the framework used for budgetary monitoring of the EU's MS (Eurostat, 2013). At the European level, the main reference for the statistical treatment of PPPs is the Eurostat Manual on Government Deficit and Debt (Eurostat, 2019), upon which this point is based.

Since the inception of PPPs, there has been a debate on the impact of these contracts on the debt and deficit reported by the MS, more precisely the classification of PPPs on or off the public sector balance sheet. According to ESA 2010:

PPPs are complex, long-term contracts between two units, one of which is normally a corporation (or a group of corporations, private or public) called the *operator* or partner, and the other normally a government unit called the *grantor*. PPPs involve a significant capital expenditure to create or renovate fixed assets by the corporation, which then operates and manages the assets to produce and deliver services either to the government unit or to the general public on behalf of the public unit. (Eurostat, 2013, paragraph 15.41)

Unlike the financial accounting treatment discussed below, the ESA 2010 framework makes a clear distinction between concessions and PPPs. Concessions are long-term contracts (frequently 30 years or more), where the majority of the concessionaire's (public or private corporation) revenue comes from charging the final user of the asset. In contrast, concerning PPP contracts, the majority of the concessionaire's revenue comes from government payments.

In a concession arrangement, the concessionaire is responsible for the building, operating and maintenance of the assets and earns revenue essentially from the users who pay user charges, such as tolls in highways.

2.2.6.1.1. PPPs

A distinction was established for National Accounts purposes between PPPs and concessions, which is that the statistical treatment of PPPs is based on the risk sharing by the underlying parties. For this, three categories of risk are defined: i) “construction risk”, covering events like late delivery, compliance with specifications and additional costs; ii) “availability risk”, covering volume and quality of output, i.e. the performance of the partner; and iii) “demand risk”, covering variability of demand, i.e. the effective use by end-users.

A Eurostat decision in 2004 mandates that assets involved in a PPP should be classified as non-governmental assets – and recorded off the government balance sheet – if the private partner bears the construction risk plus at least one of the remaining two risks, either the availability or the demand risk. In all other cases, assets are classified as government assets (Eurostat, 2019). This is the “risk and reward method” for recording PPPs (OECD, 2008).

This method is also incorporated in ESA 2010 requirements and it aims at defining a criterion to allocate the assets to an institutional unit, i.e. to determine who should be considered the “economic owner” of the assets. The analysis is carried out by assessing which unit bears the majority of the risks and which unit is expected to receive the majority of the rewards from the assets. Therefore, the allocation of risks between the public sector and the private partner is the core issue for PPPs statistical treatment purposes. This is not the case in concession contracts, where there are no risk categories to determine the “economic owner”, although general analyses of risks and rewards should be ascertained.

If the conditions for the PPP to be recognized in the partner balance sheet are met, it is also necessary to analyse the project financing and guarantees. If the financing is predominantly covered by the public sector, the government is deemed to bear the majority of risks and the asset is classified on its balance sheet. Similarly, if the public sector grants debt guarantees or assures the private partner a certain return on equity, one can conclude that the majority of risks are borne by the public sector. Financing and guarantees analyses must be carried out jointly for the evaluation of the risk distribution between the public sector and the operator.

A government may finance a PPP project to promote more competition from the private sector over these projects, to reduce the cost of capital, as interest rates on government debt instruments are lower compared to those of private sector debt instruments, or to hold the viability of the project. In situations where the assets were classified on the partner balance sheet, but during the execution phase the government increases financing to a majority level, the PPP assets must be reclassified on the government public sector balance sheet.

Thus, the risk sharing of the parties determines where the assets are recognized. When the assets are classified on the partner balance sheet, i.e. are off government balance sheet, the PPP contract has an impact on net lending/borrowing (fiscal balance surplus or deficit, respectively) over the contract duration period and not during the construction of the asset. Conversely, if the construction risk is borne by the public sector entity, or if the private partner bears only such a risk and no other, the assets are recorded in the public sector’s balance sheet, with important implications for National Accounts, both for

government debt and net lending/borrowing. This treatment is in compliance with the accrual basis – as the work proceeds, the capital expenditure is recorded as government gross fixed capital formation and debt, as in a financial lease.

Also the flows associated with the execution of the PPP contract receive specific treatment in the National Accounts when the related assets are on the government balance sheet. The payments to the operator must be spread between debt redemption, imputed interest and purchase of services, if this last component is prescribed in the contract. The latter two are considered expenses for National Accounts purposes (Eurostat, 2019).

2.2.6.1.2. Concessions

The main characteristics of a concession are (OECD, 2008, p. 23): i) the concession grants the private entity the right to operate a specific asset and earn revenue from it; ii) the concessionaire usually pays the public entity to obtain the right to earn revenue from the asset; iii) the concessionaire carries the bulk of the risk; iv) the asset remains legal property of the public sector and the private entity is responsible for the maintenance of the asset; and v) the asset must be transferred to the public sector at the end of the contract. Similarly to PPPs, both involve a private entity that operates, maintains and finances the asset during the arrangement and, at the end of the contract, the asset is transferred to the public sector.

In concessions, the main issue is to ascertain the “economic ownership” of the assets during the contract, which can be allocated either to the concessionaire or to the public sector. In short, the party considered the “economic owner” of the asset, because it was considered to bear the majority of economic risks, should recognize the asset on its balance sheet.

For the purposes of National Accounts, when the public sector is not the main purchaser of the services provided by the partner, and the main risk depends on the consumption of the services by final users, the arrangement is classified as a concession and is off the public sector balance sheet. Accordingly, in the National Accounts PPPs are distinguished from concessions by the source of revenue for the partner. The term “concession” is used to describe long-term contracts, where the majority of the partner’s revenue comes from

the final users of the asset. In opposition, PPPs are contractual arrangements where most of the revenue going to the partner comes from government payments normally as availability payments or demand based payments.

As a practical rule, when the majority of corporation revenue comes from the final users, the asset is recorded in the corporation's balance sheet during the contract period, because the concessionaire bears most of the commercial risk (majority of economic risks), which depends both on external factors, like the demand by users, and its own performance in managing and maintaining the assets. It is possible that the concessionaire has to operate under specific government requirements and is sometimes compensated through public subsidies (Eurostat, 2019).

Nevertheless, there are some situations that lead to classifying the asset on the government balance sheet. If the government is financing the majority of construction or refurbishment cost, or is providing an explicit guarantee covering more than 50% of the debt raised by the concessionaire for financing the asset, or provides a minimum revenue guarantee, the government is considered to bear the majority of risks and rewards, triggering the classification as the “economic owner”, leading the asset to be classified on the government balance sheet (Eurostat, 2019).

2.2.6.2. Financial accounting

This point describes the accounting treatment of service concession arrangements under the public sector (the grantor) perspective. The risks and rewards method described above for National Accounts purposes is now replaced by the control method proposed in *IPSAS 32 – Service Concession Arrangements: Grantor* (IPSAS 32), discussed below.

To be within the scope of IPSAS 32, the service concession arrangement (SCA) must legally bind the private sector operator to provide the public services on behalf of the public sector entity, using the service concession asset. IPSAS 32 covers both the concessions and PPPs cited above for National Accounts purposes. Here, concessions are treated under the “grant a right to the operator” model and PPPs under the “financial liability model”. Both models, as explained below, define the compensation to the operator for the service concession asset and services through the lifecycle of the project.

In parallel to the National Accounts perspective, the fundamental issue in financial accounting is which party of the arrangement – the private sector operator or the public sector grantor – should recognize, measure and present the assets and related liabilities (Hodges, 2013).

For this purpose, a preliminary overview of the accounting standards environment will be presented. In November 2006, the International Accounting Standards Board (IASB, 2006), through the International Financial Reporting Interpretations Committee (IFRIC), issued Interpretation 12, for Service Concession Arrangements (IFRIC 12). This interpretation provides guidance on reporting the property associated with a SCA that meets specified criteria related to control over such property. However, such guidance only specifically applies to private sector entities, generally the operator of the arrangement (IPSASB, 2008). The disclosures for these types of arrangements are set by Interpretation 29 (SIC-29), issued by the Standard Interpretations Committee, the predecessor of IFRIC.

Aware of this caveat, the IPSASB issued IPSAS 32 in October 2011, effective for periods beginning on or after January 1, 2014. This standard is structured in paragraphs 1 to 37. It also encompasses two appendices, the basis for conclusions, implementation guidance and illustrative examples. In this point, references to IPSAS paragraphs are denoted with “par.”, references to Appendix A: Application Guidance paragraphs are stated with “AG” and references to the basis of conclusions paragraphs are denoted with “BC”. This notation also applies to *Exposure Draft 43 – Service Concession Arrangements: Grantor* and to other IPSASs cited herein.

In contrast to the National Accounts method, based on risks and rewards, under IPSAS 32 the control method was adopted to assess on which balance sheet the arrangement assets should be recorded. Although the former method can also be used for financial reporting purposes, like in the UK from 1998 to 2009 (Hodges, 2013), the proposal of the IPSASB was different.

Additionally, the IMF (2006) proposed the rights and obligations method. It required a quantification of the risks and rewards the public sector was exposed to. However, such a method was considered to be an approach too complex and represented a substantial

change in accounting for assets and liabilities with implications beyond SCA (IPSASB, 2008; IPSASB, 2018, IPSAS 32 – BC 14).

2.2.6.2.1. Concepts and main features

Like the risk and reward method, the control method is also based on the substance over form concept, meaning that the “economic ownership” of the assets prevails over their legal ownership.

The approach based on this method, which IPSAS 32 imposes on the grantor, is consistent with the IFRIC 12 requirements, which applies to the operator. This consistency is fundamental to assure that the assets associated with the SCA are recognized either on the balance sheet of the grantor or on that of the operator. This means that only one party in the arrangement recognizes the assets (e.g. infrastructure).

IPSAS 32 covers both government-funded and user-funded PPP contracts, the latter called concessions for National Accounts purposes, as explained above. A SCA is defined as a binding contract between a grantor (the public sector entity) and an operator (usually a private sector entity) in which: i) the operator uses a public asset (the service concession asset) to provide a public service for a specified period of time, on behalf of the grantor; and ii) the operator is compensated for its services over the period of the SCA (IPSAB, 2018, IPSAS 32, par. 8).

A grantor is the entity that grants the right to use the service concession asset to the operator. An operator is the entity that uses the service concession asset to provide public services, subject to the government’s control of the asset.

Common features of an SCA are (IPSASB, 2018, IPSAS 32, AG 3): i) the grantor is a public sector entity; ii) the operator is responsible for at least some of the management of the service concession asset and related services and does not merely act as an agent on behalf of the grantor; iii) the arrangement sets the initial prices to be charged by the operator and regulates price revisions over the period of the SCA; iv) the operator is obliged to hand over the service concession asset to the grantor, in a specified condition at the end of the period of the arrangement, for little or no incremental consideration, irrespective of which party initially financed it; and v) the arrangement is governed by a

binding agreement that sets out performance standards, mechanisms for adjusting prices, and procedures for arbitrating disputes.

2.2.6.2.2. Service concession asset recognition and initial measurement

The recognition of a service concession asset is based on control for financial reporting purposes. IPSAS 32, par. 9, requires that the grantor shall recognize an asset provided by the operator and an upgrade to an existing asset of the grantor, as a service concession asset, if the following conditions are met: i) the grantor controls or regulates what services the operator must provide with the asset, to whom it must provide them, and at what price; and ii) the grantor controls - through ownership, beneficial entitlement or otherwise - any significant residual interest in the asset at the end of the term of the arrangement. The residual interest is the estimated current value, at the age and condition projected at the end of the period of the SCA. For an asset used in an SCA for its entire useful life (a “whole-of-life” asset), only condition i) need to be met (IPSASB, 2018, IPSAS 32, par. 10).

For the purpose of condition i) above, the notion of regulation of services the operator must provide with the asset is restricted to the binding arrangement established by the parties, excluding the general regulation powers that the government holds, in particular in some specific sectors like water or electricity management. Consequently, the general regulation powers the government holds do not represent control for financial reporting purposes (IPSASB, 2018, IPSAS 32, AG 8).

When the asset is not used during the entire useful life, the control criterion over the residual interest in the asset must be accomplished for the grantor recognition of a service concession asset. This type of control gives the grantor the right to prevent the operator from selling or pledging the asset during the SCA or terminating it before the term (IPSASB, 2008, p. 31).

Regardless of the kind of accounting model described in Table 2.8 below, the timing of the recognition of the underlying asset should be based on *IPSAS 17 – Property, Plant and Equipment*, or *IPSAS 31 – Intangible Assets* (IPSASB, 2018), as appropriate.

These IPSAS require that an asset shall be recognized if, and only if, the following recognition criteria are met (recognition principle):

- (a) It is probable that future economic benefits or service potential associated with the item will flow to the entity (grantor); and
- (b) The cost or fair value of the item can be measured reliably.

Consequently, the asset can be recognized during its construction or development phase if the terms of the binding arrangement allow it to determine whether the service potential would flow to the grantor at that time and if the grantor is in possession of reliable information about the cost or fair value of the asset during that phase. IPSAS 32, AG 23, gives the example of progress reports during the construction or development of the assets provided by the operator to the grantor as a source of such information.

The fair value of the asset on initial recognition is based on the type of compensation exchanged (IPSASB, 2018, IPSAS 32, AG 25). Fair value is defined as “the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction” (IPSASB, 2018, IPSAS 9, par. 11). In the instance where the grantor compensates the operator for the service concession asset by making payments, the fair value represents the portion of these payments related to such an asset. In the case where the grantor compensates the operator by granting the right to earn revenue from the service concession asset or another revenue-generating asset, we are in the presence of a non-monetary exchange transaction. Under the binding arrangement, the grantor obtains the service concession asset in exchange for a non-monetary asset, as it is the right of the operator to earn revenue from third-party users. IPSAS 17, par. 40, and IPSAS 31, par. 45 (IPSASB, 2018), provide guidance on how to estimate the fair value of the asset received.

At the initial recognition, when the grantor recognizes a service concession asset provided by the operator, the grantor shall also recognize a liability of the same value of such an asset (IPSASB, 2018, IPSAS 32, par. 15), measured at its fair value, adjusted by any consideration from the grantor to the operator or from the operator to the grantor.

Where an existing asset of the grantor is reclassified as a service concession asset because the conditions for this were met, no liability is recognized.

2.2.6.2.3. Accounting for operator's compensation

The nature of the consideration given by the grantor to the operator determines the nature of the liability recognized in the grantor's balance sheet, as described below. According to IPSAS 32, par. 17 (IPSASB, 2018), in exchange for the service concession asset, the grantor may compensate the operator through one of the three models summarized in Table 2.8.

Table 2.8: Models of operator's compensation

Model	Description
Financial liability model (Model 1)	Where the grantor has an unconditional obligation to pay cash or any another financial asset to the operator for the construction, development, acquisition, or upgrade of a service concession asset. The payments should be allocated as a reduction of the financial liability and as a finance expense and also as expenses for services provided by the operator under the SCA (construction and operation services).
Grant of a right to the operator model (Model 2)	When the grantor has no unconditional obligation to pay cash or any another financial asset to the operator for the construction, development, acquisition, or upgrade of a service concession asset, yet it grants the operator the right to earn revenue from third-party users or any another revenue-generating asset.
Bifurcated model (Model 3)	The grantor compensates the operator for the service concession asset, partly by a predetermined series of payments (financial liability) and partly by exchanging the right to earn revenue from third-party use of either the service concession asset or any another revenue-generating asset (granting a right to the operator).

Model 1 – Financial liability model

Under Model 1 the grantor records a financial liability at initial recognition. In subsequent accounting periods, the grantor recognizes, as expenses, a finance charge and a charge for maintenance and operating of the service concession asset (service component).

Under this model, the liability is a financial liability that is measured at amortized cost, according to *IPSAS 29 – Financial Instruments: Recognition and Measurement*, par. 49 (IPSAS, 2018). The operator shall recognize a financial asset of the same amount, representing the amount due from the grantor.

Accounting for a financial liability at amortized cost means that the finance charge is calculated by multiplying the outstanding financial liability at the beginning of the

accounting period by the effective rate of interest. Changes in market interest rates are ignored and, therefore, there is no subsequent measurement of the liability at the reporting date due to modifications of the market interest rates. In each reporting date the liability is increased by the interest expense and decreased by the cash disbursement that covers the financial expense accrued and financial liability reduction. The effective interest rate is computed on initial recognition and is the rate that discounts future payments over the SCA term; the financial liability is the present value of the service concession asset component of the payments and does not include the service component of the payments (IPSASB, 2018, IPSAS 32, AG 38).

If the cost of capital specific to the service concession asset is known or can be ascertained, the finance charge is based on this (IPSASB, 2018, IPSAS 32, AG 40). If the cost of capital is not known, IPSAS 32, AG 41, allows the use of the grantor's incremental borrowing rate or another rate appropriate to the terms and conditions of the arrangement. The interest rate used to calculate the finance charge may not be subsequently changed unless the asset component or the whole of the arrangement is renegotiated (IPSASB, 2018, IPSAS 32, AG 44).

According to this model, the grantor shall allocate the payments to the operator and account for them according to their substance as a reduction in the liability, a finance charge that was accrued to the financial liability, and charges for services provided by the operator (IPSASB, 2018, IPSAS 32, par. 21).

Nevertheless, the asset and service components of the payments may be separable (e.g. the binding arrangement clearly identifies the payments that are allocated to the service concession asset) or inseparable (e.g. the binding arrangement does not identify the payments that are related to the service concession asset) and this affects the measurement of the service concession asset and corresponding financial liability. IPSAS 17 (par. 26) and IPSAS 31 (par. 31) (IPSASB, 2018) require initial measurement of an asset acquired through an exchange transaction to be measured at cost, which is the transaction price, normally considered the fair value. When the payments allocated to the service concession asset (separable payments) are specifically identified under the terms of the arrangement, the fair value is the present value of these payments. However, if the fair

value of the service concession asset is lower than the present value of such payments, fair value is the one considered for initial recognition (IPSASB, 2018, IPSAS 32, AG 30).

The fair value of the service concession asset is determined using estimation techniques where the asset and service component of payments by the grantor to the operator are not separable. For this, at the inception of the arrangement, payments are allocated for the service concession asset and for other components of the SCA (e.g., operations and maintenance) on the basis of their relative fair values. For example, a grantor may estimate the payments related to the asset considering the fair value of a comparable asset included in an arrangement that contains no other components, or can estimate the payments for the other components by reference to a comparable arrangement, and obtain the asset component of payments by deduction (IPSASB, 2018, IPSAS 32, AG 32).

Where in the presence of inseparable payments, the HM Treasury Financial Reporting Manual (HM Treasury, 2015a) proposes a fair value approach. The fair value of the asset determines the amount to be recorded as a service concession asset and the corresponding financial liability. The total payment is then divided into three elements: the service charge, amortizing the financial liability and the interest expense on the financial liability outstanding, using the interest rate implicit in the contract. For both existing and new contracts, where it is not practicable to determine the interest rate implicit in the contract, the grantor shall use its cost of capital rate to calculate the interest expense.

Model 2 – Grant of a right to the operator model

According to this model the grantor shall recognize a liability as the unearned portion of the revenue arising from the exchange of assets between the grantor and the operator.

The grantor has received a service concession asset and public services provision, in exchange for granting the operator the right to earn revenue from third-party users of the service concession asset over the period of the arrangement or another revenue generating asset. The benefits of the grantor, embodied in the asset service potential to meet the public service objectives, are also gathered during the arrangement because the operator provides services on behalf of the grantor, leading to the application of *IPSAS 9 – Revenue From Exchange Transactions* - IPSAS 9 (IPSASB, 2018) for the nature and timing of

revenue recognition (diminishing the liability). According to IFRIC 12, the operator shall recognize an intangible asset.

The consideration of the credit (balancing item) for the service concession asset, as deferred or unearned revenue (liability), needs to be further discussed, as the proposal on the *Exposure Draft 43 (ED 43) – Service Concession Arrangements: Grantor* (IPSASB, 2010) intended to account for it as a performance obligation in accordance with *IPSAS 19 – Provisions, Contingent Liabilities and Contingent Assets* (IPSASB, 2018).

In ED 43, BC 17, the liability was considered a performance obligation “because the grantor has received exchange consideration (i.e., an inflow of resources in the form of the service concession asset) in advance of its performance under the exchange (i.e., its obligation to provide the operator access to the service concession asset or another revenue-generating asset).”

Taking into consideration the comments received in response to the ED 43, the IPSASB changed its initial classification of the credit as a performance obligation, to be considered as unearned revenue in IPSAS 32, acknowledging that the term “performance obligation” is used in relation to non-exchange transactions and a service concession arrangement is an exchange transaction (IPSAS, 2018, IPSAS 32, BC 19 – BC 21).

Additionally, as an argument to not consider the credit as a performance obligation, the IPSASB conceptual framework indicates that a performance obligation is “an obligation in a contract or other binding arrangement between an entity and an external party to transfer a resource to that other party” and “that obligation also arises when an entity enters into an arrangement whereby it receives a fee and, in return, provides an external with access to an asset of the government” (IPSASB, 2014, p. 62). As under Model 2 the grantor has no obligation to transfer a resource or received fees from the operator, no performance obligation arises under the SCA.

The exchange of the service concession asset for the right to earn revenue from third-party users from this asset or another revenue-generating asset, represents an increase in the net assets/equity as revenue. In accordance with IPSAS 9, par. 17 (IPSASB, 2018), when goods are sold or services are provided in exchange for dissimilar goods or services,

the exchange is regarded as a transaction that generates revenue. The service concession asset recorded by the grantor and the intangible asset (the right to earn revenue) recorded by the operator are dissimilar.

IPSAS 9, par. 17 (IPSASB, 2018), also establishes that the revenue is measured at the fair value of the goods or services received, adjusted by the amount of any cash or cash equivalents transferred. When the fair value of the goods or services received cannot be reliably measured, the revenue is measured at the fair value of the goods or services foregone, adjusted by the amount of any cash or cash equivalents transferred. In a SCA, the right to earn revenue from third party users (the asset foregone by the grantor) is not recognized on the grantor's balance sheet. As a consequence, the fair value of the asset received (the service concession asset) will be more evident than the fair value of the asset foregone.

As the right granted to the operator covers the SCA period, the grantor does not record revenue from the exchange at the same time as the service concession asset is recognized. Such revenue is recorded according to the economic substance of the SCA, usually as the access to that asset is granted to the operator over the arrangement period on a straight-line basis, and the liability, the deferred revenue, is reduced as revenue is recognized (IPSASB, 2018, IPSAS 32, par. 26 and AG 47).

Model 3 – Dividing the arrangement model

This model incorporates features of the previous two models and it requires each part of the total liability recognized to be accounted for separately. IPSAS 29 applies to the financial liability (Model 1) and IPSAS 9 to the unearned revenue recognized as a liability (Model 2) (IPSASB, 2018). So, the consideration to the operator is divided into a financial liability component (for the unconditional obligation to pay cash or another financial asset) and a liability component (for the right granted to the operator to earn revenue from third-party use of the service concession asset or another revenue-generating asset). The total liability should be equal to the amount recognized as a service concession asset.

2.2.6.2.4. Subsequent measurement and impairment

Regarding the service concession asset, the subsequent measurement must comply with requirements of IPSAS 17 or IPSAS 31 (IPSASB, 2018), as appropriate. Both of these standards state that for subsequent measurement an entity shall choose either the cost model or the revaluation model as its accounting policy.

If the grantor elects the former, the service concession asset shall be carried at its cost, less any accumulated depreciation/amortization and any accumulated impairment losses (IPSASB, 2018, IPSAS 17, par. 42 and IPSAS 31, par. 73).

If the entity opts for the revaluation model, the service concession asset shall be carried at a revalued amount, which is the fair value at the date of the revaluation, less any subsequent accumulated depreciation/amortization and subsequent accumulated impairment losses (IPSASB, 2018, IPSAS 17, par. 44, and IPSAS 31, par. 74). Fair value must be reliably measured and revaluations shall be made on a regular basis so that, at each reporting date, the carrying amount of the asset does not differ materially from its fair value. If there is no market-based evidence of fair value because of the specialized nature of the item, IPSAS 17, par. 48, allows the use of depreciated replacement cost, or restoration cost or service units approaches as they are defined on *IPSAS 21 - Impairment of Non-Cash Generating Assets* (IPSAS 21). Conversely, IPSAS 31 exclusively allows the fair value to be determined by reference to an active market. The asset is also subject to impairment testing as prescribed in IPSAS 21 and *IPSAS 26 – Impairment of Cash Generating Assets* (IPSAS 26), as appropriate (IPSASB, 2018).

The benefits that flow to the grantor from the control of the service concession asset can be future economic benefits or service potential. Many public sector assets may have a purpose to promote the availability of goods and services and not to generate cash inflows, as these assets are described as embodying service potential. Assets that are used to generate net cash inflows – or from the cash-generating unit of which the asset is a part – are described as incorporating future economic benefits.

The former types of assets are designated non-cash generating assets and the second type called cash generating assets. A non-cash generating asset is impaired when its carrying

amount exceeds its recoverable service amount, as this is the higher between fair value less the cost to sell and the non-cash generating asset value in use. A cash generating asset is impaired when its carrying amount exceeds its recoverable amount, i.e. the higher of an asset or a cash-generating unit fair value less the cost to sell or its value in use (IPSASB, 2018, IPSAS 21 and IPSAS 26).

The value in use is calculated differently for non-cash generating assets and cash generating assets. For non-cash generating assets, value in use is the present value of the asset's remaining service potential and three approaches could be used to calculate it (IPSASB, 2018, IPSAS 21, par. 14 and par. 44-49). For cash generating assets, value in use is the present value of the estimated future cash flows expected to be derived from the continuing use of an asset and from its disposal at the end of its useful life (IPSASB, 2018, IPSAS 26, par. 13).

2.2.6.2.5. Accounting for guarantees and other commitments

In a SCA the grantor can give guarantees to the operator, like securing the debt raised to construct or develop the service concession asset (generally through a financial guarantee contract) or cover minimum revenue for the operator, by setting specific clauses in the binding arrangement.

Guarantees may be classified as financial guarantees that meet the definition of a financial guarantee contract, according to IPSAS 29 requirements. A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due, in accordance with the original or modified terms of a debt instrument (IPSASB, 2018, IPSAS 29, par. 10).

The general rule is to account for financial guarantee contracts as financial instruments, unless an issuer elects to apply *IFRS 4 – Insurance Contracts* to such contracts, on an individual basis, complying with the conditions established in *IPSAS 28 – Financial Instruments: Presentation* and in IPSAS 29 (IPSASB, 2018). Currently, there is no IPSAS for insurance contracts.

To be classified as a financial liability, the guarantee provided by the grantor to secure the debt issued by the operator must be a contractual arrangement. Assets and liabilities from non-contractual arrangements do not meet the definition of a financial asset or financial liability, as is the case of constructive obligations (IPSASB, 2018, IPSAS 28, AG 19). The features of a contractual arrangement are (IPSASB, 2018, IPSAS 28, AG 20): i) the presence of willing parties entering into an arrangement; ii) the terms of the contract create rights and obligations for the contractual parties, and those rights and obligations cannot result in equal performance by both parties; and iii) the contract is enforceable by law.

At initial recognition, the financial guarantee contract is measured at fair value. If it is an exchange transaction, such value will be equal to the premium received by the guarantor. The premium will be recognized as revenue as the liability recognized at inception is amortized, in accordance with IPSAS 9 (IPSASB, 2018, IPSAS 29, AG 92-AG 94).

According to IPSAS 29, par. 49, when the grantor issues a financial guarantee contract with an embedded commitment to repay the debt raised by the operator in the case of default, the grantor measures the contract at the higher value of: i) the amount determined in accordance with IPSAS 19, par. 44; and ii) the premium received less cumulative amortization recognized as revenue (IPSASB, 2018).

If a financial guarantee contract is issued through a non-exchange transaction, without commercial purposes, with the consideration received not representing the fair value of the financial guarantee contract because there is no consideration or it is an insignificant amount, at initial recognition the first step is to try to make a reliable measure of fair value. The entity first considers if an active market exists with quoted prices for similar financial guarantee contracts. In the inexistence of an active market, a valuation technique, which considers all the facts and circumstances, including the financial risk surrounding the transaction, should be used to obtain a reliable estimate of the fair value (IPSASB, 2018, IPSAS 29, AG 95 – AG 96).

Without a reliable measure of fair value, either by the observation of quoted prices in an active market or by a valuation technique, at initial recognition the requirements of IPSAS 19, par. 44 should be applied, as well as IPSAS 19 for subsequent measurement.

Guarantees and other commitments that do not meet the definition of a financial guarantee contract in IPSAS 29, par. 10, like constructive obligations, should be treated according to the requirements of IPSAS 19. Also performance guarantees, like minimum revenue threshold or minimum return on investment by the operator, should be treated in accordance with IPSAS 19 (IPSASB, 2018).

Finally, according to IPSAS 19, par. 22, a provision should be recognized when: i) an entity has a present obligation (legal or constructive) as a result of a past event; ii) it is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation; and iii) a reliable estimate can be made of the amount of the obligation. The measurement of the provision shall be made according to the best estimate of the expenditure required to settle the present obligation at the reporting date.

2.2.6.2.6. Accounting for other revenues

SCA can also generate revenues for the grantor through revenue sharing provisions in the binding arrangement, upfront payments, or payments in instalments, from the operator, to enter into the arrangement.

The grantor should recognize revenue and related receivables generated by revenue sharing provisions as it is earned, in accordance with the requirements of IPSAS 9 for royalties. Its par. 34 stipulates that revenue from royalties shall be recognized as they are earned in accordance with the substance of the relevant agreement (IPSASB, 2018).

For the revenue associated with upfront payments, or payments in instalments, from the operator to the grantor, the straight-line method should be used or another method that better reflects the underlying economic consumption of its access to the service concession asset, considering the criteria on IPSAS 9. Any consideration received from the operator in advance of the grantor's performance should be reported as a liability until it is earned.

2.2.6.2.7. Presentation and disclosure of service concession arrangements

For presentation of the service concession asset, the grantor shall comply with *IPSAS 1 – Presentation of Financial Statements* (IPSAS 1), and present it as a non-current asset having the possibility to present it in a separate line, applying IPSAS 1, par. 89 (IPSASB, 2018). Disclosure about the SCA occurs in the notes to the financial statements.

IPSAS 1, par. 127, states which notes contain information in addition to that presented in the statement of financial position, statement of financial performance, statement of changes in net assets/equity and cash flow statement (IPSASB, 2018).

For SCA, a non-exhaustive list of disclosures must provide: a description of the arrangement, significant terms that may affect the amount, timing and certainty of future cash flows, rights and obligations associated with the arrangement, termination and renewal clauses, and change in the arrangement during the reporting period (further details in IPSASB, 2018, IPSAS 32, par. 31-32). Other standards may apply to SCA disclosures, which will not be discussed in this point for the sake of parsimony.

2.2.6.2.8. Transition requirements to IPSAS 32

Some public sector entities may have ongoing SCA and need to comply with the requirements of IPSAS 32, like, for example, the Portuguese case, where a new accounting framework mostly based on IPSAS standards for financial accounting and reporting purposes was approved in September 2015. In such a situation, the requirements of *IPSAS 33 – First-Time Adoption of Accrual Basis IPSASs* must be applied (IPSASB, 2018).

The main issue in the transition between accounting frameworks is related to the initial measurement of the service concession asset and corresponding liability, under Models 1 and 2 discussed above.

Where a grantor has not recognized assets and liabilities of SCA under the previous accounting framework, it is not required to recognize and measure these assets and liabilities for reporting periods beginning on a date within three years following the date of adoption of IPSASs. These financial statements that adopt transitional exemptions

identified in IPSAS 33 are qualified as “transition IPSAS financial statements” (IPSAS 33, par. 13). IPSAS 33 has a transitional period of three years to recognize and measure certain types of assets and liabilities, because it is assumed that it takes time to adapt processes and gather information. Following the date of adoption there is a transition period of three years (transition IPSAS financial statements) and afterwards the entity has to comply with all IPSASs requirements and the financial statements thereon are called “first IPSAS financial statements”.

When reliable cost information of the service concession asset is not available, the grantor can use fair value as the deemed cost. IPSAS 33, par. 9, defines deemed cost as an amount used as a surrogate for the acquisition cost or depreciated cost at a given date.

Where the deemed cost was considered, the grantor shall measure the liability under the financial liability model (Model 1) as the remaining contractual cash flows specified in the arrangement and considers the interest rate prescribed in IPSAS 32 (AG 40 – AG 45) to determine the finance charge to be accrued to the outstanding financial liability. Under the right to the operator model (Model 2), the liability is measured as the fair value of the asset less any outstanding financial liabilities, adjusted to reflect the remaining period of the SCA (IPSASB, 2018).

Subsequent depreciation or amortization is based on the deemed cost and starts from the date of adoption of IPSAS 32 (IPSASB, 2018, IPSAS 33, par. 65).

2.2.6.3. Conclusions

PPPs are an alternative to traditional public procurement in order to have access to assets that are necessary to provide public services, like transportation, health and sewage. Their advent, and recent spread in countries like Portugal, entails questions associated with delivering accountability, VfM, affordability and accounting.

Concerning the latter, the accounting treatment of PPPs should not drive the decision of governments towards this type of procurement. The driver should be the efficiency gains associated with this arrangement when compared with traditional public procurement and service delivery.

As this subsection has shown, under IPSAS 32 and other related IPSAS, the impact of a PPP on the main fiscal aggregates is similar to that of traditional public procurement because the latter is accounted for according to the requirements of IPSAS 17 or IPSAS 31. Under IPSAS, assets, debt and deficit indicators will all increase as the PPP asset is constructed like in traditional procurement. This is a major improvement in government financial accountability, since it prevents PPP-related assets and corresponding liabilities from being treated off the government's balance sheet.

Despite the importance of accounting to record these arrangements properly, it is not a straightforward issue because of the complexity and diversity of the underlying contracts.

The public sector accounting international environment highlights two concurrent methods to recognize PPP contracts: the risks and reward method for National Accounting reporting; and the control method for financial reporting. From an information user point of view, more convergence between National Accounts and financial accounting in the public sector is desirable regarding this matter.

With the expected increased adoption of the control method in public sector accounts, one expects new accounting issues will ensue regarding recognition, measurement, impairment, presentation and disclosure of these arrangements.

2.2.7. Public sector auditing

Public sector auditing is part of the institutional arrangements in any democracy. Usually, public sector auditing is classified as internal or external audit, where the former is part of the government machinery and the latter is delivered by institutions external to the government (Schiavo-Campo, 2017).

Porraz-Gómez (2020) takes a different perspective by identifying different public financial control subsystems: internal, external, jurisdictional, political and social. The internal control is related to internal audit mentioned in the previous paragraph and the external control is associated with external audit delivered by Supreme Audit Institutions (SAIs). In Porraz-Gomez (2020, p. 75) words, external control "is purely focused on generating transparency to feed accountability processes".

Internal audit is an independent evaluation activity, established inside an organization that reports to top officials inside the government, whose role is to examine, evaluate and report on its accounting, financial and other operations. The objective of internal audit, as a key component of the overall internal control system, is to improve the organization's operations by strengthening risk management, control and governance processes. Internal audit may carry out the same type of audits as external audit (compliance, financial and performance audits) but, in practice, there is a prevalence of compliance audit work. In opposition to the external audit, internal audit is not viewed as an independent assessment of government operations because it is a function directly accountable to elected or appointed top officials, but its outputs are useful to external audit (Porraz-Gomez, 2020; Posner and Shahan, 2014; Schiavo-Campo, 2017; Shand, 2016).

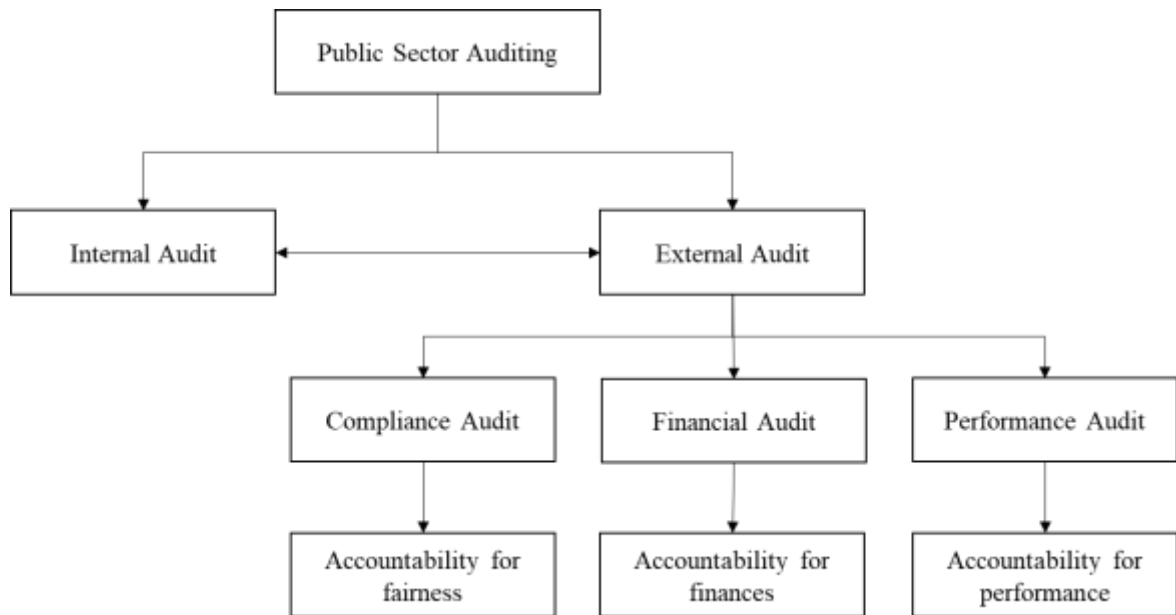
Another categorization relates to the timing of the audit activities. In some cases, SAIs also perform *ex ante* audits, also called pre-audits. *Ex ante* (or pre-audit) audits means that SAIs previously approve or disapprove certain transactions or contracts from a legal and financial regularity perspective, auditing before the fact. Conversely, post-audit is audit after the fact.

