



Universidade do Minho
Escola de Economia e Gestão

Delfina Rosa da Rocha Gomes

Accounting Change in Central Government
The institutionalization of double entry bookkeeping at
the Portuguese Royal Treasury (1761-1777)



Universidade do Minho
Escola de Economia e Gestão

Delfina Rosa da Rocha Gomes

Accounting Change in Central Government
The institutionalization of double entry bookkeeping at
the Portuguese Royal Treasury (1761-1777)

Tese de Doutoramento em Ciências Empresariais,
Especialização em Contabilidade

Trabalho efectuado sob a orientação de
Professora Doutora Lúcia Lima Rodrigues
Professor Doutor Garry Carnegie

Fevereiro de 2007

DECLARAÇÃO

Nome: DELFINA ROSA DA ROCHA GOMES

Endereço Electrónico: dgomes@eeg.uminho.pt **Telefone:** 351 253 604 510

N.º do Bilhete de Identidade: 10175629

Título da Tese de Doutoramento:

Accounting Change in Central Government:

The institutionalization of double entry bookkeeping at the Portuguese Royal Treasury (1761-1777)

Orientadores:

Professora Doutora Lúcia Lima Rodrigues

Professor Doutor Garry Carnegie

Ano de conclusão: 2007

Designação do Doutoramento:

Ciências Empresariais, Especialização em Contabilidade

É AUTORIZADA A REPRODUÇÃO INTEGRAL DESTA TESE, APENAS PARA EFEITOS DE INVESTIGAÇÃO,
MEDIANTE DECLARAÇÃO ESCRITA DO INTERESSADO, QUE A TAL SE COMPROMETE.

Universidade do Minho, / /

Assinatura: _____

Acknowledgments

Many persons and organizations contributed to the research process that resulted in the writing of this PhD dissertation. Without their ideas, support and encouragement, it would have been almost impossible to finish this dissertation.

I want to express my gratitude to Professor Conceição Falcão and Professor Tua Pereda for their help and support in the initial phase of my doctoral research.

My deepest thanks go to my supervisors Professor Lúcia Lima Rodrigues and Professor Garry Carnegie. During the last three years the discussion of ideas, the pointing out of new directions, the support to continue with the work, all the feedback provided on a continuous basis and the warm incentives were fundamental in the preparation and conclusion of this dissertation.

I want to express my gratitude to the *Arquivo Histórico do Tribunal de Contas*, in the person of the Director Dra. Judite Paixão, for all the help provided during my research work. The availability of all the persons in the archive was very helpful to obtain all the necessary information for the dissertation.

I also wish to thank to the University of Minho for the conditions provided during the years in the preparation of this dissertation, in particular the *Gabinete de Difusão* for the help provided in accessing important bibliography for the research. To the *Fundação para a Ciência e Tecnologia* for the financial support provided.

I want to thank the Carnegie family (Garry, Colleen, Joel, and Lauren) for welcoming me into your family on my visits to Australia.

I also want to thank to my colleagues and friends who encouraged me through the years to prepare this dissertation, in particular, Ana Alexandra Caria, Lídia Oliveira, João Ribeiro, Emília Fernandes, Carlos Menezes, and Joaquim Guimarães. Special thanks are extended to Pedro Camões for all the help provided in elucidating possible directions of the research.

To my parents, brothers and sisters I wish to thank you all for all the love and patience through these long years, with particular heartfelt appreciation to my mother and father for making me who I am today. To Joana and Teresa, my twin nieces, for all the questions made and for showing me how small things are so important.

February 2007

Delfina Gomes

Accounting change in central government: the institutionalization of double entry bookkeeping at the Portuguese Royal Treasury (1761-1777)

Abstract

This Comparative International Accounting History (CIAH) study examines the adoption and institutionalization of double entry bookkeeping (DEB) at the Royal Treasury, Portugal, and the subsequent diffusion of accounting technology to the Portuguese colonies, under the leadership of the Chief Minister, the Marquis of Pombal, dating from 1750 to 1777. The Royal Treasury was the first central government organization in Portugal to adopt double entry bookkeeping and this constituted a crucial first step in the institutionalisation of the technique within Country and Empire. The analysis of the accounting change occurred at the Portuguese Royal Treasury is situated in the context of similar reforms in other European countries.

A framework of questions drawn from the “International Technology Transfer”, as proposed by Jeremy (1991) and first applied to the diffusion of accounting by Carnegie and Parker (1996), is used to structure the broader process of transfer of accounting technology from different European countries to Portugal. A new question is added for the purposes of this study to specifically analyse the transfer of accounting technology to the Portuguese colonies. Set firmly in the archive, this study adopts Institutional Theory, specifically “New Institutionalism”, as developed by Powell and DiMaggio (1991, within the wider framework of CIAH, with an emphasis on identifying and analysing the institutional pressures affecting the accounting developments in Portugal during the period from 1750 to 1777, especially the adoption of DEB at the Royal Treasury and the subsequent diffusion of accounting technology within the Portuguese Empire, from its establishment in 1761 until 1777.

The study identifies key pressures exerted over and by the Royal Treasury which resulted in the adoption of specific accounting practices. In so doing, the study confirms that State actors are more likely to employ coercion in pursuing their ends. It provides further evidence of the importance of accounting as a system of rational beliefs through which the organizational structure is legitimized and of the State as an important agent in the process of institutionalization of accounting practices. It highlights for Portugal the importance of individual actors who, as powerful change agents, made key decisions that influenced the institutionalization of accounting practices.

Mudança contabilística na administração pública central: a institucionalização das partidas dobradas no Erário Régio em Portugal (1761-1777)

Resumo

No âmbito da noção de *Comparative International Accounting History* (CIAH) tal como desenvolvida por Carnegie e Napier (1996, 2002), este estudo analisa a adopção e institucionalização das Partidas Dobradas no Erário Régio Português, e a subsequente difusão do método para as colónias portuguesas, sob a liderança do Marquês de Pombal, no período 1750 a 1777. O Erário Régio foi a primeira organização governamental a adoptar o método das Partidas Dobradas o que constituiu um passo decisivo na institucionalização desta técnica no país e nas colónias. A análise da mudança contabilística no Erário Régio ocorre no contexto de reformas similares implementadas em outros países europeus.

Para estruturar o amplo processo de transferência de técnicas e práticas contabilísticas de diferentes países europeus para Portugal é adoptado um conjunto de cinco questões propostas por Jeremy (1991), para a transferência internacional de tecnologia, e aplicadas à difusão da contabilidade por Carnegie e Parker (1996). A estas cinco questões foi adicionada uma nova questão para analisar especificamente a transferência de práticas contabilísticas para as colónias portuguesas. Baseado em fontes de arquivo, este estudo adopta a Teoria Institucional, mais especificamente o “Novo Institucionalismo” tal como desenvolvido em Powell e DiMaggio (1991), no quadro da CIAH, incidindo na identificação e análise das pressões institucionais que influenciaram os desenvolvimentos da contabilidade em Portugal entre 1750 e 1777, principalmente a adopção das Partidas Dobradas no Erário Régio e a sua difusão para o Império Português desde o seu estabelecimento em 1761 até 1777.

O estudo identifica as pressões chave exercidas sobre e pelo Erário Régio as quais resultaram na adopção de práticas contabilísticas específicas. O estudo confirma que entidades ligadas ao Estado são mais propensas a exercerem pressões coercivas com vista a atingir os objectivos definidos. Reforça a ideia da importância da contabilidade como sistema de valores racionais através dos quais a estrutura organizacional é legitimada, bem como a importância do Estado no processo de institucionalização das práticas contabilísticas. No caso Português salienta-se também a importância de actores individuais que, como poderosos agentes de mudança, tomam decisões chave que influenciam a institucionalização de práticas contabilísticas.

Table of Contents

ACKNOWLEDGMENTS	iii
ABSTRACT	v
RESUMO	vii
ABBREVIATIONS	xiii
LIST OF TABLES, FIGURES AND APPENDICES	xv
CHAPTER 1: INTRODUCTION	3
A SCENARIO FOR INVESTIGATION.....	6
PURPOSE, RESEARCH METHOD AND METHODOLOGY	8
PERIOD SELECTION	10
LIMITATIONS OF THE STUDY	11
PATTERN OF ANALYSIS.....	13
CHAPTER 2: LITERATURE REVIEW – ACCOUNTING DEVELOPMENT	17
DIFFUSION OF ACCOUNTING.....	19
<i>Diffusion studies</i>	19
<i>The diffusion of accounting in Europe</i>	20
<i>Comparative international accounting history</i>	29
DOUBLE ENTRY BOOKKEEPING IN THE PUBLIC SECTOR	33
<i>Local government</i>	34
<i>Central government</i>	37
<i>Accounting and the state</i>	39
CONCEPTIONS OF ACCOUNTING	43
<i>Accounting as a technical practice</i>	43
<i>Accounting as a social and institutional practice</i>	46
NEW AND TRADITIONAL ACCOUNTING HISTORY.....	50
<i>Schools of thought in accounting theory</i>	51
<i>Accounting history research perspectives</i>	53
SUMMARY	57
CHAPTER 3: LITERATURE REVIEW – INSTITUTIONAL THEORY	59
INSTITUTIONAL THEORY.....	60
<i>Introduction to institutional theory</i>	61
<i>Forms of institutional isomorphism</i>	69

INSTITUTIONAL THEORY AND ACCOUNTING	72
<i>Contemporary accounting research and institutional theory</i>	73
<i>Historical accounting research and institutional theory</i>	74
SUMMARY.....	81
CHAPTER 4: RESEARCH METHODOLOGY	83
METHODOLOGICAL AND EPISTEMOLOGICAL PERSPECTIVE.....	83
RESEARCH DIRECTIONS	85
RESEARCH METHODS	86
ARCHIVAL SOURCES	88
THEORETICAL FOUNDATIONS	90
<i>Institutional theory</i>	91
<i>Institutional concepts</i>	92
<i>Historical accounting research and institutional theory</i>	95
TRANSFER OF ACCOUNTING TECHNOLOGY	98
SUMMARY.....	100
CHAPTER 5: SOCIAL, POLITICAL AND ECONOMIC CONTEXT, INCORPORATING THE “POMBALISM” PERIOD	103
MERCANTILISM, ENLIGHTENMENT AND ABSOLUTISM	104
<i>Mercantilism</i>	104
<i>Enlightenment</i>	106
<i>Absolutism</i>	107
ECONOMIC AND SOCIAL CONTEXT	108
POMBAL: A KEY ENVIRONMENTAL AGENT	114
<i>Life and career</i>	114
<i>Portugal under the leadership of Pombal</i>	117
SUMMARY.....	124
CHAPTER 6: DOUBLE ENTRY BOOKKEEPING WITHIN CENTRAL GOVERNMENT IN EUROPE	127
THE EARLY USE OF DOUBLE ENTRY BOOKKEEPING IN EUROPEAN PUBLIC ADMINISTRATION ...	128
COUNTRY-BY-COUNTRY ANALYSIS.....	130
<i>Spain</i>	130
<i>The Netherlands</i>	133
<i>Sweden</i>	134
<i>Germany and Austria</i>	135
<i>France</i>	136

<i>England</i>	139
SUMMARY	141
CHAPTER 7: THE ADOPTION AND USE OF DEB AT THE ROYAL TREASURY	145
THE ADOPTION OF DEB AT THE ROYAL TREASURY	146
INSTITUTIONAL PRESSURES: THE ROYAL TREASURY IN 1761.....	149
<i>Coercive isomorphism: the 1761 Law</i>	149
<i>Decoupling</i>	152
<i>Other institutional pressures</i>	154
DISCUSSION OF THE FINDINGS.....	158
ACCOUNTING PRACTICES ADOPTED AT THE ROYAL TREASURY BETWEEN 1761 AND 1777	160
<i>The nature of the accounting system in use</i>	160
<i>Difficulties in implementing the procedures of the new Law</i>	167
DISCUSSION OF THE FINDINGS.....	169
<i>Institutional pressures</i>	170
SUMMARY	171
CHAPTER 8: ACCOUNTING POLICY WITHIN THE PORTUGUESE EMPIRE	
(1761-1777)	175
PORTUGAL AND ITS COLONIAL EMPIRE	176
<i>Before 1750</i>	176
<i>After 1750</i>	180
THE ADMINISTRATION OF THE PORTUGUESE EMPIRE	181
EVIDENCE OF ACCOUNTING POLICIES WITHIN THE PORTUGUESE EMPIRE	185
<i>The system prescribed for the Colonies</i>	186
<i>The exception of Angola</i>	193
<i>The difficulties in implementing the general system to be adopted in the colonies</i>	197
DISCUSSION OF THE FINDINGS.....	201
<i>Coercive and normative pressures</i>	206
SUMMARY	209
CHAPTER 9: THE DIFFUSION OF ACCOUNTING WITHIN COUNTRY AND	
EMPIRE.....	213
THE TRANSFER OF ACCOUNTING TECHNOLOGY TO PORTUGAL	215
FRAMEWORK OF QUESTIONS.....	217
<i>Question 1: What inhibiting factors were there, technical and non-technical?</i>	218
<i>Question 2: What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection,</i>	