The International Organization of Supreme Audit Institutions - INTOSAI (2019b) considers that effective pre-audit is fundamental for the proper management of public resources and it may be a responsibility of other institution because pre-audit may add extra work to the SAI, or blurring responsibilities in circumstances where the post-audit, after the fact, deals with the same subject matter covered by the pre-audit, leading to an inherent conflict of interests because the same entity is involved in the approval of a particular financial transaction and at a later stage could have to analyse the same transaction in light of the principles of legality, economy, efficiency and effectiveness (Schiavo-Campo, 2017).

Taking into consideration the scope and objectives of external audit, audit practices are clustered around compliance, financial and performance audit, which are related to different types of public accountability (Posner and Shahan, 2014; Behn, 2001).

Figure 2.7 sets out the public sector audit field.

Figure 2.7: Public sector auditing structure



Source: Adapted from Posner and Shahan (2014)

Therefore, the scope of this subsection is the external audit delivered by SAIs, the so-called state audit (Shand, 2016). In parliamentary democracies, audit activities developed by SAIs are a general part of the constitutional arrangements and by this reason can be termed as a constitutional institution (Blume and Voigt, 2011).

SAIs are internationally represented by the INTOSAI which develops and maintains a framework of professional pronouncements, composed by principles, standards and guidance aimed at promoting independent and effective external auditing by SAIs.⁹

2.2.7.1. Types of public sector audits and public accountability

In the public sector, the word "audit" refers to a wide range of activities that tend to expand in scope. Traditionally, SAIs performed compliance and financial audits. As a consequence of NPM reforms, performance audits gained relevance on SAIs audit activities and it's a subject extensively studied in academic literature (e.g., Barzelay, 1997; Funnell, 2015). In the majority of cases, the scope of SAIs activities is enshrined in legislation (Shand, 2016; Schiavo-Campo, 2017).

⁹ INTOSAI has currently 195 members. Source: <https://www.intosai.org/about-us/members>

Compliance audit deals with analyzing and providing information about whether public revenues and expenses occurred following relevant laws and other normative instruments. Financial audit, as in the private sector, is about issuing an opinion on the conformity of financial statements to the prevalent accrual accounting framework (Shand, 2016).

INTOSAI offers its own definitions of types of external audits. Compliance audit is performed by assessing whether activities, financial transactions and information are, in all material respects, in compliance with rules, laws, regulations, budgetary, resolutions, established codes and other authorities governing the audited entity (INTOSAI, 2019a).

Compliance audit promotes compliance accountability, what Behn (2001) labelled as accountability for fairness where rules, procedures and standards are designed to establish what should or not should be done.

Moving to financial audit, INTOSAI (2019a, p. 11) indicates that it:

Focuses on determining whether an entity's financial information is presented in accordance with the applicable financial reporting and regulatory framework. This is accomplished by obtaining sufficient and appropriate audit evidence to enable the auditor to express an opinion as to whether the financial information is free from material misstatement due to fraud or error.

In the public sector the same standards as in the private sector are used, the International Standards on Auditing issued by the International Federation of Accountants, because INTOSAI incorporated them in its Framework of Professional Pronouncements as the suite of financial auditing standards (INTOSAI, 2019a).

In its relation to public accountability, financial audit promotes financial accountability, described by Behn (2001) as accountability for finances, which comprise the rules, procedures and standards that specify the expectations for how public officials should handle financial resources.

Performance audits (or VfM audits) are independent, objective and reliable examinations of whether public expenditure was incurred in a way that secures its compliance with the principles of economy, efficiency and effectiveness (Shand, 2016).

Generally, performance audits, or VfM audits, are focused on studying whether public resources were used with economy, efficiency and effectiveness. INTOSAI (2019a, p. 11) observes that:

Performance audit focuses on whether interventions, programmes and institutions are performing in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement. Performance is examined against suitable criteria, and the causes of deviation from those criteria or other problems are analysed. The aim is to answer key audit questions and to provide recommendations for improvement.

When it comes to its relation to public accountability, performance audit contributes to performance accountability (Barzelay, 1997). Unlike accountability for finances and for fairness, accountability for performance deals with the demonstration of accomplishments by those entrusted with public resources, disclosing the consequences of political actions. Accountability for performance implies the definition of expectations about the performance of public interventions and this cannot be done with the definition of rules, procedures and standards as it happens in relation to accountability for finances and for fairness (Behn, 2001).

2.2.7.2. Types of SAIs and the Portuguese Court of Audits

This point provides a brief description of the stylized models of SAIs as prescribed by the literature and the Portuguese CoA as the SAI that operates in Portugal.

Internationally, SAIs have an umbrella organization (INTOSAI) that issues principles, guidelines and standards for the external public audit community (Schiavo-Campo, 2017). CIPFA and IFAC (2014) underline their importance in securing public accountability for efficiency, effectiveness and governance arrangements put in place.

2.2.7.2.1. Types of SAIs

SAIs can be institutionally classified from different perspectives (IMF, 2018; Posner and Shahan, 2014; Shand, 2016). The most used classification is the one that classifies SAIs according to a legal-constitutional perspective. Under this view, SAIs may follow the Judicial or Napoleonic model (e.g. France, Spain and Portugal), the Parliamentary or Westminster model (e.g. Australia, New Zealand and United Kingdom) or the Board

model (e.g. Germany and Netherlands). Under the Judicial model, the SAI is part of the legal system, operating independently from the legislature (parliament) and the executive (government) and its members are magistrates with judicial power to impose sanctions based on detected financial irregularities. Regarding the Parliamentary or Westminster model, SAI is an independent body that reports to the legislature through a public accounts committee which has the responsibility to discuss and follow up SAI reports. A single person usually heads it, the so-called "Auditor General" and has no judicial power (e.g. UK and New Zealand). For the Board model, SAI is comprised of a board which takes collective decisions. Still, it cannot impose financial sanctions as the Judicial SAI, besides it also reports to the legislature (e.g. Germany and Netherlands).

A different typology based on two dimensions, the level of professional autonomy of the SAI and the degree of political influence over the SAI activities, is proposed by Posner and Shahan (2014). The two dimensions are associated with SAI independence, in a sense that professional autonomy captures the capacity of the SAI to develop audit activities according to established criteria and standards, and political influence is related to the degree of political influence over the SAI budget and audit activities. Considering two extreme points for each dimension (high and low) four types of SAI emerge, as Table 2.9 shows.

Table 2.9: Typology of SAI based on independence dimensions

Professional autonomy	Political influence	
	High	Low
High	Political	Professional
Low	Hierarchical	Legal

Source: Based on Posner and Shahan (2014)

A political SAI is one that is affected by a certain degree of influence by a political actor in determining its budget, and some audits are politically determined. However, the SAI preserves its complete professional autonomy in carrying out the audits according to professional standards and abilities that are barely questioned. Posner and Shanan (2014) cite the Government Accountability Office in the United States of America as an example of a political SAI.

On the other extreme of professional autonomy and high political influence emerges the hierarchical SAI. This type of SAI cannot be considered independent and is typically associated with authoritarian or non-democratic countries (Posner and Shanana, 2014). In this environment, the SAI lacks the capacity and skills to defy the influence of strong political actors or extend its audit activities to particular policy areas or audit objectives, failing in its core mission to assure different types of public accountability or its work is ignored.

When it comes to a professional SAI, the control of political actors over an institution's audit work is negligible. The SAI is fully independent in setting its work program and its budget is not politically determined. Along with low political influence, this type of SAI has high professional autonomy by means of pushing forward its influence to other fields, such as evaluating the performance of public policies through performance audits. The NAO in the UK is an example of this type of SAI (Posner and Shanana, 2014).

The legal SAI is associated with the judicial model briefly described above. This type of SAI enjoys a high degree of independence from political interference in its audit work because it remains outside the influence of other institutions, based on the separation of powers principle, and enjoy autonomy over budgetary issues. Although, the legal SAI do not make any effort to extend its work to new areas, adhering to a legalistic approach to audit by the execution of compliance audits, assuring public accountability for financial regularity, in the sense of accountability for the proper legal stewardship of inputs. Posner and Shanana (2014) suggest the French Court of Audits as an example of this kind of SAI.

2.2.7.2.2. The Portuguese Court of Audits

Portugal is a unitary democratic system with a written constitution conferring powers to the Parliament to hold the Government to account for policies and their execution.

The CoA is the equivalent of the Portuguese SAI¹⁰. It has constitutional power and legitimacy and serves as an accountability mechanism for holding the executive and public entities to account. The CoA serves as a supreme court with judicial powers to control the use of public money as determined by the Portuguese constitution (Machado,

¹⁰ The CoA is a founding member of the INTOSAI (Tribunal de Contas, 2016a).

2008; Moreno, 2010). The CoA follows the so-called Judicial or Napoleonic model (IMF, 2018, p. 48).

The Budget Framework Law (Law 151/2015, of 11 September) also gives responsibilities to the CoA such as auditing the consolidated financial statements – yet to be prepared by the Ministry of Finance – for the Central Administration and Social Security sectors as defined for national accounts purposes.

In terms of institutional coverage, the CoA has powers to audit (European Court of Auditors - ECA, 2019):

- the State and its services;
- the autonomous regions of Azores and Madeira and their services;
- local authorities and their associations or federations, including metropolitan areas;
- public institutes;
- social security institutions;
- public associations, associations of public entities or associations of mixed public and private entities which are mostly funded by public entities or subject to their management control;
- state-owned companies;
- regional companies;
- inter-municipal and municipal companies;
- any entities with involvement of public funds, whether they receive a grant or are partly state-owned;
- companies with concessions to manage state-owned companies, or companies with a share of public capital or mixed private and public companies controlled by the public sector, companies with concessions or which manage public services, and companies with public works concessions; and
- other entities benefiting from or managing public funds.

The President of the CoA is nominated before the President of the Republic, under a government proposal (article 133/m of the Portuguese Constitution).

The CoA's mandate establishes that it can perform financial, compliance and performance audits and deliver judgment for financial responsibility. The CoA has judicial functions and may impose, if financial irregularities occur, sanctions on those that made decisions not following financial rules. Since 1989, the CoA has established its own budget, which suggests financial independence from politics (NAO, 2005). It also approves its strategic plan for a period of three years, approves its annual work program independently from undue influence and all its reports and decisions are published on its website (ECA, 2019).

2.2.7.3. The value, functions and independence of SAIs

2.2.7.3.1. SAIs value

INTOSAI (2019d) states that SAIs value is interlinked to the capacity of the SAI to: i) promote the accountability, transparency and integrity of the public sector; ii) demonstrate ongoing relevance to citizens, parliament and other stakeholders; and iii) being a model organization through leading by example.

In the literature, there are several explanations for the value of state audit based on explanations associated with the audit function in the private sector (Hay and Cordery, 2018; Heald, 2018). Accordingly, Table 2.10 summarises several explanations or theorizations for the importance and usefulness of auditing in the public sector.

Table 2.10: Explanations for state audit

Explanation	Why state audit is useful
1. Agency	Because it reduces agency problems. The presence of agency relationships implies costs of monitoring and auditing is used as a mechanism to control the agent, such as the government as an agent of the parliament, from concealing information about the use of public funds and assets.
2. Information	The information explanation (or signalling) is complementary to the agency explanation because, without asymmetries of information between an agent and a principal, no agency problems would arise. Under this explanation, the government is interested that the several constituencies regard its statements about public financial management as credible and this is facilitated when those statements are based on information audited by an independent audit body.
3. Insurance	Auditors can be used as scapegoats for public sector failures insulating the politicians from negative consequences on their trust and reputation.
4. Organizational control	Audit services are used as a tool to assure control in the public sector realm.
5. Confirmation	Audited information is needed to confirm previous information released which was useful for a specific purpose and that usefulness is dependent on the subsequent audit of the before mentioned information.
6. Risk management	When there are in the public sector governance mechanisms akin to the private sector such as the existence of audit committees or external directors, audit is more likely to be valuable by those in audit committees or serving as external directors.

Source: Based on Hay and Cordery (2018) and Cordery and Hay (2021)

Streim (1994) emphasizes that is the existence of agency problems in the political system which justifies the existence of state audit institutions, as moral-hazard issues are more likely to occur when the actions of the agent (government) are unobservable by the principal (parliament). To serve as a transparency mechanism, audit institutions should exhibit independence. We now turn to SAIs functions and their linkage with the concept of SAI independence.

2.2.7.3.2. SAIs functions and independence

Focusing on constitutional democracies, parliament must fulfil its role of holding the government (executive) accountable and, for this objective, the information content must be appropriate. By using the reports of the SAIs, the parliament (legislature) can make its own assessments and reach conclusions of policy implementation and results without

depending on the disclosure of information by the executive (e.g. Day and Klein, 1987; English, 2007, p. 331). Also, Porras-Gómez (2020) supports the idea that the external control delivered by SAIs is focused on disclosing information to foster accountability arrangements at the jurisdictional and political level and Heald (2018) observes that state audit injects transparency into the democratic political system.

However, this is associated with one of the stylized functions of SAIs, the "watchdog" function. Some studies (e.g. Bourn, 2007; English *et al.* 2010; Ling, 2003) identified two functions that auditors could endorse. One, through an *ex post* analysis of adherence to rules, standards and expectations of proper management, information is provided to parliament and the general public. This function, which is more closely related with the comfort zone of auditors and associated to the impact of state audit on public accountability, is known as the "watchdog" function. The other function, the "sheepdog" function, directs auditing for performance improvement by government and public sector entities, suggesting a more *ex ante* proactive involvement with auditees that may impair the audit independence necessary for the first function and may blur the lines between audit and evaluation (Pierre et al., 2018). These functions are, to a certain extent, seen as in opposition by the practical difficulties to reach a balanced approach.

To achieve the outcomes described in 2.2.7.3.1, when one looks at SAIs as an accountability institution, it should be granted and exhibit full independence from undue interference of other public powers, in line with INTOSAI requirements set out in the formal pronouncements known as Lima Declaration and Mexico Declaration (INTOSAI, 2019c).

INTOSAI is aware of the critical issue of an independent SAI and issued the *Mexico Declaration on SAI Independence* (INTOSAI, 2019c). Accordingly, it identifies the following eight principles of independence:

1. There should be an appropriate and effective legal framework which underpins SAIs independence and its implementation is assured;
2. SAIs top officials should be granted security of tenure and legal immunity in the normal discharge of their duties;

3. SAIs should be granted with a broad mandate in terms of scope and selection of audit topics;
4. For the proper discharge of their statutory responsibilities, SAIs should have unrestricted access to information;
5. SAIs have both a right and obligation to report the results of their audit work;
6. SAIs have sole autonomy on the content, timing, publication and dissemination of their audit reports;
7. Follow-up mechanisms on SAIs recommendations should be institutionalized; and
8. SAIs should have financial and management autonomy and the availability of appropriate human, material and monetary resources.

Posner and Shahan (2014) identify four types of independence. First, political independence, meaning that SAIs should remain free from the influence of both the executive and the legislature, which means that an SAI should have the capacity to plan and execute its audits based on professional judgements and standards, though considering the legislature expectations about SAIs audit activities. Second, organizational independence, evaluated by the appointment, tenure and removal of the head and members of the SAIs, which requirements should be clearly stipulated in the legal framework (e.g. constitution and organic law). Under this type, an independent SAI should have the authority to manage its human resources. Third, functional independence, according to SAIs have full access to information and discretion in choosing audit topics, guidelines and methods, making their reports and recommendations perceived as relevant. Fourth, financial independence, meaning that SAIs determines the size of their budget to discharge their mandate and work program.

Despite the above arguments, there are some concerns that independence may negatively affect the relevance of SAIs, in the sense that SAIs activities will be of no impact on increased public sector performance. For example, research suggests that in performance audits, SAIs pursue both independence and relevance objectives and are tensions between them (e.g. Lonsdale, 2008; Triantafillou, 2017).

For instance, Triantafillou (2017) argues, on the one hand, if an SAI pushes too far its independence objective by consistently issuing critical performance audit reports, this could lead to counterproductive effects such as less innovation, blame avoidance and even demotivation of public administration. But, on the other hand, because performance auditing deals with questions of efficiency and effectiveness, there is a risk to be a politicized activity.

Johnsen (2019) underlies that, in pursuing relevance, SAIs may end in a situation of auditing the results of their own previous advice to the auditees, which may negatively affect its legitimacy. The author also suggests that the trade-off between independence and relevance is affected by the political composition of the legislature. For example, if the government is backed by a minority in parliament, SAIs may be less willing to provide advice to the government for improvements in order to avoid being considered as favourable to government policies, impairing its relevance for a greater perception of independence.

2.2.7.4. Audit of PPPs

Once a specific public infrastructure project has been chosen, it can be delivered through a PPP contract -bundling design, construction, operation and maintenance, along with private finance - and this choice should be properly justified in comparison to the traditional public procurement option, where there is not that bundling of project phases into a single contract and the financing is from public funds. Also, during the execution of the contract, the merits associated with the PPP option should be demonstrated, usually, whether the higher cost of private finance compared with public finance cost is offset by the increased efficiency of PPP rather than traditional public procurement (Bourne, 2007; Siemiatycki and Farooqi, 2012).

Government is accountable for PPP transparency at all stages of the project, VfM assessment using a PSC, which is the cost of delivering the project by traditional public works method adjusted by the value of the risks retained by the public sector (Opara, 2018), at the planning stage, appropriate risk transfer, budget affordability and VfM during operation stage, to name a few. According to the stages of the project, we can identify *ex ante* accountability mechanisms (before the operational stage) and *ex post*

accountability instruments (during the operational stage). Examples of *ex ante* instruments are VfM testing and a competitive procurement process and *ex post* instruments are risk management and contract management (Reeves, 2013). With the objective of avoiding blame and escaping political accountability mechanisms (e.g. testimony before parliament, elections), the executive may hide the real reasons for launching PPP infrastructure projects and not disclose the performance of the contract against defined objectives (Loxley and Loxley, 2010). As governments may attempt to avoid public scrutiny, they may not disclose all the information necessary for VfM analysis, risk transfer assessment, contract management, affordability and service delivery. Thus, the SAI improve transparency and public accountability by disclosing information not disclosed by the government, allowing parliament more avenues for holding the government to account. From this perspective, accountability relationships are also agency relationships that raise agency problems and the existence of SAIs is needed to mitigate them (Blume and Voigt, 2011).

PPPs present significant audit challenges to SAIs throughout their lifecycle, from the planning phase up to the handing back of the assets to the public sector (e.g. English and Guthrie, 2006; CAAF, 2015). Bourne (2007) suggests that SAIs should be able to intervene in all stages of the life cycle of the project.

As for audits of other subject matters¹¹, several audit objectives may be pursued in a PPP audit associated with the type of audit (e.g. compliance and/or performance audit). In his book about public sector auditing, Bourne (2007) dedicates a chapter to PPPs. The author distinguishes different objectives for the pre-contracting phase and post-contracting stage in terms of VfM. The VfM assessment for the pre-contracting stage goes through a set of questions aimed at gathering evidence whether the best project was selected, the proper procurement and administrative procedures were implemented, the best bid was selected and if the deal still makes sense before awarding the contract to the winning bid. For VfM assessment after the signature of the concession contract (post-contracting stage), the audit questions and associated objectives should cover different issues, like whether the project is delivering against the contract, is the contract performing in a manner that the

¹¹ Subject matter refers to the information, condition or activity that is measured or evaluated against certain criteria. Criteria are the benchmarks used to evaluate the subject matter (INTOSAI, 2019a, p. 14).

public sector wants, is the contract delivering at least as well as alternatives and is the project working satisfactorily within the wider system of public provision.

Also, in the area of projects phases and auditing, CAAF (2015) distinguishes the planning and procurement phases (before the contractual agreement), the construction phase and the operations phase, the last two being after the contract's signature, each one enacting specific audit questions and offering opportunities for the audit being considered as adding value.

From auditing PPP arrangements, specific challenges emerge from the length and complexity of projects, access to information, political controversy and expectations of parliamentarians and the general public (CAAF, 2015).

CAAF (2015) also identifies several specific audit issues arising from PPPs contracts, such as adequacy of the VfM assessment process, the fairness and transparency of the procurement process, the governance and decision-making processes of infrastructure projects delivered as a PPP, the systems and processes to implement to monitor contract performance over the operating phase, the realization of project outcomes, the reporting of project performance over time and the performance of dedicated PPPs units in delivering on their remit. Among all these audit issues, VfM assessment and achievement is the most contentious one because it is the tool to draw the choice of the procurement route for the project, as conventionally public procured or as a PPP. Then, the governance and decision-making processes in the sense that selecting the PPP procurement model should be based on professional analysis and information and not on political or ideological grounds.

Concerning the Portuguese context, the CoA states that it follows the guidance issued by the INTOSAI. Based on this, it has developed a standard for auditing PPPs (INTOSAI, 2017a, 2017b; Tribunal de Contas, 2008). For instance, in Portugal, draft PPP contracts must be cleared by the CoA before they become legally enforced, albeit that this procedure is essentially *a priori* regularity audit (Machado, 2008).

CHAPTER 3: EMPIRICAL ESSAYS

This chapter presents the four empirical essays aimed to address the research questions described in Section 1.5.

Essay 1 analyses the annual report as a source of accountability information that provides raw transparency (see Subsection 2.1.1), measured by the level of disclosures deemed necessary for an effective holding to account function. Essay 2 simulates the impact of IPSAS 32 in public accounts and compare it to the official figures based on national accounts requirements. The state audit of transportation PPPs is examined in Essay 3, identifying, among other aspects, the work of the CoA in creating refined transparency by the new information brought about in the public domain. To triangulate the results from the previous essays and understand the stakeholders' perceptions on other relevant PPP topics, Essay 4 sets out the results from the questionnaire displayed in the Appendix.

3.1. Essay 1: Disclosure of information and transparency in public-private partnerships: a comparative study between Portugal and the UK ¹²

Preliminary note

This essay explores the role of the annual report on public accountability towards the parliament, considering the reporting and disclosing practices for PPPs in two different institutional and public sector accounting settings. We adopted the theoretical instance of public accountability as a mechanism (Bovens, 2010), a social relation between an actor who accounts (accountor) and another actor that holds to account (accountee). To avoid public accountability deficits is essential to exchange information that enables the accountee to address his role. We followed the model proposed by Bovens (2007) and further developed (Willems and Van Dooren, 2011, 2012) in an institutional context where the accountor is the government, the accountee is the parliament and the information given is the PPPs disclosures on the annual report. The comparative study carried out shows that neither the UK, where public reporting of PPPs is based on private sector accrual accounting standards, nor Portugal, which uses local cash accounting standards for PPPs public reporting, address the political accountability information needs of the parliament as an accountee: several disclosures deemed necessary by the literature for the functioning of the political accountability relationship between the government and the parliament are missing. Furthermore, in the case of Portugal, the essay shows that resource dependence and coercive institutional pressures related to the financial bailout during the sovereign debt crisis had an impact on the higher level of disclosures.

3.1.1. Introduction

In Subsection 2.2.1, the role of public infrastructures in economic and social development is proclaimed. In terms of their procurement and management, different approaches regarding the involvement of the private sector are available. The provision of part of this

¹² The following paper was based on this section:
Viana, L., P. Alves, and J. Moreira (2021), “Disclosure of information and transparency in public-private partnerships: a comparative study between Portugal and the UK”.
This paper has been submitted to *Accounting in Europe* and is currently under a peer review process.

infrastructure and public services through PPP arrangements in the early 1990s implied a redefinition of the roles of public and private sectors triggered by the provision of public services by private sector entities, the so-called hybridization (Grimsey and Lewis, 2004; Kickert, 2001; Willems and Van Dooren, 2011).

In the past decades, Portugal funded economic and social infrastructures, notably roads and hospitals, through PPP contracts involving consulting firms and private finance by banks. Portugal had the highest cumulative investment in PPPs in the EU, up to 12% of GDP for the period 1990-2011 (IMF, 2014, p. 70). At the end of 2017 there were 32 PPP contracts with yearly net payments of 1,632 million euros, most of them in the roads sector (UTAP, 2018).

For Portugal, PPPs are a hot topic since 2011, when the country asked for financial assistance to international organizations (EC, ECB and IMF, the so-called *Troika*), as it has been the focus of intensive media coverage, parliamentary inquiries and audits. The PPP contracts raise serious doubts about transparency, budget affordability and VfM. All of these elements are important features to demonstrate public accountability by government towards the parliament (e.g. Assembleia da República, 2013; S. Azevedo, 2014; Cruz and Marques, 2012; Macário et al., 2015; Tribunal de Contas, 2012).

In Portugal, the accounting information publicly available on these contracts is prepared on a cash basis, based on local standards. Assets, liabilities, revenues and expenses associated with these contracts are not disclosed on the Annual Report of the State (*Conta Geral do Estado*), which raises significant concerns on the fiscal transparency of these contracts and opens the debate on the choice for the reporting basis – cash versus accrual.

On the contrary, the UK uses International Financial Reporting Standards (IFRS) adapted to the public sector to disclose information about the execution of these type of contracts. Because of this, the UK is considered a country with advanced public sector accounting practices and closest to the IPSAS, given that the latter are mostly based on the former (Connolly and Wall, 2012; Ernst & Young, 2012; PwC, 2014).

In this essay, we try to contribute to the debate on the suitability to the public sector of the private sector decision usefulness accounting model by focusing on the international

variations of PPPs reporting and discuss whether the elements currently reported are sufficient to assure relevant information for a public and political accountability relationship (Bovens, 2007, 2010; Kickert, 2001; Willems and Van Dooren, 2011). More precisely, this essay analyses the differences in PPPs reporting according to the private sector decision usefulness accounting model (adopted in the UK) and local cash accounting rules (adopted in Portugal).

Given that financial reporting is a mechanism of accountability in general (IPSASB, 2014), PPPs accounting and reporting can be viewed as a mechanism of accountability for this specific type of contract because the act of reporting constitutes the most basic form of account giving (Dubnick, 2005; Hodges, 2013). Moreover, due to their political relevance and budgetary impact, Portuguese PPPs offer an interesting setting to study their transparency and political accountability, and, indirectly, how accounting and reporting can play a role as an accountability information mechanism, by creating raw transparency, as illustrated in Figure 2.2 (Dubnick, 2005; Hayne and Salterio, 2014; Mulgan, 2003; Patton, 1992; Shaoul et al., 2010). PPPs external reporting through the annual report, comprising financial, non-financial and narrative information, constitute one mechanism by which the government demonstrate accountability towards the parliament (Ryan et al., 2014). Consequently, we study the annual report as a behavioural instrument of account giving (Dubnick, 2005), using a comparative approach of the reporting elements disclosed on the Portuguese and the UK public accounts.

A significant body of research has shown the impact of institutional and cultural factors on public sector accounting and reporting practices (e.g. Carpenter and Feroz, 2001; Christiaens et al., 2015; Dasí et al., 2013; Manes-Rossi et al., 2014; Oulasvirta, 2014). By studying the information disclosed on the annual report in two different institutional settings, this essay attempts to contribute to comparative studies in public sector accounting and reporting, albeit most of them have been adopting a general approach (e.g. Benito et al., 2007; Christiaens et al., 2015; Pina et al. 2009; PwC, 2014). Thus, to the best of our knowledge, there is a lack of evidence on the comparison of the reporting of PPPs in different institutional settings. We aim to contribute to filling in this gap and raise new avenues for this type of public sector accounting research focused on specific transactions. Our analysis also responds to calls to undertake research on how accounting

standards based on the decision-usefulness paradigm also serve public accountability information requirements (Ellwood and Newberry, 2016).

The empirical evidence suggests that neither a private sector accounting model nor a cash-based public sector accounting model communicates all the aspects considered relevant for PPPs public accountability at the post-procurement phase. Overall, the objective of PPP reporting seems to focus on compliance with prevalent reporting standards, private sector accrual standards based on IFRS as adapted to the public sector (the UK case) or cash-based national accounting standards (the Portuguese case).

This essay adds to the literature that supports the idea of a difference between the purpose of public sector accounting and reporting and that of the commercial private sector. Caution is needed when considering commercial private sector accounting practices as suitable for the public sector (Barton, 2005; Coy et al., 2001).

The essay proceeds as follows. The second subsection addresses the theoretical context and research questions; the third subsection presents the research questions; the fourth subsection describes the institutional context, methodology and data; the fifth subsection presents the results and associated discussion; and the sixth subsection draws some conclusions.

3.1.2. Theoretical context

3.1.2.1. The annual report

At the heart of any accountability relationship is the disclosing of information by the accountant (who renders an account) towards the accountee (to whom the account is rendered) because for holding to account to be effective, relevant, reliable and timely information has to be available (Greiling and Spraul, 2010).

Public accountability is more than just vertical accountability with defined clear lines of control. Mulgan (1997) identifies other channels through which accounting information unleashes processes of accountability, this being a mean for “giving an account to those to whom one is responsible or accountable and whose authority gives them the right to demand such an account.”

Furthermore, demonstrating accountability by those with stewardship for the public resources entrusted to them implies the disclosure of information (Heald, 2012). Moreover, the use of private companies in the provision of public services raises questions and concerns about the public accountability of private managers because they are not directly responsible to parliament, and the reporting obligations on their performance are far fewer than for public managers. This latter limitation could be somehow compensated for by increasing the reporting requirements of the public sector accountant to demonstrate accountability of several aspects (Bovens, 2005; Laughlin, 2008; Shaoul et al., 2010).

As mentioned above, due to their nature and, usually, large amounts involved, PPPs raise questions about VfM, affordability, accountability, and accounting and reporting by the public sector grantor as a mechanism for discharging public accountability (OECD, 2008; Sarmiento, 2010; Shaoul et al., 2012a). One could suggest that demonstrating PPPs accountability encompasses showing through external reporting that they deliver VfM, are affordable, comply with budget appropriations and are properly managed. Thus, transparency delivered by the disclosure of information through the reporting system is a paramount accountability requirement (Shaoul et al., 2012a).

Those who advocate the merits of PPPs, justify their standing based on greater VfM by the risk transferred to the private sector and construction on time and on budget. Nevertheless, Stafford and Stapleton (2017) warn for a gap in the *ex post* governance mechanisms of PPPs because there is no publicly available information to evaluate if they indeed deliver more VfM than other methods of public procurement, which negatively affects the holding to account function.

For the purposes of this essay, transparency is the disclosure of information visible from the outside about an accountant's decisions, processes and results that allows one or many accountees to monitor the former (Hood, 2010; Meijer, 2013).

Hodges (2013) considers PPP accounting as the third element of its accountability by the associated transparency. The first is the achievement of VfM through the design of effective processes to secure an appropriate balance of costs incurred by and risk transferred from the public sector to the private partner. Second, the political

accountability for the decisions related to the financial commitments and affordability of PPP contracts.

The lack of proper PPP reporting ensues an information asymmetry problem, typical of a principal-agent relationship, where the agent is the government and the principals are the citizens or their representatives, like the parliament (Gailmard, 2014).

The annual report prepared by public entities or the government at large is considered the primary mechanism for public accountability based on the information provided through it (e.g., Coy et al., 2001; Crawford et al., 2018; Davis and Bisman, 2015; Patton, 1992; Shaoul et al., 2010; Stafford and Stapleton, 2017; Stecciolini, 2004). Using Roberts and Scapens (1985, p. 448) words:

The practice of accounting institutionalises the notion of accountability; it institutionalises the rights of some people to hold others to account for their actions. Viewed in this way, the practice of accounting can be seen to involve the communication of a set of values, of ideals of expected behaviour, of what is approved and disapproved.

A stream of literature links the annual report or financial reporting with discharging public accountability (e.g., Coy and Dixon, 2004; Coy et al., 2001; Davis and Bisman, 2015; Patton, 1992; Steccolini, 2004; Stewart, 1984). Stewart (1984) designed a framework for the analysis of public accountability, considering financial accounting a language for account giving, which implies public disclosure of information (Patton, 1992). Such a framework rests on the following two elements: *account* and *holding to account* that, together, subject to a set of criteria, represent the public accountability concept. Where the accounts are provided, but there is no capacity for action by the accountee, we are in the presence of links of account that do not constitute a bond of accountability, but support the accountability relationship (Stewart, 1984, p. 16). To have a public accountability relationship, the two elements described above must be in interaction through the bond of accountability and accounting information helps to fulfil the account element, being a necessary condition for the evaluation and consequences that must occur on the holding to account element, but not sufficient to have the full concept of public accountability.

In this essay, we follow Coy et al. (2001) conception of the annual report as an accountability mechanism which value rests in the provision of summarized financial and

non-financial information in a single document, enabling the users, some of them having the quality of accountee, to get a comprehensive picture of government's performance on several PPP aspects during their operational or post-contractual phase.

However, Steccolini (2004) found evidence that the annual report is not used as an accountability mechanism because the report is of poor quality, with weak accrual information and service performance evaluation. She asserts that it is instead a report to comply with legal requirements, and there are no alternative mechanisms of account giving. Steccolini (2004), who conducted a study on the role of the annual report of local government entities in Italy, finds that the information disclosed carves out the capacity of the report to be considered an accountability mechanism, noting that other information sources (forms of communication) could be used for discharging public accountability. The availability and accessibility of financial and non-financial information that is comprehensive, understandable and reliable are the basis of what the author refers to as the "virtuous accountability cycle". She goes further and states that a "vicious accountability cycle" could exist when annual reports are of poor quality for accomplishing public accountability information needs.

At this point, it seems appropriate to cite here Stewart (1984, p. 26):

The formal structure of public accountability and the potential to hold public officials and institutions to account would be, and often is, a mere form because there is inadequate information to make a judgment or to make that judgment effective.

3.1.2.2. Influences on reporting practices

It is a fact that the report, the accounting information in general, reflects a set of standards that make the information worthy. Accounting standards can be developed using two different paradigms: i) the stewardship or accountability paradigm; and ii) the decision-usefulness paradigm (Chen, 1975; Coy et al., 2001; Laughlin, 2008; Mack and Ryan, 2006; Ryan et al., 2014; Tower, 1993). The following paragraphs elaborate on the differences between the two.

The development of accounting theory and standards can occur under a sector contingent approach or according to a sector-neutral approach. Some academic literature studies

whether the accounting model should be contingent upon sector (for-profit, public and not-for-profit) and other literature argues that accounting conceptual frameworks and standards can be applied to any sector, the sector neutral perspective (Crawford et al., 2018; Grossi and Steccolini, 2015; Ryan et al., 2014).

When a contingent approach is applied to the public sector, the predominance of non-exchange transactions, the involuntary nature of funding (e.g., taxes), the relevance of non-financial performance and the general ambiguity and complexity of performance, the transparency requirements of political decisions, the diversity of stakeholders, the nature of assets, the consideration of fairness and equity (not only efficiency) and sovereign power, justify a different conceptual framework and standards for the public sector (Barton, 2005; GASB, 2017; Grossi and Steccolini, 2015; Ellwood and Newberry, 2016; IPSASB, 2014; Shaoul et al., 2010; Pallot, 1992; Wynne, 2019).

Barton (2005) argues that private sector accounting firstly aims at addressing the information needs of investors and financial markets, whereas in the public sector the government should focus on reporting to convey accountability towards citizens for its actions and performance, as democratic governments are agents of citizens and accountable to them or their representatives, notably parliament. The main purpose of private sector accounting is to address the information needs of resource providers to the entity, such as shareholders or creditors, and the objective of financial reporting is for economic decision-making, the so-called decision-usefulness objective. IFRS are mostly designed for capital markets participants (Newberry, 2015). The decision-usefulness paradigm's function is to improve decision-making, which is believed to prompt more resource allocation efficiency (Williams, 1987).

The current private sector accounting model, because it is based on the decision-usefulness paradigm, lacks a communitarian perspective that emphasises fairness and public accountability (Pallot, 1992). Along the same line of reasoning, Williams (1987) points out that the decision-usefulness serves to facilitate decisions – it is ends focused – and the accountability objective acts as a constraint – it is means focused. The accountability paradigm for external reporting contains fairness as an inherent property (Williams, 1987). The absence of the concept of fairness as an organising principle of

accounting theory and practice goes against the accountability objective that should underpin the external reporting of the public sector (Coy et al., 2001).

Grossi and Steccolini (2015) found evidence that the adoption of private sector accounting standards to the public sector does not translate into increased accountability because relevant public services contracted out to the private sector are not included in the public sector reporting entities.

The primary objective of public sector reporting should be to produce information for accountability purposes and this information also serves the decision-usefulness objective (Ellwood and Newberry, 2016). Along with economic decisions, users of accounting information in the public sector also make political and social decisions directed at addressing equity and fairness issues. Pallot (1991) suggests the introduction of a communitarian perspective in accounting along with the individualistic one that is in place, integrating two different views of society, individualist and organic. The author emphasises that communitarian values should also influence accounting policymaking, and not only individualistic ones, by introducing distributive justice in the objectives of accounting and the consideration of communitarian assets, such as infrastructure, as a category of assets.