<i>the speed of transfer of the technology?</i>	220
<i>Question 3: What was the rate of adoption, the networks of distribution into the receptor economy, the hindrances faced by carriers of the new technology?</i>	222
<i>Question 4: Was the incoming technology reshaped by economic conditions, social factors, conditions in the physical environment?</i>	224
<i>Question 5: Were there any reverse flows of the technology?</i>	225
<i>Question 6: Were there any consequent flows of the technology to other jurisdiction from the receptor economy?</i>	226
SUMMARY.....	227
CHAPTER 10: CONCLUSION	229
OVERVIEW OF THE KEY FINDINGS	229
CONTRIBUTIONS OF THE STUDY	239
OPPORTUNITIES FOR FUTURE RESEARCH.....	241
APPENDICES.....	245
LEGISLATION	253
ARCHIVAL SOURCES.....	253
REFERENCES	254

Abbreviations

- AHTC *Arquivo Histórico do Tribunal de Contas* [National Audit Office Historical Archive]
- ANTT *Arquivos Nacionais da Torre do Tombo* [National Archives Torre do Tombo]
- CIAH Comparative International Accounting History
- DEB Double Entry Bookkeeping
- ER Erário Régio [Royal Treasury]

List of tables, figures and appendices

Appendix A: A descriptive list of books found in the library of the Marquis of Pombal .	245
Appendix B: A descriptive list of books found in the libraries of certain Portuguese merchants	247
Appendix C: Ledger accounts of the General Control Office of the Court and Province of Estremadura for the year 1762.....	248
Appendix D: Diffusion of Royal Treasury employees	251
Figure 1: Organizational structure of the Royal Treasury on its establishment	150
Figure 2: The Portuguese Empire in the sixteenth century.....	177
Table 1: First time adoption of DEB in European Central Government	130
Table 2: Components of the revenues and expenses of the Royal Treasury 1761-1776 ...	163
Table 3: Books to be used at the Colonies according with Instructions sent by the Royal Treasury	188
Table 4: Key determinants of institutional environment	217

**Accounting change in central government: the
institutionalization of double entry bookkeeping at the
Portuguese Royal Treasury (1761-1777)**

Chapter 1: Introduction

During the fifteenth century through to the mid seventeenth century, Portugal was a colonial power and an important participant in international trade along with Spain. During the latter half of the seventeenth century and early eighteenth century, other countries such as Britain, France and The Netherlands, gained the ascendancy in international trade and, along with Spain, became the significant colonial powers of this era. Colonies of these emerging world powers became increasingly important participants in international trade in their own right, thus creating momentum for the enhanced standing of the colonising nations in international trade and relations. In addition, a significant natural disaster occurred in 1755 when a major earthquake destroyed Lisbon, resulting in major economic disorder and social upheaval in Portugal. The country languished substantially in terms of economic significance, especially in comparison with other prominent trading countries, and became a jurisdiction that was not widely acknowledged as one that exhibited a mercantile culture (Macedo, 1951; Maxwell, 1995; Pombal, 1941; Ratton, 1813). From the perspective of accounting developments in the country, about which little is known (Rodrigues, Gomes, & Craig, 2003, p. 96), Portugal, unlike Italy and Britain, for example, is currently not well known for her innovation in the advent and transfer of accounting technology.

Nonetheless, the beginning of the second half of the eighteenth century in Portugal was characterized by a set of measures implemented by Portuguese authorities aimed at changing the political, social, and economic situation of the country which had repercussions for accounting practices, both in private and public sector, with the adoption of double entry bookkeeping (DEB), especially in public administration, being stimulated by the State as will be shown. The Royal Treasury, which represents the case institution in this study, was the first Portuguese central government institution to be required to adopt DEB under the Letter of Law of 22 December 1761. Of course, not all governments in Europe adopted DEB for public administration within central government institutions at or about the same time. However, different European countries adopted, through time, DEB in the administration of public finances and the motivations underlying such changes, important linkages and influences may be highlighted by studying those reforms, as will be undertaken in this study. Importantly, the actions by a government of any country in

adopting and diffusing DEB is instrumental in providing, across time, a network of distribution for the technique into the receptor country. The Portuguese government played a decisive role in the transfer of accounting thought and practices from different European countries and in the diffusion of accounting within country and Empire. Indeed, for Portugal, the initial adoption of DEB at the Royal Treasury was, therefore, a crucial first step, among others, in the institutionalisation of the technique within that organization but also ultimately throughout the public administration of the country as well as eventually within her colonies. As in other European countries, the use of DEB for mercantile purposes provided evidence of the technique's importance within public administration, as it was believed that the technique offered a means of improving administration and enhancing control within central government organizations (Hernández Esteve, 1984; Lemarchand, 1999; Vlaeminck, 1961).

Accounting as a social and institutional practice (see Hopwood & Miller, 1994) is perceived as being influenced by the environment while, at the same time, accounting influences its environment. Under this conception, accounting history studies command a contextual analysis to be undertaken requiring the consideration of several variables. Therefore, a contextualized comparative international analysis that highlights the implications and linkages of accounting developments in Portugal's public sector and within the Portuguese Empire within the broader context of such developments within other European countries is fundamental in the study of the Portuguese reforms during the eighteenth century. This is consistent with the notion of Comparative International Accounting History (CIAH), as introduced by Carnegie and Napier (1996, p. 27 and 2002, p. 694), which is described as "...the transnational study of the advent, development and influence of accounting bodies, conventions, ideas, practices and rules" (Carnegie & Napier, 2002, p. 694). Accordingly, this study situates the Portuguese case in the context of similar happenings in other European countries and, importantly, views accounting as a technology which is transferred from one country or region to another country or region (Carnegie & Parker, 1996; Jeremy, 1991). In studying the transfer of accounting technology from different European countries to Portugal, this study makes use of a framework of questions drawn from the "International Technology Transfer", as proposed by Jeremy (1991) and first applied to the diffusion of accounting by Carnegie and Parker (1996), and adds a sixth questions to specifically analyse the transfer of accounting technology to the Portuguese colonies. These questions are specifically answered in

Chapter 9 and provide a structured approach to studying accounting developments generally in Portugal in the eighteenth century. In particular, they assist in elucidating the diffusion of accounting within country and Empire, helping to contextualize the accounting change at the organizational level, specifically the adoption of DEB within Portuguese central government, and the transfer of accounting technology to Portugal's colonies.

Importantly, to enhance an understanding of how accounting interfaces with its environment and how and why accounting change occurs, this work adopts a theoretical perspective that will provide insights to better comprehend the accounting practices employed at the Portuguese Royal Treasury. In particular, this study applies Institutional Theory, specifically "New Institutionalism", also designated as "Neoinstitutional Theory in Sociology", as developed by Powell and DiMaggio (1991; see also DiMaggio & Powell, 1983; Meyer & Rowan, [1977]), to provide the framework through which the events under study are analysed and the findings reported are interpreted. Hopwood (2000, p. 763) drew attention to the "importance of research that can provide more adequate insights into the wider institutional and social positioning of financial accounting". In seeking to respond to this call, the adoption of institutional theory within studies on accounting, across both time and space, can assist in broadening our knowledge on how specific accounting practices emerged and were subsequently sustained, and indeed diffused, as well as how they also tend to become standardized across national boundaries. Under institutional theory, organizations are deeply immersed in wider institutional environments upon which their existence depends and with which they interact. Accordingly, accounting practices are viewed as a key component of organizational structure (Meyer, 1986; Meyer & Rowan, [1977] 1991). These practices are affected by institutional pressures as shown by previous researchers in accounting (see, for example, Bealing, Dirsmith, & Fogarty, 1996; Carmona, Ezzamel, & Gutiérrez, 1998; Carmona & Macías, 2001; Covaleski, Dirsmith, & Michelman, 1993; Eden, Dacin, & Wan, 2001; Granlund & Lukka, 1998; Núñez, 1999, 2002). Such practices play an influential role in legitimising organizations by constructing an appearance of rationality and efficiency (see, for example, Ansari & Euske, 1987; Carpenter & Feroz, 1992, 2001; Carruthers, 1995; Covaleski & Aiken, 1986; Covaleski, Dirsmith, & Samuel, 1996; Dillard, Rigsby, & Goodman, 2004). Therefore, institutional theory is used within the wider framework of CIAH, with an emphasis on identifying and analysing the institutional pressures affecting the accounting developments in Portugal during the period from 1750 to 1777, especially the adoption of DEB at the Royal Treasury

and its subsequent diffusion to the Portuguese Empire, from its establishment in 1761 until 1777.

This study is intended to contribute to the accounting history research agenda in a number of different ways. First, this study is an early application of the CIAH notion as proposed by Carnegie and Napier (1996, 2002). Second, in viewing accounting as a technology it makes use of a framework of questions as drawn from Jeremy (1991) to provide an overview of the transfer of accounting technology from different European countries to Portugal and from the colonising nation to her colonies. Third, it examines the implementation and diffusion of DEB in an organizational form (i.e. central government) and a time-space intersection (i.e. eighteenth century Portugal, Europe) that are unexplored in the accounting history literature. Fourth, the study concerns Portugal, a hitherto unexplored setting in the literature on institutional theory in accounting history. Therefore, it broadens the application of institutional theory in accounting history research to a different country and to a different time period in the context of European central government. Fifth, the study highlights for Portugal the importance of individual actors, such as the Marquis of Pombal, as powerful environmental agents, making decisions that influence the institutionalization of accounting practices and creating an environment that affects changes or the lack of changes in future years. Sixth, the study provides evidence of the importance of accounting as a system of rational beliefs through which the organizational structure is legitimized and of the State as an important agent in the process of institutionalization of accounting practices. Seventh, through the analysis of institutional pressures exerted over and by the Royal Treasury the study shows that state actors are more likely to employ coercion in pursuing their ends. Finally, it is expected that this study may stimulate further avenues of inquiry within Portuguese accounting history, in particular within the public sector.

A scenario for investigation

As stated by Parker ([1989] 1994, p. 590), “accounting techniques, institutions and concepts are all capable of being imported and exported from one country to another”, thus, creating the opportunity for accounting history studies to analyse the international transfer of accounting techniques and accounting knowledge between countries. Developments in private sector accounting or commercial accounting have been explored

in most European countries, specifically on a country by country basis (see, for example, Edwards, 1989; Jones, 1992; Vlaemminck, 1961; Walton, 1995). There is, however, a much smaller literature on accounting developments in the public sector within European and other countries (see, for example, Carnegie & Napier, 1996, p. 26). Some examples can be found in Edwards, Coombs, and Greener (2002), Forrester (1990), Lemarchand (1999) and Nikitin (2001). Across both sectors within Europe, there also exists a general shortage of studies which have comprehensively examined the diffusion of accounting from country to country; while there have been very few contributions on CIAH within Europe, especially in the public sector.

The shortage of accounting history studies, especially in the English language, is even greater in Portugal, where very little is known, as mentioned earlier, about accounting's past and its development until the present time (Rodrigues *et al.*, 2003, p. 96). Although the second half of the eighteenth century is the period of Portugal's past, in particular the period under the rule of the Marquis of Pombal (1750-1777), that has interested more Portuguese and foreign historians, the studies about the accounting practices during this period and the measures adopted to diffuse DEB both in the public and private sectors are the object of only a small number of accounting studies. Rodrigues *et al.* (2003) examined the implications of corporatist and liberal ideals on the development of accounting profession that is portrayed as having commenced in 1755. The importance of the School of Commerce established in 1759 in creating a body of skilled professionals and in the diffusion of DEB in Portugal was analysed by Rodrigues, Gomes, and Craig (2004). The influence of the English mercantilism on the formation of the Portuguese School of Commerce was addressed by Rodrigues and Craig (2004). State intervention in commercial education within the case of the Portuguese School of Commerce was addressed by Rodrigues, Craig and Gomes (2007).