In the same vein, Coy et al. (2001) argue that public sector external reporting should be based on the accountability paradigm instead of the decision-usefulness paradigm because the latter lacks the concept of fairness (Williams, 1987; Pallot, 1991). The decision-usefulness paradigm is primarily concerned with the information needs of those with a commercial relationship with the public sector.

On the contrary, accountability is based on the fair flow of information between the accountant and the accountee, balancing the interests of both parties (Ijiri, 1983). Accounting should assist in achieving societal goals and not only the economic goals of the resource providers. A public accountability objective for accounting allows the consideration of an equity criterion in the construction of accounting theory and standards (Tower, 1983).

To summarise, as information demands in the public sector are different from the private sector, a body of literature argues that the operational environment and the objectives of the public sector requires an accountability-based accounting conceptual framework and standards, and not a decision-usefulness framework imported, albeit with minor adaptations, from the corporate private sector.

Additionally, institutional pressures could also exert influence on external reporting practices (Tagesson, 2015). Several studies used the DiMaggio and Powell (1983, 1991) framework of isomorphic institutional change to explain variations in accounting and reporting practices. Institutional pressures for change can be coercive, such as that resulting from intervention and financing from international resource providers, normative, through the influence of professionals (e.g., accountants, consultants), and mimetic, by the adoption of reporting practices that are considered as modern best practice in the public sector (Adhikari and Gårseth-Nesbakk, 2016; Carpenter and Feroz, 2001; Cohen and Karatzimas, 2018; Oulasvirta, 2014).

In this essay, in relation to the Portuguese case, resource dependence and coercive isomorphism provide the theoretical background to examine external reporting practices evolution (see Subsection 2.1.2).

Furthermore, separate (individual) financial statements may be a mechanism for an individual public entity to account, the so-called entity level accountability (Laughlin, 2008). However, only consolidated financial statements, the accounts of the government or state as a whole, may be used by the government to account before parliament.

Considering the accounting basis, countries with pure cash accounting and reporting may underestimate fiscal costs and risks from PPP transactions, particularly during the construction phase of the public asset. In this case, the main fiscal aggregates - fiscal deficit and debt - do not fairly portray the level of risk undertaken by the public sector. On the one hand, cash accounting tends to induce a bias that pushes governments to underwrite PPP contracts for reasons other than public interest (Irwin, 2012). On the other hand, countries with more sophisticated accounting and reporting on accrual basis, using accounting standards like the IPSAS or IFRS adapted to the public sector, are required to record PPPs in ways similar to other projects with public financing, and, therefore, these

countries and their governments may be less exposed to such a bias, adopting PPPs as a financing instrument only in cases where such partnerships offer VfM and are affordable in the short and long-term. Thus, in the PPP context, the accounting system appears as an important tool that fosters public sector transparency and accountability. Figure 3.1 conceptualizes the main links.

Figure 3.1: Relationships between PPPs accounting and reporting, transparency and public accountability

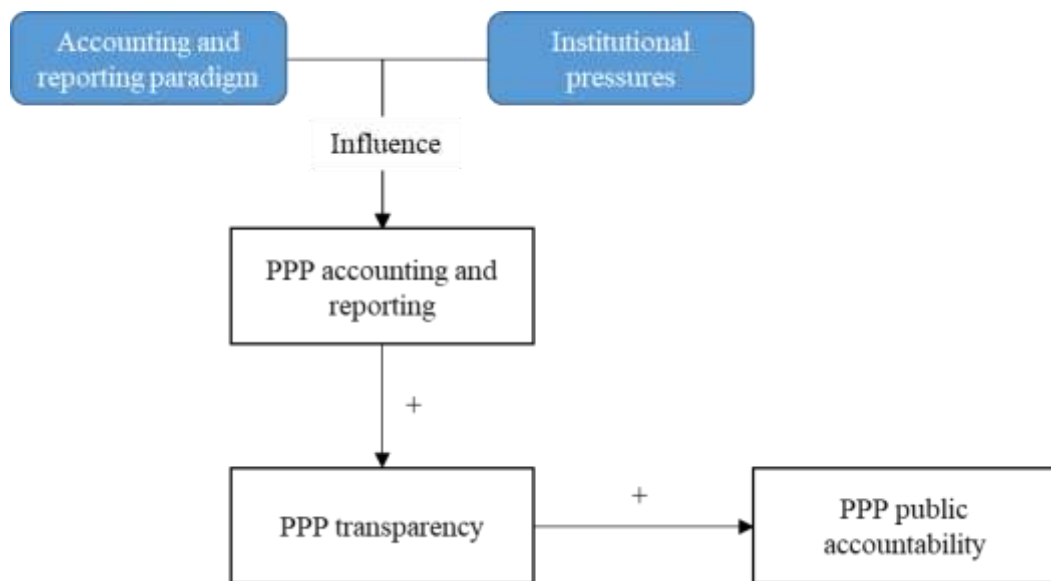


Figure 3.1 shows that PPP accounting and reporting are influenced by the accounting paradigm and institutional forces, such as those described above, and positively impact PPP transparency, which, in turn, enhances the prospects for public accountability. Moreover, the figure considers that transparency is instrumental to accountability, as is positively correlated with it (Bovens, 2007; Meijer, 2014).

For example, from a public sector accounting perspective, PPP reporting could be based on private sector international accounting standards (IFRS) adapted to the public sector, like in the UK context where IFRIC 12 was adapted to the public sector, or IPSAS 32, which resembles IFRIC 12, albeit from the public sector grantor perspective, or even according to national public sector accounting systems, as it is in Portugal, or a combination of accounting standards reporting requirements with voluntary disclosures.

3.1.3. Research questions

For the purpose of this essay, the disclosure of information about contractual PPPs after the signature of the contract in the annual report enhances transparency.

On political accountability grounds, the government is the ultimate body responsible for the governance, transparency, budget affordability, achievement of VfM, risk management, and contract management of PPPs, as it has to present an account in this regard for legislative scrutiny by parliament in its function as accountee. This is the information stage of the political accountability relationship between the government and parliament and allows the next stages of discussion and potential consequences. The scope and quality of information disclosed by the accountor is relevant for enacting learning processes that make the PPP procurement option more efficient and effective and safeguard public accountability in its political form (Bovens, 2010; Greiling and Spraul, 2010; Michels and Meijer, 2008; Mulgan, 2003).

As mentioned above, PPPs are a way of providing infrastructure-based public services by private sector entities, but they raise specific accountability issues arising from the role of private finance, budget affordability, compliance with budget appropriations, relationships between the various entities involved from the public and private sectors and the payment mechanism through which the private partner recovers the investment and earns a return. Transparency and disclosure of information through the reporting system are needed to achieve public accountability (Shaoul et al., 2012; Shaoul et al., 2010; Stafford and Stapleton, 2017).

Reporting is a mechanism of *ex post* evaluation of PPPs in line with the promises that were behind the option to develop public infrastructure using private finance and deliver public services by the private sector (Hodge and Greve, 2017; Opara et al., 2017). In theory, the accountor shares information with the accountee allowing the latter appropriate scrutiny concerning different aspects of post-procurement PPP projects related to the construction and operation phases (Yescombe and Farquharson, 2018).

On the one hand, the account rendered by the accountor (the government in this essay) should be transparent in a way that enables the accountee (parliament as representing

citizens) to ascertain the achievement of the intended results, demonstrating accountability for financial and non-financial performance. However, to avoid public accountability, the accountant may obfuscate the account rendered. The government may withhold key information needed for the political accountability effectiveness of PPPs. Proper enforceable reporting from the accountant to the accountee would allow the moral hazard agency problem to be addressed in the form of information inefficiencies (Strøm, 2000).

On the other hand, academic and guidelines issued by multilateral international organisations suggest the disclosure of information linked to several PPP-related dimensions that are deemed relevant for its transparency. A set of reporting elements described in the literature, considered in a normative perspective as important for transparency and public accountability purposes, will be checked against the UK WGA and Portuguese (PT) State Accounts. The choice of such a set builds on extant literature (Dabbico, 2015; Edwards et al., 2004; Funke et al., 2013; House of Commons, 2018; Lee and Fisher, 2004; IMF, 2006; OECD, 2012; Shaoul et al., 2008, 2010; Stafford and Stapleton, 2017; World Bank, 2016), and on the reporting and disclosures prescribed by international accounting and reporting standards for the private and public sectors (IFRIC 12, IPSAS 32).

The above arguments form the basis of our first research question with reference to Portugal and the UK:

Research question 1.1 (RQ 1.1): What is the level of transparency in PPP contracts?

This research question sets out the possibility of setting a benchmark based on the actual reporting practices in two somewhat polarised settings in terms of public sector accounting with what is considered in academic and practitioner literature (see Table 3.2 below) as the desirable reporting for the establishment of a political accountability relationship in the PPP setting during the post-procurement phase of the contracts. In the case of the UK, it also allows the suitability of a private sector accounting model to be assessed, based on the decision-usefulness model, in terms of information to be disclosed for political accountability arrangements.

Along with the assessment of the level of external reporting transparency of PPPs through the annual report for two countries with different public sector accounting models, this essay also aims to compare them.

Considering the UK context, Shaoul et al., (2010) concluded that there is a lack of information that negatively affects the transparency and accountability of PPPs, and made a call for the disclosure of additional information in public sector accounts. Nevertheless, the UK is considered to have advanced practices in public sector budgeting and accounting (OECD, 2015; PwC, 2014; World Bank, 2016). Thus, it can be used as a benchmark for the Portuguese public sector accounting practices, leading to a comparison between the PT State Accounts (*Conta Geral do Estado*) and the UK (WGA) regarding PPP reporting, in order to identify how these two different models of public accounts compare, leading to our second research question:

Research question 1.2 (RQ 1.2): How do the Portuguese State Accounts compare with the UK WGA in terms of disclosures about PPPs?

Both research questions will be answered simultaneously in Subsection 3.1.5.

3.1.4. Institutional context, methodology and data

3.1.4.1. Institutional context: Portugal versus UK

In this point, we make an overview of the Portuguese and UK contexts in terms of political-administrative regime, state audit, public sector accounting, external reporting and PPPs.

Table 3.1 summarizes and compares the main dimensions of the two institutional settings (Aggestam et al., 2014; Corte-Real, 2008; EPEC, 2011, 2014; Jorge, 2015; OECD, 2015; Posner and Shahan, 2014; PwC, 2014; Pollitt and Bouckaert, 2017).

Table 3.1: Institutional context

Dimension	Portugal	United Kingdom
Legal system	Civil law	Common law
Administrative tradition	Napoleonic	Westminster
Government structure	Central government Local government Two Autonomous Regions	Central government Local government
Supreme Audit Institution	Court of Audits	National Audit Office
Accounting standards	National standards for separate financial statements* Consolidation requirements set up in legislation based on the principles and criteria of IPSAS 6	IFRS adapted for the UK public sector
Accounting requirements for service concession arrangements	Not formally defined	IFRIC 12 adapted to the public sector grantor
Definition of consolidation boundary	Control principle for municipalities, universities and health sector based on IPSAS 6 Budget sector for central government**	Bodies of a public nature or funded substantially from the public purse
Entities included in the consolidation	Municipalities and controlled entities Universities and controlled entities Central Health Agency and controlled entities by the Ministry of Health	The two levels of government (central and local) and public corporations Parliament, the Royal Household and Auditor General excluded
Parliamentary oversight	Commission on Budget, Finances and Public Administration Affairs Court of Audits	Public Accounts Committee Treasury Committee Comptroller and Auditor General (head of the National Audit Office)
PPP Law	Yes. Decree-Law 111/2012	No
PPP dedicated unit	Yes	Yes

Notes:

* From 1 January 2018 onwards, a new accounting framework is in force for the central administration. For financial accounting, it's based on IPSASB Conceptual Framework and IPSAS standards. For local government and social security it came into force by 1 January 2020.

** Consolidated financial statements have never been prepared for the central government or the public sector as a whole. There are only consolidated budgetary statements on a cash basis.

Portugal exhibits features of a Napoleonic type administrative structure, contrasting to the Anglo-Saxon (or Westminster) model in the UK (Corte-Real, 2008; EPEC, 2011; Pollitt and Bouckaert, 2017, p. 63; Tribunal de Contas, 2016b):

- a unitary State and a centralized style of governance, legalistic culture with the administrative law being an autonomous body of the legal system, a civil service based in careers, and to some extent a separation between public administration and the government;
- regarding accounting and financial management, the introduction in 1997 of a new accrual accounting framework (POCP – *Plano Oficial de Contabilidade Pública*) was a major legal innovation and not necessarily a *de facto* innovation because the accounting practices in several areas still reflect cash accounting principles; and
- civil law jurisdictions are expected to have detailed and prescriptive legal requirements for PPPs arrangements, contrasting with common law jurisdictions.

As far as state audit is concerned, the role of the SAI as an accountability mechanism is to assure three dimensions of accountability better described in 2.2.7.1: i) legal, i.e. the compliance with laws and other legal acts; ii) financial, i.e. the financial statements prepared by the government or public entities are free of material misstatements; iii) performance, i.e. to guarantee that public policies achieve their goals in the most effective and efficient manner (Posner and Shahan, 2014).

In this respect, there are some differences between the SAI in Portugal (Court of Audits) and in the UK (National Audit Office). Considering Posner and Shahan (2014, pp. 499-501) types of SAI (see 2.2.7.2), the Portuguese Court of Accounts is a “Legal SAI” because it exhibits the following characteristics: i) is a constitutional body with a judicial function; ii) enjoys full autonomy for managing the own court resources; iii) is independent of both the legislative and executive powers, being part of the judicial power as set up by the Portuguese Constitution; iv) has a judicial function that enables the application of financial sanctions to politicians and public managers; v) the audits performed are essentially focused on legality and financial regularity (compliance audit); and vi) the President of the Court of Audits is appointed by the President of the Republic based on a government proposal. Conversely, the UK NAO is a “Professional SAI”, and the main differences for the “Legal SAI” are: i) non-performing judicial functions; and ii) more focused on financial audit and performance audit.

In the UK, PPPs (so-called PFI) were launched in 1992 to provide an alternative model for infrastructure financing and engage the private sector in the design, building, financing and operation of public infrastructures (Hellowell, 2010). Under PFI, a type of contractual PPP, a SPV is set up for the financing, construction, operation and maintenance of the infrastructure, receiving a stream of payments during the contract duration (25-30 years) for covering the costs incurred, debt service and an adequate return to investors on the SPV (House of Commons, 2018). The UK has the largest PPP program in Europe with around 700 operational contracts up to 60 billion pounds of capital value and had a recent and positive evaluation of OECD on its governance (OECD, 2015).

Some evidence suggests that the UK used the PFI procurement method as a mechanism to present less public debt in national accounts than the delivery of infrastructure by the traditional public procurement approach (House of Commons, 2018; OECD, 2015).

Due to some criticisms, the PFI model for the delivery of public infrastructure and services was reassessed and updated in 2012 to the Private Finance 2, which is a new approach to address some of the criticisms made to PFI. For example, one of the significant differences to PFI is the inclusion of the public sector with a minority stake on the equity of the SPV (HM Treasury, 2012a; OECD, 2015).

The Portuguese State Accounts that government delivers to the parliament do not follow international accrual standards. Instead, the information therein is mainly based on cash standards, alongside national accounts calculations and the disclosure of future payments and contingencies.

On the contrary, the UK adapted IFRS standards to the public sector and currently prepares the so-called WGA. The announcement in 2007 of the IFRS adoption in the UK public sector was part of NPM reforms in terms of accounting professionalization (Connolly and Wall, 2012). Because IPSAS standards, except for those aimed at specific public sector matters, are based on IFRS, the UK is considered strongly convergent with IPSAS, particularly with IPSAS 32 that establishes the accounting and reporting requirements for contractual PPPs (see 2.2.6.2.).

WGA are a set of audited financial statements comprising central government, local government, the National Health Service (NHS) and public corporations (e.g., HM Treasury, 2015b). Regarding PFI contracts, IFRIC 12 and other IFRS standards are the basis for accounting requirements. PFI contracts are reported on the WGA that are published as part of government accountability towards parliament. The objectives of WGA are to improve (HM Treasury, 1998, 2011): i) transparency; ii) accountability; iv) completeness; v) comparability; and vi) complementary information.

The WGA are considered an advanced practice on fiscal reporting because they offer a full overview of the public sector financial affairs. To the best of our knowledge, the UK is the only country in Europe that accounts and reports for PFI/PPPs in accordance with internationally accepted accounting standards. According to IMF (2016) the UK has advanced practices of external reporting preparing a comprehensive balance sheet, but the timeliness of the WGA publication should be improved.

3.1.4.2. Methodology

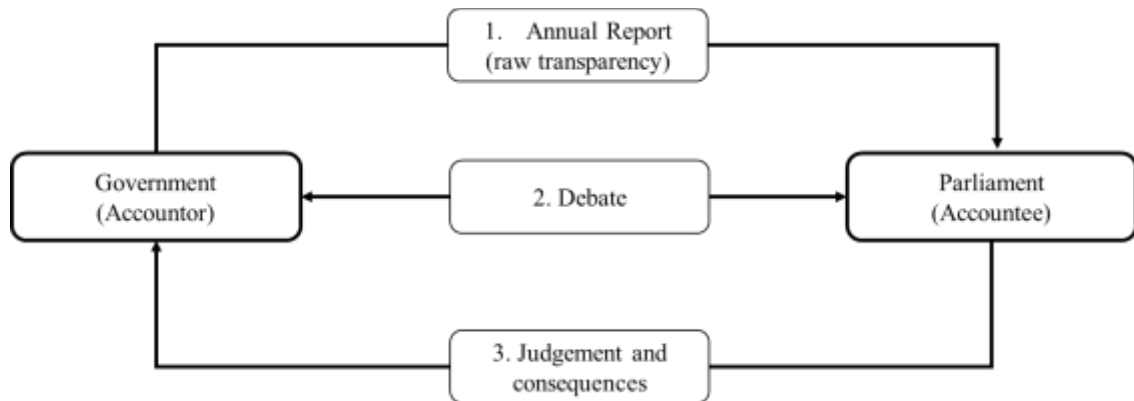
PPPs require oversight *ex ante* and *ex post* contract formation. Financial and non-financial reporting may enhance the scrutiny over the execution or post-procurement phase of the contract.

As it is comprehensively illustrated in 2.2.4.2, depending on the project, PPPs can be an optimal procurement model compared to traditional public procurement (Yescombe and Farquharson, 2018). As a procurement model, they should be chosen on the grounds of better VfM over traditional public procurement because of the risks that are transferred to the private partner, notably construction and availability risk. As a consequence for public accountability purposes, information about VfM achievement and risk transfer should be disclosed by the government on the annual report (e.g., Shaoul et al., 2010).

Using the public accountability notions and concepts, the accountor is the government, and the accountee is the parliament that pass judgment by the approval, or not, of the annual report (Portuguese State Accounts, and the WGA in the UK). Thus, our theoretical framework of reference is the concept of public accountability as a mechanism to enhance democratic governance and the schematic representation of it is in Figure 3.2 that sets the

annual report as raw transparency identified in Figure 2.2 (Bovens, 2007, Bovens, 2010, Willems and Van Dooren, 2012).

Figure 3.2: The political accountability relationship forum



Parliament authorizes the government to raise revenues and spend public money and has a constitutional responsibility to hold the government to account for the use of public resources (Brazier, 2007). Therefore, the account of the use of public resources by the government to parliament is given through the annual report, which provides the content to the information disclosed by the accountor (reporting phase) in order to have the necessary public debate (discussion phase) and formal judgment (consequences phase) by the accountee (Bovens, 2007, Mulgan, 2003, 2014a).

From a normative perspective, to answer both research questions, the first step is to identify a set of reporting elements described in the literature as relevant for transparency and public accountability purposes. Secondly, the existence of these will be checked in the UK WGA and PT State Accounts (*Conta Geral do Estado*). The choice of such a set builds on extant literature (Dabbicco, 2015; Edwards et al., 2004; Funke et al., 2013; House of Commons, 2018; IMF, 2006; Lee and Fisher, 2004; OECD, 2012; Shaoul et al., 2008, 2010; Stafford and Stapleton, 2017; World Bank, 2016), and on international accounting and reporting standards for the private and public sectors (IFRIC 12, IPSAS 32).

To address the research questions, we study the reporting of PFI contracts on the UK WGA since its inception, comparatively to the reporting of PPPs on PT State Accounts, from a qualitative perspective, not being relevant for the purposes of this essay the

analysis of numerical values and their evolution or deviations from budget amounts. This approach is consistent with the literature that tries to develop public accountability disclosure indices (e.g. Dixon et al., 1991; Ryan et al., 2002; Steccolini, 2004).

Consequently, Table 3.2 summarizes the reporting elements related to PPP contracts in the post procurement phase. The consideration of these elements is essential and are the minimum requirements for discharging PPPs public accountability at the information phase (Mulgan, 2003, 2014a). After the procurement phase, the government should give a transparent public account of the execution of PPP contracts as a form of demonstrating public accountability by the disclosure of the reporting elements presented in Table 3.2.

Table 3.2: PPPs reporting elements considered necessary for the establishment of a public accountability relationship

Reporting element	References
1 Stock of assets (infrastructure)	IFRIC 12/IPSAS 32; Shaoul et al. (2010); Shaoul et al. (2008)
2 Capital investments during the financial year	Shaoul et al. (2008)
3 Financial liability	IFRIC 12/IPSAS 32; Shaoul et al. (2010); Shaoul et al. (2008)
4 Future cash flows	Funke et al. (2013); IMF (2006); Edwards et al. (2004)
5 Service charge	IFRIC 12/IPSAS 32; OECD (2012)
6 Cost of finance (finance charge)	IFRIC 12/IPSAS 32; OECD (2012); Shaoul et al. (2010)
7 Budgeted payments	Shaoul et al. (2010); Shaoul et al. (2008)
8 Actual payments	Shaoul et al. (2010); Shaoul et al. (2008)
9 Explanation of differences between budgeted and actual payments	Shaoul et al. (2010); Shaoul et al. (2008)
10 Monitoring costs	Shaoul et al. (2010); Shaoul et al. (2008)
11 Contingent liabilities	Dabbico (2015); Funke et al. (2013); IMF (2006); Shaoul et al. (2008); World Bank (2016)
12 Performance data	House of Commons (2018); Lee and Fisher (2004); World Bank (2016)
13 Penalties	Shaoul et al. (2010); Edwards et al. (2004); World Bank (2016)
14 VfM considerations	Stafford and Stapleton (2017); World Bank (2016)
15 National accounts impact	IMF (2006); Shaoul et al. (2008)

It's against these elements that we assess the information delivered to the accountee by the accountant.

Our assumption is that external reporting through the annual report of these items would allow the government to demonstrate accountability for PPPs financial and non-financial performance, as well as for compliance with budgetary requirements.

In the empirical work we will also take into account the report of the SAI as a tool to reduce information asymmetries. Given this institution capacity of delivering a public audit, it can support public accountability by delivering additional information, providing refined transparency as illustrated in Figure 2.2, helping the accountee in its role of account judgment (Stewart, 1984).

Overall, we can consider these reporting elements as the expectations about the information to be given by the accountant to the accountee in the public forum of the accountability relationship (Willems and Van Dooren, 2011).

3.1.4.3. Data

For the UK WGA the data sources are publicly available information (HM Treasury, 2011, 2012b, 2013, 2014, 2015b, 2016, 2017, 2018b), as well for Portugal. We analyse the Portuguese State Accounts, which covers the Central Administration and Social Security sectors that the Government delivered to the Parliament under the Portuguese Constitution and Budget Framework Law's stipulations.¹³

WGA are prepared annually, covering the period from the first of April to the end of March and the technical standards underlying their preparation are included on the Financial Reporting Manual (FReM) issued each year.¹⁴ The UK WGA were first published in November 2011, for the financial year ended 31 March 2010 (2009-2010 accounts).¹⁵

The WGA, prepared under the Government Resources and Accounts Act 2000, comprising the Consolidated Statement of Revenue and Expenditure, the Consolidated Statement of Financial Position, the Consolidated Statement of Changes in Taxpayers Equity, the Consolidated Cash Flow Statement and the related notes, are audited by the Comptroller and Auditor General (C&AG) that is the head of the NAO (the UK SAI).

¹³ The accounts are available at:

<http://www.parlamento.pt/OrcamentoEstado/Paginas/ContaGeraldoEstado.aspx>

¹⁴ The different FReM can be accessed here: <https://www.gov.uk/government/collections/government-financial-reporting-manual-frem>

¹⁵ The whole of UK government accounts (consolidated financial statements) are publicly available from: <https://www.gov.uk/government/collections/whole-of-government-accounts>

The C&AG issues a Certificate (auditor opinion) that we will analyse in order to evaluate if there is any qualification or emphasis of matter related to PPPs arrangements.

From the notes to the accounts, we analysed the PFI accounting policies, which are based on IFRIC 12 and remained unchanged over the study period.

In Portugal (PT) the annual report of PPPs is included in the State Accounts. According to the Budget Framework Law (Law n.º 91/2001 as amended), these accounts are prepared by the government on an annual basis for the year ended on 31 December. The documents must be delivered to the Parliament by the end of June of the following year. The Parliament discusses and approves (there is a legal possibility for not approval) the documents until the end of December of the following year, considering the Report from the CoA issued according to its legal mandate.

In the next subsection, we will compare the accounting and reporting, along with the C&AG Certificate of the WGA and the CoA recommendations over the PT State Accounts, of this type of contracts in two countries that have used PPPs extensively, but with different political-administrative and accounting contexts (IMF, 2014, 2016).

3.1.5. Results and discussion

3.1.5.1. Level of transparency: Portugal and the UK

Considering the methodology described in 3.1.4.2 and the analyses of the UK WGA and the PT State Accounts, and considering the list of reporting elements disclosed in Table 3.2., we have the following information in Table 3.3 since the inception of the WGA until the last annual report considered in our study that allows us addressing the two research questions put forward in Subsection 3.1.3.

Table 3.3: Reporting elements disclosed by year and set of public accounts

Reporting element (RE)		2010		2011		2012		2013		2014		2015		2016		2017	
		PT	UK	PT	UK	PT	UK	PT	UK	PT	UK	PT	UK	PT	UK	PT	UK
1	Stock of assets (infrastructure)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
2	Capital investments during the financial year	Yes	No	Yes	No	Yes	No	No	No	Yes	No	Yes	No	Yes	No	Yes	No
3	Financial liability	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
4	Future cash flows	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	Service charge	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
6	Cost of finance (finance charge)	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
7	Budgeted payments	No	No	No	No	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
8	Actual payments	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
9	Explanation of differences between budgeted and actual payments	No	No	No	No	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
10	Costs of monitoring	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
11	Contingent liabilities	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	Performance data	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
13	Penalties	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
14	Value for money considerations	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
15	National accounts impact	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Number of Yes		4	7	4	7	4	7	5	7	6	7	6	7	6	7	6	7
Percentage of Yes		27%	47%	27%	47%	27%	47%	33%	47%	40%	47%	40%	47%	40%	47%	40%	47%

Notes:

2010 refers to 2009-2010 UK WGA and 2010 PT State Accounts. The same reasoning applies to the following years.

“Yes” means that the reporting element was disclosed and “No” it’s the contrary.

Throughout the sample period, any set of accounts disclosed no more than 50% of the reporting elements. The UK WGA disclosed the same seven reporting elements (47%) for the period considered (RE 1, 3, 4, 5, 6, 11 and 15). PT State accounts disclosed information for four reporting elements from 2010 until 2012 (27%). The number increased to five in 2013 (33%) and to six from 2014 onwards (40%).

The main notes concerning Table 3.2 content are as follows:

- For all years, the UK WGA disclosed the stock of assets (RE 1) measured according to accrual accounting standards. From 2013 onwards, PT State Accounts cancelled disclosing information related to the accumulated capital investment;
- Except for 2013, capital investments during the year (RE 2) were disclosed on PT State Accounts. Instead, the UK WGA have no information on this reporting element. This evidence for UK may be associated with the adoption of IFRIC 12 where there is no requirement to disclosed capital investments;
- The amount of the financial liability as at the end of the financial year is disclosed for all years on the UK WGA. On the contrary, PT State Accounts have no information for this reporting element (RE 3);
- Only for future cash flows (RE 4) both set of accounts disclose information for the period covered. This information is relevant for budget affordability assessment (OECD, 2012);
- Service and cost of finance charge (RE 5 and 6) are disclosed on the UK WGA for all years but are not disclosed on PT State Accounts in any year;
- For RE 7, 8 and 9, PT State Accounts provide further information than the UK WGA Accounts. More precisely, any of these reporting elements is disclosed on the UK WGA for all years. Until 2012, PT State Accounts only disclosed actual payments and afterwards the three reporting elements are public available;

- Contingent liabilities (RE 11) were disclosed for all years in the UK WGA and started to be disclosed on PT State Accounts since the 2013 financial year. The UK WGA identify the following types of contingent liabilities – quantifiable contingent liabilities; non-quantifiable contingent liabilities; remote quantifiable and non-quantifiable contingent liabilities. We went through the notes to the financial statements to verify if there are disclosures related to PFI contingencies. For 2010, a remote quantifiable contingent liability associated with a PFI arrangement was disclosed. For PT State Accounts since the beginning of the presence of this RE, contingent liabilities were never quantified, but with general expressions referring to risks associated with PPP contracts and litigation, which can have an adverse financial impact. Notwithstanding, in 2016 PT State Accounts, there is information related to some unquantifiable contingencies from previous years resulting from legal disputes with the concessionaires that resulted in court decisions which crystallize (requiring a payout), transformed that contingencies in liabilities of 184 million euros;
- Penalties prescribed in contracts for any kind of breaches by the operator should be properly enforced by the public sector to incentivise the contracted performance because risks, and associated costs, could with ease revert to the public sector (Shaoul et al., 2008; Stafford and Stapleton, 2017). For all years considered, both sets of accounts did not disclosed any penalties imposed on private contractors. Also, for monitoring expenses (a *proxy* for transaction costs during the contracts execution phase), performance data, and considerations about achievement of VfM, no information was disclosed. Altogether, the lack of these reporting elements hinders the possibility: i) to evaluate the performance of these contracts against specified targets; and ii) to compare VfM assessment made at pre-contract stage to its achievement at post-contract stage, or if VfM was not considered at all on the decision to choose PPP as the procurement option;
- National accounts impact was never specifically identified on PT State Accounts but, on the contrary, the UK WGA presents the national accounts impact of these contracts and this enhances its transparency;

- More precisely, the WGA includes a chapter with the comparison to national accounts figures (RE 15). There is a reconciliation table between the main fiscal aggregates that are relevant for the EU fiscal surveillance framework and accounting based measures. A reconciliation is provided: i) between net liabilities (WGA) and public sector net debt (National Accounts); and ii) between net expenditure (WGA) and current deficit (National Accounts);
- In the reconciliation between the net liabilities and public sector net debt, the effect of PFI contracts is isolated and has a positive impact because, according to financial accounting requirements (IFRIC 12, IPSAS 32), more PFI will be classified on the public sector balance sheet than with national accounts requirements; and
- The PT State Accounts also present a reconciliation table between a working balance (difference between revenues and expenses from transactions) on a cash basis, and the net lending/net borrowing for national accounts purposes (Jorge et al., 2018). In that reconciliation table there is no isolation of the impact from PPP arrangements. However, as stated in the 2010 report, some PPP contracts that were classified off balance sheet saw a statistical revision that led to their reclassification on balance sheet with the associated impact on debt and deficit figures for national accounts purposes.

As far as SAI report is concerned, in the UK the A&CG issue no modification to its opinion based on PFI contracts. The Court of Accounts made in 2017 a recommendation regarding PPPs, on the following terms: i) certify the inventory of PPPs; ii) access to information for evaluating contracts execution; iii) validate the information reported by the public and private sector; and iv) evaluate the accomplishment of PPPs objectives.

3.1.5.2. Insights from the comparison: answering the research questions

The results described above allow some comments into the external reporting of PPPs in two different institutional settings and answering both research questions.

The UK WGA disclose more reporting elements than the PT State Accounts, but both accounts do not cover the majority of the items identified for public accountability

purposes. Moreover, the UK WGA accounting policies and disclosed information about PPP remained the same for the whole period covered in this essay, revealing great stability. This is not the case for Portugal where there were variations during the period. Information related to RE 7 (budgeted payments), 9 (explanation of differences between budgeted and actual payments) and 11 (contingent liabilities) appeared only in 2013 accounts and afterwards.

During the period 2011-2014, Portugal was under a financial assistance programme led by the *Troika*. Under the conditionality, Portugal assumed deficit and debt targets for each of the years covered by the programme, the breach of which could lead to a second bailout and new terms and conditions to be negotiated with the international organizations that constitute the *Troika*.

Regarding PPPs, the following clause was negotiated and inserted in the Memorandum of Understanding on Specific Economic and Financial Policies of 17 May 2011, among others:

Enhance the annual PPP and concessions report prepared by the Ministry of Finance in July with a comprehensive assessment of the fiscal risks stemming from PPPs and concessions. The report will provide information and analysis at sectoral level. The annual review of PPPs and concessions will be accompanied by an analysis of credit flows channelled to PPPs through banks (loans and securities other than shares) by industry and an impact assessment on credit allocation and crowding out effects. This particular element will be done in liaison with the Bank of Portugal. (EC, 2011, p. 70)

Therefore, the *Troika* recommendations for more transparent PPP reporting (EC, 2011) appear to have an effect because two more items (50% increase from four RE to six RE) are being disclosed when compared with the 2010-2012 period. In fact, in 2012, the government approved a new PPP decree-law as part of addressing the *Troika* impositions that have some provisions for disclosing information. These results are consistent with institutional and resource dependence theories prediction that fiscal stress and resource dependency are coercive institutional pressures for changing reporting practices (Carpenter and Feroz, 2001; Cohen and Karatzimas, 2018).

Overall, the results suggest that the accounting standards have a strong influence on the RE disclosed in UK and that coercive institutional pressures resulting from *Troika's*

financial resources dependence affected the level of elements disclosed in Portugal. The WGA in the UK presents RE associated with the accrual accounting framework based on IFRS adapted for the public sector, and this framework has some caveats for public accountability purposes (Shaoul et al., 2008, 2010; Stafford and Stapleton, 2017). As far as PPPs is concerned, business-like accounting standards fall short in terms of the information scope considered necessary for the information stage of the political accountability relationship. The PT State Accounts presents RE mainly associated with the cash basis, which underlies the preparation of accounts, lacking some elements related to accrual accounting (RE 3, RE 5 and RE 6) and non-financial reporting elements (RE 12, RE 13 and RE 14).

Our argument is that the information preparer's adoption of accounting and reporting standards does not guarantee that the annual report contains the information users need for public accountability purposes. The decision to disclose information may respond to public or institutional pressure (Carpenter and Feroz, 2001; Cohen and Karatzimas, 2018). There is evidence in cases where disclosure about infrastructure was voluntary that a low level and diverse reporting practices prevail (Lee and Fisher, 2004). To tackle this situation, IMF (2006, pp. 28-29), for example, shows guidance on the disclosure of relevant and useful PPPs information for public accountability purposes. Thus, the lack of specific accounting and reporting standards for PPPs cannot be used to justify the lack of the reporting elements identified in Table 3.2.

For both sets of public accounts, it seems that the provision of information as the first phase of the political accountability relationship between the Government (accountor) and the Parliament (accountee) is lacking sufficient transparency, by the absence of more than half of the reporting elements, putting at risk the following phases - discussion and consequences -, in the process of accountability (Bovens, 2007, Mulgan, 2003, Mulgan, 2014a; Willems and Van Dooren, 2012).

Due to the lack of several reporting elements identified in the literature as relevant to the information stage of the public accountability process, our results also support the importance to design a harmonized international framework for PPPs reporting to assure proper public scrutiny, as IFRS based accounting standards applied to the public sector seem not to be sufficient (Shaoul et al., 2008, 2010, 2012a; Stafford and Stapleton, 2017).

Regarding the level of transparency in the UK (RQ 1.1), measure as the number of disclosed reporting elements, the lack of information over VfM achievement, including risk transfer, performance, budgetary execution and deviation analysis, monitoring costs and penalties, negatively affects the potential scrutiny of the accountee. This result warrants a comment that accrual accounting in the public sector must be designed to address its specific nature, because the public sector's unique characteristics and accountability information requirements demand different accounting standards (Barton, 2005; Ellwood and Newberry, 2016; Pallot, 1992; Wynne, 2019). The results from the UK WGA confirm the argument that the decision usefulness paradigm for accrual accounting does not assure *per se* disclosing information for discharging PPPs public accountability.

Answering RQ 1.1 using the PT State Accounts data, where local cash accounting standards underpin the annual report that the Government sends to the Parliament, budgetary execution and deviation analysis is disclosed, but it lacks information associated with the application of accrual requirements, VfM, risk transfer, performance, monitoring costs, penalties and national accounts impact, lagging behind the UK, in terms of the number of disclosures, by one RE from 2014 onwards.

In summary, these results raise some doubts concerning the value of the annual report as an appropriate tool for the Governments' discharging of PPP political accountability towards Parliament and citizenry because the level of transparency is considered to be insufficient (RQ 1.1). Concerning RQ 1.2, the UK discloses slightly more reporting elements than Portugal, seven percentage points higher than Portugal in the last year considered.