Although there are studies in the Portuguese language about the Royal Treasury (see Paixão 1998; Rodrigues, 1995, 1996; Tomaz, 1988) they are more descriptive of the evolution of the organization and how the Royal Treasury was organized, merely mentioning the accounting method established in the Letter of Law of 22 December 1761, without even discussing in any detail the actual method adopted and how it was applied. Accordingly, the adoption of DEB at the Royal Treasury has not previously been subject to any in-depth historical analysis. The transfer of accounting technology to Portugal,

especially the advent and use of DEB system, the environmental factors that influenced its adoption and the implications in the institutionalization of the accounting practices, both in private and public sectors, still remain largely under investigated. Further, how accounting practices adopted at the Royal Treasury spread in the country and to the Portuguese colonies at the time still remains under investigated. Consequently, and as mentioned previously, this study will assist to augment an understanding of accounting developments in the public sector in Europe in general by exploring the early adoption and spread of accounting technology in Portugal and within her Empire, particularly at the Portuguese Royal Treasury, settling the analysis in the context of similar reforms in other European countries.

Purpose, research method and methodology

This study of financial accounting developments in the public sector across both time and space adopts the case study method, having as the case institution the Portuguese Royal Treasury. The study will be based in archive research and, as alluded to earlier, assumes that accounting is both a social and institutional practice (Hopwood & Miller, 1994) that has to be examined and understood in the contexts in which it operates (Hopwood, 1983). Therefore, in the trend of the “new” accounting history an interpretative perspective is adopted in the study. Besides the importance attributed to the contextual analysis which will be enriched, for overview purposes, by the use of the framework of questions drawn from the transfer of accounting technology, the interpretative perspective is enhanced by the use of institutional theory as developed by DiMaggio and Powell (1983) and mentioned previously in examining the specific accounting developments at the Royal Treasury.

The express objective of this study is to augment an understanding of accounting developments in public administration in Europe generally by specifically examining the initial adoption and institutionalization of DEB at the Royal Treasury, Portugal, and the subsequent diffusion of accounting technology to the Portuguese colonies, during the period 1761 to 1777, under the leadership of the Chief Minister, the Marquis of Pombal. Therefore, this CIAH study intends to contribute to the literature on accounting’s past by identifying the sources of institutional pressures that impacted upon the adoption and institutionalization of DEB by the Portuguese Royal Treasury, and the subsequent transfer

of accounting technology within the Portuguese Empire. In so doing, the study also endeavours to highlight the role of prominent individual actors in the process of accounting change, which tended to be neglected or underplayed by early institutional theorists (see, for example, Covalleski & Dirsmith, 1995; Dacin, 1997; Powell, 1991; Scott, 1991, 1995).

Given the major research objective the two major general research questions posed in this study are stated as follows:

What sources of institutional pressures impacted upon the adoption and institutionalization of DEB at the Portuguese Royal Treasury and affected the diffusion of accounting practices to the Portuguese colonies?

What roles were played by prominent institutional/individual actors in the process of transfer of accounting technology in eighteenth century Portugal?

With a combination of primary and secondary sources it is expected to have access to the necessary and appropriate information to meet the express research objective of this study and to answer these two general research questions. This work adopts a wider interpretation of what constitutes the “archive” for accounting research (see Carnegie & Napier, 1996, pp. 8, 28). Although recognizing that the account books are a privileged archival source for accounting historians, other forms of record keeping are considered in this study, such as letters, laws, reports, news, memoirs, and diaries. Therefore, archival information for the development of this study was collected at the *Biblioteca Nacional* [National Library], *Tribunal de Contas* [National Audit Office] and *Arquivos Nacionais Torre do Tombo* [National Archives of Torre do Tombo], in Lisbon, where important collections of the Royal Treasury, legislation, official documents, and private documents from different personalities are available for the period under study. The available archival sources permit an examination of the surviving accounting records to obtain evidence of actual accounting practices adopted at the Royal Treasury and of the requirements that were prepared and issued for application within the Portuguese colonies. An examination of surviving accounting records prepared in the colonies was not undertaken as this form of investigation is outside the scope of the study while such records, if many survive, were not available within Portugal in the mentioned archives. The examination of the social, political, economic and cultural context of the period was based on Portuguese, English,

Spanish and French bibliography. Bibliography on different subjects related with the study was obtained in international journals from different disciplines, including accounting, political science, sociology, and social and economic history. Contacts with prominent accounting historians from different European countries were also established in order to assist in obtaining relevant information for the purposes of the study.

Period selection

The period of approximately 27 years accommodated in this study extends from the rise to power of the Marquis of Pombal, in 1750, as part of the government and later as Chief Minister, incorporating the creation of the Royal Treasury by the Letter of Law of 22 December 1761, to the time of his dismissal, following the death of the Portuguese King *D. José I* in 1777. This period of time was marked by a series of political, economic, social and cultural changes that exerted pressures on how accounting was used both by private and public organizations. The action of the state in all aspects of society was influential during this period and was dictated by the political ideologies at that moment, characterized by mercantilist policies, enlightened ideals and an absolute conception of the State, known as absolutism (Black, 1990; Hartung, 1957; Maxwell, 1995; Serrão, 1996a). These practices consisted mainly in the centralization of the administrative structure, the creation of a loyal and competent bureaucracy, the divisionalisation of the governmental functions, and in a growing professionalization in government and administration (Black, 1990, p. 378; Falcon, 1982, p. 134; Maxwell, 1995, pp. 18-19).

By 1750 the importance Portugal held in previous centuries in Europe had decreased significantly; the economy was under-industrialized in comparison with other European nations, and a significant part of the country's commerce had, by then, become effectively controlled by foreign merchants (Azevedo, 1929; Macedo, 1951; Marques, 1984; Mauro, 1991; Serrão, 1996b). In a period of increasing economic difficulties the administration of public finances and a strong action by the state on the economy, regulating the functioning of private activity was determinant. The creation of the Royal Treasury, in 1761, was a part of the broader set of measures implemented by the Portuguese government to create an efficient bureaucracy and develop the country. Pombal's leadership was decisive in the adoption of the economic and social reforms in this phase of Portugal's past known as "Pombalism". Pombal was part of the enlightened

Portuguese elite and, more specifically, he was part of a group of officials and diplomats who were concerned with understanding the imperial organization and economic practices which they believed were the reasons for the power and wealth of France and Great Britain (Marques, 1984; Maxwell, 1995; Serrão, 1996a). Through that knowledge it was expected to be able to determine the measures that should be implemented to improve the Portuguese situation.

The political and administrative reforms that were conducive to strengthening the power of the king, and which led to the modernization of Portuguese economy and society, started mainly after 1755, after the Lisbon earthquake and the appointment of Pombal as Chief Minister. Pombal's main actions were influenced by the experiences of several European countries, mainly France and England. Among the considerable number of key measures implemented by Pombal, measures have been identified which to varying degrees were important for the development of accounting practices and education in Portugal. Such measures included the establishment of several monopoly trading companies to be responsible for the commercial trade with the Portuguese colonies and within the country; the establishment of the Board of Trade in 1756; the advent of the School of Commerce in 1759 and, of course, as mentioned before, the establishment of the Royal Treasury in 1761.

Pombal endeavoured to develop commerce and industry, to reduce imports and consequently restrict the amount of gold that went abroad to pay for imported goods while, at the same time, he was keen to create a powerful class of Portuguese businessmen with the necessary skills and capital resources to compete with the foreign businessmen. With these measures in place it was expected to bring Portugal to the level of the most developed nations of Europe. Nonetheless, Pombal's wide ranging initiatives and actions were controversial, granting him with the designation "Paradox of the Enlightenment" (Maxwell, 1995). It is this unique period of the Portuguese history that provides the context for this study of financial accounting in the public sector across both time and space.

Limitations of the study

This CIAH study is based on written records and is set firmly in the archive. Consequently, a limitation of any study of this nature relates with the fact that only the

records that are identified and organized can be examined. There is always the possibility that records that were produced as part of a whole system were lost, destroyed or even not identified as part of the collection used in the study. In addition, in the case of the archive of the Royal Treasury at the National Audit Office, the books were reorganized around 1969 and a number of books were not classified as belonging to a specific section of the Royal Treasury, and a specific label was created for them. Therefore, the organization of the archive may have changed the initial organization and interaction between the different records.

Another limitation that may be pointed to in this work, perhaps by certain scholars, is related with the selection of institutional theory as the theoretical framework and also the use of the transfer of accounting technology framework of questions. Such scholars may state that other perspectives or theories may also help in understanding the actions and events involved in this case study. The intention is not to argue that the theoretical perspective adopted is the best, but that it is, as will be argued later, appropriate given the phenomenon under investigation. As argued by Covalleski *et al.* (1996, p. 24), there are diverse perspectives that may be used, however, it is not possible to elect a “champion” paradigm. The appropriateness of adopting institutional theory comes from different aspects. First, institutional theory is considered to be a useful tool for obtaining a better understanding of the phenomena being investigated taking in consideration its broader context. Second, its use in accounting research within the public sector, in particular in accounting history research (such as applied by Bergevärn, Mellemvik, & Olson, 1995; Carmona & Donoso, 2004; Carmona *et al.*, 1998; Carmona & Macías, 2001; Carpenter & Feroz, 1992, 2001; Covalleski & Dirsmith, 1995; Núñez, 2002), has shown that institutional theory can be very helpful when a contextual analysis is undertaken, especially when trying to analyse the role of accounting in specific organizations, and when accounting is used as an instrument of power by different institutional actors. Therefore, institutional theory can be fruitfully used in studies where the State was a dominant actor of the institutional environment and the key organization, such as the Portuguese Royal Treasury, was an instrument of the State. Accordingly, the concepts of legitimacy and isomorphism are particularly useful for understanding the actions of the Portuguese government at the beginning of the second half of the eighteenth century. The international technology transfer framework of questions has already been used effectively in accounting history research to help understanding the international transfer of accounting knowledge (see, for

example, Carnegie, Foreman, & West, 2006; Carnegie & Parker, 1996, 1999; Foreman, 2001; Parker, [1989] 1994; Rodrigues & Craig, 2004).

Another aspect that can be pointed out by some scholars as a limitation is related to the question about historical subjectivity. Regarding the subjectivity of historical writing observations have been made that “whether philosophical or historical, everything depends upon the perception we had before entering the discourse” (Fleishmann, Mills, & Tyson, 1996a, p. 59; also see Hegel, 1975, p. 286). Even the selection of the historical documents, as well as other evidence such as any available oral evidence, to be analysed are a consequence of the subjective judgment of the researcher about what is important (Fleishmann *et al.*, 1996a, p. 59). This subjectivity is one aspect that must be acknowledged when doing historical research, but that cannot be avoided. Consequently, this study recognizes this inherent subjectivity and adopts a perspective which views the world as being socially constructed and subjective (see also Chua, 1986; Covalleski & Dirsmith, 1990) and, consequently, analyses accounting practices within its organizational, economic and social contexts.

Additionally, the examination of the actions and events that happened centuries before are made through written materials of that time that survived until the present and are available for examination as well as secondary sources. These sources provide partial understandings of what happened and why it happened. Besides the subjectivity of the world that surrounds us as well as the subjectivity or biases of the researcher when conducting historical research, there is also the limitation of the available records and other sources that were selected through time and that provide only a partial explanation for a complex context in which the reforms under investigation took place.

Pattern of analysis

This study constitutes 10 chapters. Chapter 1 consists of the introduction to the work, where the scenario for investigation, the purpose, research method and methodology, the period selection and the limitations of the study are presented. The review of the pertinent literature for this study occurs in chapters 2 and 3. Chapter 2 helps to establish the basic assumptions of this study and establishes its connection with the existing literature. The chapter includes a revision of the literature on the diffusion of accounting,

the use of DEB both by local and central government organizations and also explores the relationship between accounting and the state. This chapter also includes a literature review of the different conceptions of accounting and the distinction between the new and the traditional accounting history research schools, establishing the underlying conception, methodological approach and theoretical perspective adopted in this study. Chapter 3 provides the theoretical background for this study through a literature review of institutional theory and its use within both contemporary and historical accounting research. This review is important to understand the main theoretical contributions of this perspective that are useful within this study, such as the concepts of legitimacy, institutionalization, isomorphism and the role of powerful environment agents. Based on what was developed in the previous chapters, Chapter 4 details the methodology adopted in this study and includes the methodological and epistemological perspective, research directions, the research methods, and the archival sources used in this work. Included is also a discussion of the theoretical perspective adopted and the development of the framework of questions drawn from the transfer of accounting technology to structure the broader research findings of this study.

Chapters 5 to 8 are related with the context and the application of DEB, both in Portugal and in Europe, with a focus in the public sector. Chapter 5 provides the analysis of the Portuguese social, political and economic context in order to properly situate the accounting change that occurred in the second half of the eighteenth century in Portugal. Therefore, the chapter is divided in three sections. The first section introduces the concepts of mercantilism, enlightenment and absolutism in order to provide a better understanding of the description made in the following sections. The following two sections address the economic and social context within a period of approximately 250 years up to 1750, and the rise to power of the Marquis of Pombal as a key environmental agent who, as Chief Minister from 1756, governed the country for a period of 21 years, respectively. The introduction of DEB system within public administration in Europe, mainly in Spain, The Netherlands, Sweden, Germany/Austria, France and England, is analysed in Chapter 6. This chapter provides an understanding of the arguments of the early advocates of the use of DEB in central government and the motivations, difficulties, and possible influences of similar reforms implemented in the past by different European countries.

With the scenario of similar reforms implemented in Europe given in the previous chapter, Chapter 7 makes a detailed analysis of the creation of the Portuguese Royal Treasury and the adoption of DEB from its beginning, in 1761, with a specific focus on the institutional pressures that were exerted upon the Royal Treasury on its establishment. The chapter also presents an analysis of the actual accounting practices adopted at the Royal Treasury between 1761 and 1777, both at the General Treasurer Office and at the four General Control Offices, based on the examination of the surviving accounting records. Chapter 8 explores the accounting policy within the Portuguese Empire from 1761 to 1777 relating to accounting in public administration within the colonies. This chapter provides an examination of the context in which the Portuguese Empire emerged and its situation until the second half of the eighteenth century and of the administrative system of the Portuguese Empire. Importantly, it also includes an analysis of the available evidence of accounting policies within the Portuguese Empire based on the accounting requirements that were prepared and issued for application within the Portuguese colonies between 1761 and 1777.

Chapter 9 presents a discussion of accounting change within country and Empire through the use of the framework of questions, as developed by Jeremy (1991) and applied to the transfer of accounting technology, thus providing a broad, structured approach to enhancing an understanding of accounting developments generally of the Pombalism period. Chapter 10 contains the conclusion where an overview of the key findings, the contributions of the study and its implications are presented together with an outline of opportunities for future research.

Chapter 2: Literature Review – Accounting Development

Accounting development has been defined as the “state of the art or discipline of accounting in a society to a particular point in time” (Carnegie, 1997, p. 15). As addressed in chapter 1, this current study of financial accounting in the public sector across both time and space endeavours to provide probable explanations for the adoption and use of DEB at the Portuguese Royal Treasury. Within the context of central government, the study is broadly concerned with the diffusion of accounting technology from different countries to Portugal in the eighteenth century and from Portugal to her colonies. To provide such explanations, it is firstly important to address relevant aspects of the general process of diffusion in accounting both within the European context and at the international level. There follows an analysis of the early adoption of DEB within local and central governments and an overview of the relationship between accounting and the state. It is known that the transfer of accounting technology between different European countries began before the eighteenth century and involved different diffusion mechanisms (see, for example, Carruthers & Espeland, 1991; Edwards, 1989; Parker, [1989] 1994; Vlaemminck, 1961; Zurdo, 1996). As will be shown in this study, governments of different European countries implemented accounting reforms which resulted in the introduction of DEB for managing public finances within central government (see, for example, Edwards, Coombs, & Greener, 2002; Edwards & Greener, 2003; Filios, 1983; Forrester, 1990; Greener, 1999; Hernández Esteve, 1996, 1997, 1998a; Lemarchand, 1999; Nikitin, 2001; Sandin, 1991; ten Have, 1956; Vlaemminck, 1961).

Any examination today of the “state of the art or discipline of accounting”, whether undertaken from an historical perspective or not, is necessarily undertaken from the perspective of the present. It is important, therefore, to give consideration to the methodologies followed and the paradigms adopted when conducting accounting research. Particularly important in the context of this historical study of accounting development is how accounting’s past has been studied, including the identification of the main trends in historical accounting research. This will have repercussions for the way the case study on the adoption and use of DEB at the Portuguese Royal Treasury is conducted, including the selection of theoretical perspectives for application in analysing the findings. The review

of relevant prior research will help to develop a justification for this study and it will also help in the decision about what theoretical perspective and research methods to use.

This chapter contains four key sections. The first deals with the literature on the diffusion of accounting, especially in Europe. It advocates a comparative historical approach for conducting research of this genre under the notion, as introduced in chapter 1, of CIAH. The literature on the diffusion of accounting is often concerned with the initial adoption of DEB as will be addressed in section two in the context of accounting developments in the public sector. As outlined in chapter 1, this study is no exception as DEB is a key, time-honoured accounting technology which, in this study, is being examined within public administration, specifically on its first time adoption at the Royal Treasury, Portugal (1761). The way accounting diffusion has been studied or can be studied is related to how accounting itself is conceived. Accounting may be seen as a mere technical practice or may be more broadly conceived as a social and institutional practice, with implications for social and organizational functioning, as well as a technical practice. In studying accounting, it is important for researchers to be able to identify and explain the conceptions of accounting which underpin their investigations as will be dealt with in section three. Consistent with the portrayal of different conceptions of accounting is the distinction between what is known as “traditional” and “new” accounting history research, which principally forms the discussion situated in section four. Viewing accounting as a social practice, as opposed to a mere technical practice, orientates the researcher into the arena of “new” accounting history which recognises the pervasive and enabling characteristics of accounting.

Collectively, the four sections in this chapter assist in establishing the parameters of this study on the Portuguese Royal Treasury. They also assist in portraying the underlying conception of accounting employed and enhance an appreciation of the objective of this study and its connection with the existing literature. Following this chapter, chapter 3 deals with the literature on the key theoretical perspective adopted herein, namely institutional theory, while chapter 4 addresses the research methodology adopted.

Diffusion of accounting

Diffusion studies

Webster (1971, p. 178) provided a definition of diffusion as the “social process by which an innovation spreads through a social system over time”. According to Rogers (1995) there are two key prerequisites for diffusion to take place. First, it is necessary for there to exist an idea or innovation to be diffused. Second, there must be a population of potential adopters for that innovation. In addition, it is also necessary for there to exist communication flows between the innovators and the potential adopters (Lapsley & Wright, 2004, p. 356). Therefore, in the process of diffusion it is possible to identify different types of participants: the leaders, who invented, borrowed or imitated the idea; and the adopters who may play an important role as propagators in later stages in the diffusion process (Bjørnenak, 1997, p. 4).

The most important aspect in the diffusion process is to know how and why (or indeed why not) an idea or phenomena is adopted by some agents (Bjørnenak, 1997, p. 4). Notwithstanding the connection between diffusion and innovation, diffusion is not an automatic consequence of innovation (Lapsley & Wright, 2004, p. 356). For diffusion to occur there must be in place favourable factors within the environment. Therefore, diffusion is dependent upon the degree of benefit the innovation will bring to the organization; the consistency between the innovation and the adopters existing values; the complexity of the innovation; the potential to implement the idea on a trial basis, and the easiness to observe the resulting benefits (Lapsley & Wright, 2004, p. 356; Rogers, 1995).

Diffusion and accounting have been studied in different perspectives but with an emphasis in private sector organizations (see, for example, Ax & Bjørnenak, 2005; Bjørnenak, 1997; Clarke, Hill, & Stevens, 1999; Malmi, 1999). More recently the issue of diffusion of accounting thought and practice has assumed a new importance within the public sector (Lapsley & Wright, 2004, p. 358; also see, among others, Jackson & Lapsley, 2003; Perera, McKinnon, & Harrison, 2003). Within accounting history research, diffusion studies have shown that the diffusion of accounting techniques, institutions and concepts cannot be explained by a single model or formula, it involves different mechanisms of transfer and is motivated as well as constrained by a diversity of economic, political, socio-historical and cultural forces (see, for example, Anderson 1996; Carnegie *et al.*, 2006;

Carnegie & Parker, 1996, 1999; Carnegie, Parker, & Wigg, 2000; Foreman, 2001; Lee, 1997; Parker, [1989] 1994; Rodrigues & Craig, 2004; Scorgie & Capitano, 1997; Vent & Milne, 1997). Once the technology is imported to a specific country it is important for that technology to be appropriate to the circumstances and needs of the country, of course, in order to be generally accepted and adopted. This can help to explain why in certain countries, although more developed accounting systems were known to exist, it took a long period of time for them to be broadly adopted (see Parker, [1989] 1994; Yamey, 1977). This seems to have happened in Portugal where DEB was adopted later than it was in certain other European countries, and only when the State considered it to be the more appropriate method to be used both within public and private organizations as will be shown.

The next section encompasses an overview of the diffusion of DEB in Europe and the main mechanisms through which this transfer occurred.

The diffusion of accounting in Europe

The diffusion of accounting technology has been the object of intensive research by accounting historians. Specifically, this research has tended to focus mainly in the origins of DEB. In particular, earlier accounting historians adopted what has been designated as “traditional” perspective, concentrating in “economic” rationales to explain the appearance of the new accounting practices during the Middle Ages and especially in the locations where the technology was developed. This section addresses the diffusion of accounting in Europe, by specifically analysing the diffusion of DEB within this geographical area. This literature review will help to highlight the main aspects of the general diffusion of accounting in Europe providing a scenario for the analysis of the transfer of accounting technology to Portugal in the eighteenth century and the transfer of accounting technology to the Portuguese colonies.

It is widely accepted that the Italian merchants were the leading businessmen of Europe by the end of the Middle Age with a superior organization when compared with the other European countries (de Roover, 1956, p. 159; Hernández Esteve, 1992, p. 658). This situation remained unchanged until the sixteenth century when Portugal and Spain assumed an important role in international trade. The northern Italian cities (Genoa,

Florence and Venice)¹ played an important role in international trade between Europe and the Orient and accounting historians point to the early application and development of DEB in these Italian cities (Bryer, 1993, p. 114; Chatfield, 1977; 1996a, p. 184; de Roover, 1956, p. 115; Edwards, 1989, p. 48; Lee, [1973] 1984; [1977] 1984, p. 45; 1994; Melis, 1950; Sá, 1953, 1998). These Italian cities were until the fifteenth century the most developed in intellectual capability such as through education, writing, reading and arithmetic (Lopez, 1980; Mills, 1994, pp. 81-82).

While some authors claim that the oldest records using DEB belonged to the *Farolfi* company (1299-1300) (Lee, [1977] 1984, p. 45), others mention the records from the company *Burlamacchi* (1332-1336) (Monteiro, 1979, p. 47), while certain others argue that the earliest records using DEB belonged to a municipality, the *Massari* of Genoa (1340) (Chatfield, 1996b, p. 400; Martinelli, 1983, Mills, 1994, pp. 81-82; Peragallo, 1956, p. 215; Yamey, 1940, p. 135). This reinforces the argument that DEB was well established as a technique in the beginning of the fourteenth century, not just in commercial entities. As stated by Martinelli (1983, p. 117), by the 1340s “all the fundamental characteristics of the system were already in place, that is, accounts with laterally divided sections, constant application of the same monetary unit, constant reference for each entry to its cross-entry, and regular use of two complete sets of antithetical accounts”.

As the available evidence shows, Italy is usually identified as the originating country of the DEB system. It was in the Italian cities that the method was developed during the twelfth, thirteenth and fourteenth centuries, and after it was exported to other European countries. The diffusion throughout Europe of DEB was stimulated in the fifteenth century by an important innovation – the printing press (Carnegie & Parker, 1994, p. 79; Mills, 1994, pp. 81-82; Parker, [1981] 1984, p. 6; Zurdo, 1996, p. 51), and by the publication in 1494 of the first printed book on DEB *Summa de Arithmetica, Geometria, Proportioni et Proportionalita* written by Luca Pacioli². This invention made possible, and stimulated in the following centuries, the publication of a considerable number of accounting books that were widely diffused and accessible to a considerable number of

¹ These Italian cities were important commercial and banking centres. Florence is considered to have been, around that time, the leading banking city in Europe with 80 banks in 1338 increasing to in excess of 100 around 1400 (Edwards, 1989, p. 48).