A limitation of the analysis is the assumption that the documents studied are the only source of information for accountability purposes. It should be stated that the Parliament may use other accountability mechanisms to gather the needed information for all PPPs accountability disclosures described above, such as parliamentary questions and enquiries (Mulgan, 2003).

3.1.5.3. Reporting elements content comparison

Another limitation of the previous analysis is that it only shows the presence or absence of each RE (quantitative approach), not discussing the information content of each RE disclosed (qualitative approach). To address this limitation, for each RE we made a finer comparison of the information disclosed, considering the last year published and the RE that are common to both institutional environments. Results are presented in Table 3.4.

Table 3.4: Description of the reporting elements disclosed (2016-2017 the UK WGA and 2017 PT State Accounts)

Reporting element (RE)	PT	UK	PT	UK
1 Stock of assets (infrastructure)	No	Yes		The carrying amount of assets is disclosed. PPP assets are also disclosed as a percentage of government asset base
2 Capital investments during the financial year	Yes	No	There is a graph with the investment made by sector done by the operators	
3 Financial liability	No	Yes		The total amount of PFI liabilities presented on the balance sheet is disclosed
4 Future cash flows	Yes	Yes	Future cash flows for each sector (roads, railways, health and security) are reported by year until 2042	Are aggregated and disclosed by maturity: no later than one year; later than one year and no later than five years; and later than five years
5 Service charge	No	Yes		PFI assets are paid for in instalments. The payment covers the cost of asset, an interest expense to reflect the financing of the asset and a service expense for maintenance and operation of the asset. Service charges are recognised as they fall due. In 2016-2017 WGA the service charge was disclosed
6 Cost of finance (finance charge)	No	Yes		See comment related to RE 5. In 2016-2017 WGA the finance charge related with finance leases and PFI contracts was disclosed
7 Budgeted payments	Yes	No	Total amounts by sector are presented	
8 Actual payments	Yes	No	Total amounts by sector are presented	
9 Explanation of differences between budgeted and actual payments	Yes	No	Narrative text by sector explaining the factors which justify the deviations	
11 Contingent liabilities	Yes	Yes	No accounting standard is stated as reference. Contingencies associated with legal disputes, financial equilibrium of the contracts and renegotiations are cited and quantified	According to IAS 37, in WGA contingent liabilities are disclosed under two categories: quantifiable contingent liabilities and non-quantifiable contingent liabilities. Quantifiable remote contingent liabilities are also disclosed and that is not required by IAS 37. In 2016-2017 WGA any contingent liability associated with PFI contracts was disclosed
15 National accounts impact	No	Yes		WGA makes a comparison of PFI treatment according to accounting standards and national accounts. There is a table with a reconciliation between the public sector net debt (national accounts figure) and net liabilities (IFRS based figure). In that table, the PFI contracts are separately disclosed

Note:

Blank cells mean that the RE was not disclosed.

Considering Table 3.4, we can only make a direct comparison for RE 4 and 11 because they are the only ones disclosed on both sets of accounts.

For RE 4 the main difference is that the PT State Accounts disclose all the years until the last year with foreseen payments and the UK WGA disclose future cash flows by year intervals.¹⁶

Regarding RE 11, the UK explicitly follows IAS 37 – Provisions, contingent liabilities and contingent assets and PT State Accounts disclose contingent liabilities without explicitly considering any accounting standard as a technical source.

Nonetheless, this finer analysis does not change our comments to the results made in the previous subsection.

3.1.6. Conclusions

To understand the political and social justification of PPPs, information is needed on several dimensions of its post-procurement phase to allow parliament and the public to carry out their democratic scrutinising function effectively.

There is a stream of academic and professional literature that points to some caveats in introducing private sector accounting practices into the public sector due to the different nature and objectives of the latter (e.g., Barton, 2005; GASB, 2017; Ellwood and Newberry, 2016; Grossi and Steccolini, 2015; Mack and Ryan, 2006; Newberry, 2015; Pallot, 1992; Wynne, 2019). The essay contributes to the literature by analysing the reporting by the public sector of operational PPPs in a comparative perspective using UK's and Portugal's annual reports presented by the Government to the Parliament as case studies, two countries with different institutional and reporting environments.

The results of this research support the importance of designing a harmonised international framework for PPP reporting to assure proper public scrutiny because accounting standards alone may not be sufficient for this objective. After all, the evidence gathered suggests that the governments do not go beyond the presentation and disclosure requirements resulting from those standards. Furthermore, the UK example illustrates that

¹⁶ No later than one year, later than one year and non later than five years, and later than five years (HM Treasury, 2018b, p. 140).

the adoption of private sector accounting standards does not necessarily translate into increased public accountability.

Despite all the literature on consolidated financial statements and WGA in particular (Bergmann et al., 2016; Grossi and Pepe, 2009; Grossi and Soverchia, 2011; Chow et al., 2007, 2009, 2015; Heald and Georgiou, 2011a; Newberry, 2011), we are not aware of comparative studies of reporting in different institutional settings and at the consolidated level of specific contracts with accounting, reporting and public accountability consequences, like the PPP arrangements. Our work addresses this gap considering PPP/PFI setting.

Political accountability over PPPs implies a set of disclosures other than those required by private sector reporting frameworks such as those used for the UK WGA. Academic literature has been debating the issue of adopting IPSAS standards, which are IFRS based, in the public sector (Grossi and Steccolini, 2015; Oulasvirta, 2014). This essay analyses reporting practices of contractual PPPs through the lens of public accountability information needs as portrayed by a set of 15 reporting elements that should be disclosed in the annual report. It aims to contribute to the debate of the suitability of private sector accounting standards based on the decision-usefulness paradigm to the public sector. In this essay, we contribute to this debate by analysing the public sector's actual reporting practices and assessing them from a public accountability information disclosure perspective, using two different external reporting settings.

As far as PPPs are concerned, our essay demonstrates that business-like accounting standards fall short in terms of the information scope that covers a range of aspects which are relevant for political accountability. For example, disclosures are needed for VfM achievement judgments and the impact of large infrastructure projects on budgets for years to come. Accessibility and understandability of information is also necessary to achieve political accountability (Shaoul et al., 2008).

Stafford and Stapleton (2017) point out that PPP governance arrangements are inspired by private sector corporate governance structures and processes, thus public values of probity and stewardship are not centrepieces, as one of the justifications for that is the adoption by the public sector of private sector financial reporting. Elsewhere, other critics

exist associated with the lack of suitability of private sector inspired accounting standards to public sector information needs and this essay identified some reporting shortcomings in the post-procurement phase of PPP contracts (Grossi and Steccolini, 2015; Mack and Ryan, 2006).

Our results also confirm these expectations by showing that neither a private sector accrual-based system nor a cash-based system is satisfactory at the level of reporting elements considered necessary to ensure political accountability for PPPs from the government towards parliament, but they are somewhat complementary.

3.2. Essay 2: The impact of public-private partnerships on public accounts: The Portuguese roads sector ¹⁷

Preliminary note

The accounting and reporting of PPPs is a matter of extensive debate and is associated with a compelling incentive to follow the PPP route for the construction of public infrastructures rather than CPP, even if the PPP route is not affordable and fails to achieve VfM in comparison to traditional forms of procurement. The aim of this essay is to empirically evaluate the so-called debt hidden hypothesis. Using a novel dataset for the Portuguese roads sector, we studied the operators' annual reports since the adoption of IFRIC 12, from 2010 up until 2017. Our results show a lack of transparency in the reporting of PPPs in public accounts, as well as a material difference between our simulation of the impact of IPSAS 32 in public accounts, and also the impact resulting from the application of the European System of Accounts, according to which official debt figures are calculated. The essay also presents evidence of the effects of the financial bailout on PPPs accounting. Overall, the results show that public debt is understated from 1.96% of GDP in 2010 (3,519 million euros), to 3.99% of GDP in 2014 (6,907 million euros) and an average of 11,027 million euros of fixed assets for the period 2010-2017 are not reported in the Portuguese State Accounts. The results also show the need for a

¹⁷ The following publication was based on this section: Viana, L., P. Alves, J. Moreira and J. Sarmiento (2021), "The Impact of Public-Private Partnerships on Public Accounts: The Portuguese Roads Sector", *Financial Accountability & Management*, Vol. 27, Issue 3, pp. 279-302. <https://doi.org/10.1111/faam.12275>

closer alignment between national accounts and accrual accounting based on IPSAS standards. In addition, they represent a strong case for implementing the ongoing accounting reform at the national and EU level under the EPSAS movement.

3.2.1. Introduction

In CPP, the public sector typically assumes the responsibility for the provision of infrastructures, such as roads, education, or health, and also related services, while the private sector role is restricted to just the construction of the asset (Burger and Hawkesworth, 2011). Public sector responsibility covers all the other stages of the project, ranging from concept and planning, to operation and maintenance. With the use of this form of procurement, the impact on public accounts is straightforward: during the construction phase, a capital expenditure is recognised, which negatively affects both the fiscal balance and the public debt for national accounts purposes. However, over the last decades, the contracting out of services to the private sector has increased - mainly through privatisations, concessions, and PPPs (Sarmiento and Renneboog, 2016), which creates new challenges and questions which are related to the impact of PPPs on public accounts and associated financial accountability (Eurostat, 2018a; Heald and Georgiou, 2011b; Engel et al., 2014; IPSASB, 2008; Irwin, 2012; Shaoul et al., 2010).

The inception of a PPP, in which different phases of an infrastructure project are bundled, gives rise to the debatable expectation of better operational and financial management by the private sector, which is expected to lead to VfM in comparison to the traditional public procurement method (Grimsey and Lewis, 2004; Mladenovic et al., 2013; Tsamboulas et al., 2013). The choice of the method of PPP to deliver public infrastructure and services is consistent with the NPM principles, which supports the idea that private management models increase the efficiency of public sector management (Hood, 1991, 1995; Hyndman and Lapsley, 2016). However, other motivations can justify the choice of the option of PPP for infrastructures such as moving costs to the future by the substitution of a stream of future payments (current expenditure) for capital spending, or using the PPP route to create new business opportunities to the private sector that would otherwise not be available due to financial or political obstacles (Funke et al., 2013; Shaoul et al., 2012b). Indeed, several questions have been raised regarding VfM (Burger and Hawkesworth, 2011; Grimsey and Lewis, 2002, 2004, 2005; Shaoul et al., 2006),

affordability (Asenova and Beck, 2010; Moreno, 2010; OECD, 2012), public accountability, and how the prevailing accounting and reporting of these arrangements by the public sector grantor can lead to a bias regarding the choice of PPP, due to off-balance-sheet financing (Eurostat, 2018a; Irwin et al., 2018; OECD, 2008; Sarmiento, 2010; Shaoul et al., 2012a).

With regards to the treatment of PPPs for public accounting purposes, a relevant issue relates to their recognition in the government balance sheet, which could shed some light on a particular determinant of choice for the PPP model for the procurement of public infrastructures and the delivery of the associated services. A likely reason for a government's adoption of such a partnership arises from budget constraints, as public sector accounting rules allow infrastructures to be implemented without implying an immediate increase in reported spending and debt, which shifts public expenditures to the operational phase of a project (Boardman and Vining, 2012; Sarmiento and Renneboog, 2014). Unless IPSAS 32, or the equivalent, is used, when a PPP asset is being constructed, no immediate expenses or debt is recorded in the public sector accounts, in contrast to the alternative option of being treated as a direct investment, which is recognised as work-in-progress. In the case of a PPP, the public costs of the asset are recorded during the long execution phase of the contract (Asenova and Beck, 2010; Hodges, 2013). Furthermore, the importance of financial accounting based on international standards results from the provision of transparency for *ex post* VfM achievement and affordability of PPP contracts, which, in turn, could influence PPP policy in such a way that the choice of delivery of infrastructures through a PPP is not only based on off-balance sheet financing, which occults debt and associated fiscal risks (Hodges, 2013).

Differences in accounting treatment can thus drive the choice of PPP as a public procurement option for delivering public infrastructures, which justifies the debate on the implications for public sector accounting of PPPs, as there is a temptation for governments to just use PPPs for "off-balance sheet" purposes. This is a problematic issue, as short term political interests can override the efficient allocation of scarce public resources, whereby financial liabilities are not reported in the public accounts (Benito et al., 2008; Hodges, 2013; Irwin et al., 2018; Loxley and Loxley, 2010; Reis and Sarmiento, 2019; Stafford et al., 2010). Starting with the assumption of the public choice theory that incumbent politicians are self-interested, and bias their decisions in favour of their own

objectives or particular interest groups – such as the construction of infrastructures which may be not necessary – incentives should be designed to align the decisions of politicians with the interests of their constituencies (Boardman et al., 2016; Eriksson, 2017).

On concerning the Portuguese PPPs, strong doubts on whether they represented VfM have emerged, based on reasons that were shared by the practitioner and academic communities: (i) the concentration of PPP projects was very high over a limited time span, and the public sector was not prepared and did not have the ability to manage and control the contracts; (ii) the motive to resort to PPPs seems to be mainly to avoid budget constraints rather than to use public resources better by taking advantage of private sector efficiency; and (iii) the risk allocation between the private and public sector was flawed because the private sector borne too little risk, and payments from the public to the private sector were considerably above the investment cost (Cruz and Marques, 2012; Moreno, 2010).

Not surprisingly, PPPs contracts, particularly those of the roads sector (22 out of 35 on total), have been subject to a large amount of criticism regarding not only the mentioned VfM but also their transparency, financial affordability, and public accountability (Cruz and Marques, 2012; Moreno, 2010; Reis and Sarmento, 2019; Sarmento, 2010). Furthermore, in its reports, the Portuguese Court of Audits has also criticised the use of PPPs for "off-budget" reasons, rather than efficiency (Moreno, 2010).

Based on the above-mentioned considerations, this essay has two aims: firstly, to simulate the impact of Portuguese roads PPPs on the public sector balance sheet in accordance with IPSAS 32; and secondly, to evaluate the difference between the actual impact of PPPs on the national accounts, in accordance with EU requirements (Eurostat, 2019) and the IPSAS 32 simulated impact. These two aims enable us to test the debt hidden hypothesis by off-balance sheet financing through PPP arrangements.

To achieve these aims, we will simulate the IPSAS 32 impact at the macro level through the analysis of the accounting treatment of operators in accordance with International

Financial Reporting Standards Interpretation 12 (IFRIC 12),¹⁸ which establishes the operator's (which is normally a private sector entity) accounting and reporting requirements, by using their annual reports. Our objective is to shed light on the following research questions (RQ):

RQ 2.1: What would the impact of PPP contracts be on public accounts if PPPs were to be accounted for according to IPSAS 32?

RQ 2.2: What are the differences between the national accounts impact of PPPs and the IPSAS 32 impact on public accounts?

In this essay we use the Portuguese experience in PPPs to answer these research questions along with a simulation of the impacts in the public sector balance sheet of PPPs, following Engel et al. (2014) and Loxley and Loxley (2010) public choice theory arguments. By using this method, we expect to anticipate the main motivation of governments for using this type of procurement. Under IPSAS 32 requirements, the development of infrastructure is subject to the same accounting treatment whenever a PPP or traditional public procurement is used for the delivery of a public infrastructure.

The Portuguese case is relevant for an international audience, both of academics and practitioners. In the last three decades, Portugal was one of the countries that used PPPs more intensively (Sarmiento and Renneboog, 2016). Particularly in the roads sector, examined in this essay, Portugal have increased its network by 700% between 1990 and 2007, similar to Ireland (+900%) and Greece (+500%) (Cruz and Marques, 2012). This evidence places Portugal among the countries with the highest density of highways in Europe per million people (Cruz and Marques, 2012, p. 82). PPPs in Portugal also have an economic significance, which justifies their study through the lens of public choice theory. According to the IMF (2014) and Sarmiento and Renneboog (2016), investment in PPPs in Portugal for the period 1995-2012 accounted for 12% of 2012 GDP, which was the highest value in the EU. In addition, in terms of contingent liabilities for national

¹⁸ In this essay the term “standards” is indistinctively addressed to accounting standards and IFRIC interpretations issued by the International Accounting Standards Board. This was also the option that is part of the Preface to IFRS Standards (paragraph 2). Available at:

<https://www.ifrs.org/issued-standards/list-of-standards/preface-to-ifrs-standards/>

accounts purposes, Eurostat estimates that the greatest liabilities (as a percentage of GDP) from PPPs contracts was registered in Portugal with 3.2% of GDP (Eurostat, 2018b).

The Portuguese scenario is also relevant to understand the impact of IPSAS standards on public sector financial statements. IPSAS are relevant to an international audience and this essay also makes a contribution to the ongoing EPSAS project at the EU, and brings evidence to foster the global debate surrounding IPSAS contribution to transparency and financial accountability and also the discussion between accounting and statistical communities over the existing differences for some transactions between financial and national accounting such as in the PPP setting.

Moreover, given the period covered, which comprises the financial assistance programme from the EC, the ECB and the IMF (*Troika*), the essay also analyses the impact of renegotiations on the PPPs accounting treatment, and the results and conclusions from the Portuguese experience can be of interest to other contexts (both for European and less developed countries that have less experience on PPPs).

Overall, our essay is relevant to other jurisdictions by showing evidence of off balance sheet financing through PPPs in a country that has current public sector accounting practices which are not convergent with international public sector accounting standards. It contributes to the discussion regarding the different treatment of certain transactions according to IPSAS and national accounts requirements (Caruana et al., 2019; Dabbicco, 2018). At the macro level, there is an ongoing discussion about the role of the WGA as a macro surveillance tool (Bracci et al., 2015) and the essay also contributes to this literature by showing the role of accrual accounting as a macroeconomic control tool hand in hand with national accounts by the analysis of PPPs contracts at the light of IPSAS and national accounts rules.

This essay is organised as follows. Subsection 3.2.2. addresses the theoretical background of the analysis; Subsection 3.2.3. describes our data and methodology, and Subsection 3.2.4. presents the results. Finally, Subsection 3.2.5. concludes.

3.2.2. Public choice theory and fiscal constraints

As mentioned above, the political interest in PPPs as a way of constructing investment infrastructures without immediately increasing reported spending and debt seems to be closely related to the way governments measure their spending and debt. In a normal procurement procedure, a government records spending on a project financed by budget revenues when the project is under construction and the government is paying, or being invoiced by, the private sector entity (contractor). In contrast, for projects classified off the public sector balance sheet, no expenses or debt are recorded in the public sector accounts when a PPP asset is being built. Expenses, which are normally recorded on a cash basis, are only incurred during the execution phase of a contract, which usually lasts for long periods (30 years or more). This provides an incentive, which we call "PPP bias", to privilege the financing of public investments by using PPP contracts, which provide a better short run impact on public finance indicators (e.g., Boardman and Vining, 2012; Boardman et al., 2016; Irwin et al., 2018; Yescombe and Farquharson, 2018).

According to the public choice theory (or political economy theory), governments pursue their political objectives by increasing expenditure through debt-financed projects, as taxpayers underestimate the increases of future taxes which are required to pay the incurred debt. Citizens are more aware of the costs of public policies when they are paid for by current taxes (Benito et al., 2008; Boardman and Vining, 2012).

To manage this incentive to increase debt levels, some countries impose fiscal rules concerning debt and deficit, as a way of promoting macroeconomic stability and fiscal sustainability (Andrle et al., 2015). However, governments that are subject to fiscal pressure to comply with fiscal rules regarding debt and deficit are tempted to use accounting solutions to conceal the fiscal impact underlying traditional procurement, thus creating the so-called "fiscal illusion" by entering into transactions which are not recorded on the balance sheet (Easterly et al., 1999; Irwin, 2012). This is the reason why García (2014, p. 351) asserts that "for politicians with short planning horizons, accounting measures that defer deficits to the future are preferable to those creating current deficits."

Several arguments have been used to defend the use of PPPs for delivering public infrastructure projects and associated services (Hodge and Greve, 2013). One of them is

to use PPPs as a mechanism for hiding debt and circumventing the budgetary limits which are associated with debt and deficit, such as the limits put in place in the EU under the auspices of the Stability and Growth Pact - SGP (Andrle et al., 2015; Irwin et al., 2018; Ortega et al., 2016; Stafford et al., 2010). Off-balance sheet financial obligations obfuscate the underlying budgetary performance of a country and consequently negatively affect the transparency required for the public scrutiny of the use of public funds (English and Guthrie, 2003; Newberry and Pallot, 2003).

Moreover, the above mentioned “PPP bias” can also result in governments assuming financial commitments, which later prove to be unaffordable (Funke et al., 2013, p. 5). Such situations arise from what Yescombe and Farquharson (2018, pp. 100-101) call the “affordability illusion”, where there is a lack of funds for paying the private partner for delivering the services over the contract's life, despite the availability of private finance which could have financed the building of the infrastructure.

Irwin et al. (2018) highlighted the relevance of the treatment of PPPs in the national accounts and the ability to structure these contracts in such a way as to avoid their classification on the balance sheet. The authors suggest that the most effective way to avoid the use of PPPs for reasons other than economic efficiency is to report them on the national accounts in the same way as if the infrastructure was publicly financed. In effect, the choice to deliver infrastructures as a PPP should not be based on the classification of the project in the national accounts, either on or off balance sheet, but rather on the potential advantages of the PPP procurement model over traditional public procurement methods (e.g. Benito et al., 2008; Engel et al., 2014; Yescombe and Farquharson, 2018).

Considering the above arguments and the essay’s research questions, later on we study whether the debt hidden hypothesis associated with the public choice theory could be an explanation for the option to procure and operate Portuguese public roads as PPPs.

3.2.3. Methodology and data

For our research, we study for the roads sector how Portugal recognised PPPs contracts and their related expenditures in the public accounts. We studied the current accounting treatment (cash-basis and national accounts) and the estimated impact of IPSAS 32 by

analysing the actual accounting treatment by the private sector operators according to IFRIC 12 requirements for the period 2010-2017. Portugal adopted IFRIC 12 in 2010 due to the legal obligation to comply with the EC regulation 254/2009.

By depicting the accounting treatment of PPP contracts for the operator, we can simulate the impact on financial statements of the public sector grantor based on the assumption that IPSAS 32 is a mirror image of IFRIC 12. We then compare this impact with the actual impact of PPP contracts on public accounts, as recorded under a cash-based system.

We collected proprietary data, not available publicly, for 21 (22 up to 2012) PPPs in the road sector from the concessionaries financial reports, information provided by the CoA.

From each report we collected the following information: the type of concession model (either Model 1 – Financial Asset; Model 2 – Intangible Asset; or Model 3 – Bifurcated, as described in 2.2.6.2.3); the annual revenues (operational, financial, or from the infrastructure construction); the assets (financial and intangible, including amortisation), and also additional information from the external auditors' report in order to ascertain whether there were any auditing issues regarding the accounting and reporting of the concession contracts. The information collected from the financial statements of the operators allowed us to simulate the impact on the financial statements of the grantor.

From the Ministry of Finance, *Unidade Técnica de Acompanhamento de Projetos* (UTAP) – which is the PPP agency in Portugal –, INE (Instituto Nacional de Estatística, Statistics Portugal) and the State Accounts (*Conta Geral do Estado*) we obtained, for each PPP, information regarding the total investment, annual public payments, renegotiation issues resulting from the *Troika's* financial bailout, classification for national accounts purposes, and also the project's impact on debt, fiscal balance, and gross fixed capital formation (GFCF). The data from the Ministry of Finance, UTAP and State Accounts is publicly available (Ministério das Finanças, 2012; UTAP, 2013, 2014, 2015b, 2016, 2017, 2018).¹⁹ However, the national accounts data was obtained from INE under a confidentiality agreement.

¹⁹ State Accounts since 2010 can be found at:
<https://www.parlamento.pt/OrcamentoEstado/Paginas/ContaGeraldoEstado.aspx>

With such information we were able to find the model used for the accounting treatment of each PPP from the private sector perspective. Furthermore, and more interestingly, we were able to compare the annual public payments made to each PPP by the public sector with the reported accounting revenues of the private sector operator. This enabled us to understand how the public sector reduced the debt (or depreciated the assets) in each case, or if it had been postponing expenditures. Furthermore, we are also able to assess the impact on the debt and deficit of using IPSAS 32 requirements, rather than the national accounts rules, by extrapolating the IFRIC 12 accounting results and to analyse the potential impact of recognising all these PPPs on the public sector balance sheet.

Table 3.5: Operator compensation schemes

Compensation Scheme	PPP
Availability payments	Costa da Prata (former SCUT)
	Norte Litoral (former SCUT)
	Grande Porto (former SCUT)
	Beiras Litoral e Alta (former SCUT)
	Algarve (former SCUT)
	Interior Norte (former SCUT)
	Norte
	Grande Lisboa
User fees (tolls)	Douro Litoral
	Litoral Centro
	Oeste
	Brisa
	Lusoponte
Availability payments and traffic based payments	Beira Interior (former SCUT)
	Subconcessão Transmontana
	Subconcessão Douro Interior
	Subconcessão Baixo Alentejo
	Subconcessão Baixo Tejo
	Subconcessão Litoral Oeste
	Subconcessão Algarve Litoral
	Subconcessão Pinhal Interior

Note:

SCUT = Motorways Without Costs to the User

In Table 3.5 we describe each operator's compensation scheme (UTAP, 2018). Regardless of the payment scheme in the mentioned contracts, the private partner assumes the responsibility for the design, build, finance, operate and maintain the roads

infrastructures. When the scheme includes the construction of an infrastructure (e.g., roads, mainly motorways), there are two distinct phases: the *construction phase* and the *operation phase*. Public sector payments normally start at the beginning of the operation phase.

Under the availability payments scheme, the public sector pays a fee to compensate the availability of the infrastructure by the operator, irrespective of the demand, which is adjusted for availability shortfalls, road accidents, and safety statistics. These payments are made over the lifetime of a PPP in return for the service of the operator in making the infrastructure available. This is defined in the concession contract and is a common form of payment in public sector-funded PPPs. These schemes fall under the financial liability model, which is described in 2.2.6.2.3, and are considered as PPPs for national accounts treatment (Eurostat, 2019).

Under this availability scheme if the user pay tolls such a revenue belongs to *Infraestruturas de Portugal* (hereafter referred to as IP), a 100% state-owned enterprise which manages the roads and railways sectors on behalf of the State.

In the case of the user fees compensation scheme, no pre-determined payment is made by the public sector grantor, due to the fact that the PPP contract is funded by the tolls collected by the operator (the 'concessionaire'). Nevertheless, some payments must be made by the public sector, which are related to contract contingencies and renegotiations. Due to the lack of regular public sector payments based on availability, asset usage or a combination of both, this type of contracts is classified as a 'concession' for national accounts purposes and fall under the grant of a right to the operator model (Eurostat, 2019).

For the third compensation scheme – availability payments and traffic based payments – operators receive payments both for availability and based on volumes of traffic. Also in this case, the tolls are credited to IP, except for the case of the Beira Interior PPP where the tolls are revenue of the operator. Overall, because there are regular public sector payments these contracts are considered PPPs for national accounts treatment assessment (Eurostat, 2019) and are under the scope of the bifurcated model.

Table 3.6 summarizes the information concerning the phase of the contracts,²⁰ showing that no new contracts have been signed since 2010, and that from 2017 onwards no project is in the construction phase.

Table 3.6: Phase of the contracts

Year	Construction phase	Operation phase	Total
2010	9	13	22
2011	8	14	22
2012	6	16	22
2013	3	18	21
2014	2	19	21
2015	2	19	21
2016	2	19	21
2017	0	21	21

Units: Number of PPP

Annex 1 contains the list of roads concessions and subconcessions in execution (contractual PPPs).

3.2.4. Results

Under the presumption that international public sector accounting standards were used in all cases, in this subsection, for the period 2010–2017, we present the main results of the expected impact of PPPs on public sector financial statements, the actual impact for national accounting purposes, the consequences of the financial bailout and the results discussion in comparative terms.

3.2.4.1. IPSAS 32 simulated impact

According to our empirical analysis of the operator's annual reports, all contracts fall under the scope of IFRIC 12 and, consequently, because IPSAS 32 is consistent with IFRIC 12 from the grantor (public sector) perspective, the roads (fixed assets) should be recognised on the public sector balance sheet.

²⁰ One PPP (the “Tunel do Marão”) had an early termination in 2013, during the construction phase, due to contract violations by the operator, which led the Government to take over the construction of the infrastructure, as well as its operation and maintenance thereafter. This explains the total decrease from 22 to 21 in 2013.

With regards to the three different accounting models of operator's compensation described in Table 2.8, from the operator accounting point of view, the distribution of concession contracts by year and model is as follows according to IFRIC 12 terminology (Table 3.7).

Table 3.7: Distribution of PPPs by IFRIC 12 accounting model

Year	No IFRIC 12	IFRIC 12 Model			Total
		Financial Asset	Intangible Asset	Bifurcated	
2010	0	10	10	2	22
2011	0	10	9	3	22
2012	1	10	10	1	22
2013	0	10	10	1	21
2014	0	10	8	3	21
2015	0	7	7	7	21
2016	0	6	7	8	21
2017	0	6	5	10	21

Units: Number of PPP

From 2010 to 2013, the financial asset model and the intangible asset model have roughly the same proportion of concession contracts. In 2012 one concession contract was not accounted for by the requirements of IFRIC 12, due to the financial distress of the concessionaire, which led not to consider the going concern assumption which underlies the preparation of the financial statements.

Table 3.8 displays the impact of all concession contracts on the balance sheet. For the income statement, only those contracts which imply public sector regular cash outflows were considered.

Table 3.8: Impact of concession contracts on the operator's and grantor's financial statements, and comparison with public payments

Panel A: Impact on operator's financial statements

Year	Balance Sheet		Income Statement (revenue recognized by the operator)			
	Intangible assets [A]	Financial assets [B]	Construction services [1]	Operations and maintenance services [2]	Interest [3]	Sum [4]=[1]+[2]+[3]
2010	6 689	4 335	941	148	233	1 322
2011	6 459	5 562	1 287	147	318	1 752
2012	5 269	6 103	721	148	390	1 259
2013	4 860	6 578	209	172	452	833
2014	3 832	7 452	45	186	539	770
2015	3 853	7 133	89	186	544	819
2016	3 771	6 513	36	172	516	724
2017	3 330	6 473	9	191	541	741

Panel B: IPSAS 32 simulated impact on public sector financial statements and public payments

	IPSAS 32 impact simulation (mirror image of IFRIC 12)							Public accounts disclosed payments		Difference [7]=[4]-[5]
	Balance Sheet			Income Statement (expenses)						
	Fixed assets (carrying amount) [C]	Unearned revenue [D]	Financial liability [E]	Construction services [1]	Operations and maintenance services [2]	Interest [3]	Sum [4] = [1]+[2]+[3]	Gross payments [5]	Net payments [6]	
2010	11 024	6 689	4 335	941	148	233	1 322	947	898	375
2011	12 021	6 459	5 562	1 287	147	318	1 752	1 676	1 528	76
2012	11 372	5 269	6 103	721	148	390	1 259	933	676	326
2013	11 438	4 860	6 578	209	172	452	833	805	511	28
2014	11 284	3 832	7 452	45	186	539	770	1 386	1 069	-616
2015	10 986	3 853	7 133	89	186	544	819	1 435	1 116	-616
2016	10 284	3 771	6 513	36	172	516	724	1 552	1 211	-828
2017	9 803	3 330	6 473	9	191	541	741	1 470	1 137	-729
Mean	11 027	4 758	6 269	417	169	442	1 028			

Notes:

Values in million euros.

Columns [A] and [B] represent construction costs capitalized on assets not yet amortized (column [A]) or received (column [B]). The sum of these columns is used as an estimation of the roads assets carrying amount that should be on the public sector balance sheet (column [C]).

On Panel B, the carrying amount of intangible assets in column [A] is used as a proxy for the public sector unearned revenue that should be recognized in accordance with Model 2 in Table 2.8.

Net payments in column [6] correspond to the gross payments minus the tolls collected by the concessionaires on behalf of the public sector counterpart of the contract.

Column [7] is the difference between the expenses estimated on an accrual basis (column [4]) and the cash basis expenses recorded on public accounts (column [5]).

The decrease in intangible assets (Panel A) is due to amortisation and impairment losses, and also because most of the infrastructures had been concluded. The construction services tend to disappear as no new contracts have been launched and the existing contracts have all been in the operation phase since 2017 (see Table 3.6).

From the grantor perspective (Panel B), with regards to the assets, both the intangible and financial assets should be recognised as fixed assets (infrastructure). By adding these two

items, we can estimate the value of those assets which are not accounted for in the public accounts (column [C]). The unearned revenue, financial liability, and expenses are the same as the intangible assets, financial assets, and revenues presented in the operator's financial statements, and accordingly we used the operator's financial statements to simulate the effects on the public sector financial statements.

Still, from the grantor perspective, starting from 2013, a distinction must be made between gross and net payments. For until that year, only net payments were disclosed. We obtained the gross payments for the period 2010-2011 from the Ministry of Finance report (Ministério das Finanças, 2012).

Concerning RQ 2.1, as we can see from Table 3.8 (Panel B), the gross payments were insufficient to cover the revenues recorded by the operator, which the public sector grantor must pay. After 2013, the gross payments are substantially higher than the revenues recorded by the operator, and this excess justifies the decrease in the operator's financial assets.

3.2.4.2. National Accounts impact

Contrary to IPSAS 32, according to national accounts rules each contract should be classified by the statistical authorities as a concession or as a PPP. INE provided us with the relevant information for the classification of each contract, per year.

In terms of national accounts classification and impact on the balance sheet, those contracts that are classified as concessions are off-balance sheet and the remaining contracts are classified as PPP because public sector is the direct source of the majority of the revenues that the operator is entitled to receive under the contract, by an availability scheme, or based on demand for the roads or a combination of both.

For contracts classified as concession or PPPs for national accounts purposes, the situation is disclosed in Table 3.9.

Table 3.9: Classification of contracts for national accounts purposes

Year	Concessions [1]		PPP [2]		Total
	On	Off	On	Off	
2010	0	5	3	14	22
2011	0	5	4	13	22
2012	0	5	4	13	22
2013	0	5	3	13	21
2014	0	5	3	13	21
2015	0	5	3	13	21
2016	0	5	3	13	21
2017	0	5	3	13	21

Notes:

Units: Number of PPP

[1] = Contracts classified as concessions for statistical purposes

[2] = Contracts classified as a PPP for statistical purposes

On = 1, if the contract was classified on public sector balance sheet

Off = 1, if the contract was classified off public sector balance sheet

Five contracts were classified as concessions without any impact on the national accounts (off balance sheet). However, it is important to stress that if an obligation arises for the public sector from these concessions, due to contract contingencies, then the obligation is considered an expense.

Almost two thirds of the contracts were classified as PPPs for national accounts purposes. For this type of arrangement, the issue is whether they are classified on, or off the public sector balance sheet, which has different consequences for national accounts, as described above in 2.2.6.1.

About one fifth of PPPs were classified on the public sector balance sheet. The classification on the balance sheet of the PPPs identified above was not based on the risks and rewards approach described in 2.2.6.1., but rather in accordance with a Eurostat rule which is specific to Portugal (Eurostat, 2011). This issue originated from when changes were made to the 'Motorways Without Costs to the User' system (hereafter referred to as SCUT, an acronym of the Portuguese expression "*Sem Custos para o Utilizador*"), which are shadow tolls contracts, where the public sector payments to the operators are based on the infrastructure usage. As part of the first wave of roads PPPs in Portugal, the SCUT program was launched in 1997, seven contracts were signed under this shadow tolls scheme (EPEC, 2014; Tribunal de Contas, 2012) and three of them are on-balance sheet

by the reason described as follows: during 2010, these contracts were changed with the introduction of tolls (users fees), and the government started paying for the availability of the infrastructure (availability payments). The underlying rule was (Eurostat, 2011, p. 14): "for those contracts where tolls represent more than 50% of the total cost of the service, these should be classified on the balance sheet of the government". Furthermore, any contract which ended up being terminated, with the construction of the infrastructure being transferred to the public sector, was reclassified on the balance sheet. A classic example is the Túnel do Marão, where, from 2013 onwards, the project was developed by the public sector, because the PPP contract had been terminated. Table 3.5 identifies the former SCUT contracts.

When considering both the UTAP reports and the INE data, we estimate the impact on national accounts of all the contracts in respect of debt, gross fixed capital formation (GFCF), and deficit (Table 3.10).

Table 3.10: National accounts impact

Million euros			
Year	Debt	GFCF	Deficit
2010	816	816	947
2011	961	304	1 392
2012	773	11	810
2013	656	0	715
2014	545	0	1 027
2015	452	0	1 206
2016	336	0	1 428
2017	226	0	1 360
Mean	595	141	1 111

The debt reported in Table 3.10 is related to PPPs classified on public sector balance and it starts decreasing since 2011 because a portion of public payments was imputed to debt amortization, as INE disclosed it for the essay, and no other PPP since then was classified on public sector balance sheet.

The estimated deficit impact for national accounting purposes was based on the payments information disclosed in the UTAP reports. For those PPPs which were classified on the

public sector balance sheet, the deficit impact was based on payments deducted by an amount disclosed by INE, which was imputed to the amortisation of debt in accordance with the Eurostat rule (Eurostat, 2011).

3.2.4.3. Consequences of the financial bailout

In March 2011, due to the sovereign debt crisis, Portugal asked for financial support from the *Troika*. The Portuguese Government assumed in exchange for it the implementation of several policies and reforms to promote economic growth and the sustainability of public policies (EC, 2011).