² See Chatfield (1977, Chapter 4), Hernández Esteve (1994), Lee (1989), Martin Lamouroux (1994) for information about the life and work of Luca Pacioli.

literate and numerate people who previously did not have access to this instructional literature.³

The diffusion of DEB throughout countries in Europe happened through the use of different vehicles of transfer. In the case of the British merchants, Parker ([1989] 1994, p. 591) claims that ways (or vehicles of transfer) through which they could obtain knowledge of DEB were: manuscripts or books, Italian instructors teaching in Britain, foreign merchants living in Britain, and instruction obtained abroad by British citizens from a foreign merchant or teacher. Evidence available seems to confirm that in the case of Britain all of these vehicles were employed to gain access to knowledge of DEB (Parker, [1989] 1994, p. 591). Edwards (1989, p. 56) highlights two main vehicles: British businessmen learning their trade abroad and returning to Britain and translations of the bookkeeping chapters of *Summa* and other writings becoming available in Britain during the sixteenth century. In the case of Portugal, as will be developed in this study, evidence seems to confirm that these mechanisms were also used in the eighteenth century to assist in transferring accounting technology from different European countries to Portugal.

In general, the vehicles of transfer used in the diffusion of DEB were books, foreign merchants, and schools. Pacioli's pivotal book was an important instrument of diffusion, since it was translated into other languages and exerted a strong influence on the books published subsequently by authors from different countries (Amorim, 1968; Vlaemminck, 1961; Zurdo, 1996). Parker ([1989] 1994, p. 592) provides the example of another book that was an important vehicle of transfer:

A book which illustrates the way in which knowledge of double entry spread from country to country is Jan Ympyn's *Nieuwe instructie...* published in Antwerp in Flemish (Dutch) and French (as the *Nouvelle Instruction...*) in 1543 and in London in 1547 (as *A Notable and Very Excellent Woorke...*). In his Prologue the author states that his book is based on a translation of a work in Italian by one Juan Paulo di Bianchi. (...) It is clear from this (and other similar evidence) that knowledge of double entry was made available throughout sixteenth-century Europe through both books and manuscripts; that these were translated into various languages; and that they often contained illustrative sets of books...

The sixteenth century was characterized by an intensified publication of accounting books, mainly in Italy and in The Netherlands (Amorim, 1968; Vlaemminck, 1961; Zurdo, 1996). During this period the main concern of the books published was with the exposition

³ About some of these publications through the centuries and their importance see Amorim (1968), Sá (1998), and Vlaemminck (1961).

of DEB, and the rules associated with the use of the method. These books generally aimed to convince readers of the relevance and advantages of the new practices, hence, not differing greatly from the orientation of Pacioli's book (Amorim, 1968; Tua Pereda, 1988; Vlaemminck, 1961). During the sixteenth century the first books on DEB were published in Spain, The Netherlands, England, France, and Germany (Amorim, 1968, pp. 113-127; Chatfield, 1977, pp. 52-63; Hernández Esteve, 1983; Vlaemminck 1961, pp. 127-171; Zurdo, 1996, pp. 77-145), contributing to the diffusion of the method in those countries. During the seventeenth century the number of publications continued to increase, with France contributing significantly to this number, and with accounting authors, in general, contributing to the development of accounting thought (Sá, 1994, p. 28; Vlaemminck, 1961, p. 184). In Portugal the first book on DEB in the Portuguese language only appeared in the eighteenth century, by Bonavie, João Baptista, in 1758, *Mercador Exacto nos seus Livros de Contas* [Exact Businessman in his Account Books]⁴. Therefore, books were a fundamental vehicle of transfer of DEB in Europe, helping in diffusing the method from Italy to the other European countries at the beginning, and after contributing to the development of accounting practices between and within the countries.

Peripatetic merchants constituted another important vehicle of transfer. Merchants were generally mobile and had business contacts in different countries (Carruthers & Espeland, 1991, p. 52; Edwards, 1989, pp. 49-56; Parker, [1989] 1994), thereby contributing to the diffusion and institutionalization of commercial techniques, including DEB, from Italy to other European countries. Important Italian merchants and bankers would often establish branches in different European cities (de Roover, 1956; Edwards, 1989, pp. 49-56; Parker, [1989] 1994). This was the case of the merchant-bankers Borromei from Milan with branches in Venice, Bruges and London, where they practiced the same methods they used in their business in Italy (de Roover, 1956, p. 154). Through contact with these merchants, local people, both as employees or partners in business, could become aware of DEB and also learn about the method stemming from their engagement with those merchants. Such familiarisation with the method seems to have occurred in Spain in the sixteenth century, where an important Italian community of

⁴ Although there are evidences that the book from Luca Pacioli was known in Portugal in the sixteenth century by Portuguese mathematicians, that in their books made references and critics to Pacioli's book, Portuguese mathematicians and some merchants who wrote about arithmetic did not dedicate any part of their manuscripts to DEB as Pacioli did (see Almeida, 1997, pp. 67, 163; Nogueira, 2001, pp. 257, 259).

businessmen was established, and where important Italian commercial houses had branches, contributing to the diffusion and to the prestige of DEB in the country at that time (Hernández Esteve, 1998b, p. 67; Vanes, 1984, p. 110). The perceived appropriateness of the method for private business influenced the decision of the state to introduce the method within different branches of public administration and in the organization of the Spanish Royal Treasury in 1592 (Hernández Esteve, 1998a, p. 69; see also Donoso Anes, 1997; Donoso Anes, 1996, 2002; Hernández Esteve, 1996, 1997). Another example relates to the important Portuguese Jewish family *Mendes*. The *Mendes* were bankers and merchants who established operations in Lisbon during the sixteenth century, with a branch in Antwerp, with agents in different cities, London, Lyon, Venice, along with a partnership with an important Italian business house the *Affaitadi* (Nogueira, 2001, pp. 229-231, 663). According to Vlaemminck (1961, pp. 175-178), the family used DEB in keeping its accounting books.

The establishment by important business houses of branches in different countries also helped in the practical learning of commercial matters by the employment of locals who had the opportunity to learn in their work foreign practices. Accordingly, one common way to learn about commerce, in Portugal as in other countries, was as an apprentice or as a cashier in a business house (Coornaert, 1967, p. 240; Pedreira, 1995, p. 209). Furthermore, some cities, because of their important commercial activity, provided an effective “commercial college” for young merchants (Ramsey, 1956, p. 186). It was the case of Antwerp to where young apprentices, for example from England, went to work as servants to their principals in London, in what was considered to be their business education (Ramsey, 1956, p. 186). In addition, in Portugal before 1761, it was customary for the sons of merchants, both Portuguese and foreigners working in Portugal, to be sent abroad to important commercial cities in England, France, Holland and Italy in order to learn about commerce, including the DEB method of recording (Ratton, 1813, p. 261; Serrão, 1996b, p. 249). One example of an important businessmen who started by going to Genoa, in 1755, to learn about commerce was Anselmo da Cruz Sobral⁵, where he had a partnership with an Italian business house (Gramosa, 1882, p. 130). In 1760 he returned to Portugal, created his own commercial house, became involved, together with his two older

⁵ ANTT, *Habilitações para a Ordem de Cristo*, Letra A, Maço 11, doc.7.

brothers, the Cruz, in public administration and made part of the most important group of Lisbon Businessmen (Pedreira, 1995, pp. 164-165).

As a complement to the vehicles of transfer of accounting technology and working as an important mechanism in the diffusion of DEB were the commercial schools that were created in different European nations, being private or public schools, through the centuries (see Carruthers & Espeland, 1991, p. 49; Rodrigues *et al.*, 2003, 2004; ten Have, 1956, p. 237). Italy was the first country where schools teaching DEB were established. These schools were important catalysts in the diffusion of DEB (Rodrigues *et al.*, 2007). In Italy several *scuola d'abaco* existed in the fourteenth century. By 1338, Florence supported six of these schools and by 1614 in Nuremberg, Germany there were 48 of these schools in existence (Carruthers & Espeland, 1991, p. 49; Swetz, 1987). In The Netherlands during the sixteenth and seventeenth centuries private schools were established to teach DEB (ten Have, 1956, p. 237). In Spain private colleges were established in the beginning of the seventeenth century (Fernández Aguado, 1997). In France in the seventeenth century private schools teaching DEB were important centres of diffusion of DEB (Lemarchand, 1998; Stevelinck, 1970). The evidence collected by Rodrigues *et al.* (2007) indicates that during the eighteenth and nineteenth centuries the number of schools in Europe where DEB was taught increased considerably, intensifying the diffusion of the method across Europe. After the 1750s the creation of these schools was increasingly sponsored by the state reflecting the concerns held by many European governments at the time about the need of a qualifying education and commercial knowledge (Rodrigues *et al.*, 2007). As will be further elaborated in this study, a government sponsored school was established in Lisbon, in 1759, to teach commercial subjects, including formal instruction in DEB as part of the curriculum of the school. In the following decades until 1844, this school made important contributions to the diffusion of DEB in both the private and public sectors in Portugal.

Notwithstanding all the available mechanisms of diffusion, “the new accounting technique did not appear to be immediately and in all circumstances more efficient than the ancient techniques” (Martinelli, 1983, p. 117). The technique was not adopted on a large scale and many businessmen continued to routinely use simple, traditional accounting procedures they were accustomed to using, remaining largely indifferent to the innovations that defined and reflected the new accounting practices. In fact, until around 1500 DEB

was hardly used outside Italy except in the countries where Italian merchants had established branches of their firms (de Roover, 1956, p. 160; Parker, [1989] 1994, p. 591). According to Vanes (1984, p. 109), “it is generally accepted that England – most of Europe in fact – was about two hundred years behind Italy in the techniques of accountancy and banking”. As stated by de Roover (1956, p. 161), “the relatively advanced state of Flemish book-keeping in the fourteenth century is without doubt due to Italian influences. Beyond Bruges, even in Holland, this was no longer true”. In the case of Germany and Switzerland, de Roover (1956, p. 169) argued that until around 1500 “book-keeping remained backward” when compared with bookkeeping in Italy.

In addition, the rate of adoption of DEB in the different European countries was not the same through time. Some countries were more open to the new practices and tended to adopt effective ways of inculcating knowledge of the technique, while other countries were not so receptive. According to Yamey (1980, p. 82), the Flemish merchant Jan Ympyn in his book written in 1543 praised the Spanish and the German merchants for their organization of the books and for learning the method from the Italians. Nonetheless, he was critical of the merchants of The Netherlands and England for they did not keep their account books by the DEB method described in his book (Yamey, 1980, p. 82). But, as pointed out by Chatfield (1977, p. 54), even in the previous century when Spain was the most important country in Europe “it lagged behind in bookkeeping knowledge, serving mainly as a transmission belt for ideas between Italy and England”. Notwithstanding the situation changed. By the mid-sixteenth century these methods were well known in Spain, as it is shown by the ledgers of Simon Ruiz, dated from 1551 (Vanes, 1984, p. 110), and as evidenced in legislation which imposed the method upon bankers and merchants by Royal laws issued in 1549 and 1552 respectively (Donoso Anes, 1996, p. 120; 2002, p. 94; see also Hernández Esteve, 1985a, 1986, 1992).

In the case of Portugal, in spite of the close contact between Portugal and other European nations, where the DEB was being used, there is little evidence of the application of the method within the country before the 1750s. Among the few who may have used DEB were the Portuguese Jesuits who apparently used DEB from the beginning of the seventeenth century (Almeida, 1997, p. 165; Nogueira, 2001, p. 267). The scant evidence, based on old testimonies about that period, indicate that around 1750 only a small number of Portuguese businessmen were familiar with, and applied the DEB method themselves in

conducting their commercial affairs (see Pombal, 1775, p. 246; Ratton, 1813, p. 191). The names of *Bandeira e Bacigalupo*, *Bom e Ferreira*, and *Emeretz e Brito*⁶ are mentioned as partnerships between Portuguese and foreigners where DEB was applied in the account books of those commercial companies. The low level of diffusion and related application of DEB in Portugal before 1750 is reinforced by the necessity to employ skilled accountants on the method from other countries, like from Venice and Genoa (Smith, 1843, p. 305). This happened with the *Real Fábrica das Sedas*⁷ [Royal Silk Factory], whose surviving business records provide evidence that DEB was applied in conducting its affairs between the period of 1745 to 1747 when a foreigner, Nicolau Julio Cortinovis (who was probably an Italian), was employed as an accountant in the organization (Carvalho, Rodrigues, & Craig, 2007; see also Sousa, 1995).

In England by the middle of the sixteenth century there were treatises on DEB by English authors and also translations of Italian and other foreign books (Ramsey, 1956, p. 185; see also Coomber, 1956). The first book on DEB, as far as can be ascertained, was written by Hugh Oldcastle in 1543 and was considered to be a translation of Pacioli's book (Chatfield, 1977, p. 56). Later dated books published in the seventeenth century exhibited a strong Dutch influence (Chatfield, 1977, p. 57). In the case of British merchants it was only in the sixteenth century that these merchants started to adopt DEB (Vanes, 1984; Parker, [1989] 1994). Although the Italian influence in Europe around the fifteenth and sixteenth century was considerable, since they had branches spread throughout Europe, and they did not make any attempt to keep DEB as a secret technique, both England and Scotland were rather more influenced by France and The Netherlands than by Italy (Parker, [1989] 1994, p. 591). According to Parker ([1989] 1994, p. 594), although in the sixteenth and seventeenth centuries British merchants had many possibilities available to them to adopt DEB, since all vehicles of transfer were at their disposal, the available evidence suggests that they generally decided not to do so. Consequently, according to Yamey (1977, p. 17), it was only in the nineteenth century that DEB was widely adopted in Britain. Even in France, although DEB was known and used, including in the public sector by the beginning of the eighteenth century (Lemarchand, 1999), it was only in the

⁶ José Rodrigues Bandeira, Luís José de Brito and António Caetano Ferreira, were part of the most important merchants of the city of Lisbon, and were later involved in the administration of public institutions, mainly the Royal Treasury and the Board of Trade, and in the state-aided monopoly companies (see for additional information Pedreira, 1995).

⁷ The factory was established by private initiative in 1734, in Lisbon, and became royal property by the Decree of 14 May 1750.

nineteenth century that its use became widespread in industry (Lemarchand, 1994), while the method was reintroduced in France during the nineteenth century for the administration and management of public finances (see Nikitin, 2001).

Therefore, after 1500 and until the eighteenth century the rate of adoption of DEB in the different European countries was slow. While the reasons for this delay are not known, it is possible to advance certain hindrances faced by the new accounting practices. Prior to 1500, one of the first hindrances that DEB faced to its diffusion was the non-existence of printing. It was only after the invention of printing that DEB was able to be diffused more readily to other countries from Italy (Parker, [1981] 1984, p. 6). After overcoming this first hindrance, there remained language differences between all the European countries. DEB was developed in Italy and books were written initially in Italian and then translated into other languages; thus the exporter country and importer countries did not share the same language (Parker, [1989] 1994, p. 595). In dealing with this problem the importer country had several options: first, treat the foreign words as native words; second, change them into native words; third, invent new words in his native language, or use already existing words (Parker, [1989] 1994, p. 595). In the English case writers on DEB decided to change foreign words into native ones, “taking and adapting from Italian such words as journal, folio, capital (replacing stock), cash (replacing money), and bank” (Parker, [1989] 1994, p. 595). Nonetheless, after the printing books became available and the translation into the different European languages took place, the rate of adoption of DEB continued to be slow. According to Edwards (1989, p. 57) the explanation may be related to the apparent absence during those centuries of a strong demand from large businesses, since “the vast majority of firms were not large and the number of transactions did not justify the use of double entry procedures”. Therefore, it was only after 1850 that DEB was adopted by a majority of businesses in Europe with the “manufacturing corporation, the income tax, and the emerging accounting profession as major stimulants” (Chatfield, 1977, p. 61).

This general overview of the diffusion of accounting in Europe in previous centuries can assist in better understanding the different ways through which the several European countries had contact with the developments in accounting practices accomplished in other countries. It also highlights that the diffusion process was not a straightforward process. It faced, through time, some hindrances and took a long period of

time before the wide diffusion of DEB through the different European countries was accomplished. Although making a contribution to our understanding of accounting's past, the studies on the diffusion of accounting are characterized by a general analysis of the diffusion process and a general overview of the different factors involved. There is a lack of detailed analysis, through both time and space, of the process of adopting DEB within each of the European countries. Accordingly, a comparative historical analysis is desired to focus attention on how accounting technology was transferred from one country or region to another and on how such technology was generally diffused within single countries and, where appropriate, within particular colonial empires. This space dimension can be incorporated into the analysis by conducting applicable comparative international accounting history research as developed in the next section.

Comparative international accounting history

The traditional conception of the development of accounting practices, as shown in the previous section, although contributing significantly to the accounting history literature, is subject to certain limitations. Research has tended to concentrate mainly upon private sector accounting practices while it has neglected the distinctive national factors that prevailed in the different European countries. It is also characterized by a lack of a comparative international accounting research perspective. As the previous section demonstrated, and a general review of accounting history research confirms, there has been an emphasis in specific countries or regions of a country on studying the diffusion of accounting ideas, techniques and institutions from one country to others (Carnegie & Napier, 1996, pp. 27-28; 2002, p. 689). There is an unfilled need for studies "examining and explaining cross-national differences in accounting development" (Carnegie & Napier, 1996, p. 27). By focusing attention on one country some aspects are lost, such as important linkages, parallels and contrasts between different societies, which would enrich the research and provide a broader perspective of the phenomenon under research. Sometimes what transpires in a particular country is not exclusively dependent on changes within that specific country and is affected by developments that occurred previously or simultaneously in other countries. As indicated by Carnegie and Napier (2002, p. 689) "contemporary accounting in any country is not the outcome of invention within a single country or culture but rather the outcome of innovations in many places across centuries".

The comparative study of international accounting, or comparative international accounting as it is often known, has become an important research field in accounting since the 1980s (Carnegie & Napier, 2002, p. 693). From the initial concern with documenting and classifying the different national accounting systems the research has moved to an attempt to explain cross-national differences in accounting practices and standards and, more recently, has tended to focus on the international harmonisation of financial reporting practices (Carnegie & Napier, 2002, p. 693; see, for example, Gregoriou & Gaber, 2006; Nobes & Parker, 2006; Radebaugh, Gray, & Black, 2006; Roberts, Weetman, & Gordon, 2005; Rodrigues & Craig, 2006). The focus in financial reporting has broadened and recently comparative international accounting is being increasingly used in management accounting, auditing and public sector accounting (Carnegie & Napier, 2002, p. 693). As stated by Carnegie and Napier (2002, p. 694):

Comparative research undertakes to identify, explain and interpret similarities and differences between phenomena in different locations or cultures. This helps the researcher to test and critique explanations that are provided for phenomena based on investigations within one country, forces the researcher to reflect on culturally-dependent assumptions, and can potentially problematise the taken-for-granted within a single location. Within the field of accounting, comparative international research has helped to make clear not only the diversity in international accounting systems and theories but also mutual influences of different systems on one another.

When analysing future possibilities for historical accounting research, Carnegie and Napier (1996) advocated a genre of investigation under the label CIAH, as introduced earlier. In advancing this notion Carnegie and Napier (2002, p. 694) defined CIAH in broad terms as "... the transnational study of the advent, development and influence of accounting bodies, conventions, ideas, practices and rules". The authors argued that this comparative international perspective can "deepen our collective understanding of how accounting came to be what it was in different locations at different points in time, and how accounting affected the economies and societies in which it operated" (p. 694). The notion of CIAH as espoused by Carnegie and Napier (2002, p. 698) places a strong emphasis on the study of accounting in the contexts in which it operates. The location of accounting in its social and organizational contexts will sharpen our awareness of cross-national differences in accounting development and also will shed light on accounting relevance in more general economic and social contexts. As stated by Carnegie and Napier (2002, p. 690):

Challenges lie in expanding the horizons of researchers beyond national and provincial boundaries, in viewing accounting as embracing economic calculation beyond financial reporting practices, in

replicating studies in different locations so as to make synthesis possible and in more readily embracing broader perspectives, such as those referred to by Carnegie and Napier (1996) as interpretative and critical histories, for application on a comparative basis in historical accounting research.

The comparative analysis within the notion of CIAH can assume different forms. Carnegie and Napier (2002, p.295) classified such forms into three categories. The first category consists of “synchronic” comparisons of accounting across several countries using a particular moment of time in the past. This form of comparative research is similar to modern international accounting and could apply contemporary research approaches to a moment in the past. The distinctiveness of this type of comparative studies is the temporal distance between the research and the specific moment in time selected to the analysis. The second category is referred to as “parallel” studies. Parallel studies take a defined time period, from say a few years, such as a decade, to half-centuries or even centuries, and study accounting phenomena of the respective period chosen in different locations. The main focus is placed in understanding similarities and differences. The third category comprises “diffusion” studies. Diffusion studies are the traditional application of historical perspectives within the international accounting literature. As stated by Carnegie and Napier (2002, p. 696), “a CIAH approach to diffusion studies is likely to focus in particular on factors that facilitate or inhibit the adoption of some aspect of accounting in different countries during the period under review”.

The fact is that the process of diffusion of accounting knowledge between countries is not a simple one, involving simultaneously economic, cultural and technical dimensions (Eden *et al.*, 2001). The complexity of the process of diffusion of accounting between countries can be surpassed through the portrayal of accounting as a technology and the diffusion of accounting as a process of international technology transfer. According with Jeremy (1991, p.1) technology “may be defined as knowledge about the ways in which processes and products are designed, made or organized”. Although most of the time technologies are regarded as associated only with machines, when broadly defined they can be considered as “bodies of skills, knowledge and procedures for making, using and doing useful things” (Merrill, 1968, p. 576). As a result the concept of technology encompasses the skills of writing, arithmetic and also DEB which commands the effective use of literacy and numeric skills. At least in what regards to bookkeeping, it has been

argued that an important technology of bookkeeping has been available for more than 475 years (that is, from 1494) with little change (Chatfield, 1977, p. 49).

Nevertheless, accounting technology differs from physical productive technology. First, it cannot be controlled and sold, since it is non-proprietary in nature. Second, it is not embodied in marketable capital goods (Carnegie & Parker, 1996, p. 25). Concerning the transfer, as Parker ([1989] 1994, p. 590) stated, and already mentioned in Chapter 1, “accounting techniques, institutions and concepts are all capable of being imported and exported from one country to another”. Nevertheless, and since there are presumably little or no cultural, social, or political costs or benefits attached to them, techniques can be considered easier to import than institutions or concepts (Parker, [1989] 1994, p. 591).

Accounting technology transfer has been object of research under different perspectives. Parker ([1989] 1994) considered the transfer of concepts and techniques as well as institutions, notably professional accounting organizations. Anderson (1996), Lee (1997) and Carnegie and Parker (1999) dealt with the transfer of accounting associations, from their British origins to the English speaking world. Other examples include Carnegie and Parker (1996) where the contributions and influence of England-born William Butler Yaldwyn, a peripatetic accountant and accounting author, within Australia, New Zealand and South Africa are studied. Vent and Milne (1997) analysed cost accounting practices transfer during the late nineteenth and early twentieth centuries between Nevada and Western Australia. Foreman (2001) analysed the transfer of scientific management techniques, including cost accounting systems, from North America to Australia. Within the context of Portugal, Rodrigues and Craig (2004) addressed the role of English mercantilist influences on the formation of the Portuguese School of Commerce. Carnegie *et al.* (2006) examined F. E. Vigars’ *Station Book-Keeping*, first published in 1900, which facilitated the adaptation and transference of DEB to a specific industry, namely the Australian pastoral industry.

As a way of structuring the research on the international technology transfer, Jeremy (1991, pp. 3-5) suggested a set of five questions. These questions were summarized by Carnegie and Parker (1996, p. 25) and applied to the transfer of accounting technology. The questions were summarized as follows:

1. What inhibiting factors were there, technical and non-technical?
2. What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection, the speed of transfer of the technology?
3. What was the rate of adoption, the networks of distribution into the receptor economy, the hindrances faced by carriers of the new technology?
4. Was the incoming technology reshaped by economic conditions, social factors, conditions in the physical environment?
5. Were there any reverse flows of the technology?

This framework of questions, adapted from Jeremy (1991), reveals itself to be useful in presenting an overview of the findings of this study of the transfer of accounting technology involving processes of accounting change within both country and Empire. Extending the application of these questions to the Portuguese Empire has resulted in the setting of an additional question, known in this study as the sixth question, which will be identified in chapter 4.