The financial assistance package that Portugal signed with the *Troika* included the need to renegotiate roads PPPs with the objective to cut the public expenditure with these contracts. The outcome of the renegotiation process was the reviewing of financing for major repairs, reducing service levels, lowering the operator profitability, transferring to the public sector some operation and maintenance activities, extension of contracts and changes in the risk allocation matrix (Reis and Sarmento, 2019; UTAP, 2015a). Such savings measures positively affected the affordability of roads PPPs.

The PPP unit (UTAP) assumed the leadership of the renegotiation process that started with a legal mandate provided by the 2013 budget law (article 143 of the Law 66-B/2012) aimed at achieving public savings of 30% per year from the original roads contracts (estimated at 250 million euros for year 2013). In terms of scope, the renegotiation process covered sixteen contracts, comprising all the seven former SCUT contracts and more nine other contracts (UTAP, 2013). The remaining five contracts, which were directly funded by tolls, were not include in the renegotiation process.

More precisely, the renegotiation process started in 2012 and for nine of the contracts (all the seven former SCUT and other two) it became legally binding by the end of 2015; for one during 2016 and for two in 2017. By the end of 2017 four PPPs still under renegotiations (UTAP 2015a, 2016, 2017, 2018).

Table 3.7 shows, from 2015 onwards, the general impact of the renegotiations on the classification of PPPs by IFRIC 12 accounting model. A more detailed analysis of such an impact is displayed in Table 3.11, which presents the accounting effects on each of the

12 PPPs, which renegotiation process have been concluded up to the end of 2017, in terms of the accounting model, and the nature and value of associated assets.

Table 3.11: Financial bailout accounting effects

Panel A: Change in IFRIC 12 accounting model				
Accounting model	Financial asset [1]	Intangible asset [2]	Bifurcated [3]	Total
Before renegotiation	7	5	0	12
After renegotiation	4	0	8	12

Panel B: Renegotiations one-off financial effects

PPP	Change in accounting model	Accounting value impact	
		Intangible asset	Financial asset
1	From [1] to [3]	24	n/a
2	From [2] to [1]	-595	507
3	From [1] to [3]	15	n/a
4	From [2] to [1]	-263	194
5	From [2] to [1]	-617	425
6	From [1] to [3]	42	n/a
7	From [1] to [1]	0	n/a
8	From [1] to [3]	19	n/a
9	From [1] to [3]	8	n/a
10	From [2] to [3]	-321	337
11	From [2] to [3]	-39	59
12	From [1] to [3]	19	n/a
Sum		-1 708	1 522

Notes:

In Panel A, values are the number of PPPs.

In Panel B, values are in millions of euros.

We only present each PPP as a number because of the confidentiality agreement with the Court of Audits.

Change in accounting model: [1] = financial asset; [2] = intangible asset; [3] = bifurcated

PPP 7 was the only case where the financial asset accounting model did not change after renegotiations.

n/a is related to situations where it's not possible to isolate the impact of renegotiations on the financial asset decrease. That is the case when the accounting model changed from [1] to [3] and for PPP 7.

In terms of change to the accounting model, three types of changes were identified.²¹ Six contracts (numbers 1, 3, 6, 8, 9 and 12) changed from the financial asset model to the

²¹ We only present each PPP as a number because of the confidentiality agreement with the Court of Audits.

bifurcated model because for those renegotiations the underlying contracts had their term extended and the operator earned the right to receive the tolls over the extended period. Such a right implied the recognition of an intangible asset and the change to the bifurcated model, because along with the financial asset the operator also recognizes an intangible asset for the right to receive tolls over the extended period. Three contracts (numbers 2, 4 and 5) changed from the intangible asset to the financial asset model and two contracts (10 and 11) moved from the intangible asset to the bifurcated model. One renegotiated contract (number 7) did not have any change in the accounting model (that remained “financial asset”), because the outcome of the renegotiation did not affect the compensation scheme but other contractual provisions such as major repairs and operational optimizations (UTAP, 2015a).

We now turn to the impact of renegotiations on operators’ assets. The renegotiation process led to a decrease of intangible asset gross carrying amount of 1,708 million euros. When it comes to financial asset impact two distinct situations were found: i) for renegotiations that changed the accounting model from financial asset to bifurcated model it is expected a decrease in the value of the financial asset. Due to data limitations it is not possible to isolate this effect. Also for PPP 7 it was not possible to isolate the effect of the renegotiated contract on the financial asset; ii) for renegotiations that changed the accounting model from intangible asset to financial asset, or from intangible asset to bifurcated, the positive impact on financial assets was 1,522 million euros.

3.2.4.4. Comparison of the accounting impacts and discussion

The two main empirical questions of this essay are: i) to simulate the impact of PPPs on public sector financial statements in accordance with IPSAS 32 requirements; and ii) to compare it with the actual impact in the national accounts. The former of these questions was already answered in point 3.2.4.1 above. The second one will be discussed now.

For national accounts purposes, only five-contracts were classified as being concessions, which is far less than those contracts which were classified under the intangible asset model of IFRIC 12. The reason lies with the fact that under the intangible asset model, contracts which have infrastructure usage payments made by the grantor are classified as PPP under national accounts rules.

Table 3.12 enables us to compare the national accounts impact of PPP on debt and deficit, and the corresponding simulated IPSAS 32 impact on financial liabilities and expenses. This information allows us to answer the second research question.

Table 3.12: National accounts and IPSAS 32 impact

Year	Debt [1]	Financial liability [2]	Difference [3]=[1]-[2]	Deficit [4]	Total expenses [5]	Difference [6]=[4]-[5]
2010	816	4.335	-3.519	947	1.322	-375
2011	961	5.562	-4.601	1.392	1.752	-360
2012	773	6.103	-5.330	810	1.259	-449
2013	656	6.578	-5.922	715	833	-118
2014	545	7.452	-6.907	1.027	770	257
2015	452	7.133	-6.681	1.206	819	387
2016	336	6.513	-6.177	1.428	724	704
2017	226	6.473	-6.248	1.360	741	619
Mean	595	6.269	-5.673	1.111	1.028	83

Notes:

Values are in million euros.

Debt data (column [1]) was obtained from INE. The debt relates to the PPPs that were classified on balance sheet.

Column [2] data was taken from column [E] in Table 3.8.

Deficit in column [4] was estimated from the gross payments identified on the UTAP reports and INE information and the values are the same that are in Table 3.10.

Data for column [5] was gathered from Panel B, column [4] in Table 3.8.

These results show a large difference between the debt that is reported for European fiscal surveillance (column 1) and the estimated financial liability evaluated by the operator's outstanding financial assets (column 2). On average, for the eight-year period under analysis, the financial liability according to the IPSAS 32 simulation is on average 5,673 million euros higher than the debt considered for national accounts (column 3).

On average, the difference between the impact of PPPs on the deficit and the IPSAS 32-simulated expenses is immaterial (column 6), despite the simulated expenses being higher than the impact on the deficit from 2010 until 2013, with a reversal in this trend after 2013. A limitation regarding these results is that no data is available to simulate the GFCF – gross fixed capital formation since the beginning of each contract, as infrastructure construction proceeds, which counts as a capital expense for national accounts, based on fixed assets (infrastructure) recognition and measurement by the grantor during the

construction phase. For the PPPs where construction started before 2010, the estimated impact on deficit and debt of the construction costs should have occurred by that date.

Generally, the impact on debt and deficit is higher during the construction phase of each project for off balance sheet PPPs and the main impact on the deficit as capital spending (GFCF) occurred during the construction phase which most part of it was before 2010, the first year of our data. This justifies why our results do not capture the main impact of PPPs on deficit though the debt outstanding estimated by the operators financial assets (column 2 in Table 3.12) give us a sense of the magnitude of the deficit impact occurred in previous years before the financial bailout, allegedly above the 3% criteria established on the SGP framework.

We now turn to the economic significance of the difference between the official impact of PPPs on debt and the simulated impact according to financial accounting standards.

Table 3.13 shows the IPSAS 32-simulated impact on debt as a percentage of GDP, which is an important indicator under the SGP that is imposed to the country by the EU. The impact ranges from 1.96% of GDP in 2010 (3,519 million euros), to 3.99% of GDP in 2014 (6,907 million euros).

Table 3.13: Impact of IPSAS 32 on debt as a percentage of GDP

Year	GDP [1]	ESA 2010 Gross debt [2]	Public debt (% of GDP) [3]=[2]/[1]	IPSAS 32 impact [4]	Adjusted public debt [5]=[3]+[4]	Increase in public debt (%) [6]=[4]/[3]
2010	179.930	173.100	96,20%	1,96%	98,16%	2,03%
2011	176.167	196.200	111,40%	2,61%	114,01%	2,34%
2012	168.398	212.600	126,20%	3,17%	129,37%	2,51%
2013	170.269	219.700	129,00%	3,48%	132,48%	2,70%
2014	173.079	226.000	130,60%	3,99%	134,59%	3,06%
2015	179.809	231.500	128,75%	3,72%	132,47%	2,89%
2016	186.481	241.000	129,21%	3,31%	132,52%	2,56%
2017	194.614	242.800	124,76%	3,21%	127,97%	2,57%

Notes:

Gross Domestic Product (GDP) data is from Eurostat database accessed on 2019-04-28.

Available at: <http://ec.europa.eu/eurostat/web/national-accounts/data/main-tables>

ESA 2010 gross debt for Portugal was obtained from the AMECO database accessed on 2019-04-28: available at:

http://ec.europa.eu/economy_finance/ameco/user/serie/ResultSerie.cfm

IPSAS 32 impact results from the difference calculated in column [3] at Table 3.12 divided by GDP (column [1]).

The results confirm that the current treatment of PPPs in national accounts reduces the impact on debt in comparison to IPSAS 32 requirements. Consistent with public choice theory predictions, hidden debt appears to be the underlying factor behind the option to contract projects through PPP procurement (Boardman et al., 2016; Engel et al., 2014, pp. 104-121; Stafford et al., 2010). In our opinion, IPSAS 32-simulated impact is considered to be significant, being above 3% of GDP from 2012 onwards. The evidence found add to Engel et al. (2014, p. 120) suggestion that the current national accounting rules are in place due to political pressure, and that PPP-procured projects should be treated as traditional public procured projects in national accounts.

3.2.5. Conclusions

The accounting treatment of PPPs should not drive the decision of governments towards adopting this type of public investment. On the contrary, the driver should be the gains in efficiency which are associated with this method of procurement when compared with traditional public procurement and service delivery. As governments are generally keen to avoid public scrutiny and typically face budgetary limits regarding debt, they are liable to exert a certain pressure to not disclose the full impact of PPPs on financial statements, which is facilitated by the absence of the adoption and enforcement of internationally accepted accounting standards.

Those countries that have a more sophisticated accounting and reporting system, which adopts accounting standards, such as the IPSAS or the IFRS adapted for the public sector, are required to record PPPs in a similar way to other projects which are paid for by public financing. Accordingly, these countries and their governments can be less exposed to such a bias, only adopting PPPs as a financing instrument in cases where such partnerships offer VfM and are affordable in both the short and long term (Engel et al., 2014; Irwin et al., 2018; Yescombe and Farquharson, 2018).

In the current essay, we assumed that the Portuguese government suffered from such a bias, using PPP procurement to hide deficit and debt. To test this general assumption, and in particular the hypothesis of the hidden debt, we simulated the impact of PPPs for roads infrastructures as if IPSAS 32 was applied by the public sector and then compared this impact with the actual national accounts' impact.

The evidence obtained, related to a period where the more substantial impacts on deficit, underlying the construction phase, were not considered, shows that a significant level of financial liabilities exist outside the official debt records (5,673 million euros yearly average), which is consistent with the public choice theory arguments, which posits that governments are tempted to use off-balance sheet financing schemes to deliver political benefits to incumbent governments and interest groups, as off-balance sheet financing allows incumbent governments to provide benefits to current users and voters, and thereby gain a political advantage while deferring the payment of the cost to future governments and taxpayers (Boardman and Vining, 2012; Boardman et al., 2016; Hodge and Greve, 2019, p. 92).

Many questions are open for future research. Among them, for the Portuguese case, what decisions would have been taken by the governments if the concession contracts had been accounted for in accordance with IFRIC 12/IPSAS 32 requirements? How will be implemented the recently adopted new public sector accounting framework, which is mainly inspired by the accrual-based IPSAS, in the case of PPPs?

Whatever the answers to these questions, the increasing usage of the control method in public sector accounts is expected to raise new accounting issues, especially with regards to the recognition, measurement, impairment, presentation, and disclosure of PPPs. Thus, many and new research avenues will be opened in the field.

3.3. Essay 3: State audit of public-private partnerships: audit findings, recommendations and government reactions²²

Preliminary note

Supreme Audit Institutions (SAIs) play an active role in the government's accountability towards parliament. PPPs are an alternative used to deliver infrastructure-based public services by private sector entities compared to CPP. Due to their nature, PPPs raise specific issues related to public accountability and SAIs, through the independent and competent audit they provide, may enhance the information content of the accountability relationship between the government and parliament, providing refined transparency. To examine the audit process and outputs, we analysed 16 PPP audit reports of the Portuguese CoA. Overall, our evidence suggests that the CoA, through the audit reports, disclosed relevant information for more comprehensive public scrutiny and political accountability of PPPs and made several recommendations associated with better PPP governance, safeguarding its independence. Furthermore, our findings corroborate the two functions of SAIs, which can both be found in the same audit report: the watchdog function, drawing attention to failures at different stages of the PPP cycle, and the shepherding function, providing advice to the government towards best practices on PPP governance and management. In terms of audit impact, there are doubts about the government's implementation of CoA recommendations. Nonetheless, some improvements should be made to the audit reports that would also allow the CoA's audit process to be more transparent.

3.3.1. Introduction

Governments represent and serve the people. By this notion, an agency relationship is established between the government (agent) and the people (principal) or their representatives (parliament) and SAIs can serve as a control mechanism for the principal

²² The following paper was based on this section:

Viana, L., P. Alves, and J. Moreira (2020), "State Audit of Public-Private Partnerships: Audit Findings, Recommendations and Government Reactions".

This paper has been submitted to *Financial Accountability & Management*. Currently it is on the revise and resubmit stage.

monitoring of the agent (Bourne, 2007). This agency relationship between the parliament and the government, referred to by Streim (1994) as the legislature-government relationship, also has agency problems due to moral hazard and adverse selection resulting from the asymmetrical distribution of information between the parties. Under the agency theory explanation, the value of auditing as a bonding-monitoring device result from reducing agency costs (Hay and Cordery, 2018; Put, 2011; Streim, 1994).

Public infrastructure, such as motorways, schools or hospitals, are vital for the economic and social development of any country. The procurement of infrastructure can be carried out through CPP or PPP. As a procurement option for delivering public infrastructure, the latter may offer advantages compared with CPP, notably better VfM (Burger and Hawkesworth, 2013).

Although some PPP contracts (user pay PPPs such as Brisa Concession) already existed, in the 1990s Portugal launched its first wave of PPPs that has since increased into the 2000s with a second wave of projects to develop economic infrastructures, such as transport (motorways and railways) and social infrastructure such as hospitals (Sarmiento and Reis, 2013). These contracts involved the private sector, including consulting firms and private finance by banks.

PPPs represent particular audit issues from the perspective of the public sector, which raises the question of how the Portuguese SAI, the CoA, approached these contractual PPPs for the development of transport infrastructure (e.g. Bourn, 2007; English, 2007; English et al., 2010; Ortega et al., 2016).

State audit is conducted by SAIs, which have the authority to examine whether at what cost and to what degree PPPs for infrastructure adhere to the principles of economy (keep costs low), efficiency (optimization of available resources), effectiveness (realization of objectives) and if they are better, in terms of performance standards and expectations, than traditional forms of procurement and service delivery. There is a public expectation that, on the one hand, SAIs have the legal responsibility to check the proper use of public funds according to specified criteria and disclose information accordingly that may then be used for holding to account those entrusted with certain responsibilities. On the other

hand, through the audit process, they may want to have a positive impact on public management reforms (Pollitt and Summa, 1997; Pollitt et al., 1999; Svärdesten, 2019).

SAIs are accountability institutions because they provide an independent analysis of how those entrusted with public powers, such as politicians and public managers, used public resources (Normanton, 1966). According to the Institute of Internal Auditors - IIA (2012, p. 5):

Auditing is a cornerstone of good public sector governance. By providing unbiased, objective assessments of whether public resources are managed responsibly and effectively to achieve intended results, auditors help public sector organizations achieve accountability and integrity, improve operations, and instil confidence among citizens and stakeholders.

Furthermore, PPPs are hybrid organizational forms, normally governed by a contract between the public and the private sector, for providing public services, raising special auditing and accountability issues arising from the reasons that justify the choice of the PPP route, the role of private finance, the relationships between the various entities involved, the payment mechanism, allocation of risks and contract management. Public audit by SAIs of these contracts may enhance the effectiveness of public accountability by the information that results from audits (De Fine Licht, 2019; INTOSAI, 2007a, 2007b).

We may argue that intending to avoid public accountability, governments usually circumvent public scrutiny by not disclosing all the information associated with PPPs at several stages of the project, such as VfM assessments at the planning and operational stages, affordability, risk transfer or contract management. As a public accountability institution, the CoA can improve public scrutiny by reducing the information asymmetry, thus making the issues related to PPPs more transparent on matters such as VfM, risk transfer, contract management and full disclosure of the budget implications. For instance, CoA, which has constitutional power and legitimacy, can play a role as an oversight mechanism of PPPs public accountability (Moreno, 2010; Reeves, 2013).

Therefore, Portugal, due to its extensive utilization of this form of procurement in the transportation sector, notably roads (see Essay 2), presents an interesting environment to study the state audit of PPPs, political accountability and transparency of PPP contracts

because of governance challenges at the different phases of the project and incentives associated with these contracts. Therefore, how the CoA played a role as an accountability mechanism through the information disclosed about the choice and implementation of a contractual PPP is worth studying (e.g., De Fine Licht, 2019; English et al, 2010; Hayne and Salterio, 2014; Mulgan, 2003; OECD, 2016, 2017).

This essay examines the state audit of PPPs for transportation infrastructure where the private consortium (the concessionaire), according to a contract signed as a result of a public procurement process, undertakes the responsibility for designing, financing, constructing, managing and operating infrastructure-based services. At the end of the contract, the management of the infrastructure is handed over to the public sector. As mentioned in Subsection 2.2.3., this situation is the so-called design, build, finance and operate (maintain) PPP scheme (DBFO). Along with Portugal, Canada, Spain and the United Kingdom also used this form of PPP to deliver transportation infrastructure (Acerete et al., 2019).

By analysing the Portuguese SAI audit reports related to long-term infrastructure contracts for transportation (contractual PPPs), a family of PPPs (Hodge and Greve, 2007, 2009), we expect to provide new insights concerning PPP audit characteristics and shed light on the issues uncovered by audits, the government's reaction to the audit reports and their impact on change by the auditee upon the audit recommendations.

Overall, we endeavour to assess the CoA's impact on PPPs and our work may have implications for the public audit of PPPs and for the establishment of well-functioning public accountability relationships, where the proper information feeds into the different processes of the accountability phases (Mulgan 2003).

To the best of our knowledge, there is no systematic study of PPP audits covering a wide range of issues related to the audit process developed by an SAI with constitutional status and judicial apparatus (Pollitt and Summa, 1997). In fact, there is limited research available on the work of SAIs as accountability institutions, notably concerning the state audit impact on PPP arrangements and how the SAIs interact with the auditee, the accountant in the accountability relationship (e.g., Jantz et al., 2015; Johnsen et al., 2019; Pollitt and Summa, 1997; Reichborn-Kjennerud and Johnsen, 2018).

This essay purposes four objectives: i) to identify what audit methods the CoA's used (Lonsdale, 2011); ii) to shed light on and contribute to the discussion around PPP audit issues (e.g. English, 2007; English et al., 2010); iii) to analyse how the CoA's PPP audits contributed with new information to the accountability relationship between the Government and the Parliament (e.g., De Fine Licht, 2019, Streim, 1994); and iv) to examine how the Government dealt with audit findings, observations or recommendations (e.g. Funnell and Wade, 2012; Reichborn-Kjennerud, 2014a).

Ex ante (pre-contract stage) and *ex post* (post-contract stage) independent oversight of what criteria governments used to support their decision to adopt PPPs for delivering transport infrastructure, how transparent and competitive the procurement process was, how affordability is secured, how much risk allocation and VfM is achieved during the operational stage and how effectively the contracts are managed are essential to hold the government to account before the legislative power.

The general expectation is that the CoA fulfils this role of watchdog as it is independent of political, or any undue external influence, and competence (Pollitt and Summa, 1997).

Taking into consideration the literature studied and objectives of the essay, we address the following research questions (RQ) in the empirical work:

RQ 3.1: What methods did the CoA use to gather evidence?

RQ 3.2: What information was disclosed in the audit reports?

RQ 3.3: What are the categories and intensity of the CoA's recommendations?

RQ 3.4: What roles did the CoA fulfil?

RQ 3.5: How the Government (accountor) reacted to the main audit findings and conclusions and dealt with audit recommendations afterwards?

To accomplish those objectives and to answer these research questions, we analysed the content of the 16 audit reports published from 2000 (the year of the first report) up to December 2017 by the Portuguese SAI, the CoA, including the government's comments, related to PPPs for transportation infrastructure (roads and rails).

The evidence presented in this essay suggests that the CoA contributes to PPP accountability in two ways. Firstly, through the recommendations directed towards the Government, it puts pressure on politicians and public administration to better manage PPPs during all the stages, from the planning stage up to the operational phase. Secondly, discloses information in the audit reports that allows Parliament to execute its function of overseeing the Government's activities correctly.

Our results also show that the CoA remained independent from the Government, thus reinforcing its legitimacy as a guardian of public interest, contributing to the understanding of PPP audits in a highly politicized context (Funnell, 2003, 2015).

The remainder of the essay is outlined as follows: Subsection 3.3.2 gives the theoretical context; Subsection 3.3.3 describes the methodology followed and the data used; Subsection 3.3.4 discusses the findings; and Subsection 3.3.5 presents the conclusions.

3.3.2. Theoretical context

One of the explanations for the usefulness of state audit is the contribution to the reduction of agency problems because it serves as a monitoring mechanism imposed on the accountant (see Table 2.10). In this regard, Hay and Cordery (2021), acknowledging that in the public sector there are more agency relationships than in the private sector (see Figure 2.1), found evidence that agency theory could explain the value of state audit.

In fact, state audit provides an independent source of information, revealing facts that would otherwise be inaccessible because the accountant may find embarrassed to provide explanations of the decisions taken and actions made, providing a balance to public accountability relationships, making those who are accountable to justify their decisions and actions (Normanton, 1971). For the political accountability relationship (see Figure 2.2), state audit provides an independent evaluation of the reliability and disclosure of all relevant matters by the accountant (White and Hollingsworth, 1999).

State audit is performed by the SAI, which has constitutional duties. As a scrutinizing body, it has a broad mandate for carrying out its activities such as *ex ante* controls before public expenditure is committed, evaluation of the regularity (spending in accordance with legal limits and provisions) and propriety (absence of fraud and corruption) of the

use of public funds, certificate of accounts (financial audits), performance audits and performance improvement recommendations (Heald, 2018; Pollitt and Summa, 1997).

Accountability is essential for the quality of democracy (Behn, 2001; Bourne, 2007), and SAIs are essential for the effective functioning of representative democracies due to the objective and independent public information they provide through the audit reports, contributing to public accountability, better policy formulation, implementation and evaluation (OECD, 2016). More precisely, competent and independent auditors must audit the account element of the accountability relationship as described in Figure 2.2 (Blume and Voigt, 2011; Bringselius, 2014; White and Hollingsworth, 1999).

The work of SAIs is an important input into the processes of public accountability as it provides transparency across different accountability relationships (Mulgan, 2003; White and Hollingsworth, 1999; Willems and Van Dooren, 2011, 2012). We borrow from others the concept of transparency as the availability of information about an accountant's decisions, processes and results that allows one or many accountees to monitor the former. Audits enhance transparency by adding clarity and value to the information disclosed by the auditee. Audit reports release information into the public domain, which is an important element of modern democratic accountability arrangements (De Fine Licht, 2019; Meijer, 2013).

According to Funnell (1997), "the auditor-general [SAI] is crucial in ensuring that there is an unbroken chain of accountability between the executive and its agencies and the parliament. The existence of an independent auditor-general [SAI] preserves the ability of the parliament to monitor the actions of the executive through an officer which it knows should owe his first loyalty to them" (p. 92).

In summary, we may argue that state audit is a mechanism for optimizing public accountability because audit activities have an impact on greater transparency for public accountability for finances, fairness and performance (Behn, 2001).

3.3.3. Methodology and data

3.3.3.1. Methodology

Based on a list of audit reports made available by the CoA upon our request and using documentary analysis as the research method (Bowen, 2009), we have analysed all audit reports related to transportation infrastructure PPPs. These reports are publicly available from the CoA's website. The PPPs that we studied are governed by a concession contract, known as contractual PPPs, as described in Subsection 2.2.2. This research draws on a longitudinal study of those PPPs audit reports published by the CoA from 2000 until 2017.

In order to address the research questions, for each report, we will analyse the audit features and findings, the CoA's recommendations and role, and the Government's reaction to the audit findings, observations, conclusions and recommendations.

Regarding audit features, we will collect information on the size of the audit team, subject of the audit, number of PPPs audited, length of the audit report, year of the concession contract, if applicable, type of audit (see 2.2.7.1), audit effort and submission of the audit reports to the legislature (ECA, 2018; INTOSAI, 2019a; Pollitt. et al., 1999).

Emphasising the relevance of audit methods (RQ 3.1), Lonsdale (2011) observes that the methods used by SAIs determine what evidence will be uncovered, what analysis it is possible to undertake and, ultimately, what conclusions and recommendations will be part of the audit report.

Concerning the information disclosed through audit observations and findings (RQ 3.2), we will assess whether the findings were related to *ex ante* VfM assessment, the procurement phase, risk analysis, fiscal transparency, performance measurement, construction delays, cost overruns, contract renegotiations and institutional and legal framework (Boers et al., 2013; Bourne, 2007; CAAF, 2015; ECA, 2018; English, 2007; English et al., 2010; Reeves, 2013).

Considering the audit objectives, conclusions and recommendations, we established the nature of the CoA's recommendations and the roles adopted in each report (RQ 3.3 and

RQ 3.4). With regard to PPP audit-related literature, recommendations in the final audit report are categorised as recommendations related to (RQ 3.3): i) the pre-contract stage; ii) risks and costs; iii) the management of the concession contracts; iv) contract evaluation; v) fiscal transparency; and vi) policies and conditions that must be established for the proper functioning of the contract's arrangements (Boers et al., 2013; Bourne, 2007; CAAF, 2015; ECA, 2018; English, 2007; English et al., 2010).

In the same report, the CoA can perform different roles (RQ 3.4). Adapted to the PPP setting, the following roles are ascribed to the CoA (Bourne, 2007; Bringselius, 2014; Reichborn-Kjennerud, 2014b; Pollitt, 2003; Pollitt et al., 1999; White and Hollingsworth, 1999, pp. 78-79): i) magistrate, if the audit report aims to verify legal compliance related to public procurement procedures and specific PPP legislation; ii) public accountant, if the audit report aims to enhance accountability and transparency of PPPs, for example by recommending the use of the public sector comparator as an evaluation tool and public disclosure of information; iii) researcher, creating and disseminating new knowledge about PPPs; and iv) management consultant, by giving advice for the proper functioning of the PPP policy.

SAIs acknowledge the importance of the positive impact of their work because the usefulness of their audit reports and legitimacy depends in part on this (e.g., Pollitt et al., 1999; Morin, 2001; Van Looke and Put, 2011). Audit impact implies the ability of the SAI's work to influence the auditee towards changes, which leads to improvement, and being held to account (Johnsen et al., 2019; Reichborn-Kjennerud, 2013).

Scholars present several approaches to the difficult task of measuring audit impact, with one of these being the auditees' reaction by commenting on the draft audit report (Morin, 2001; Reichborn-Kjennerud, 2013; Van Looke and Put, 2011). The auditees' reaction can be used as a measure of the predisposition for making changes according to the SAI's findings, conclusions and recommendations (RQ 3.5).

Thus, the Government can comment on the audit findings, conclusions and recommendations presented in the draft report. The CoA has the discretionary power to decide not to publish the auditees' comments on the draft report as an annex to the final report. The legal provisions applicable to the CoA's governance and processes confer this

power to it. Despite this, as a general rule, the CoA publishes the comments made by the auditees. The CoA sends the draft report for comments based on the assumption that this will enhance the understanding of the issues by the public and by citizens. The ultimate aim of including the auditees' reactions to the draft report is to promote a consensus between auditor and auditee about the audit evidence. When an agreement is not possible, all differences should be indicated and reasons for the auditor's standpoint should be fully disclosed. There are countries where an agreement between the auditor and auditee is necessary before the audit report becomes public. For example, to avoid arguments during Public Accounts Committee hearings in the UK Parliament, there is a convention in place by which the NAO's performance audit reports are agreed with the auditee (Pollitt et al., 1999, p. 117).

Beginning with the research of Oliver (1991), SAI literature (Reichborn-Kjennerud, 2014a) has identified four types of reaction that the auditees can adopt in relation to the audit reports, taking into consideration the degree of disagreement with the SAI conclusions and the importance of the potential sanctions. Funnell and Wade (2012) also used the typology proposed by Oliver (1991) as a reference.

Following Reichborn-Kjennerud (2014a), for each audit report, our work classifies the Government's reactions to the CoA's conclusions and observation according to the following typology: i) defying; ii) capitulating; iii) copying; and iv) ignoring.

Defying corresponds to Oliver's (1991) strategies of avoidance and defiance because in both situations there is a resistance to institutional pressures (see Table 2.1). The Government's comments clearly show an outright disagreement with the CoA's findings and conclusions through dismissal, challenge or attack. The Government could also pretend to agree, but its intention is not make changes resulting from the CoA recommendations.

Capitulating, when the Government explicitly disagrees with the findings and conclusions reached by the CoA, but clearly states that it will comply with the recommendations. This Government's reaction is interpreted as the effect of coercive isomorphic pressures (DiMaggio and Powell, 1983).

Copying, which corresponds to Oliver's (1991) strategies of acquiescence and compromise, in the sense that the CoA audit reports did have an effect on conformity to institutional pressures (see Table 2.1). It occurs when the CoA's findings and conclusions are corroborated by the Government's reactions to the report, at least partially. Usually, government representatives (ministers or heads of cabinet) explicitly state that they will make changes following the CoA's report and implement appropriate measures to address the shortcomings pointed out by the CoA.

Ignoring, when the Government makes no comments to one or some of the CoA's findings and conclusions. This strategy suggests that no consequences result from the CoA's reports because they are perceived as uncontroversial.

In the preceding classification of governments' reaction to the audit reports, Oliver's (1991) strategies of compromise and manipulation (see Table 2.1) were not considered because the associated tactics are regarded as not being at its disposal (Reichborn-Kjennerud, 2014a).

Another way to evaluate the impact of audit reports is to examine the proportion of recommendations adopted by the auditee (Pollitt et al., 1999; Van Loocke and Put, 2011). Some of the reports are related to follow-up audits that assess the degree of implementation of the previous recommendations but also allow the identification of new risks for the public sector and the issuance of new recommendations. In these reports, the CoA analyses how the auditees dealt with previous recommendations from the original report but also issue recommendations, some of them are the same as those found in the previous report and others are new recommendations.

There are claims that the audit reports only focus on negative findings, and do not communicate positive findings, therefore negatively affecting the dissemination of good practices (Bringselius, 2014). Although this is not a research question by itself, in the essay we analysed if the CoA also mentioned positive features.

3.3.3.2. Data

According to UTAP (2018), in a total of 32 contracts related to roads, rail, health and internal security, contractual PPPs for road and rail transport infrastructure account for

68% (23 contracts) and, in 2017, they represent 72% of the total payments made by the public sector to the concessionaires (1,144 million euros). Among the 23 contracts that are part of our study, the roads sector accounts for 21 (91%) of the contracts and the rail sector for two contracts (9%). This may draw the CoA's attention to the procurement process, transparency, effective contract management and VfM (Jantz et al., 2015).

Overall, our study comprises 16 audit reports of PPP transportation infrastructure projects (roads and rails) described in Annex 2. There were no audit reports published in 2016 and 2017. The structure of the reports remained roughly the same during this period with an executive summary, the body of the report, approval of the report and annexes.

In general, the audit reports present the legal background of the contracts and some suggestions for the improvement of the legal framework. In this regard, one of the main issues noted by the CoA is the absence of an appropriate PPP legal framework before the launch of the PPP programme (e.g. Audit 33/2005). Conversely to the European Court of Auditors (ECA, 2018), the CoA's recommendations are not always numbered.

Before a report is publicly available and sent to Parliament, Government and other relevant entities (notably, public sector entities), the Government (responsible minister or ministers) is invited to comment on the audit findings and conclusions. A team of assigned judges vote on the audit reports. One of the judges is responsible for the audit and he/she is the rapporteur (judge-rapporteur). The team of judges approves and signs off the report.

Subsequently, the final audit report, which in most cases includes comments from the auditees, is then published and disseminated through the media and sent to the above-mentioned entities.

Based on the audit report title, Table 3.14 shows the distribution of audit reports by transportation sector categories.

Table 3.14: Audits by sector

Sector	N	%
Rail infrastructure	7	44%
Roads and rail infrastructure	2	13%
Roads infrastructure	7	44%
Total	16	100%

From Table 3.14, we would like to highlight the seven reports for rail infrastructure (44% of the total) that are well above these PPP's contribution to the overall roads and rail infrastructure sector contracts (9%). In two reports, CoA jointly analysed contracts for roads and rail infrastructure.

3.3.4. Findings and discussion

In this subsection, we develop and discuss the content of the CoA's reports on PPPs for transportation infrastructure in terms of audit features, audit evidence, the CoA's recommendations and roles discharged and the government's reactions and recommendations implementation.

3.3.4.1. Audit features

For each audit report, the CoA states the audit objectives and criteria. Although, regarding criteria, the CoA does not clearly state for all the reports whether it is a compliance, financial or performance audit. In several reports, the CoA states that it is a management audit or an audit of economy, efficiency and effectiveness (performance audit) or operational audit. These are all expressions associated with performance audits (Funnell and Wade, 2012).

By combining the paragraphs of the audit reports related to criteria and the audit objectives, we classified each audit report as a performance audit or compliance audit. As the subject matter of audits is concession contracts between the Government and a concessionaire, a financial audit was not considered a possible audit type.

Regarding other audit features, the audit team has a minimum size of three and a maximum of five members, which are, normally, auditors with legal and economic backgrounds. Most of the audits (14 out of 16) were carried out by a team of four. The mean size is 3.87 members, including members with coordination roles.²³

²³ For comparison, in the European Court of Accounts' (ECA) (2018) special report the size of the audit team is nine members.

Single audits (one PPP contract) account for nine (56% of the reports) and portfolio audits (two or more PPP contracts were audited) for seven reports (44%). In portfolio audits the number of PPP contracts audited ranges from two (e.g. Audit 11/2015) to 22 (Audit 15/2012). Audit 15/2012 covered all PPPs for roads infrastructure that existed at the time of the audit.²⁴

The audit effort, measured as audit work period, was only disclosed in report Audit 11/2015 (from May to October 2014).²⁵

Regarding the nature of the audits, 12 (5%) were new audits (the subject matter was audited for the first time), three (19%) were follow-up audits and one (6%) was explicitly classified by the CoA as a new and follow-up audit (Audit 47/2001). With regard to follow-up audits, the audit report has a separate section that analyses the adoption of the recommendations from previous audits. Despite the classification in report Audit 47/2001 as a new and follow-up audit, there is no section analysing the adoption of recommendations from the previous report (Audit 31/2000). In the methodology section of the audit reports, an additional audit feature is a general reference to the audit and procedures manual prepared by the CoA (CoA, 1999) and INTOSAI standards. In some road sector reports, the UK NAO guidelines (e.g. Audit 14/2003) are also mentioned. From 2008 onwards, there is also reference to the CoA's PPP guidelines (Tribunal de Contas, 2008).

In terms of criteria or audit types (compliance, financial, performance), six (37.5%) audits were classified as performance audits and 10 (62.5%) as mixed audits because of the presence in the same audit report of elements of compliance and performance audit.

3.3.4.2. Audit methods

Based on Pollitt et al. (1999) and Lonsdale's (2000) classification, we counted the audit methods cited in the methodology section of the audit reports: document examination was

²⁴ In 2013, one PPP ("Túnel do Marão") was terminated early, during the construction phase, due to contract violations by the operator that led the Government to take over the infrastructure construction works, operation and maintenance thereafter.

²⁵ For example, the ECA's recent audit report on PPPs (ECA, 2018, p. 20) disclosed the audit effort in terms of the period of work (from May 2016 to September 2017).

cited in all reports (16); interviews were used in seven reports (44%); questionnaires appeared in 11 reports (69%); and site visits were conducted in two reports (13%).

Lonsdale (2000), in a study of SAIs' choice of methods for gathering evidence in Finland, France, Netherlands, Sweden and UK identified 16 audit methods with very different degrees of usage. The four methods most often used were: i) document examination; ii) interviews; iii) review of secondary data; and iv) questionnaires/surveys. Although, the results show that the CoA chooses audit methods consistent with the international evidence that SAIs do not engage in a wider range of methods to uncover audit evidence and are not prone to develop innovative studies. Lonsdale (2000) also points to a widening in the range of methods used and identifies factors that work for and against the portfolio of methods used.

From these results, and in response to RQ 3.1 (what methods were used), we conclude that four methods were used and it is worth noting the prevalence of document examination and, to a lesser extent, questionnaires.

3.3.4.3. Audit evidence

One of the research questions is to identify what information is disclosed in the audit reports (RQ 3.2). To this end, based on the conclusions and body of the report sections, we examined the audit evidence presented in the audit reports upon which audit recommendations are made. Table 3.15 presents audit evidence according to a set of categories.

Table 3.15: Audit evidence

Sector	Evidence category								
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Rail infrastructure	3	2	7	2	6	2	3	5	4
Roads and rail infrastructure	0	0	2	2	0	2	2	0	2
Roads infrastructure	3	2	5	2	2	1	3	5	6
Total	6	4	14	6	8	5	8	10	12
% (of 15)*	40%	27%	93%	40%	53%	33%	53%	67%	80%

Notes:

[1] VfM assessment: 1 = if the CoA commented on the lack, or presence, of VfM evaluation using the PSC method; 0 = no VfM analysis by the CoA

[2] Procurement phase: 1 = If the CoA included comments regarding transparency, timeliness and competitiveness of the procurement process; 0 = no comments made

[3] Risk analysis: 1 = if the CoA took into consideration and included comments about risks borne by the public sector; 0 = not done

[4] Fiscal transparency: 1 = the CoA included comments about the fiscal transparency of the contracts (budgeting issues; impact of contracts on national accounts); 0 = no comments made

[5] Performance measurement: 1 = If the CoA analysed the existence and effectiveness of performance measurement systems; 0 = not mentioned

[6] Construction delays: 1 = if CoA mentioned construction delays; 0 = not mentioned

[7] Cost overruns: 1 = if the CoA pointed out cost overruns for the public sector; 0 = not commented

[8] Contract renegotiations: 1 = if the CoA included comments about contract renegotiations; 0 = no comments made

[9] Institutional and legal framework: 1 = if the CoA took this into consideration; 0 = no considerations made

* The % only takes 15 audit reports into consideration because one of them has no new audit findings because it is a pure follow-up report (it only evaluates the implementation of recommendations made in the previous report). Audit 34/2005 is the report in this situation.

Supporting the notion that risk identification and allocation is a very relevant issue in PPP governance (ECA, 2018), risk-related findings [3] are present in 14 (93%) audit reports. The CoA criticises the lack of proper risk management by the public sector, retaining some risks, as the demand risk (e.g. Audit 46/2006; 15/2012).

In 12 (80%) audit reports, findings are related to the institutional and legal framework. Aspects included here are observations associated with the availability of proper PPP legislation, PPP specialised units, capacity issues, managing relations with consultants, the use of standardised contracts and manuals, appropriate governance structures and the creation of knowledge resource centres.

This is followed by audit findings associated with contract renegotiations present in 10 (67%) reports. The CoA is highly critical regarding the issue of the renegotiation of contracts because in all situations audited, except the renegotiation related to the FERTAGUS concession (Audit 31/2015), the terms of the renegotiation favoured the private sector (most notably, Audit 47/2001 and 15/2012), in terms of more favourable financial conditions and risks allocated. The performance measurement and cost overrun findings are each one stated in eight (43%) reports, followed by VfM considerations and fiscal transparency issues.

Regarding fiscal transparency, it is worth highlighting that any finding is associated with the accounting treatment of PPPs. This is relevant because PPPs should be accounted for on an accrual basis by the public sector and are currently accounted for on a cash basis (Hodges and Mellett, 2012). This evidence suggests that the CoA does not consider accrual accounting as a mechanism for transparency and accountability.

Positive conclusions were identified in nine (56%) audit reports alongside conclusions identifying caveats. For example, in Audit 15/2012 the CoA values the fact that the contract manager was positively involved in monitoring the economic and financial aspects by ascertaining the sustainability and risks of each PPP contract.

Figure 2.2 portrays PPPs state audit as an accountability mechanism that enhances the accountability information in the public domain, providing refined transparency. The results in Table 3.15, which represent the response to RQ 3.2, allow the conclusion that the CoA disclosed new information associated with relevant aspects of contractual PPP, associated with different project phases, which the accountee could use to discharging its holding to account responsibilities, promoting better scrutiny and governance of this modality of infrastructure-based public services delivery.

3.3.4.4. CoA's recommendations and roles

To address RQ 3.3, the recommendations made by the CoA, which are not numbered, were categorised into six categories. We counted 107 recommendations spread across the transportation sectors covered by each audit report and category presented in Table 3.16.

Table 3.16: Total recommendations by category and sector

Sector	[A]	[B]	[C]	Pre-contract stage [1]	Risks and costs [2]	Contract management [3]	PPP evaluation [4]	Fiscal transparency [5]	Policies and conditions [6]	Mean [A]/[B]
Rail infrastructure	35	7	33%	14	4	6	0	0	11	5
Roads and rail infrastructure	12	2	11%	2	2	3	1	2	2	6
Roads infrastructure	60	7	56%	10	7	25	0	7	11	9
Total	107	16	100%	26	13	34	1	9	24	7
% of total recommendations				24%	12%	32%	1%	8%	22%	

Notes:

[A] = Sum of recommendations

[B] = Number of audit reports

[C] = Percentage of total recommendations

[1] = Recommendations associated with the pre-contract stage (e.g. VfM assessment; procurement process)

[2] = Recommendations related to risks and costs (e.g. risk identification and allocation; financial equilibrium disputes)

[3] = Recommendations on the management of the concession contracts (e.g. contract renegotiations; contract monitoring)

[4] = Recommendations associated with PPP policy evaluation (e.g. system of lessons learned)

[5] = Recommendations on fiscal transparency (e.g. disclose of budgetary commitments; budget affordability; national accounts and accounting treatment)

[6] = Recommendations regarding the policies and conditions that must be established for the proper functioning of the contractual arrangements

Seven recommendations are issued on average and roads infrastructure accounts for 56% of the recommendations.

Regarding the category of recommendations, most of them are associated with contract management, adding up to 34 (32%). There are recommendations regarding litigation management, performance monitoring systems, contract changes, and financial equilibrium provisions management in this category.

The second area with more recommendations is related to the pre-contract stage (e.g. VfM assessment issues, procurement process) with 26 (24%) recommendations.

Policies and conditions for safeguarding the good governance of PPPs come next with 24 (22%) recommendations. The risks and costs category has 13 (12%) recommendations.²⁶

Based on recommendations and audit conclusions, taking RQ 3.4 into consideration, we interpreted the different roles of the CoA and reached the results presented in Table 3.17.

Table 3.17: The CoA's roles

Sector	Magistrate	Public accountant	Researcher	Management consultant
Rail infrastructure	7	7	0	6
Roads and rail infrastructure	2	2	0	2
Roads infrastructure	7	7	0	5
Total	16	16	0	13
%	100%	100%	0%	81%

Notes:

Magistrate = 1, if we identified this in the report; 0, otherwise

Public accountant = 1, if we identified this role in the report; 0, otherwise

Researcher = 1, if we identified this role in the report; 0, otherwise

Management consultant = 1, if we identified this role in the report; 0, otherwise

All the reports have elements that led us to conclude the presence of two or more roles. In all reports, the CoA addressed the roles of a magistrate and public accountant (e.g. Pollitt et al., 1999; Reichborn-Kjennerud, 2014b), consistent with the watchdog function

²⁶ To safeguard their independence as overseers of the delivery of public policies, SAIs should not comment on the merits of any policy, such as the PPPs for transportation infrastructure construction and maintenance policy, but upon the process of policy implementation (Funnell, 2015). Bearing this in mind, the CoA, in the first audit published (Audit 31/2000), before the recommendations therein, makes a statement whereby its mission is not to interfere in policy decisions and not to be co-responsible for the management of public funds.

(English et al., 2010). Secondly, the role of management consultant, providing advice to the government in order to foster PPP governance and management was identified in 81% of the reports, demonstrating that the CoA also executed the shepherding function (English et al., 2010). We did not find evidence enabling us to conclude the existence of a researcher role, which means a focus on generating knowledge according to scientific standards (Pollitt et al., 1999; Reichborn-Kjennerud, 2014b).

3.3.4.5. Government's reaction and recommendations implementation

The final research question (RQ 3.5) in this essay aims to understand the impact of the CoA audit reports by analysing the Government's reaction and the degree of recommendations implementation.

Inferences about the impact of the CoA's reports can be made by analysing the auditees' reaction to audit findings and observations (Morin, 2016; Reichborn-Kjennerud and Johnsen, 2018). Based on the types of reaction to audit findings and observations described in 3.3.3.1, data was collected by reading the Government's comments, when available.

For this analysis, four reports were excluded due to lack of access to the Government's comments for various reasons. The CoA did not send one report (Audit 34/2005) for comments because it was a follow-up audit and the Government, in the CoA's words, had recently been given the opportunity to include comments on the same subject matter covered by the other audit report. For the remaining three reports (Audit 31/2005; Audit 4/2007; Audit 11/2012), the Government decided not to include any comments. Table 3.18 presents the results of this analysis.

Table 3.18: Government reaction

Sector	Defying	Capitulating	Copying	Ignoring
Rail infrastructure	3	0	2	4
Roads and rail infrastructure	0	0	1	1
Roads infrastructure	6	0	1	4
Total	9	0	4	9
% (of 12)	75%	0%	33%	75%

Notes:

Defying = 1, if this reaction was identified, 0 otherwise

Capitulating = 1, if this reaction was identified, 0 otherwise

Copying = 1, if this reaction was identified, 0 otherwise

Ignoring = 1, if this reaction was identified, 0 otherwise

Somewhat surprisingly, the Government did not directly comment on the CoA's conclusions and observations on all the reports analysed. In general terms, the Government's comments are to clarify some paragraphs in the reports, give further detailed explanations of the options made, contest (sometimes vigorously, notably on the roads PPPs) some audit conclusions and make some political assertions.

The relatively small percentage of copying comments may signal a lack of clear governmental tendency to change in accordance with the CoA's conclusions. Additionally, some of the copying comments were essentially to shift the blame to the previous government (Audit 31/2000).

There are defying comments in strong disagreement with the CoA's findings, conclusions and observations (Audit 47/2001; Audit 15/2012). In these reports, the conclusions of the CoA's are outrightly contested and politicised. Examples of expressions used are (unofficial translation) "the audit report contains errors", "the reality is distorted", "audit objectivity is impaired" and so forth and so on.

Considering these types of reactions, maybe the audit reports do not have the desired impact on PPP governance, transparency, management, VfM, accountability and affordability (Pollitt et al., 1999, pp. 180-183).

We also found evidence that the audit reports do not clearly present how the Government's comments, when made to the draft report, impacted the final report published.

Regarding the second approach to gain some understanding of the Government's predisposition to change following the audit reports, considering the follow-up reports on previous recommendations, it is possible to come up with an idea of the adherence from the auditee to the CoA's recommendations. Table 3.19 summarises the analysis of the follow-up reports included in our sample.

Table 3.19: Follow-up audit reports

N	Year	Abbreviated title	Follow-up audit report	Basis of the follow-up report		Recommendations					
				Identifier	N	Number			Percentage		
						[1]	[2]	[3]	[1]/N	[2]/N	[3]/N
7	2005	Roads shadow toll contracts	Audit 34/2005	Audit 14/2003	10	3	6	1	30%	60%	10%
8	2005	Fertagus concession	Audit 31/2005	Audit 24/2002	9	7	1	1	78%	11%	11%
10	2007	Public funds for roads and rail infrastructure PPPs	Audit 04/2007	Audit 33/2005	9	2	7	0	22%	78%	0%
Total					28	12	14	2	43%	50%	7%

Notes:

N is the number of recommendations

[1] = Number of recommendations fully adopted

[2] = Number of recommendations partially adopted

[3] = Number of recommendations not adopted

The CoA considers 43% of the recommendations followed up as fully adopted and 58% of them (seven out of 12) pertain to the FERTAGUS concession (rail PPP).

Most of the recommendations that are considered partially adopted ([2]) were based on the existence, since 2003 and further developed in 2006, of a legal framework for public procurement under a PPP scheme and also a change in 2004 to the budget framework that imposes a legal requirement to evaluate the VfM of the PPP procurement option, using the PSC methodology.

The CoA classified the recommendations as partially adopted based more on expectations that changes would take place because of the new legal environment than on an actual change in practices.

In Audit 4/2007 (pp. 11-12), the CoA claims to be responsible for the changes encountered in the report in terms of recommendations implemented and made in Audit 33/2005, classifying its audit work as decisive for protecting the financial interests of the state and for the improved management of public resources. This claim by the CoA is consistent with the notion that SAIs do care and work to show their impact on society.

Taking this into consideration, one should note that the existence of legal requirements do not assure, *per se*, changes in practices. Furthermore, this is confirmed by later reports, most of them in the roads sector, which have a very critical stance of all the stages of the project cycle, from pre-procurement procedures to the management of operational contracts (Audit 10/2008 and Audit 15/2012).

Based on the audit reports analysed, the FERTAGUS concession is considered by the CoA a good practice for using a PPP to deliver transport infrastructure.

3.3.4.6. Discussion

In all the PPPs audited by the CoA, for only one concession (FERTAGUS) - Audit 31/2005 and Audit 11/2015 -, the involvement of the private sector in delivering infrastructure-based public services (public transportation by train) was considered to be a success as, in the CoA's opinion, public interest and the financial resources of the State are protected in this PPP. Contrary to Broadbent and Laughlin (2003), the evidence suggests that the CoA was in general very critical of PPP arrangements, management and governance and did not act to support the Government's policy of PPP arrangements to deliver public services. However, the CoA also had an advisory role in making recommendations aimed at improving PPP management and governance (management consultant role). This role is in contrast to Jantz et al.'s (2015) findings claiming that SAIs adhere to their traditional watchdog role, not supporting new forms of public procurement or contracting outside of public services.

Budget constraints should not drive the decision to develop infrastructure by PPP arrangements (Moreno, 2010). Nonetheless, the CoA's conclusions suggest that this was the main driver for constructing public infrastructure using the PPP route, especially concerning the roads sector.

Broadly speaking, the Government's reactions to the audit reports do not directly address the conclusions made therein but are built on general comments or specific comments to some of the paragraphs that need to be clarified. We may speculate that this outright avoidance to reply to each recommendation could avoid political accountability issues at a later stage. This argument is consistent with Morin (2016, p. 114), who raises doubt

about the impacts of the French SAI reports on auditees. Furthermore, Funnell and Wade (2012) found evidence that suggests auditees can resist and defy audit conclusions if the audit is perceived as political interference in the executive governments' affairs. Regarding audit recommendations, in terms of the follow-up audit reports available, the CoA concluded that 93% are full or partially adopted. Although, at the time of the evaluation and considering the partially adopted recommendations, the CoA revealed some optimism because later on it issued some audit reports for the same roads PPPs with very negative conclusions (Audit 10/2008 and Audit 15/2012).

Our findings corroborate the idea of two SAI roles: the watchdog function, drawing attention to failures, and the shepherding function, advising the government towards best practices on PPP management and governance (English et al., 2010).

We may conclude, in contrast to Pollitt et al.'s (1999) findings for the French Court of Accounts (*Cours des Comptes*), that the Portuguese CoA (a judicial or Napoleonic model of SAI) has developed knowledge and capacity to conduct PPP performance audits.

Overall, the evidence presented seems to point to the reduction of information asymmetry between the Government and the Parliament throughout the work of the CoA in what De Fine Licht (2019) coined as "refined transparency", which results from an audit, establishing favourable conditions for political accountability. In short, it is information that is available as an effect of the CoA's audit activity. Thus, our results seem to confirm the value of auditing as a mechanism to reduce agency problems in the legislature-government relationship (Hay and Cordery, 2018. 2021; Streim, 1994).

3.3.5. Conclusions

By the audit report, the CoA, the Portuguese SAI, generates additional information needed to hold the Government accountable towards the Parliament. SAIs are part of the democratic machinery and the people expect that they provide scrutiny of government activities to ensure transparency and public accountability. Through their audits about the economic, efficient and effective use of public resources on top of compliance with established rules, they support public accountability in its several forms.

This essay examined 16 PPPs for transportation audit reports prepared by the CoA and sent to the Parliament and other entities considered relevant. According to performance audits and the scarce PPP audit literature, several features of the reports were analysed (e.g. Boers et al., 2013; Bourn, 2007; English, 2007; Jantz et al., 2015; Reichborn-Kjennerud, 2013).

Under PPP arrangements, the public sector becomes a commissioner of public services provided and managed by the private sector, although it remains accountable for those services. These types of arrangements are associated with NPM reforms and have an impact on state audits (Power, 1997).

By their nature, PPPs raise specific audit issues across all the stages of the project, such as the use of a public sector comparator for *ex ante* VfM assessment, the governance of decision-making processes, the performance management systems implemented, the fairness and transparency of the procurement process, public sector capacity for managing these type of arrangements, transparency and accountability of the projects during the operational phase (e.g., Barrett, 2003; Boers et al., 2013; CAAF, 2015; English, 2007; INTOSAI, 2007a, 2007b; Tribunal de Contas, 2008). Independent and competent SAI audits may contribute to democratic accountability of PPPs by placing them under public scrutiny and debate through parliamentary processes, reducing agency problems between the parliament and the government (Hay and Cordery, 2018; Streim, 1994).

Our results also show that the CoA developed a hybrid strategy for PPP audits with compliance audit and performance audit elements, and some narrower different audit methods were used to gather audit evidence (Lonsdale, 2000, 2011; Pollitt, 2003; Pollitt et al., 1999).

The essay elucidates the work carried out by the CoA on the PPP setting *vis-à-vis* a number of perspectives regarding audit features, audit findings, audit recommendations, the role of the CoA and the Government's reactions to audit findings, observations and recommendations. In terms of the Government's reactions to audit reports, Oliver's (1991) typology of strategic responses to institutional pressures such as an audit allowed us to understand better the acceptance of audit findings and the Government's stance to comply with recommendations.

Our main conclusion is that the work of the CoA has been effective in bringing new information relevant to hold the Government accountable for the PPP policy, reducing information asymmetries. To the best of our knowledge, the essay is the first one to attempt to study state audit of PPPs in a Napoleonic type audit environment.

In western democracies, the legislature represents the people and should hold government to account for the implementation of policies, the use of public funds, stewardship in managing public resources and development objectives. Regarding PPPs, the legislature should evaluate if there is a governance system that assures the PPP route delivers VfM throughout its entire lifecycle, budget affordability is secured, contract management protects the public interest, proper reporting and comprehensive governance mechanisms are in place.

3.4. Essay 4: Stakeholders' perceptions

Preliminary note

This essay presents the results of a questionnaire sent to roads PPPs stakeholders. The argument that the development of roads infrastructures should continue to be opened up to the private sector is supported. Although, there isn't strong support for the idea that concession contracts were chosen on the ideological grounds that the private sector is more efficient than the public sector in the delivery of public services. The majority of the respondents consider that some roads infrastructures were constructed only to address local political interests, suggesting that there are doubts about their effective relevance in terms of national priorities and needs. Regarding the identified advantages of concession contracts, stakeholders' opinions are in some way split. When it comes to disadvantages, there is a general agreement with those put forward in the questionnaire. In relation to transparency, stakeholders' support the argument that concession contracts were used as a tool to hide information considered relevant for public and political scrutiny. Concerning contracts' management, the general opinion is that the public sector lags behind the capacity needed for effective contract management. The results show that there are doubts about the Parliament's execution of its scrutiny function. Furthermore, this essay also enables the triangulation of the evidence gathered through the previous three essays by posing specific related questions, confirming the debt hidden hypothesis and

fiscal constraints as a motivation to use a PPP as a delivery modality, the stakeholders' perception about the lack of transparency of external reporting through the State Accounts and the reasons behind it, and the perceived lack of impact of the CoA reports on change upon its recommendations.

3.4.1. Introduction

As illustrated in Subsection 2.2.3, public infrastructure and related services can be procured according to a variety of models, with different degrees of involvement of the private sector in the project's different phases, according to risk allocation and the level of control retained by the public sector.

Regardless of the procurement model, the choice to develop public infrastructures should be based on a sound governance framework that assures economic growth and improves citizen's wellbeing (OECD, 2017).

Although, several challenges emerge in the delivery of public infrastructures. Specifically, in relation to the delivery modality, OECD (2017) argues that "government should balance the political, sectorial, economic, and strategic aspects. Legitimacy, affordability, risk allocation, and value for money should guide this balancing."

Bearing this in mind and the results from the three previous essays, the aims of this essay are twofold: i) to evaluate the stakeholders' perceptions on a set of dimensions related to the choice of a contractual PPP as a delivery modality, considering the roads sector as a case study, because of its relevance in the Portuguese PPP market; ii) to triangulate the results from the three previous essays as a way to confirm, or not, the previous empirical results and conclusions.

To accomplish these aims we designed a web-based questionnaire that was sent to roads contractual PPPs stakeholders.

The essay proceeds as follows. Subsection 3.4.2 defines the scope, objectives and the research question of the questionnaire; Subsections 3.4.3, 3.4.4, 3.4.5 describe the process of respondent's identification, questionnaire design and data collection, respectively; Subsection 3.4.6 presents the results and discussion; and Subsection 3.4.7 concludes.

3.4.2. Scope, objectives and research question

Roads infrastructures concession contracts are the scope of a questionnaire with the following objectives: i) evaluate the perceptions of different stakeholders upon a set of dimensions, such as their accordance with using concession contracts for contracting out public services, their opinion regarding budgetary constraints as an explanation for taking the PPP route, political and policy reasons for following the PPP option, the advantages and disadvantages of this procurement and public infrastructure-based services delivery model, the level of PPP reporting transparency, the potential impact of the new accounting IPSAS based framework, contract management, their views about the political accountability relationship between the Government (accountor) and the Parliament (accountee) and ii) gather an opinion on the evidence related with our analysis of Portuguese State Accounts, roads PPPs and CoA reports.

To address these objectives, we defined a broad research question that guided the questionnaire's design:

RQ 4.1: What are the stakeholders' perceptions about different PPP issues in the roads sector?

3.4.3. Identification of respondents

As far as the identification of potential respondents is concerned, the first step was to identify the adequate stakeholders' categories. We identified nine categories: academic; state auditor; member of the concessionaire or industry representative; consultant; member of the Parliamentary Budget and Finance Committee; member of the Government; civil society organizations; public accounts preparer; and contracts supervisor or regulator. Due to data privacy concerns associated with the obligation to comply with the EU data protection regulation, the categories were defined in broad terms because narrower categories could lead to the identification of the respondent (individual person or organization). For example, if we considered in isolation the categories contracts manager, PPP unit, contracts regulator or Parliament Budget Unit, because there is only one entity that has each of these functions in Portugal, a response in one of these

categories would allow the identification of the respondents. Therefore, we assembled the entities that perform these roles in the contracts supervisor and regulator category.

The reasons to consider these respondent categories are presented in Table 3.20.

Table 3.20: Reason to include the different types of respondents

Type of respondent	Reasons
1. Academic	Academics with research interests on PPPs may reveal some interesting insights about the PPP phenomena in Portugal.
2. State Auditor	Roads PPPs contracts were audited and the opinions of those who were or are involved in PPPs audit are relevant for the objectives of our research.
3. Member of the concessionaire or industry representative	The views of the operators or their representatives should be considered because they may have different perspectives around the PPP issues raised in the questionnaire.
4. Consultant	The consultants do have a role in promoting and evaluating concession contracts, publishing materials that express their preference for PPPs as a better infrastructure delivery model (Opara, 2018, p. 398).
5. Member of the Parliament	The terms of reference of the Budget, Finance and Administrative Modernisation standing committee stipulates the supervision of public finances as a function of the Committee. It is also part of the remit of this committee to consider further parliamentary action upon the reception of the Court of Audits reports ²⁷ .
6. Member of the Government	Government is the ultimate responsible for choosing PPP as an option to deliver roads infrastructures and for assuring that an adequate governance framework is in place.
7. Member of civil society organizations	Some civil society organizations have concerns regarding public sector transparency, the proper use of public funds, fraud, corruption and all forms of abuse by those who are entrusted with public functions.
8. Public accounts preparers	Those who prepare public accounts, on a budgetary basis and for national accounts purposes, may have their specific views that should be taken into account.
9. Contracts supervisor or regulator	With this category, we want to bring about the views of entities that perform different PPP related roles, such as their impact on public finances, advisory, contract management, surveillance, and regulator.
10. Other	Residual category. Some respondents may want to be identified by other category or be more specific and a restricted scope of categories could negatively affect the response rate.

Based on these categories, the next step was to identify potential individuals or entities that fall under one of the first nine categories described above. Table 3.21 shows the

²⁷ The terms of reference can be accessed at the Parliament website:
<http://debates.parlamento.pt/catalogo/r3/dar/s2c/13/01/008/2016-01-26>

individuals and entities identified by respondent category and the number of potential respondents for each category.

Table 3.21: Identification of potential respondents

Potential respondent	Category	Number of potential respondents	%
Portuguese academics with research interests in PPPs	Academic	9	4
Court of Audits (TdC) a)	State auditor	37	16
General Inspection Directorate (IGF) a)			
21 roads concessionaires and subconcessionaires	Member of the concessionaire or industry representative	23	10
Infrastructures of Portugal (IP)			
Portuguese Association of Toll Roads and Bridges Concessionaires (APCAP)			
Deloitte a)	Consultant	18	8
EY a)			
KPMG a)			
PwC a)			
Actual members of the Parliamentary Budget and Finance Committee and the rapporteur on the 2013 parliamentary inquiry on roads and rails PPPs	Member of the Parliament	25	11
Ministries of finance and secretaries of state for the budget since 2011 up to the date of the questionnaire release	Member of the Government	6	3
Transparency and Integrity (TI) a)	Civil society organizations	67	28
Civil Society Organizations Platform (PASC) a)			
Observatory of Economy and Fraud Management (OBEGEF) a)			
General Budget Directorate (DGO)	Public accounts preparers	12	5
Statistics Portugal (INE) a)			
Bank of Portugal (BdP) a)			
General Treasury and Finance Directorate (DGTF) a)	Contracts supervisor or regulator	39	17
Projects Technical Monitoring Unit (UTAP) a)			
Parliamentary Budget Office (UTAO) a)			
Public Finance Council (CFP) a)			
Institute of Mobility and Transportation (IMT)			
Authority of Mobility and Transportation (AMT)			
Former UTAP head			
	Total	236	100

Notes:

a) For these entities, we previously asked their heads or senior officials to make the questionnaire available only to individuals who have activities regarding PPPs. After that, upon our request, the named individuals sent us an email disclosing how many people had received the questionnaire on their organization.

The organizations' name was translated to English and the Portuguese acronyms are in brackets. Table 3.22 has the official designation and the same acronym.

Due to rounding, the sum of the potential percentages is more than 100%.

With this procedure, we selected 236 potential respondents, where state auditor, civil society organizations and contracts supervisor or regulator are the most representative ones.

It's important to notice here that this *a priori* classification of organizations or individuals in categories does not assure that in the responses the same categories will be chosen by each respondent.

For example, we estimated 67 potential respondents from civil society organizations, but in the responses each respondent may not assume its response as a member of the organization but maybe as an academic or state auditor. In the Appendix is available the questionnaire that has been sent to the potential respondents.

For a group of potential respondents, Table 3.22 sets out the justifications for their inclusion in the questionnaire.

Table 3.22: Justification for respondent's choice

Entities	Justifications
Tribunal de Contas (TdC)	Court of Audits (CoA) gives an opinion on PPP draft contracts to evaluate the compliance with the applicable legal provisions and, once the contracts are in execution, CoA may conduct any type of audit, notably performance audits.
Inspeção-Geral de Finanças (IGF)	The General Inspection Directorate (IGF) is a public administration entity that is part of the Ministry of Finance and is responsible for the financial control of PPPs, among other competencies.
Infraestruturas de Portugal (IP)	Infrastructures of Portugal (IP) is a state-owned enterprise that since 2007 is the State general concessionaire for roads and had granted seven subconcessions to private operators.
Associação Portuguesa das Sociedades Concessionárias de Autoestradas ou Pontes com Portagens (APCAP)	All the roads operators who signed contracts with the public sector are members of this industry association.
Transparência e Integridade (TI)	Transparency and Integrity (TI) is a civil society organization that promotes democratic governance, transparency and integrity.
Plataforma de Associações da Sociedade Civil (PASC)	The Civil Society Organizations Platform (PASC) promotes civil society participation on public life.

(continued)

Table 3.22: (continued)

Entities	Justifications
Observatório de Economia e Gestão da Fraude (OBEGEF)	The Observatory of Economy and Fraud Management (OBEGEF) is an academic think tank that promotes knowledge about informal economy and fraud detection and prevention.
Direção-Geral do Orçamento (DGO)	The General Budget Directorate (DGO) is a public administration entity that is part of the Ministry of Finance and is technically responsible for the preparation of State Budget and Accounts.
Instituto Nacional de Estatística (INE)	Statistical Portugal (INE), along with the Bank of Portugal, is the statistical authority for national accounts purposes.
Banco de Portugal (BdP)	Along with INE, the Bank of Portugal (BdP) is the statistical authority for national accounts purposes with specific responsibilities on public debt measurement in accordance with European Union rules.
Direção-Geral do Tesouro e Finanças (DGTF)	The General Treasury and Finance Directorate (DGTF) is a public administration entity that is part of the Ministry of Finance and should monitor the State concessions in order to assure compliance with financial criteria and enhancing the models for control and analysis.
Unidade Técnica de Acompanhamento de Projetos (UTAP)	The PPP Unit (UTAP) was created in 2012 and is part of its mandate to oversee PPP contracts and to provide technical support in financial and legal issues as necessary.
Unidade Técnica de Apoio Orçamental (UTAO)	The Parliamentary Budget Office (UTAO) mandate is to support the Parliamentary Budget and Finance Committee by doing technical reports, including those related to the evaluation and monitoring of concession contracts.
Conselho das Finanças Públicas (CFP)	The Public Finance Council (CFP) is an independent watchdog of the sustainability and transparency of public finances and PPPs monitoring is under its remit.
Instituto da Mobilidade e dos Transportes (IMT)	The Institute for Mobility and Transportation (IMT) is a public administration entity that is part of the Ministry of Infrastructures and Housing and as the contract manager is entitled to monitor the operation and performance of the concession contracts.
Autoridade da Mobilidade e dos Transportes (AMT)	Authority of Mobility and Transportation (AMT) was set up in 2014 and it's the independent economic regulator.

3.4.4. Questionnaire design

To accomplish the objectives stated above, we designed a web-based questionnaire, which comprises three parts: i) introduction and objectives; ii) type of respondent (a tenth category “other” and associated description was added to the nine options described above); and iii) twelve questions, with some of them being disaggregated into sub-questions. All the questions are mandatory and closed with only one statement upon which the respondent gives its opinion, except for questions 5, 6 and 8, where sub-questions were considered, and the respondents were allowed to add one more justification on the matter under appreciation (see Appendix).

Whenever relevant, for a better understanding of the scope of the questions, we added a definition of concepts to the relevant questions through a web link (see Appendix).

The questions were shaped by the objectives cited above, the literature and the empirical results described in previous chapters.

All of the questions used a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). To have the maximum response rate possible for each question, we added the option “don’t know/don’t respond”.

3.4.5. Data collection

Data collection took place from 10th March until 5th April 2019. During this period, email reminders were sent out along with several phone calls. As a result, we obtained 104 valid responses, which represents a response rate of 44,07%.

3.4.6. Results and discussion

This subsection presents the questionnaire results and associated discussion.

3.4.6.1. Respondents

Table 3.23 presents the frequency distribution of the 104 respondents across the ten possible categories.

Table 3.23: Number of respondents by category

Respondent category	N	Expected proportion	Actual proportion
[1] Academic	13	4%	13%
[2] State Auditor	29	16%	28%
[3] Member of the concessionaire or industry representative	9	10%	9%
[4] Consultant	15	8%	14%
[5] Member of the Parliament	6	11%	6%
[6] Member of the Government	3	3%	3%
[7] Member of civil society organizations	15	28%	14%
[8] Public accounts preparers	5	5%	5%
[9] Contracts supervisor or regulator	1	17%	1%
[10] Other	8	0%	8%
Total	104	100%	100%

Notes:

N = Number of respondents.

The expected proportion is from Table 3.21.

The actual proportion is the number of respondents by category divided by the responses total.

For academic, state auditor and consultant categories, the actual proportion is more than the expected proportion. For the academic category, the number of actual respondents (13) is more than the expected respondents (9).

For two categories (member of the Government and public accounts preparers), the proportion is roughly the same and the remaining categories exhibit an actual proportion less than the expected one. The most divergent result is for the contracts supervisor or regulator category with only one respondent, whereas the expected *a priori* response rate was 17%, calculated based on 39 potential respondents. One explanation could be the respondents belonging to the entities assigned to this category (see Table 3.21) did not participate in the study. Another explanation is, despite the potential respondents' participation, other respondent categories were chosen by the respondents *a priori* classified in category [9] (see Table 3.23).

Looking into the “other” respondents category, two respondents identified themselves as public sector consultant, one as a member of an international financial institution, Respondent (R) 20 as an academic, public finances evaluator and former member of the government, R 23 as a public finances analyst, R 60 as a collaborator of the State grantor, R 81 as a private sector worker and R 91 left empty the description of its role.

3.4.6.2. Contracting out of public services (Q01)

According to Portuguese legislation, contractual PPPs should have the legal form of a concession contract that is awarded to a private sector bidder in accordance with public procurement EU and Portuguese legislation (M. Azevedo, 2014).

When the Government signs a concession contract, public services are being contracted out to the private sector and this changes the nature and governance of public services delivery (Greve, 2008).

Considering the previous considerations, our first question is to perceive stakeholders opinions about contracting out of roads infrastructures services through the use of concession contracts, supporting the marketization of public service delivery, one of the tenets of the NPM movement (Mulgan, 2014b, p. 30). Table 3.24 presents the results.

Table 3.24: Stakeholders' agreement with contracting out public services

Q01. The Government of Portugal used and shall be using concession contracts for the development of roads infrastructures

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	1 8%	2 15%	4 31%	4 31%	2 15%	0 0%	13 100%
[2]	0 0%	7 24%	9 31%	13 45%	0 0%	0 0%	29 100%
[3]	0 0%	0 0%	0 0%	4 44%	5 56%	0 0%	9 100%
[4]	0 0%	3 20%	1 7%	6 40%	5 33%	0 0%	15 100%
[5]	1 17%	0 0%	1 17%	4 67%	0 0%	0 0%	6 100%
[6]	0 0%	0 0%	0 0%	3 100%	0 0%	0 0%	3 100%
[7]	1 7%	4 27%	4 27%	5 33%	1 7%	0 0%	15 100%
[8]	0 0%	1 20%	2 40%	2 40%	0 0%	0 0%	5 100%
[9]	0 0%	0 0%	0 0%	1 100%	0 0%	0 0%	1 100%
[10]	0 0%	0 0%	0 0%	5 63%	3 38%	0 0%	8 100%
Total	3	17	21	47	16	0	104
Percentage	3%	16%	20%	45%	15%	0%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

In general, stakeholders are very keen on the idea of using the private sector to deliver roads infrastructure-based services as 60% of them agree or strongly agree and only 19% are not in accordance.

Breaking down by respondent category, responses under categories 3 and 6 are all in favour of using contracting out. Category 8 respondents are less supportive of this approach.

3.4.6.3. Budgetary restrictions (Q02)

The delivery of roads infrastructures through a concession contract, whether the private sector special purpose vehicle (SPV) has a bundled responsibility for designing, building, financing, operating and maintaining a public facility, allows the government to turn a large one-off capital expenditure, with the associated impact on fiscal indicators, into a series of smaller annual operational expenditures, which occur only after the construction phase, except for user-pay contracts, where infrastructure funding comes from final users payments, such as tolls.

In the face of public finances under strain, the PPP model offers governments the possibility to address the infrastructure gap by bringing private finance on board, raised by the concessionaire. The concessionaire (normally an SPV created in obedience to the public tender terms of reference) raises debt and equity to develop or renew an asset and is repaid by the government and/or service users over the contract duration (Boardman et al., 2016; Engel et al., 2014; Grimsey and Lewis, 2017).

At the European level, under the SGP framework, countries should comply with established fiscal rules related to debt and budget balance fiscal indicators (Andrle et al., 2015).

Table 3.25 shows the respondents' opinion about the influence of budgetary limits in using concession contracts for roads infrastructures.