Double entry bookkeeping in the public sector

The study of accounting in the public sector covers the analysis of different types of organizations. According with Broadbent and Guthrie (1992, p. 3) the “public sector is that part of a nation’s economic activity which is traditionally owned and controlled by government” and is “composed of those public organizations which provide utilities and services to the community and which traditionally have been seen as essential to the fabric of our society”. The public sector can be divided into four main groups: local government; central government; public organizations with links with the central and local government organizations; and public business entities linked with central government but which can also be funded by private capital (Broadbent & Guthrie, 1992, p. 9). Research to date on the development of public sector accounting practices has generally adopted a traditional approach and has taken the state as a non-problematic, regulatory body (Goddard, 2002, p. 655; see, for example, Coombs & Edwards, 1994; Edwards & Greener, 2003). This traditional approach generally exhibits a technical focus and does not take in consideration the contextual aspects; however, the call for the study of accounting in its social context (Burchell, Clubb, Hopwood, Hughes, & Nahaphiet, 1980; Hopwood, 1983; Hopwood &

Miller, 1994) has highlighted the importance of studying accounting in the contexts in which it operates and brought with it the necessity for employing theoretical variety in accounting research. In spite of this move and the adoption of a critical methodology in the analysis of the nature of the state, critical accounting research has tended to focus to date mainly on the development of the organized accounting profession in the public sector rather than on the dissemination of accounting practices more generally (Goddard, 2002, p. 656; see also Chua & Poullaos, 1993; Chua & Sinclair, 1994).

Traditionally, accounting history research has focused attention on investigations in the private sector (Carnegie & Napier, 1996, p. 26). There has been, however, an increased interest in historical studies of public sector accounting in different countries with a particular focus on local government accounting and financial control, particularly in Britain (Carnegie & Napier, 1996, p. 26). In this section an overview of public sector accounting history research focusing on the adoption of DEB, both at the central and at the local level, is presented, and followed by an overview of literature about the relations between accounting and the state. Based on the following literature review, a more in-depth analysis of the adoption of DEB within central government in Europe will be presented in Chapter 6.

Local government

Although the initial development of DEB was connected with commerce and banking activity, its reputation and credibility within the business community generally assisted in the adoption of the method within the public sector. Its initial adoption in the public sector happened in the fourteenth century at the level of local government, within either local municipalities or city states⁸. Accounting historians have identified several cities that used DEB in their administration before the end of the seventeenth century, such as Genoa in 1340 (see Mills, 1994, pp. 81-82; Vlaemminck, 1961, pp. 101-102; Yamey, 1984, p. 135), in Seville in 1567 and in Naples in 1583 (Hernández Esteve, 1992, p. 663; Martínez Ruiz, 1988, p. 335), in Venice in 1628 (Zambon, 2000, p. 367), as well as in Stockholm in 1643 (ten Have, 1956, p. 245). It is generally accepted that the first example of the use of DEB in the public sector is provided by the surviving account books of the *Massari* of Genoa as early as 1340 (Martinelli, 1983, p. 83; Mills, 1994, pp. 81-82). The

⁸ For a clarification on the characteristics of charge/discharge and DEB in local government see Jones (1994).

accounts of the stewards of the City of Genoa (1340-1341) provided evidence of the use of DEB, “not in its infancy but fully grown” (Martinelli, 1983, pp. 83-84), long before it was described in Pacioli’s book. The laws enacted by the Commune of Genoa provided as explanation for this early use of DEB outside commerce and banking activities “the many frauds that were perpetrated involving the financial statements and revenues of the Commune of Genoa” (Martinelli, 1983, p. 85). To heighten administrative controls to assist in preventing such frauds the elaboration of accounting ledgers made accordingly with the manner of the banks was ordered (Martinelli, 1983, p. 85).

In Venice, the DEB method seems to have been adopted in Venetian public administration from 1628 (Zambon, 2000, p. 367). Zambon (2000, p. 355), when analysing the relationship between the Venetian state and accounting (and audit), argued that “accounting and systematic audit have therefore constituted a way of embodying political projects and rendering institutional ideals visible”. Zambon (2000, p. 355) further stated:

It is also likely that the widespread presumption of usefulness and neutrality that surrounded accounting helped to raise it to the role of ‘operational arm’ of broader political processes, a kind of rule of the game that bolstered the fundamental choices relating to the configuration and functioning of the state and above all to its underlying ‘philosophy’.

The early implementation of the DEB method within local governments in different cities or city states was often founded upon the connections between local government and businessmen, and was also based upon the necessity to control public funds, especially as a result of financial difficulties that were experienced from time to time (Hernández Esteve, 1992, p. 663; Martínez Ruiz, 1988, pp. 336, 338). Businessmen were familiar with the accounting practices used in commerce at the time and were often involved in the administration of local governments. However, the initial adoption of DEB within local government faced strong opposition in some cases that even, on occasions, resulted in the abandonment of the system. The following example is provided by de Roover (1956, p. 133):

In general, double entry bookkeeping conflicted with the voucher system favoured by the public authorities and was rarely adopted by government bodies. Experiments made by minor officials usually met with rebuttal from higher up. An example is that of an enterprising municipal treasurer of Reggio Emilia who, in 1385, devised a system of double entry to keep the accounts with the central treasury of the Milanese Visconti. He was soon rebuked by the auditor and forbidden to deviate from the beaten path.

In spite of early examples of the use of DEB in local government, Edwards (1989, p. 41) argued that “the use of double entry, in local government, was not common until the nineteenth century” (see also Jones, 1994, p. 377). Municipal corporations’ accounting practices, including the move from the charge and discharge system to DEB in Britain have been studied by Coombs and Edwards (1992, 1993, 1994, 1995), Jones (1992, 1994), and Livock (1965). Coombs and Edwards (1993) reported upon the disorganization and confusion of municipal accounts in the nineteenth century when corporations gradually moved over to DEB. The “triumph” of DEB in municipal corporations in the nineteenth century was analysed by Coombs and Edwards (1994). In this study, based on records of municipal corporations, the authors examined the transition to DEB and evaluated general explanations for the adoption of the method. Coombs and Edwards (1992) considered that the adoption of income and expenditure accounting by municipal corporations was facilitated by the use of DEB, and was associated with their trading activities. According to Coombs and Edwards (1994, p. 177):

...the system of charge/discharge accounting increasingly proved inadequate to meet the needs of municipal corporations due to the number, nature and rapidly expanding range of transactions undertaken during the late eighteenth and nineteenth centuries. The move to DEB occurred at different points in time at different boroughs and, even within the same borough, was not adopted at a single date for all activities.

In the case of the corporation of Bristol, the DEB method was introduced in 1785 and continued to be used more or less in the same way for many years, being used in 1835 (Livock, 1965, p. 86, 102). According to Jones (1992, p. 59) contributing to this decision was the fact that “charge/discharge account increasingly demanded subsidiary books of account to the point where these needed to be linked in a structured way”. According to Jones (1994, pp. 394-395), the analysis of the accounts of county treasurers suggests that, at the end of the eighteenth century and the beginning of the nineteenth century, DEB was introduced in some areas as part of the movement for “economic reform” which was born in the 1780s. Therefore, the main reasons for the adoption of DEB were related to the presumption, obtained through the use of the method by private businesses, of the usefulness and neutrality of the method, which gave rise to the idea that it was helpful in preventing frauds. The increasing complexity of local government activities across time was also seen as commanding the adoption of a more complex and detailed method for their administration (Hernández Esteve, 1992, p. 663, 1998a, p. 69; Jones, 1992, p. 59; Zambon, 2000, p. 355).

Central government

Early advocates of the use of DEB within central government, such as Stevin (1608), Irson (1678), and Barrême (1721), believed that the technique offered a means of improving administration and enhancing control over public revenues and expenses within central government organizations based largely on its effective use by merchants, since DEB was considered as an important instrument of supervision which could prevent possible mistakes and frauds (Hernández Esteve, 1984; Lemarchand, 1999; Vlaemminck, 1961). Calls for the use of DEB in an array of different organizational contexts, such as religious entities and non-profit organizations, as well as for managing public finances, became widespread during the eighteenth century (Lemarchand, 1994, p. 137; Vlaemminck, 1961, pp. 184-205).

Available evidence indicates that the first time adoption of DEB within central government occurred in periods before the writings of the early advocates. Hernández Esteve (1986) studied the introduction of DEB in the central account of the *Real Hacienda* [Royal Treasury] in Spain in 1592. Spain was, according to Hernández Esteve (1986, p. 15; 1992, p. 538), the first European nation to implement DEB in managing public finances. This central government reform was preceded by the use of the method in certain branches of the public administration, such as in the case of the *Casa de la Contratación de las Indias de Sevilla* [Seville Trade House for Indies] from at least 1555 (Hernández Esteve, 1998a, p. 69; see also Donoso Anes, 1997; Donoso Anes, 1996, 2002; Hernández Esteve, 1996, 1997). The accounting practices of the *Casa de la Contratación* of Seville were studied during the period 1503-1717 (Donoso Anes, 1996) and also from 1784 to 1787 when DEB was once again implemented (Donoso Anes, 1997). Donoso Anes (1994) also studied the books of the *Casa de la Contratación* of Seville for the year 1760. The method adopted was DEB that was frequently found, at that time, to be in use within private businesses (Donoso Anes, 1994). However, single-entry bookkeeping continued to be used as the official procedure to control the activity of the treasurer of the *Casa de la Contratación* of Seville, while DEB was occasionally used (Donoso Anes, 1994).

As will be further addressed in Chapter 6, other European countries adopted DEB in central government after the Spanish adopted the method, as was the case for The Netherlands (1604), Sweden (1623), Germany/Austria (1703), and France (1716). Although only scarce information is available in the English language about the countries

mentioned previously, in the case of France recent in depth historical studies are available in the English language on the early adoption of DEB (Lemarchand, 1999; Nikitin 2001). Lemarchand (1999) studied the reform of public finances that resulted in the use of DEB, from 1716 to 1726, as an “attractive technical innovation” in an attempt to reform financial administration (p. 225). Nonetheless, the system was abandoned in 1726 as the result of strong opposition from the financiers. Attempts were made between 1788 and 1791 to reintroduce DEB, but, according to Nikitin (2001, pp. 78-80), only after 1808 was the method successfully reintroduced in the public finances within central government, as mentioned earlier, as part of an implementation of a modern public sector accounting that was found to have been completed in 1838.

In depth studies have also been conducted in the case of the British central government (Edwards *et al.*, 2002; Edwards & Greener, 2003; Greener, 1999). It was only in the nineteenth century that DEB was adopted in the British public finances within central government. Edwards *et al.* (2002) studied this adoption that resulted from the ideological conflict between individuals representing the competing interests of the aristocracy and the new capitalist classes. Edwards and Greener (2003) examined the characteristics of the assembly of politicians committed to this accounting change. In addition, Greener (1999) made a longitudinal study of financial record keeping in British central government. According to Nikitin (2001, p. 90) the British reform of finances and accounting practices may have been influenced by the French reforms of the beginning of the nineteenth century.

Most of the studies on the adoption of DEB within central government are on a single country basis. Examples of a comparative analysis are provided by Nikitin (2001) between France and Britain and by Jurado-Sánchez (2002) who, on studying the mechanisms for controlling expenditure in the Spanish Royal Household, included an analysis of the use of the DEB method in some State Treasuries of Europe during the early part of the Modern Age. However, the literature generally lacks a broader comparative analysis that identifies the contrasts, differences, influences and possible interdependencies between similar accounting reforms within European central government.

Portugal, as will be shown in detail to follow, was also one of the European countries that adopted DEB in managing the public finances, as determined in the Letter of

Law of 22 December 1761, which led to the creation of the Royal Treasury. This Portuguese reform has not been previously subject to an in-depth examination as occurs in this study. In particular, the adoption of DEB at the Portuguese Royal Treasury in the context of European accounting developments, in general, and developments in public administration, in particular, from the late sixteenth century will assist in obtaining a better understanding of the processes involved and of the factors influencing the introduction of DEB within central government. In addition, from this general overview, there emerged a research possibility that has not been comprehensively explored until now. This consists in the elaboration of a comparative international accounting history study at the European level on the introduction of DEB in central government to highlight possible similarities, contrasts, and influences between similar reforms implemented in different countries. Further, it is important to analyse if previous reforms in one country may have provided the model to be emulated by other nations. This matter will be addressed within the following chapters of this study.