Table 3.25: Stakeholders' agreement with budgetary constraints as the reason behind the choice of concession contracts

Q02. The choice of concessions contracts as a procurement method is due to the political need for infrastructure construction in a context of budgetary constraints imposed by the Stability and Growth Pact rules regarding deficit (below 3% of the Gross Domestic Product – GDP) and debt (less than 60% of GDP)

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency %	Frequency %	Frequency %	Frequency %	Frequency %	Frequency %	
[1]	0 0%	3 23%	3 23%	5 38%	2 15%	0 0%	13 100%
[2]	1 3%	8 28%	1 3%	13 45%	6 21%	0 0%	29 100%
[3]	0 0%	0 0%	3 33%	3 33%	3 33%	0 0%	9 100%
[4]	0 0%	4 27%	3 20%	5 33%	3 20%	0 0%	15 100%
[5]	0 0%	1 17%	1 17%	3 50%	1 17%	0 0%	6 100%
[6]	0 0%	0 0%	0 0%	2 67%	1 33%	0 0%	3 100%
[7]	0 0%	6 40%	1 7%	6 40%	2 13%	0 0%	15 100%
[8]	1 20%	0 0%	1 20%	2 40%	1 20%	0 0%	5 100%
[9]	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	1 100%
[10]	0 0%	0 0%	0 0%	8 100%	0 0%	0 0%	8 100%
Total	2	23	13	47	19	0	104
Percentage	2%	22%	13%	45%	18%	0%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

More than 60% of respondents share the idea that the combination of infrastructure needs with the presence of budgetary constraints influenced the procurement method. Above this degree of accordane are categories 2 (66%), 3 (66%), 5 (67%) and 6 (100%).

These results are aligned with the evidence presented in Essay 2, where a significant proportion of debt in relation to GDP was not accounted for in the official debt figures used for fiscal surveillance at the EU level (Andrle et al., 2015).

3.4.6.4. Political bias (Q03)

Before the choice of the procurement method (e.g. PPP or traditional procurement), a decision should be made over the choice of a particular project to address infrastructure needs, according to sound project prioritization, evaluation and selection criteria (Burger and Hawkesworth, 2013; OECD, 2017; Yescombe and Farquharson, 2018).

Despite this normative assumption, governments trying to maximize their electoral results may choose projects only on political grounds to benefit political clienteles' private interests, instead of the general population interest (Engel et al., 2014). Engel et al. (2014, p. 9) illustrate this argument with the example of Belgium, where numerous white elephants of abandoned tunnels, light rail lines without demand and unused bridges exist because of political pressures to replicate projects on the regions. On the ground of this argument, Table 3.26 presents the results, accordingly.

Table 3.26: Stakeholders' agreement with the need to address local political interests

Q03. Some of the investments in roads infrastructures were mainly motivated by the need to address local political interests

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	0	1	1	6	4	1	13
	0%	8%	8%	46%	31%	8%	100%
[2]	0	2	4	17	5	1	29
	0%	7%	14%	59%	17%	3%	100%
[3]	0	1	3	3	2	0	9
	0%	11%	33%	33%	22%	0%	100%
[4]	0	1	3	7	3	1	15
	0%	7%	20%	47%	20%	7%	100%
[5]	0	3	0	2	1	0	6
	0%	50%	0%	33%	17%	0%	100%
[6]	0	0	0	2	1	0	3
	0%	0%	0%	67%	33%	0%	100%
[7]	0	1	1	10	2	1	15
	0%	7%	7%	67%	13%	7%	100%
[8]	0	1	0	4	0	0	5
	0%	20%	0%	80%	0%	0%	100%
[9]	0	1	0	0	0	0	1
	0%	100%	0%	0%	0%	0%	100%
[10]	0	1	1	4	0	2	8
	0%	13%	13%	50%	0%	25%	100%
Total	0	12	13	55	18	6	104
Percentage	0%	12%	13%	53%	17%	6%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

A large majority of respondents (70%) agree or strongly agree with this argument behind the decision to construct roads infrastructures. Notably, categories 6, 7, 8 and 2 are even further in agreement. For category 5, which is composed of actual politicians, the opinions

are split and 6% of all respondents do not have an opinion. It seems that occurred the launch of roads infrastructure projects which are not based on sound population needs evaluation (OECD, 2017; Yescombe and Farquharson, 2018).

3.4.6.5. Policy orientation (Q04)

As a public policy instrument, PPPs have an ideological meaning, being associated with the modernisation of the public sector, contracting out and privatization agenda (Broadbent and Laughlin, 2005; Hodge and Greve, 2019).

Thus, through roads concession contracts the private sector is involved in public transportation policy. PPPs can be viewed as a policy related to the role of the State in the economy, passing over to the private sector, as part of a privatization agenda and on the grounds that this sector is more efficient than the public sector, responsibilities that were previously discharged by the public sector (Hodge et al., 2018; Savas, 2000). To come up with an opinion of what stakeholders think about the importance of the modernisation, contracting out and privatization agenda had on Government's decisions, Table 3.27 illustrates stakeholders' views.

Table 3.27: Stakeholders' agreement with greater private sector efficiency in delivering public services

Q04. The use of concession contracts resulted from the ideology that the private sector is more efficient than the public sector in delivering public services

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	1 8%	4 31%	3 23%	3 23%	2 15%	0 0%	13 100%
[2]	1 3%	10 34%	4 14%	12 41%	2 7%	0 0%	29 100%
[3]	0 0%	1 11%	1 11%	4 44%	3 33%	0 0%	9 100%
[4]	0 0%	3 20%	1 7%	10 67%	1 7%	0 0%	15 100%
[5]	1 17%	3 50%	0 0%	2 33%	0 0%	0 0%	6 100%
[6]	0 0%	1 33%	2 67%	0 0%	0 0%	0 0%	3 100%
[7]	0 0%	5 33%	2 13%	8 53%	0 0%	0 0%	15 100%
[8]	0 0%	2 40%	1 20%	1 20%	1 20%	0 0%	5 100%
[9]	0 0%	0 0%	0 0%	0 0%	1 100%	0 0%	1 100%
[10]	0 0%	2 25%	0 0%	5 63%	0 0%	1 13%	8 100%
Total	3	31	14	45	10	1	104
Percentage	3%	30%	13%	43%	10%	1%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

This statement halves the respondents in a certain way. Respondents that are more associated with the for-profit private sector (categories 3 and 4) are in strong favour of the statement, with more than 70% agreeing and strongly agreeing to responses. Category

5 respondents are not convinced that the choice of concession contracts resulted from ideology.

3.4.6.6. Reasons to adopt PPP as a procurement method (Q05)

Academic and practitioner literature points to some potential benefits associated with using PPPs for infrastructure (Grimsey and Lewis, 2017; Hodge and Greve, 2017a; Yescombe and Farquharson, 2018). First, we make a brief description of the alleged advantages and, second, we present and discuss the stakeholders' views therein.

On time and on budget

One of the arguments in favour of PPPs is that this procurement method assures delivery on time and on budget. By contrast, traditional public procured infrastructure projects can result in large cost overruns and time delays (e.g. Flyvbjerg et al., 2003).

The reasons put forward for this relative better score are that construction risks are passed to the private partner and the public sector only starts payments, or users are charged, only after the construction is completed (NAO, 2018; Yescombe and Farquharson, 2018).

Access to innovation by the private sector that allows cost efficiency over the whole project cycle

The profit motive of the private sector and its realization throughout the long term contract may incentivize the search of innovative solutions, whether in the design, construction or infrastructure-based services and this is considered beneficial to the public sector that may learn from it (Hodge and Greve, 2017a; Yescombe and Farquharson, 2018).

The private sector is more efficient in infrastructure construction and management

We now turn to the argument which states that the private sector is more efficient in infrastructure construction and management. In PPP roads, construction, operations and maintenance are bundled into a single contract, being this a distinctive difference to traditional public procurement, where for the latter, construction, operations and maintenance, in the case the public sector would not directly operate and maintain the

asset, are carried out through different contracts. Bundling gives incentives to the private partner to optimize whole of life costing to the agreement (Grimsey and Lewis, 2017; Yescombe and Farquharson, 2018).

Efficient risk sharing

At the heart of a PPP transaction is the sharing of different risks related to different stages of the project (construction, operation and hand back) among the parties to the contract, which are best able to manage them. Thus, the risk transfer to the private sector can result in benefits that can outweigh the higher financing costs of the private sector, and it's one of the main drivers of the VfM assessment (Siemiatycki and Farooqi, 2012; Yescombe and Farquharson, 2018).

Use of private finance as a means to release public finance to other types of expenses

Infrastructure investments using private finance as part of the procurement option as a PPP allows the shifting of payments to future periods, transforming a one-off capital expenditure into a series of payments over the term of the contract, reducing pressure on current budgetary resources, making them available to other policy areas (Hodge and Greve, 2007). This advantage is also related to the debt hidden hypothesis examined in Essay 2.

Table 3.28 presents the results for each of the above-mentioned reasons.

Table 3.28: Stakeholders' opinions about PPP advantages as a procurement method

Q05. The reasons behind the option of using concession contracts for the construction of roads infrastructures were:

Reasons	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
SQ1: To deliver the infrastructure on time	7 7%	38 37%	17 16%	31 30%	10 10%	1 1%	104 100%
SQ2: To deliver the infrastructure on budget	11 11%	32 31%	11 11%	40 38%	9 9%	1 1%	104 100%
SQ3: Access to innovation by the private sector that allows cost efficiency over the whole project cycle	9 9%	33 32%	16 15%	37 36%	8 8%	1 1%	104 100%
SQ4: Private sector is more efficient in infrastructure construction and management	7 7%	19 18%	18 17%	47 45%	12 12%	1 1%	104 100%
SQ5: Efficient risk sharing	15 14%	36 35%	10 10%	33 32%	9 9%	1 1%	104 100%
SQ6: Use of private finance as a means to release public finance to other types of expenses	4 4%	7 7%	5 5%	54 52%	32 31%	2 2%	104 100%

Except for SQ6, respondents are somehow divided on their opinion towards the different reasons to take the PPP route. Among the six closed options, efficiency advantages of the private sector and, to a larger extent, the release of public finance to other types of expenses emerged as the main justifications for the choice of this procurement option, with 57% and 83% favourable opinions, respectively.

On top of the mandatory responses to the defined sub-questions, six respondents also included the option “other” to include other reasons (the statements that follow were translated from the original in Portuguese).

Respondent (R) 10 (consultant) stated: “launch of constructions, delaying the costs”.

R 17 (Member of the Government) added the following justification: “one of the reasons that influenced the choice of the PPP option was an attempt to deceive fiscal criteria, shifting the costs to the future without a present impact on public debt.”

Another different reason was brought by R 31 (state auditor): “satisfaction of private interests”. Also, R 40 (academic) point to: “favouring certain sectors, economic groups or persons.”

On the same line of justification, albeit in a more elaborated way, R 39 (public accounts preparers) conclude: “in some cases, private interests appear to prevail, notably when, probably, there were no justifications for the construction of roads infrastructures.”

R 102 (Member of the Parliament) made the following contribution:

infrastructure construction in a context of budgetary constraints imposed by the Stability and Growth Pact rules regarding deficit (below 3% of the Gross Domestic Product – GDP) and debt (less than 60% of GDP) and ALSO favouring/valuation of economic and financial groups.

When we break down the responses by respondent's category, different patterns emerge across categories (not tabulated).

As far as delivering the infrastructure on time is concerned, all the nine respondents in category 3 agree (56%) or strongly agree (44%). Respondents in categories 1 and 2 are less supportive of the assertion contained in this sub question.

The next sub question (no cost overruns) also illustrates the difference of opinions among the categories with three or more respondents, except for category 10, which is not homogenous. In fact, respondents in categories 3 and 4 concur with the statement that concession contracts allowed to deliver roads infrastructures on budget by 78% and 60%, respectively. On the contrary, the remaining respondent categories have rates of accordance equal to or under 40%, except in Category 2, where the accordance rate (45%) is slightly behind the disagreement rate of 48%.

When it comes to enhanced innovation by using concession contracts (SQ 3), the same pattern appears, except for category 5, in which 50% of the respondents support the idea that innovation is a positive consequence of using this kind of contracts.

Moving to efficiency impacts, respondents in categories 2, 3 and 4 fully support the notion of efficiency gains coming out of this form of procurement with 66%, 89% and 87% in accordance, respectively. Categories 5 and 6 (the political categories) are less enthusiastic about this hypothesis, being in disagreement (sum of strongly disagree and disagree percentages) by 67%, each.

Regarding the use of concession contracts as a mechanism for efficient risk sharing between the public and the private sector, a division appears again between respondents. Categories more associated with the private sector (categories 3 and 4) believe in the risk sharing reason, more pronounced in Category 3 (77%) than in Category 4 (53%). Except for Category 5, where the disagreement about efficiency in risk sharing is about 33%, the remaining categories (1, 2, 6, 7 and 8) are not in accordance with over 50%.

The less contentious sub question (SQ6) exhibit a somewhat homogenous pattern of the responses across the significant respondents' categories (excluding category 9, which has only one respondent). All respondents categories show a rate of accordance above 70%.

3.4.6.7. Disadvantages of PPPs against traditional public procurement (Q06)

On the disadvantages side, there are also several arguments against PPPs as an infrastructure based services procurement alternative. Each of these arguments is now tackled in turn.

Cost of private finance

According to Yescombe and Farquharson (2018, p. 455), the cost of capital for a PPP is around 2-5% higher than the public sector borrowing costs. This is because the government has a lower default risk than the created SPV that borrowed for the road's construction.

Loss of flexibility

The long term nature of the concession contract (e.g. 25-30 years), with associated rights and obligations for both parties, make it a lock-in arrangement which may impose difficulties on government to adjust the contract when changing circumstances may require significant modifications in the way the infrastructure service is provided. For instance, one may speculate that current contracts are not flexible enough to absorb the impact of automated vehicles on existing roads design and operation (Grimsey and Lewis, 2017).

Contract changes require renegotiation, which handles transaction and bargaining without competition from the concessionaire side (Ross and Yan, 2015; Yescombe and Farquharson, 2018).

Transaction costs

Boardman et al. (2016) argue that in PPP contracts are principal-agent problems that increase transaction costs because they often have characteristics such as asset specificity, uncertainty due to the long term nature of the contract, renegotiation of incomplete contracts and poor contract management skills.

Accountability

The accountability relationship between the government and the parliament is one of a political nature and is driven by the principles of a parliamentary democracy enshrined in the Portuguese Constitution. Flinders (2001) poses that control of abuse, corruption and misuse of public power, assurance that public resources are being used legally, effectiveness and efficiency of public policies are being improved, and the government's legitimacy is enhanced, are the aims of accountability on liberal democracies.

Parliamentary control by virtue of accountability mechanisms such as legislative scrutiny through parliamentary questions, committees investigation, accounts and reports, ministerial responsibility and state auditors should contribute to the stated aims (Mulgan, 2003).

Public sector bears excessive risk

The public service provided through a PPP arrangement is an ultimate responsibility of the government. If the private partner enters into financial difficulties, the risks may be shifting back to the public sector in order to assure the delivery of infrastructure-based services. The recent collapse of Carillion, a large facilities management and construction firm, in the UK, with 420 contracts with the public sector (House of Commons, 2018), illustrates this process that Yescombe and Farquharson (2018, p. 457) call as “privatising profits while socialising losses”.

Public management becomes more complex

In a PPP environment, there are different roles and responsibilities between the parties to the contract. One distinctive facet of a PPP is the delegation to the private sector the delivery of a public service according to the terms of the contract.

Skelcher (2010) observes two competing institutional logics embodied in PPPs, being them the logic of democratic accountability in a public arena and the logic of commercial competitiveness in a private setting. The management of these two competing logics, the long term nature of the relationship and the lack of a hierarchical relationship between parties represent additional complexity to public management.

Considering these alleged drawbacks of the PPP model, Table 3.29 presents stakeholders' answers.

Table 3.29: Stakeholders' opinions about PPP disadvantages as a procurement method

Q06. Comparing with traditional public procurement, concession contracts exhibit the following disadvantages:

Disadvantage	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
SQ1: Private finance is more expensive	5 5%	24 23%	18 17%	43 41%	11 11%	3 3%	104 100%
SQ2: Concession contracts limit flexibility in face of technology changes	3 3%	44 42%	21 20%	33 32%	1 1%	2 2%	104 100%
SQ3: Significant transaction costs	2 2%	19 18%	16 15%	51 49%	12 12%	4 4%	104 100%
SQ4: There is less accountability of the Government towards the Parliament	8 8%	19 18%	9 9%	48 46%	18 17%	2 2%	104 100%
SQ5: Public sector bears excessive risk	4 4%	20 19%	16 15%	38 37%	24 23%	2 2%	104 100%
SQ6: Public management becomes more complex	3 3%	21 20%	19 18%	38 37%	20 19%	3 3%	104 100%

Except for the issue of diminishing flexibility (SQ2), in general respondents agree or strongly agree with the reasons put forward as disadvantages of the PPP route.

The non-mandatory other option was not chosen by any of the respondents, as it occurred for the previous question.

To increase our understanding of respondents views about a specific reason, for each one, we disaggregate the answers by respondent category (not tabulated).

The argument that private finance is more expensive than public finance is less supported by categories 5, 6, 7 and 8 (less than 50%) and categories 1, 2, 3 and 4 are more than 50% in favour of it.

The decreased flexibility only gathers 50% or more support in categories 5 and 8. It also worth noting that 20% of the respondents are indifferent (neither agree nor disagree). On the disagreement side, categories 3 and 6 surpass 75%, with 78% and 100%, respectively.

Moving to the transaction costs argument, categories 3 and 6 do not concur with it. Category 5 is evenly divided and categories 1, 2, 4, 7 and 8 favour this argument against the use of concession contracts.

As far as political accountability of the Government towards the Parliament, respondents in Category 3 do not consider the existence of less accountability, 33% of respondents in Category 6 strongly disagree, 33% strongly agree and 33% neither agree or disagree. The remaining categories are in accordance with the lessen of political accountability.

In terms of excessive risk born by the public sector, 66% of respondents in category 3 are against this argument. In Category 6, the options disagree, neither agree nor disagree and agree scored 33% each, and the remaining categories consider that the distribution of risks is not balanced, having two categories (2 and 8) 80% or more rate of accordance.

Regarding the increased complexity to public management, categories 3 and 4 reject this idea and the others admit an increase in public management complexity.

3.4.6.8. Lack of transparency (Q07 e Q08)

Study 1 presents the level of post-contract PPPs disclosures in the annual report, using data from Portugal and UK. The number of reporting elements disclosed is our measure of raw transparency.

Here, related to transparency, we designed two specific questions. One to gather an opinion on general terms and the second to identify some reasons for the current PPPs reporting on Portuguese State Accounts (*Conta Geral do Estado*).

Flybjerg et al. (2003) believe that in the public sector the main mechanism to enforce accountability is transparency. For having proper public scrutiny, they argue that the transparency requirement means, at least, that all documents prepared on the public sector side should be available to the public, without any information been severely restricted on the grounds of commercial confidentiality. In the same vein, Yescombe and Farquharson (2018, p. 463) simply put that “the result of transparency [in PPP projects] is accountability”.

Considering the Irish context, which is somewhat similar to the Portuguese one by the extensive use of PPPs for roads infrastructures, Reeves (2015) considers the paucity of information as a concrete obstacle to public scrutiny by preventing an informed debate and negatively affecting the legitimacy of using PPPs in public policy.

Considering all the above, stakeholders’ opinion of whether the information disclosed was appropriate is shown in Table 3.30.

Table 3.30: Stakeholders' agreement with information asymmetries

Q07. The use of concession contracts for the construction and operation of infrastructures allowed the Government to hide relevant information necessary for a proper scrutiny of public accounts by the Parliament and the general public.

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	0 0%	0 0%	0 0%	5 38%	7 54%	1 8%	13 100%
[2]	0 0%	2 7%	0 0%	16 55%	11 38%	0 0%	29 100%
[3]	3 33%	3 33%	1 11%	1 11%	1 11%	0 0%	9 100%
[4]	3 20%	0 0%	1 7%	4 27%	6 40%	1 7%	15 100%
[5]	1 17%	1 17%	0 0%	3 50%	1 17%	0 0%	6 100%
[6]	0 0%	0 0%	0 0%	1 33%	2 67%	0 0%	3 100%
[7]	0 0%	1 7%	0 0%	8 53%	5 33%	1 7%	15 100%
[8]	0 0%	1 20%	0 0%	3 60%	1 20%	0 0%	5 100%
[9]	0 0%	0 0%	0 0%	1 100%	0 0%	0 0%	1 100%
[10]	1 13%	1 13%	2 25%	2 25%	1 13%	1 13%	8 100%
Total	8	9	4	44	35	4	104
Percentage	8%	9%	4%	42%	34%	4%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

A large majority agree or strongly agree with (summing up 76%) the use of concession contracts to withhold information from the public domain, creating difficulties to public

scrutiny institutional processes. Only respondents in Category 3 have different views in this respect.

Moving to the second question under the transparency subject, we recall here that in Section 3.1. we developed a comparative study of the public reporting of PPPs in Portugal and the UK.

Question 08 of the questionnaire was designed to have some insights about the reasons of the level of reported elements presented on the Portuguese State Accounts.

With this objective in mind, this question presented the following information to respondents (the original is in Portuguese – see Appendix):

Reporting element	2010	2011	2012	2013	2014	2015	2016	2017
1 Stock of assets (infrastructure)	Yes	Yes	Yes	No	No	No	No	No
2 Capital investments during the financial year	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
3 Financial liability	No	No	No	No	No	No	No	No
4 Future cash flows	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5 Service charge	No	No	No	No	No	No	No	No
6 Cost of finance (finance charge)	No	No	No	No	No	No	No	No
7 Budgeted payments	No	No	No	Yes	Yes	Yes	Yes	Yes
8 Actual payments	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9 Explanation of differences between budgeted and actual payments	No	No	No	Yes	Yes	Yes	Yes	Yes
10 Costs of monitoring	No	No	No	No	No	No	No	No
11 Contingent liabilities	No	No	No	Yes	Yes	Yes	Yes	Yes
12 Performance data	No	No	No	No	No	No	No	No
13 Penalties	No	No	No	No	No	No	No	No
14 Value for money considerations	No	No	No	No	No	No	No	No
15 National accounts impact	No	No	No	No	No	No	No	No
Number of Yes	4	4	4	5	6	6	6	6
Percentage of Yes	27%	27%	27%	33%	40%	40%	40%	40%

Note:

“Yes” means that the reporting element had been disclosed.

Table 3.31 presents the results for each of the factors considered as a justification for the level of disclosures in State Accounts.

Table 3.31: Stakeholders' views about the level of disclosures

Q08. What are the reasons for the level of disclosures in State Accounts since 2010 up to 2017.

Reasons	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
SQ1: Opacity culture by the executive politicians	0	6	15	49	32	2	104
	0%	6%	14%	47%	31%	2%	100%
SQ2: Governments avoid to disclose information that enhances public scrutiny	0	8	10	51	33	2	104
	0%	8%	10%	49%	32%	2%	100%
SQ3: Lack of mandatory legal requirements for disclosing complete information	1	21	18	42	18	4	104
	1%	20%	17%	40%	17%	4%	100%

Only 6% of respondents disagree with the assignment to executive politicians a culture of opacity. In the same direction, 81% of the respondents concur that governments avoid disclosing information that enables public scrutiny.

Sub Question 3 (SQ 3) tries to capture the belief of stakeholders in coercive isomorphism mechanisms, such as the imposition of legal requirements (DiMaggio and Powell, 1983, 1991). The results therein are more moderate, with 57% of respondents being following the need of legal requirements.

Along with questions 5 and 6, also for this question we made available an option to indicate other reasons. Two respondents decided to give further reasons. R 17 (Member of the Government) pointed to: “the lack of financial accounting instruments allowing clarity in explanation of PPP costs.”

R 20 (other category – academic, public finances evaluator and former member of the Government) stated: “lack of technical competencies inside the Public Administration to monitor all the stated elements.”

Disaggregating the sub questions by respondents categories (not tabulated), a similar pattern emerged for sub questions 1 and 2. Albeit the level of agreement is higher than the level of disagreement, only respondents in Category 3 exhibit a level of agreement (sum of agree and strongly agree percentages) below 50%.

A different pattern is present at SQ 3, where respondents categories 1, 3, 5 and 7 level of agreement is lower than 50%.

Taking questions 07 and 08 altogether, there is a general perception of lacking transparency in the same way Essay 1 concluded.

3.4.6.9. Change in incentives (Q09)

International financial accounting standards (IFRIC 12, IPSAS 32) have a control-based approach to concession contracts that fall under the definition of service concession arrangements. According to this approach, concession contracts will affect the government's financial statements in the same way as traditionally procured infrastructure. Although, for national accounts purposes prevails the risks and rewards approach (see Subsection 2.2.6).

Recently, Portugal adopted an IPSAS based public sector accounting framework that follows IPSAS 32 recognition, measurement and disclosure requirements.

With the objective to analyse if this change in the financial accounting model for concession contracts would provide different incentives to political decision makers, we asked stakeholders accordingly, and Table 3.32 presents the results.

Table 3.32: Stakeholders' agreement with the expected impact of the accounting framework

Q09. According to the new accounting framework the impact of these contracts is the same as the construction of the infrastructure using the traditional public procurement method. Considering this change in the accounting for service concession arrangements, the nature of the motivations to use concessions contracts as a procurement method will change.

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	0	2	5	5	0	1	13
	0%	15%	38%	38%	0%	8%	100%
[2]	0	7	4	15	3	0	29
	0%	24%	14%	52%	10%	0%	100%
[3]	1	3	2	2	0	1	9
	11%	33%	22%	22%	0%	11%	100%
[4]	2	6	3	2	2	0	15
	13%	40%	20%	13%	13%	0%	100%
[5]	0	1	2	3	0	0	6
	0%	17%	33%	50%	0%	0%	100%
[6]	0	0	0	3	0	0	3
	0%	0%	0%	100%	0%	0%	100%
[7]	0	2	4	7	1	1	15
	0%	13%	27%	47%	7%	7%	100%
[8]	1	1	1	1	1	0	5
	20%	20%	20%	20%	20%	0%	100%
[9]	0	0	0	0	0	1	1
	0%	0%	0%	0%	0%	100%	100%
[10]	1	0	1	4	0	2	8
	13%	0%	13%	50%	0%	25%	100%
Total	5	22	22	42	7	6	104
Percentage	5%	21%	21%	40%	7%	6%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

The percentage of respondents that believes in the impact of financial accounting standards is slightly two times more than the opposite. It's worth mention that 21% of respondents neither agree nor disagree. This may be justified by the technical nature of the issue.

Respondents categories 2, 5, 6 and 7 are the ones that are more confident of the impact of the new accounting framework.

3.4.6.10. Contract management (Q10)

Public sector should have in place management processes to oversee project delivery, deal with contract contingencies, monitor the performance of the infrastructure based public services and detect any issues as soon as they arise, along with an effective risk management framework (Grimsey and Lewis, 2017; Hodge et al., 2017; Yescombe and Farquharson, 2018).

Stakeholders' opinion on contract management is presented in Table 3.33.

Table 3.33: Stakeholders' agreement with public sector contract management effectiveness

Q10. Public sector has implemented a contract management system that assures the expected results with these contracts during their execution.

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency %	Frequency %	Frequency %	Frequency %	Frequency %	Frequency %	
[1]	2 15%	6 46%	3 23%	0 0%	0 0%	2 15%	13 100%
[2]	7 24%	20 69%	0 0%	1 3%	0 0%	1 3%	29 100%
[3]	1 11%	2 22%	2 22%	3 33%	1 11%	0 0%	9 100%
[4]	3 20%	7 47%	2 13%	3 20%	0 0%	0 0%	15 100%
[5]	0 0%	3 50%	1 17%	2 33%	0 0%	0 0%	6 100%
[6]	0 0%	2 67%	1 33%	0 0%	0 0%	0 0%	3 100%
[7]	5 33%	6 40%	2 13%	2 13%	0 0%	0 0%	15 100%
[8]	0 0%	2 40%	1 20%	1 20%	0 0%	1 20%	5 100%
[9]	0 0%	0 0%	0 0%	1 100%	0 0%	0 0%	1 100%
[10]	3 38%	2 25%	1 13%	2 25%	0 0%	0 0%	8 100%
Total	21	50	13	15	1	4	104
Percentage	20%	48%	13%	14%	1%	4%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

Only 15% of the respondents are in accordance with that statement and 68% are against it. In terms of respondents' category, Category 3 presents the most favourable opinion on public sector contract management capacity (44% agree or strongly agree) and Category

2 the less favourable opinion, with 93% of respondents not supporting the idea of an effective contract management system developed by the public sector.

3.4.6.11. Impact of the CoA audits (Q11)

CoA is an institutional actor that exerts institutional pressures on government by the issuance of audit reports with recommendations aimed at changing prevalent institutions (Funnell and Wade, 2012).

CoA reports are publicly disclosed and are granted media coverage, making them an institutional pressure on the government for change (Oliver, 1991; Reichborn-Kjennerud, 2014a). One way to have an idea of changing institutions is the adherence to audit recommendations by the government. Aiming at gathering an opinion from the stakeholders about the impact of CoA recommendations and compare it to the results from Essay 3 (RQ 3.5), Table 3.34 shows the question made and associated results by respondent category.

Table 3.34: Stakeholders' agreement with CoA recommendations implementation

Q11. From 2010 to 2017 the Court of Audits published nine audit reports related with roads concession contracts, making several recommendations to governments over disclosing of information about budget affordability, value for money, risk allocation, contingent liabilities and contract management.

Governments have been implementing such recommendations.

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	1 8%	4 31%	2 15%	2 15%	0 0%	4 31%	13 100%
[2]	4 14%	17 59%	6 21%	0 0%	0 0%	2 7%	29 100%
[3]	0 0%	2 22%	3 33%	2 22%	0 0%	2 22%	9 100%
[4]	0 0%	8 53%	1 7%	4 27%	0 0%	2 13%	15 100%
[5]	0 0%	2 33%	1 17%	2 33%	0 0%	1 17%	6 100%
[6]	0 0%	2 67%	0 0%	0 0%	0 0%	1 33%	3 100%
[7]	6 40%	5 33%	1 7%	2 13%	0 0%	1 7%	15 100%
[8]	0 0%	2 40%	2 40%	0 0%	0 0%	1 20%	5 100%
[9]	0 0%	0 0%	0 0%	1 100%	0 0%	0 0%	1 100%
[10]	0 0%	2 25%	0 0%	4 50%	0 0%	2 25%	8 100%
Total	11	44	16	17	0	16	104
Percentage	11%	42%	15%	16%	0%	15%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

Respondents are sceptical about the CoA impact, when it is measured by recommendations implementation. Only 16% of respondents agree with recommendations being implemented.

From the perspective of the auditor (Category 2) and the auditee (Category 6) none of the respondents inside these categories gave a favourable opinion (agree or strongly agree). Respondents in categories 3 and 5 are clearly divided on the Government's compliance with the CoA recommendations.

This is also the question with the highest don't know/no opinion response rate (15%). For all the other questions, this percentage assumes values between 0% and 6%.

We may conclude that the perceived audit usefulness is low in the sense that respondents are not confident in changes made by the Government upon the release of the audit reports and this evidence is consistent with that presented in Essay 3.

3.4.6.12. Parliament scrutiny (Q12)

On the political accountability relationship between the government and the parliament, the latter is the accountee, who has the responsibility to hold to account the former. The accountability relationship starts with the provision of information by the accountant. Thus, the government should supply all the relevant information for the account-holding function of the parliament, for which it is expected to use this information to pose questions and pass judgment on the conduct of the government.

Schillemans and Busuioc (2015) claim that much of the literature on accountability largely focus on whether the accountors carry out their account-giving obligations and ignore the commitment of the accountee in discharging its role on debating and imposing consequences.

With the objective to have an opinion on Parliament's discharging its role as an accountee, Table 3.35 presents the associated statement and stakeholders' degree of agreement.

Table 3.35: Stakeholders' agreement with Parliament's scrutinizing function

Q12. The Parliament has carried out an effective scrutiny of concession contracts budget affordability, risk allocation and value for money.

Respondent category	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/no opinion	Total %
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	
	%	%	%	%	%	%	
[1]	5 38%	6 46%	0 0%	1 8%	0 0%	1 8%	13 100%
[2]	5 17%	20 69%	3 10%	0 0%	0 0%	1 3%	29 100%
[3]	1 11%	3 33%	4 44%	0 0%	0 0%	1 11%	9 100%
[4]	4 27%	7 47%	3 20%	0 0%	0 0%	1 7%	15 100%
[5]	0 0%	3 50%	1 17%	2 33%	0 0%	0 0%	6 100%
[6]	0 0%	3 100%	0 0%	0 0%	0 0%	0 0%	3 100%
[7]	8 53%	6 40%	0 0%	0 0%	0 0%	1 7%	15 100%
[8]	1 20%	0 0%	4 80%	0 0%	0 0%	0 0%	5 100%
[9]	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	1 100%
[10]	2 25%	5 63%	1 13%	0 0%	0 0%	0 0%	8 100%
Total	26	54	16	3	0	5	104
Percentage	25%	52%	15%	3%	0%	5%	100%

Notes:

[1] = Academic

[2] = State Auditor

[3] = Member of the concessionaire or industry representative

[4] = Consultant

[5] = Member of the Parliament

[6] = Member of the Government

[7] = Member of civil society organizations

[8] = Public accounts preparers

[9] = Contracts' supervisor or regulator

[10] = Other

Each cell presents the number of answers and the correspondent percentage

Our results confirm the accountee drift hypothesis (Busuioc and Lodge, 2016; Schillemans and Busuioc, 2015), as only 3% of the respondents agree with the assertion whereby the Parliament properly scrutinizes concession contracts. 25% of the

respondents strongly disagree and 52% disagree with the notion that the Parliament is discharging its holding to account tasks.

3.4.7. Conclusions

The responses to the questionnaire allow us to set out some general conclusions about the different themes covered and address the two objectives put forward in Subsection 3.4.2.

On the use of contracting out roads infrastructure construction and services, there is no outright opposition from the stakeholders. We conclude that, in principle, there is no predicament to the private sector involvement through the celebration of concession contracts.

According to stakeholders' opinion, the Portuguese fiscal environment seemed to have an influence on the choice of PPPs as a delivery modality in the face of infrastructure needs. This opinion supports the conclusion in Essay 2 that public choice theory arguments were behind the decision to develop roads infrastructure projects by using concession contracts (a contractual PPP).

On the side of political motivations, such as influencing the results of the next election, a strong majority of stakeholders support the argument that the public interest was downplayed by other interests, such as local political aspirations. When PPPs are conceptualized as a policy, based on the ideology that private should be brought to the front line of public services delivery because it's comparably more efficient, most respondents concur that this ideological belief made its contribution to the signing of concession contracts.

Regarding the reasons for using concession contracts for roads infrastructures, there is a division on stakeholders' opinions, except for the efficiency advantage of the private sector and the substitution of public finance for private finance.

When we turn to the disadvantages of concession contracts when compared to traditional public procurement, a different pattern emerge. Except for the argument that these contracts limit flexibility in the face of technology changes, all the other arguments are backed by respondents, when generally considered (private finance is more expensive,

significant transaction costs, less accountability of the Government towards Parliament, excessive risks born by the public sector and more public management complexity). An interesting finding is, when we break down each argument by respondent category, respondents in Category 3 [member of the concessionaire or industry representative] are clearly away from the opinions of other categories, not supporting the arguments stated.

Moving to the two questions dealing with transparency by the disclosure of information, the general conclusion is that stakeholders are not satisfied with transparency levels and have their views on the reasons behind it. For the first question (Q07), only respondents in category 3 do not agree with the statement that concession contracts contributed to the lack of transparency. The second transparency-related question (Q08) allowed us to have insights into the reasons behind the actual level of PPPs disclosure on State Accounts. Opacity culture, avoiding public scrutiny and, to a lesser extent, the lacking of legal requirements to disclose complete information were considered as the reasons for the scarce information that is published at the State Accounts prepared by the Government and sent to the Parliament. These results are compatible with Essay 1 evidence concerning the proportion of reporting elements disclosed in State Accounts in relation to a set of 15 reporting elements deemed as appropriated to address the political accountability information needs.

On the specific question of the potential impact ascribed to the new financial accounting IPSAS based standards, there are some expectations that the new accounting treatment will affect the reasoning to choose concession contracts as a procurement modality.

About the capacity installed in the public sector, stakeholders' views are not favourable and this deserves future research because contract management is a very relevant factor to PPPs outcomes, managing stakeholders' expectations and build trust relationships.

Despite the extensive work made by the CoA (see Section 3.3.), which culminates with the issuance of recommendations aimed at promoting changes in PPPs governance, the general opinion is that governments continue to act as usual, not implementing those recommendations. This evidence from the questionnaire corroborates the evidence presented in Essay 3.

Considering the political accountability relationship (combination of questions 7 and 8, which are associated with the information phase, and Question 12, related to the debate, judgment and consequences phase of the accountability relationship), on one hand, our results show that there is a problem at the information stage of the accountability relationship, due to lack of transparency and the notion that governments purportedly hide information from the public domain. On the other hand, the views about the capacity of holding to account by the Parliament are very negative, jeopardizing the debate, judgement and consequences phase of that relationship. Taking this all together, we conclude that there is a perceived political accountability deficit that negatively affects democratic governance and that accountor and accountee are the main sources of this deficit as they seem to act as having “parallel lives” when it comes to discharging their accountability roles in the PPP setting. Busuioc and Lodge (2016) portray a situation of “parallel lives” when both parties to the accountability relationship are minimally engaged with the only concern that this pattern of mutual lack of interest does not have any reputational damage in case of any issue arises.

CHAPTER 4: GENERAL CONCLUSIONS

The existence of public accountability forms the basis upon which citizens consent to delegate power to politicians to act on their behalf. The legitimacy of using public authority depends on adequate public accountability mechanisms that contribute to public governance and responsiveness to citizens' needs. The lack of public accountability arrangements supported by effective mechanisms could lead to the waste of public resources, fraud and corruption, undermining citizens trust in politicians and the very existence of democratic societies. Those with delegated power through democratic processes have to be held accountable in public for their acts, omissions, decisions, expenditures and policies for the sake of giving content to democracy itself (Boven, 2005; Bovens et al., 2008, 2014; Funnell et al., 2012; Mulgan 2003; 2014b).

PPPs are an alternative to traditional public procurement and should have appropriate public accountability mechanisms to assure the public they represent advantages over traditional public procurement and service delivery and are considered a legitimate policy option. They are designed to construct assets and provide public services by the private sector, such as transportation, health, and sewage. Their advent and recent spread in Portugal give rise to questions associated with VfM, affordability, accounting, external reporting, legitimacy and state audit.

PPPs for infrastructures offer strong political incentives because they allow quicker delivery of that kind of assets, support from local voters, and business relationships with finance and construction sectors, in terms of repeated transactions, new financial deals and even influence over project selection (Hodge and Greve, 2010).

As an accountable actor, the government must disclose information to be held accountable by the parliament, the accountee on the accountability relationship between government and parliament. Through legally binding external reporting obligations, raw transparency is achieved, that is information put in the public domain by the government. When the information is disclosed by the CoA - or any other third party -, and has the potential to be used instrumentally for any type of public accountability, refined transparency is created (De Fine Licht, 2019).

On the one hand, this thesis is about public accountability mechanisms aimed at reducing the asymmetry of information between the government and the parliament. On the other hand, in this thesis, we attempted to understand the different stakeholders' perceptions about those mechanisms and other aspects related to the policy of delivering roads infrastructure-based services through a PPP. External reporting and state audit are the mechanisms studied associated with the information disclosed about PPPs and may be used to hold government accountable in relation to the choice of a PPP as a public procurement model, among several other aspects resulting from different phases of the project.

In this thesis, different theoretical lenses (e.g. agency theory, institutional and resource dependence theories, public choice theory) were used to better understand Portugal's PPP phenomenon. The evidence gathered lead to an enhanced understanding of its accounting, external reporting, transparency, motivations, state audit and stakeholders' views about several dimensions.

4.1. Main results

Essay 1 identifies some external reporting shortcomings on the operational (or post-contract) phase of contractual PPP. Empirical results confirm the arguments provided in the literature by showing that neither a private sector accrual-based system nor a cash-based system is satisfactory at disclosing the level of reporting elements considered necessary to ensure transparency for PPPs political accountability from the Government towards the Parliament, but they are somewhat complementary. Stafford and Stapleton (2017) point out that PPPs governance arrangements in place are inspired by private sector corporate governance structures and processes, such as financial reporting. Thus, public values of probity and stewardship aren't centrepieces, being one of the justifications for adopting by the public sector of the private sector financial reporting decision usefulness model. Elsewhere, other critics exist associated with the lack of suitability of private sector inspired accounting standards to public sector information needs (Grossi and Steccolini, 2015; Laughlin, 2008; Mack and Ryan, 2006; Pallot, 1992; Wynne, 2019).

Due to the lack of several reporting elements identified in the literature as relevant to the information phase of the accountability process, Essay's 1 results also support the importance to design a harmonised international framework for PPPs reporting to assure proper public scrutiny and accountability, because IFRS based accounting standards applied to the public sector may not be sufficient for this objective (Shaoul et al., 2012a, 2008, 2010; Stafford and Stapleton, 2017).

Using accounting data of the private partner in contractual roads PPPs and national accounts data, Essay 2 provides a simulation of IPSAS 32 impact and compares it to the actual national accounts impact. Overall, our results suggest that the way that PPPs were accounted for and reported in public and national accounts was the effect of a bias towards the PPP route rather than that of CPP. Thus, the hypothesis of the hidden debt of the public choice theory is proved.

In Essay 3, audit reports of PPPs for transport infrastructure were analysed in several dimensions. The results show that new information in addition to that disclosed by the Government in the annual report (raw transparency), representing refined transparency (De Fine Licht, 2019), was made available for scrutinizing the Government over the PPP policy, confirming the value of audit as a mechanism to mitigate agency problems (Hay and Cordery, 2018; Streim, 1994). In terms of the Government's reactions and related audit impact, the evidence found suggests that no substantial changes followed as a consequence of CoA's audits. The evidence presented in the essay also demonstrates that, contrary to previous academic research (e.g. Broadbent and Laughlin, 2003), the CoA did not support or legitimate the Government's PPP policy.

Essay 4 allows for several insights into understanding the PPP phenomenon in Portugal that deserve our reflexivity. First, there is no opposition to horizontal types of public accountability by the involvement of the private sector in the delivery of roads infrastructure-based services. Second, budgetary constraints resulting from the requirements of the SGP, associated with political motivations and ideology, seem to be the main drivers behind the PPP modality choice. Third, all the advantages of using a PPP identified in the literature are not fully backed, except the idea that the private sector is more efficient in infrastructure construction and management. Fourth, except for less flexibility provided by concession contracts, the results from the questionnaire show an

agreement on the identified disadvantages of PPPs over CPP. Fifth, stakeholder's opinion in relation to transparency is very negative, because they are convinced that concession contracts provided to the Government a tool to hide information relevant for public scrutiny and the level of transparency of its external reporting through the State Accounts is affected by a culture of opacity, disclosure avoidance and, to a lesser extent, the lack of proper mandatory disclosure standards. Sixth, the confidence in the capacity of the public sector to manage these long term contractual relationships is very low. Seventh, the expectations about the impact of the CoA on the Government's adoption of its recommendations are low. Finally, stakeholders do not recognize the capacity of the Parliament in scrutinizing the Government in relation to budget affordability, VfM and risk allocation.

Overall, considering the results from Essay 4, it seems that the trust in political institutions to use PPPs for roads infrastructures is undermined. Due to several flaws in its public governance, a lack of legitimacy of the PPP model to deliver infrastructure-based public services resulted in a perverse consequence (Hodge and Greve, 2017a; Skelcher, 2010).

4.2. Contributions

Through its empirical essays in Chapter 3, this thesis accomplishes several contributions to the existing knowledge. Each of the essays contributions is now tackled in turn.

By examining actual PPPs external reporting practices, Essay 1 contributes to the literature that discusses introducing private sector based accounting standards into the public sector, instead of accounting standards consistent with the accountability objective that should underpin the public sector accounting system (Ellwood and Newberry, 2016). The essay also shows how *Troika's* institutional pressure affected the level of disclosures on Portuguese State Accounts, confirming the institutional and resource dependence theories predictions that fiscal stress and resource dependency are coercive pressures for change in disclosure practices.

It adds to the existing knowledge that supports the idea of a difference in the purpose of public sector accounting and reporting from that for the business sector, and caution is

needed when considering commercial accounting practices as suitable for the public sector (Barton, 2005; Coy et al., 2001).

Despite all the literature on consolidated financial statements and WGA in particular (Bergmann et al., 2016; Grossi and Pepe, 2009; Grossi and Soverchia, 2011; Chow et al., 2007, 2009, 2015; Heald and Georgiou, 2011a; Newberry, 2011), we are not aware of comparative studies of reporting in different institutional settings and at the consolidated level of specific contracts with accounting, reporting and public accountability consequences, like the PPPs arrangements. Our work addresses this gap considering the PPP/PFI setting.

Essay 2 makes several important contributions. Firstly, in a relevant scenario given the size of the investment, the number of roads PPPs and the fact that Portugal is one of the financial crisis bailout countries, the study is a novelty concerning the proprietary financial accounting data used, not publicly available.

Secondly, as far as we know, is the first academic study that delivers information concerning the real impact of PPPs on debt and deficit. Only a very few countries, like the UK in its WGA, offers yearly such information. Thus, this contribution, by simulating IPSAS 32 impact on public sector consolidated financial statements and the prevalent differences to national accounting, highlights the importance academics may have in delivering information that may increase the transparency of public accounting, mainly in countries that did not adopt the public sector international accounting standards, yet.

Thirdly, the results are of importance for countries that are currently discussing and starting the implementation of an accrual accounting system based on IPSAS, because they help to preview the impact the international accounting rules may have on the country financial reporting.

Fourthly, based on the Portuguese experience, it enhances our understanding of how a financial crisis bailout may impact countries financial reporting and national accounts. In particular, the effect of the change in accounting when the SCUT projects (shadow tolls) moved to availability fees, a novelty not discussed yet in the literature.

Fifthly, it is a piece of stimulation to the debate between the relevant stakeholders (e.g., standard setters, statistical community) regarding the convergence of different frameworks for measuring and reporting economic reality (Caruana et al., 2019; Dabbicco, 2018).

From the perspective of Essay 3, there is a contribution to the debate about the role of SAIs in terms of transparency for public accountability, more particularly the political accountability associated with the implementation of PPPs in a Napoleonic type SAI jurisdiction.

This essay contributes not only to performance audit literature in general but also to specific discussions on PPP auditing, auditees' reactions to audit products, audit impact and change in PPP governance and management.

Essay 4 makes a diagnosis of the stakeholders' opinion about several relevant topics related to roads concession contracts and identify a public accountability deficit with two sources. One source is the Government's lack of transparency (accountor) and the absence of responsiveness to the CoA recommendations. Another source rests on the Parliament (accountee) because there are doubts about the execution of its constitutionally mandated role in overseeing, controlling and imposing consequences on the executive government.

In general, our essays could also serve to stimulate comparative policy analysis (Reeves, 2015).

4.3. Policy implications

Some policy implications may result from our findings, such as the definition of a post-procurement reporting framework for PPPs considering financial, non-financial and narrative information as the content appropriate for the information phase of the political accountability relationship between the government and the parliament, rendering the account given more transparent than the current situation.

Also based on Essay's 1 evidence, another implication is for countries considering changing their accounting standards by moving to IPSAS, primarily based on IFRS,

considering public accountability information needs as a constraint to observe (Oulasvirta, 2014).

Through Essay 2, this thesis adds to the literature that discusses the high level of divergence between the national accounts impact and the IPSAS 32-simulated impact. Policy implications should be highlighted, such as promoting the harmonisation between national accounts and the international standards-based accrual accounting system for PPPs.

From the analysis of the audit reports in Essay 3, some implications unfold in relation to the harmonisation of the CoA's audit reports on PPP audits. For instance, in all the reports (i) the recommendations should be numbered; (ii) the draft recommendations should be included; (iii) the criteria section should clearly state, without ambiguity, the type of audit; (iv) the methods section could be improved by a better description; (v) the final report should clearly state what the conclusions were and how they changed based on the auditee's comments on the draft report; and (vi) the audit effort should (e.g. workdays) be disclosed on all reports.

Furthermore, from Essay 3, before considering PPP as a legitimate policy option to deliver social and economic infrastructure and public services, an implication that can be taken from this essay is that, first of all, the lack of governance capacity inside the public sector should be solved, assuring the conditions to protect the public interest of these long-term and complex arrangements (OECD, 2017).

The main policy contribution from Essay 4 relates to the building of trust and legitimacy in using PPPs as a policy instrument. The results from the questionnaire suggest that Portugal needs an overhaul of its public and democratic governance of PPPs.

4.4. Suggestions for future research

The formal adoption of accounting standards does not necessarily translate into increased accountability because the accountee could not use the resulting new information for holding to account. Portugal is at the beginning of a public sector accounting reform covering financial accounting, inspired mainly by accrual IPSAS, the budgetary accounting, with a modified cash-based model adapted to the Portuguese tradition and

institutional setting, and concepts and principles for management accounting. The new accounting framework has been published by the Decree-Law n.º 192/2015, and it's been mandatory since 1 January 2018. This raises the question for future research to investigate how the new accounting and reporting requirements for PPPs, based in IPSAS 32, will be implemented and the uses of information resulting from the IPSAS based accounting framework. Another interesting point for future research is to analyse if the new accounting requirements for PPP would influence the structuring of new PPP projects (Hodges, 2013). Also, future studies could investigate horizontal public accountability, such as how the Portuguese media cover the publication of the State Accounts, the Report of the CoA and parliamentary discussions upon it (e.g., Norris, 2014).

In terms of the public audit field, future research could evaluate the impact of audit reports on Parliament and media in terms of attention received (Bringselius, 2014; Pollit et al., 1999, p. 182).

In fact, the CoA has constitutional obligations towards the Parliament on the assumption that the reports would be used by the latter as a means to hold the Government to account for PPPs. Therefore, we suggest the examination of how the Parliament used the refined transparency delivered by the PPP audits to complete the accountability cycle through the debating and consequences phases (e.g., Busuioc and Lodge, 2016; De Fine Licht, 2019; McGee, 2002; Morin, 2016; White and Hollingsworth, 1999; Reichborn-Kjennerud 2014a).

Furthermore, for future research, the impact of the CoA from the perspective of the auditees is a research avenue worth exploring further (Johnsen et al., 2019; Morin, 2001; Reichborn-Kjennerud and Johnsen, 2018).

Elsewhere, PPPs for infrastructure are considered a success story (Siemiatycki, 2015) and some authors explain the policy approval as a result of institutional factors (Opara et al., 2017). For future research, it might be relevant to study the institutional environment surrounding the Portuguese roads PPP procurement and service delivery method.

PPPs in the Portuguese health sector are considered a successful history (e.g. Entidade Reguladora da Saúde, 2016; Tribunal de Contas, 2021). Taking this into consideration,

studying the institutional conditions that allowed this general perception among key stakeholders, it would be helpful to analyse the institutional factors that act as of the comparative advantage of PPPs over the public provision of health infrastructures and services (Opara, 2018).

Now that all PPPs are at the operational stage, future research could address their performance on several dimensions. Furthermore, the post-procurement and the end of concession stages are under-researched in terms of what are the optimal governance arrangements (Hodge and Greve, 2018, 2019).

4.5. Limitations

This thesis has some limitations. The first essay did not examine the relative relevance of each reporting element, considering all of them with equal weight. Nevertheless, the reporting elements may be differentially valued by the Parliament in terms of accountability information content. This limitation could be addressed in future studies.

Regarding the immaterial impact of PPP on the general government budgetary deficit (Essay 2), this evidence suffers from the limitation discussed in 3.2.4.4. Therefore, for up until 2010, the majority of roads infrastructures were already constructed, with the respective costs being accounted for in the operators' accounts, which were recorded either as a financial asset, or an intangible asset, or a combination of both. This circumstance refrained us from simulating the impact on public capital expenses as gross fixed capital formation and debt since the very beginning of the construction phase, when the private operator is making up-front investments. Nevertheless, this limitation had no impact on the debt hidden hypothesis demonstration made in Essay 2.

Another limitation of our work is the lack of evidence related to the auditees' evaluation of PPP audit (Essay 3). For some audit reports, the Government decided to not comment on preliminary findings, observations and recommendations and we were not able to know why. For those reports, it was not possible to identify the government's reaction (see 3.3.4.5).

In Essay 4, some respondent categories have fewer responses than the questionnaire mean response. This situation may induce some bias in the overall results of the questionnaire

by and over-representation of some stakeholders, as is the case of Category 2 – State Auditor.

Appendix

Appendix - Questionnaire

Perceções sobre os contratos de concessões rodoviárias em Portugal

I. Introdução e objetivo

O presente questionário insere-se no âmbito de uma tese subordinada ao tema em referência, enquadrada no Doutoramento em Gestão da Faculdade de Economia da Universidade do Porto.

O investimento em infraestruturas públicas, de natureza económica, como é o caso das rodoviárias, e de cariz social, designadamente no setor da saúde, é essencial ao desenvolvimento económico e coesão social.

Em termos de modalidades de investimento, as infraestruturas podem ser desenvolvidas com financiamento público, a designada contratação pública tradicional, ou com o recurso ao financiamento privado, seguido da celebração de um contrato de concessão ou de subconcessão, nos termos das regras da contratação pública, doravante contratos de concessão.

Com este questionário pretende-se obter a sua opinião sobre um conjunto de dimensões relevantes na análise de contratos de concessão na área dos transportes rodoviários em Portugal.

É assegurado o anonimato, não sendo recolhidos quaisquer dados pessoais.

Para algumas questões são disponibilizados conceitos que visam auxiliar a sua resposta.

Responda a todas as questões. A sua opinião sobre cada uma delas é importante para o sucesso do presente inquérito.

Muito Obrigado pela colaboração.

II. Tipo de respondente

Responde ao presente questionário na qualidade de:

A1. Académico/a

A2. Auditor/a Público

A3. Colaborador/a de uma concessionária ou representante da indústria

A4. Consultor/a

A5. Deputado/a

A6. Membro do Governo (atual ou passado)

A7. Membro da sociedade civil

A8. Preparador de contas públicas

A9. Supervisor ou regulador dos contratos

A10. Outra (especifique):

III. Questões (marque a resposta que corresponda melhor à sua opinião)

1. Os contratos de concessão pelo Governo português foram e devem continuar a ser utilizados para o desenvolvimento de infraestruturas rodoviárias.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	Não sabe/Não responde (NS/NR)
1	2	3	4	5	9

[? Conceitos relevantes](#)

2. A escolha dos contratos de concessão resultou da necessidade política de construção de infraestruturas, num contexto caracterizado por restrições orçamentais impostas pelo cumprimento das regras do Pacto de Estabilidade e Crescimento relativamente ao défice (abaixo de 3% do Produto Interno Bruto - PIB) e à dívida (inferior a 60% do PIB).

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

[? Conceitos relevantes](#)

3. Alguns dos investimentos em infraestruturas rodoviárias foram motivados, essencialmente, pela necessidade de satisfazer interesses políticos locais.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

4. A utilização de contratos de concessão resultou da convicção ideológica de que o setor privado é mais eficiente na prestação de serviços públicos.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

5. As razões que estiveram na base da opção pela construção de infraestruturas rodoviárias com o recurso a contratos de concessão foram:

Razão	Discordo totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
5.1. Cumprimento dos prazos de construção contratualizados	1	2	3	5	5	9
5.2. Evitar de derrapagens orçamentais	1	2	3	5	5	9
5.3. Conceção de soluções inovadoras pelo setor privado com o objetivo de minimizar os custos em todo o ciclo do projeto	1	2	3	5	5	9
5.4. Maior eficiência do setor privado na construção e gestão de infraestruturas	1	2	3	5	5	9
5.5. Partilha eficiente de riscos	1	2	3	5	5	9
5.6. Recurso ao financiamento privado como forma de libertar financiamento público para despesas de outra natureza	1	2	3	5	5	9
5.7. Outra (descreva):	1	2	3	5	5	9

[? Conceitos relevantes](#)

6. Relativamente à contratação pública tradicional, os contratos de concessão apresentam as seguintes desvantagens:

Desvantagens	Discordo totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
6.1. O custo do financiamento privado é mais elevado	1	2	3	4	5	9
6.2. Os contratos de concessão limitam a flexibilidade do Governo em face de alterações tecnológicas	1	2	3	4	5	9
6.3. Os contratos de concessão implicam elevados custos de transação	1	2	3	4	5	9
6.4. Há uma menor <i>accountability</i> do Governo perante o Parlamento	1	2	3	4	5	9
6.5. O setor público assume demasiados riscos	1	2	3	4	5	9
6.6. O recurso a contratos de concessão traz maior complexidade à gestão pública do que a contratação pública tradicional	1	2	3	4	5	9
6.7. Outra (descreva):	1	2	3	4	5	9

? Conceitos relevantes

7. A adoção de contratos de concessão no desenvolvimento e operação de infraestruturas permitiu aos Governos ocultar informação relevante para o escrutínio das contas públicas pelo Parlamento e pelo público em geral.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

8. De acordo com a literatura científica da especialidade e as boas práticas internacionais, deve ser divulgado um conjunto de elementos que assegurem a transparência na execução dos contratos de concessão. Com o objetivo de avaliar tal transparência na informação da Conta Geral do Estado (CGE), alisaram-se os respetivos relatórios, para o período 2010 a 2017, para verificar quais os elementos nela presentes (não o seu conteúdo). Os resultados foram os seguintes:

Elemento	2010	2011	2012	2013	2014	2015	2016	2017
1 Valor da infraestrutura	Sim	Sim	Sim	Não	Não	Não	Não	Não
2 Despesas de capital durante o ano	Sim	Sim	Sim	Não	Sim	Sim	Sim	Sim
3 Passivo financeiro	Não	Não	Não	Não	Não	Não	Não	Não
4 Fluxos de caixa futuros	Sim	Sim	Sim	Sim	Sim	Sim	Sim	Sim
5 Custos com serviços de operação e manutenção	Não	Não	Não	Não	Não	Não	Não	Não
6 Custos com juros	Não	Não	Não	Não	Não	Não	Não	Não
7 Pagamentos orçamentados	Não	Não	Não	Sim	Sim	Sim	Sim	Sim
8 Pagamentos efetivos	Sim	Sim	Sim	Sim	Sim	Sim	Sim	Sim
9 Explicação dos desvios entre os pagamentos orçamentados e efetivos	Não	Não	Não	Sim	Sim	Sim	Sim	Sim
10 Custos de monitorização dos contratos	Não	Não	Não	Não	Não	Não	Não	Não
11 Responsabilidades contingentes	Não	Não	Não	Sim	Sim	Sim	Sim	Sim
12 Informação de desempenho	Não	Não	Não	Não	Não	Não	Não	Não
13 Penalizações	Não	Não	Não	Não	Não	Não	Não	Não
14 Considerações sobre o value for money	Não	Não	Não	Não	Não	Não	Não	Não
15 Impacto nas contas nacionais	Não	Não	Não	Não	Não	Não	Não	Não
Contagem do "Sim"	4	4	4	5	6	6	6	6
Percentagem do "Sim"	27%	27%	27%	33%	40%	40%	40%	40%

Indique a sua opinião sobre as razões para este nível de divulgação de informação.

Razão	Discordo totalmente	Discordo	Nem Concordo/ Nem Discordo	Concordo	Concordo Totalmente	NS/NR
9.1. Cultura de opacidade por parte dos decisores políticos	1	2	3	5	5	9
9.2. Os políticos procuram evitar divulgar informação que proporcione um maior escrutínio	1	2	3	5	5	9
9.3. Ausência de normas legais que obriguem a divulgar informação completa	1	2	3	5	5	9
9.4. Outra (descreva):	1	2	3	5	5	9

[? Conceitos relevantes](#)

9. Com a entrada em vigor do Sistema de Normalização Contabilística para as Administrações Públicas, o impacto destes contratos nas contas públicas será idêntico ao da construção da infraestrutura de acordo com o método da contratação pública tradicional. Tendo em conta tal alteração, a natureza das motivações para adoção de contratos de concessão na implementação de infraestruturas rodoviárias alterar-se-á.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

[? Conceitos relevantes](#)

10. O setor público tem implementado um sistema de gestão dos contratos de concessão que garante os resultados esperados com a execução dos contratos.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

[? Conceitos relevantes](#)

11. De 2000 a 2017 o Tribunal de Contas publicou nove relatórios de auditoria relativos a contratos de concessão de infraestruturas rodoviárias, em que são efetuadas diversas recomendações aos Governos no âmbito da divulgação de informação sobre a transparência, comportabilidade orçamental, avaliação do *value for money*, partilha de riscos, responsabilidades contingentes e gestão contratual. Os Governos têm implementado tais recomendações.

Escolher uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

[? Conceitos relevantes](#)

12. O Parlamento tem efetuado um escrutínio eficaz dos contratos de concessão relativamente à comportabilidade orçamental, alocação de riscos e *value for money*. Escolha uma das seguintes respostas:

Discordo Totalmente	Discordo	Nem Concordo/Nem Discordo	Concordo	Concordo Totalmente	NS/NR
1	2	3	4	5	9

[? Conceitos relevantes](#)

Muito obrigado pela sua participação!

Perguntas com conceitos relevantes associados

Q01

Termo	Definição
Contratos de concessão	São contratos que exibem normalmente as seguintes características: • Contrato de longo prazo (normalmente entre 25 a 30 anos) entre o setor público e o setor privado; • O setor privado assume a responsabilidade pela conceção, construção e operação da infraestrutura; • A construção da infraestrutura é financiada, no todo ou em parte, com capitais privados; • Os pagamentos ao setor privado durante a vigência do contrato são realizados pelo setor público, pelos utilizadores da infraestrutura, ou por ambos; • A infraestrutura é propriedade do setor público ou a propriedade reverte para este no final do contrato; • Há uma partilha de riscos entre o setor privado e o setor público; • A infraestrutura é usada para prestar um serviço público

Link: https://drive.google.com/file/d/1QNYmjqFM6FP0S6e5Y4X2e_pSlfmQuR2b/view

Q02

Termo	Definição
Impacto em Contas Nacionais	Em Contabilidade Nacional os contratos de concessão em que o concedente público efetua pagamentos ao concessionário com base na disponibilidade da infraestrutura são classificados pelas autoridades estatísticas como integrando ou não o setor das administrações públicas. É com base na alocação dos riscos ao setor privado (risco de construção, risco de procura e risco de disponibilidade) que é feita a classificação. Quanto o contrato é classificado no setor das administrações públicas (no balanço) ocorre um impacto imediato no investimento público e dívida pública. Sendo o contrato classificado fora das administrações públicas (fora do balanço) somente os pagamentos feitos ao concessionário durante o contrato afetam a despesa pública ao nível dos consumos intermédios (aquisição de serviços)

Link: <https://drive.google.com/file/d/1cvMBbzI1BsyILQPSjcQS9SSp4WWCoFWr/view>

Q05

Termo	Definição
Partilha de riscos	Os riscos do investimento – riscos gerais, de construção e de operação – são assegurados por uma das partes, devendo ser alocados àquela (setor público ou setor privado) que está em melhores condições de os gerir (eficiente partilha de riscos)

Link: <https://drive.google.com/file/d/1HdVLRribEtc5QkxegPF2JUrmKF4d7F8R/view>

Q06

Termo	Definição
<i>Accountability</i>	É a relação que se estabelece entre uma entidade que presta contas (<i>accountor</i>) e uma outra que analisa as contas prestadas (<i>accountee</i>), que decorre num fórum público no qual a primeira entidade tem a obrigação de explicar e justificar a sua conduta e a entidade que analisa a prestação de contas pode colocar questões e efetuar um juízo que pode implicar para a entidade que presta contas penalizações. A investigação em curso aborda a relação de <i>accountability</i> entre o Governo (<i>accountor</i>) e o Parlamento (<i>accountee</i>)
Contratação Pública Tradicional	Método de contratação de acordo com o qual o setor público contrato ao setor privado o desenvolvimento de uma infraestrutura em que o financiamento é público e o setor privado é renumerado somente pela construção de acordo com o estipulado no contrato
Custos de transação	São os custos incorridos <i>ex ante</i> , como os de contratação e de negociação, e <i>ex post</i> , ou seja, depois da assinatura do contrato de concessão, tais como os relativos à monitorização do contrato, de resolução de litígios, com renegociações e de finalização do contrato

Link: https://drive.google.com/file/d/10accyz_xZ52C0Qm7eCK_oROxEFCaI8hf/view

Q08

Termo	Definição
Responsabilidades contingentes	São obrigações possíveis que decorrem de eventos passados cuja magnitude e ocorrência dependem de eventos futuros que não estão sob o controlo total do setor público. São passivos potenciais e não atuais, ou seja, não afetam a dívida reportada, devendo sim ser divulgada a sua existência e respetiva quantificação, se possível. No contexto dos contratos de concessão, as responsabilidades contingentes estão normalmente associadas a riscos a que o setor público está exposto e que se poderão materializar no futuro
<i>Value for money</i>	<i>Value for Money</i> (VfM) é a designação usada quando a opção pelo contrato de concessão é menos dispendiosa, considerando o ciclo de vida do projeto de investimento, do que a opção pela contratação pública tradicional.

Link: https://drive.google.com/file/d/10k7gQJeYgEV70iPBRseSWmHZbBoh_SN8/view

Q09

Termo	Definição
Contratação Pública Tradicional	Método de contratação de acordo com o qual o setor público contrato ao setor privado o desenvolvimento de uma infraestrutura em que o financiamento é público e o setor privado é renumerado somente pela construção de acordo com o estipulado no contrato
Impacto em Contas Nacionais	Em Contabilidade Nacional os contratos de concessão em que o concedente público efetua pagamentos ao concessionário com base na disponibilidade da infraestrutura são classificados pelas autoridades estatísticas como integrando ou não o setor das administrações públicas. É com base na alocação dos riscos ao setor privado (risco de construção, risco de procura e risco de disponibilidade) que é feita a classificação. Quanto o contrato é classificado no setor das administrações públicas (no balanço) ocorre um impacto imediato no investimento público e dívida pública. Sendo o contrato classificado fora das administrações públicas (fora do balanço) somente os pagamentos feitos ao concessionário durante o contrato afetam a despesa pública ao nível dos consumos intermédios (aquisição de serviços)

Link: <https://drive.google.com/file/d/1ppJnJ6KxNUkivruVm6TgoeugVxY1A3Gk/view>

Q10

Termo	Definição
Gestão do Contrato de Concessão	Conjunto de atividades desenvolvidas pelo setor público que visam assegurar: • A prestação dos serviços contratados • A gestão dos riscos alocados ao setor público • A monitorização da performance do concessionário • A gestão de alterações que ocorram durante a vida da concessão • A gestão das relações com o concessionário e outros <i>stakeholders</i>

Link: <https://drive.google.com/file/d/1o8x9vBwdRsJ4HmMtykxBJ1ZscxPBJKnY/view>

Q11

Termo	Definição
Comportabilidade orçamental (<i>Affordability</i>)	Uma parceria público-privada (PPP) é comportável orçamentalmente se a despesa que a mesma representa é acomodável nos níveis atuais e futuros de despesa pública
Custo público comparável	É o custo de desenvolvimento da infraestrutura quando é usado o método de contratação pública tradicional
Gestão do Contrato de Concessão	Conjunto de atividades desenvolvidas pelo setor público que visam assegurar: • A prestação dos serviços contratados • A gestão dos riscos alocados ao setor público • A monitorização da performance do concessionário • A gestão de alterações que ocorram durante a vida da concessão • A gestão das relações com o concessionário e outros <i>stakeholders</i>
Parceria Público-Privada (PPP)	É um método de contratação pública em que o parceiro privado procede à conceção, construção, financiamento, conservação e exploração de uma infraestrutura em troca de pagamentos por parte do setor público durante a vigência do contrato
Partilha de riscos	Os riscos do investimento – riscos gerais, de construção e de operação – são assegurados por uma das partes, devendo ser alocados àquela (setor público ou setor privado) que está em melhores condições de os gerir (eficiente partilha de riscos)
Responsabilidades contingentes	São obrigações possíveis que decoram de eventos passados cuja magnitude e ocorrência dependem de eventos futuros que não estão sob o controlo total do setor público. São passivos potenciais e não atuais, ou seja, não afetam a dívida reportada, devendo sim ser divulgada a sua existência e respetiva quantificação, se possível. No contexto dos contratos de concessão, as responsabilidades contingentes estão normalmente associadas a riscos a que o setor público está exposto e que se poderão materializar no futuro
<i>Value for money</i>	<i>Value for Money</i> (VfM) é a designação usada quando a opção PPP é menos dispendiosa, considerando o ciclo de vida do projeto de investimento, do que a opção pela contratação pública tradicional.

Link: https://drive.google.com/file/d/1t8sQ0wBUqYok_GsYxnMx1GUdNUVjiR_n/view

Q12

Termo	Definição
Comportabilidade orçamental (<i>Affordability</i>)	Uma parceria público-privada (PPP) é comportável orçamentalmente se a despesa que a mesma representa é acomodável nos níveis atuais e futuros de despesa pública
Parceria Público-Privada (PPP)	É um método de contratação pública em que o parceiro privado procede à conceção, construção, financiamento, conservação e exploração de uma infraestrutura em troca de pagamentos por parte do setor público durante a vigência do contrato
Partilha de riscos	Os riscos do investimento – riscos gerais, de construção e de operação – são assegurados por uma das partes, devendo ser alocados àquela (setor público ou setor privado) que está em melhores condições de os gerir (eficiente partilha de riscos)
<i>Value for money</i>	<i>Value for Money</i> (VfM) é a designação usada quando a opção PPP é menos dispendiosa, considerando o ciclo de vida do projeto de investimento, do que a opção pela contratação pública tradicional.

Link: <https://drive.google.com/file/d/1YC2t6Zextks40vU8yN2dThBuSSgd8ED3/view>

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Annexes

Annex 1: List of roads concessions and subconcessions in execution (contractual PPPs)

N	PPP	Legal basis [1]	Year of the contract [2]	Duration (years) [3]	Investment [4]	Kms [5]	Type [6]
1	Concession Lusoponte	166/94	1995	33	860	17	DBFO (M)
2	Concession Norte	248-A/99	1999	30+3	979	175	DBFO (M)
3	Concession Oeste	393-A/98	1999	30	584	170	DBFO (M)
4	Concession Brisa	467/72	1972	63	2881	1099	DBFO (M)
5	Concession Litoral Centro	215-B/2004	2004	30	590	92	DBFO (M)
6	Concession Beira Interior	335-A/99	1999	30+3	636	174	DBFO (M)
7	Concession Costa da Prata	87-A/2000	2000	30+3	400	110	DBFO (M)
8	Concession Algarve	55-A/2000	2000	30	254	127	DBFO (M)
9	Concession Interior Norte	323-G/2000	2000	30	697	155	DBFO (M)
10	Concession das Beiras Litoral e Alta	142-A/2001	2001	30+3	800	173	DBFO (M)
11	Concession Norte Litoral	234/2001	2001	30	337	120	DBFO (M)
12	Concession Grande Porto	189/2002	2002	30+3	552	56	DBFO (M)
13	Concession Grande Lisboa	242/2006	2007	30+3	233	23	DBFO (M)
14	Concession Douro Litoral	392-A/2007	2007	27	782	79	DBFO (M)
15	Subconcession Transmontana	RCM 177/2007	2008	30	615	190	DBFO (M)
16	Subconcession Douro Interior	RCM 177/2007	2008	30	698	241	DBFO (M)
17	Subconcession Baixo Alentejo	RCM 181/2007	2009	30	263	40	DBFO (M)
18	Subconcession Baixo Tejo	RCM 181/2007	2009	30	244	60	DBFO (M)
19	Subconcession Litoral Oeste	RCM 181/2007	2009	30	445	110	DBFO (M)
20	Subconcession Algarve Litoral	RCM 57/2008	2009	30	94	0	DBFO (M)
21	Subconcession Pinhal Interior	RCM 181/2007	2010	30	769	489	DBFO (M)
Total					13 713	3 700	

Notes:

The table shows PPP contracts in execution as at 31 December 2017

For concessions, the legal basis is a decree-law and for subconcessions it is a council of ministers resolution

The decree-laws cited on column [1] award the contract to the private partner and establish the PPP main features

Concession Brisa was the first granted to a private entity (operator) even before the end of dictatorship in 1974. In 1975 the public sector was the major shareholder and in 2001 the enterprise is again controlled by private shareholders. Several modifications were made to the first concession contract (signed in 1972), which last version was signed in 2008 (Assembleia da República, 2013, pp. 169-187)

The source of the data for columns [2] to [5] is UTAP (2018)

Investment is stated in millions of euros. It comprises expenditures such as construction services, expropriation indemnity and major repairs made by the private partner (UTAP, 2018)

From the analysis of the decree-laws, we identified the type of PPP in column [6]. For subconcessions, the classifications were based on the contracts available at UTAP website. Assembleia da República (2013) was also used for this classification

DBFO (M) = Design, Build, Finance, Operate and Maintain. At the end of the contract, the roads management is handed back to the public sector

Annex 2: List of audit reports studied

N	Year issued	Sector	Report title	Abbreviation
1	2000	Roads Infrastructure	Lusoponte concession	Audit 31/2000
2	2001	Roads Infrastructure	Global agreement between the State and Lusoponte	Audit 47/2001
3	2002	Rail Infrastructure	Fertagus concession (north/south rail axis)	Audit 24/2002
4	2003	Roads Infrastructure	Roads shadow tolls contracts	Audit 14/2003
5	2003	Roads Infrastructure	Brisa (motorway concessionaire) contract	Audit 13/2003
6	2005	Roads and rail infrastructure	Public funds for roads and rail infrastructure PPPs	Audit 33/2005
7	2005	Roads Infrastructure	Roads shadow tolls contracts - follow up audit (Audit 14/2003)	Audit 34/2005
8	2005	Rail Infrastructure	Fertagus concession (north/south rail axis) - follow up audit (Audit 24/2002)	Audit 31/2005
9	2006	Rail Infrastructure	Metro Sul do Tejo concession	Audit 46/2006
10	2007	Roads and rail infrastructure	Public funds for roads and rail infrastructure PPPs - follow up audit (Audit 33/2005)	Audit 04/2007
11	2008	Roads Infrastructure	Roads PPPs management	Audit 10/2008
12	2011	Rail Infrastructure	Metro Sul do Tejo concession	Audit 22/2011
13	2012	Roads Infrastructure	Roads PPP management, financing and regulation model	Audit 15/2012
14	2012	Rail Infrastructure	Fertagus concession (north/south rail axis)	Audit 11/2012
15	2014	Rail Infrastructure	Audit to the high-speed rail project	Audit 24/2014
16	2015	Rail Infrastructure	Audit of rails PPPs	Audit 11/2015

Notes:

The audit reports list was sent to us by the CoA. All these reports are available at the CoA website:

<https://www.tcontas.pt/pt-pt/ProdutosTC/Relatorios/RelatoriosAuditoria/Pages/RelatoriosAuditoria.aspx>

The title of each report was translated and adapted from the Portuguese version