Accounting and the state

In the previous subsections an analysis of the use of DEB in local and central government organizations in Europe has been made. However, the relationship between accounting and the state is not restricted to the decision to use specific accounting practices by any government of any kind. More than simply a body of techniques accounting is increasingly seen more as an instrument of power and domination (Carnegie & Napier, 1996, p. 8) which is also at the disposal of the state. At the same time, according to Meyer, Boli, Thomas, and Ramirez (1997, p. 144), “many features of the contemporary nation-state derive from the worldwide models constructed and propagated through global cultural and associational processes”. Consequently, the adoption and use of accounting systems by the state has to be simultaneously understood as an instrument of power used by the state to accomplish specific ends, and as an instrument that fulfils the objectives of worldwide models shared by the state.

Therefore, when conducting accounting history studies in general, and particularly within the public sector, is important to take into consideration worldwide models prevailing at the time of the study, such as mercantilism and enlightenment that prevailed

in eighteenth century Europe⁹. Such “worldwide models define and legitimate agendas for local action, shaping the structures and policies of nation-states and other national and local actors in virtually all of the domains of rationalized social life – business, politics, education, medicine, science, even the family and religion” (Meyer *et al.*, 1997, p. 145). This is particularly the case when conducting comparative international accounting history research, since worldwide models shared by different states can assist in enhancing an understanding of accounting developments. As argued by Meyer *et al.* (1997, p. 145), “we are trying to account for a world whose societies, organized as nation-states, are structurally similar in many unexpected dimensions and change in unexpected similar ways”. The nation-state, therefore, is considered to be “culturally constructed and embedded” and not the “unanalyzed rational actor depicted by realists” and in which culture is “organized on a worldwide basis, not simply built up from local circumstances and history” (Meyer *et al.*, 1997, p. 147; see also Meyer, 1980; Thomas, Meyer, Ramirez, & Boli, 1987). As nation-states “routinely organize and legitimate themselves in terms of universalistic (world) models like citizenship, socioeconomic development, and rationalized justice” (Meyer *et al.*, 1997, p. 148), accounting also can help to legitimize the actions of nation-states themselves in facilitating such ends. As Meyer *et al.* (1997, p. 163) stated,

In the West since at least the 17th century, nation-states have claimed legitimacy in terms of largely common models; this commonality led them to copy each other more freely than is usual in systems of interdependent societies. The institutionalization of common world models similarly stimulates copying among all nation-states, in sharp contrast to traditional segmental societies in which entities jealously guard their secrets of success and regard copying as cultural treason.

Adopting the same reasoning, Jepperson and Meyer (1991, p. 225) argued “that nation-states policies in the West have always been situated in a dense and competitive network of economic exchange, political and military competition and imitation, and cultural isomorphism”, and that “isomorphism itself facilitates local change through competition and diffusion”.¹⁰ This argument has important implications for accounting research, in particular when studying accounting change, since it is often the case that institutional change “occurring in any given polity can be predicted more readily from knowledge of the wider world environment than from an understanding of internal structure” (Jepperson & Meyer, 1991, p. 226).

⁹ An example of an accounting history study taking in consideration the institutional changes in economic thinking from mercantilism to economic liberalism in accounting change was provided by Bhimani (1994).

¹⁰ The term “isomorphism” will be explained in Chapter 3 of this study, when developing institutional theory.

Meyer *et al.* (1997, p. 152) summarized a number of empirical observations about contemporary nation-states. First, nation-states “exhibit a great deal of isomorphism in their structures and policies”. Second, they make “efforts to live up to the model of rational actorhood”. Third, they are marked by considerable “decoupling¹¹ between purposes and structures, intentions and results”. Fourth, they “undergo expansive structuration in largely standardized ways”. According to Meyer *et al.* (1997, p. 173), the result is that nation-states are modelled by exogenous world culture and, therefore, they are characterized by extensive internal decoupling and they encompass a higher level of structuration than what they would have if they were only influenced by local cultural, functional, or power processes. These empirical observations about contemporary nation-states may be helpful when studying the interrelations between accounting and the state.

The interrelations of accounting and the state have been viewed as central to understand accounting change, in different ways and from different perspectives. According to Miller (1990, p. 316), “specific calculative practices and their rationales (...) are held to be linked to particular conceptions of government and of the appropriate mechanisms through which they are to be enacted”. In particular, Miller (1990, p. 329) called for the “identification of *ad hoc* and historically specific factors that condition the point of emergence of innovations in government”. Miller (1990) postulated a theoretical framework based upon two aspects: “political rationalities” and “technologies”. These two aspects of government are linked in a relationship of reciprocity. While political rationalities concern statements and claims that set out the objects and objectives of government, technologies concern the range of calculations, procedures and tools that materialize and visualize processes and activities. To illustrate the framework, Miller (1990) made use of the innovations in accounting and other practices of government across the “Colbert period” (1661-1683) of the reign of Louis XIV in France. According to Miller (1990, p. 329)

It is the *reciprocity* between the practices of accounting and the abstract rationales that seek to endow them with significance that explains much of the utility of accounting within programmes of government. (...) the calculable practices of accounting hold out the promise so central to programmes of government: that the desire to administer effectively can be achieved in practice by simply following certain technical routines.

¹¹ The term “decoupling” will be explained in Chapter 3 of this study, when developing institutional theory.

According to Napier (2006, p. 459), the role of the state is also central to the histories of value added as developed by Burchell, Clubb, & Hopwood (1985), discounted cash flow by Miller (1991), accounting standard setting and inflation accounting by Robson (1991, 1994) and was also in the background of studies on the professionalization of accounting. Jönsson (1991) also studied the interrelations between accounting and the state by studying the regulation of three areas of accounting (municipal, financial and management accounting) in Sweden over the last century to analyse what aspects of cultural context were relevant to accounting regulation.

Also studying the interrelations between accounting and the state Sánchez-Matamoros, Gutiérrez Hidalgo, Álvarez-Dardet Espejo and Carrasco Fenech (2005) analysed how accounting practices relate to governmental discourses in two Spanish governmental organizations in the second half of the eighteenth century. According to Sánchez-Matamoros *et al.* (2005, p. 207), “in spite of the different discourses within different public organizations, governments use the calculations and language of accounting to try to manage and control the response of the population to governmental solutions”. In another study on the development of public sector accounting profession and accounting practices Goddard (2002, p. 655) concluded that “the public sector accounting professional body in the UK has played an important hegemonic role in constituting and reflecting ideologies and in reflecting the coercive and consensual approaches adopted by the state”.

When conducting accounting research in the public sector it is important to take into consideration that “rather than two independent entities, accounting and the state can be viewed as interdependent and mutually supportive sets of practices, whose linkages and boundaries were constructed at least in their early stages out of concerns to elaborate the art of the statecraft” (Miller, 1990, p. 332). Studies on the interrelations between accounting and the state are important in contributing to an understanding of the ways in which particular state programmes influence the nature and direction of accounting (Miller, 1990, p. 334). The perception that accounting is, according to Miller (1986, p. 101), “always interrelated with broad political programmes for the management and government of societies” and “is part of a diverse range of knowledges which are an important aspect of the conditions of operation of such governmental programmes”, reinforces the arguments to study the interrelations between accounting and the state. According to

Power and Laughlin (1996, p. 457), “accounting is itself a crucial medium not only between economy and lifeworld but also a basis for linking different sub-systems”, emerging “as an important technology for the state”.

Conceptions of accounting

In studying accounting diffusion and particularly the adoption of DEB within public administration, the conception of accounting adopted, even if not explicitly declared, is the perception of accounting as a mere technical practice, as illuminated in the previous sections, where accounting is explained by economic rationales alone. Nonetheless, recent accounting literature, such as the earlier examined literature on the interface between accounting and the state, has assumed a conception of accounting that goes beyond the consideration of accounting as a neutral, if not benign, technical practice. When reflecting broadly upon accounting and its roles in organization and society, different dimensions can be highlighted. On the one hand, accounting researchers emphasize the technical dimension of accounting, perceiving that accounting is a bundle of procedures that are used in order to satisfy the information requirements of its users. On the other hand, accounting researchers may emphasize the social and institutional dimension of accounting, trying to understand and explain the pervasive and enabling attributes of accounting, especially pertaining to how accounting impacts on organizational and social functioning. This focus requires a greater understanding of how accounting shapes its environment and of how, in turn, the environment shapes accounting. Whether accounting is considered as being a mere technical practice or as a social and institutional practice will have influence on the methodology and the way accounting research is developed. These two conceptions of accounting and their implications for accounting research are analysed in what follows. This is intended to enhance an appreciation of the different approaches to accounting history research, since the construction of historical studies is determined by the conception of accounting adopted and will, therefore, be decisive to the comprehension of the methodological choices made in this study.

Accounting as a technical practice

The technical dimension of accounting is an important element of the accounting discipline which cannot be overlooked. For a long period of time this technical dimension

had been privileged in the conception of accounting as a discipline (see Chambers, 1991, p. 53; Littleton 1966, Preface; Riahi-Belkaoui, 2000, p. 60). In the description of the purpose of accounting the technical recording was the privileged characteristic. The conception of accounting as a technical practice embodied accounting with characteristics of neutrality and objectivity and usefulness for decision making. The economic decision-making model has had a deep influence in accounting research, and economic explanations became associated with a particular methodological approach in accounting research: the “scientific” or “positive” approach (Carnegie & Napier, 1996, p. 15; Hoque, 2006, p. 1; Napier, 2006, pp. 451-452).

The notion of accounting as the measurement and communication of economic information relevant for decision making is a characteristic of positive accounting theory in the traditional conception of accounting (Watts & Zimmerman, 1986). Positive accounting theory (Watts & Zimmerman, 1986) encompasses the economic-based empirical literature in accounting, and is based on the notion that theory should seek to explain and predict accounting practice (Napier, 1989, p. 247). One distinctive feature of the positivist school has to do with the way rationality in the doing of research is viewed. For positivist accounting researchers, rationality is “taken-for-granted”, “objective”, “the only way”, “absolute”, “orderly”, “it is used interchangeably and synonymously with the notion of science and is advanced by the natural sciences in general” (Lodh & Gaffikin, 1997, p. 439).

It was during the mid to late 1960s that the concept of positive theory was introduced into the accounting literature, as a reaction to a normative tendency of the accounting literature, which emphasised the prescriptions without testing the hypothesis underlying the prescriptions (Watts & Zimmerman, 1986, p. 14). The importance of accounting, according to the positivist conception, comes from the possibility to “provide those who must take decisions on accounting policy (corporate managers, public accountants, loan officers, investors, financial analysts, regulators) with predictions of, and explanations for, the consequences of their decisions” (Watts & Zimmerman, 1986, p. 14).

Under the traditional conception of the discipline, “accounting held out the promise of demarcating a financial domain that would be neutral, objective and calculable, and that would allow the corporation to be governed and administered according to the facts”

(Miller & O’Leary, 1993, p. 189). Accounting techniques were represented as providing a neutral, disciplined way of measuring and regulating what was already there and was only to be found. As pointed out by Morgan and Willmott (1993, p. 8), “on this view, accounting is uncontentious because it is simply measuring or reporting reality, not constituting it or even being constituted by it”. The consideration of accounting as a static and technical phenomenon has influenced for a long period of time accounting history research (Hopwood, 1987, p. 209). Following this conception, the history of accounting would be little more than a history of progress in which accounting evolves in response to the technical developments of a particular period. Within this traditionalist conception Littleton (1966, p. 361) provides the following definition of accounting:

Accounting is relative and progressive. The phenomena which form its subject matter are constantly changing. Older methods become less effective under altered conditions; earlier ideas become irrelevant in the face of new problems. Thus surrounding conditions generate fresh ideas and stimulate the ingenious to advise new methods. And as such ideas and methods prove successful they in turn begin to modify the surrounding conditions. The result we call progress.

This definition has, however, been strongly criticized (Miller & Napier, 1993), since it implies a certain degree of change but also of improvement, and researchers influenced by the social sciences see this definition as an incorrect judgment of values (Napier, 2001). Even at the present time it is possible to verify, according to Potter (2005, p. 266), that:

... the existing literature in relation to detailed accounting pronouncements developed in most countries is, instead, dominated by ‘official-type’ accounts from the organized accounting profession, central rule-making and their representatives. Invariably, these accounts seek to rationalize the application of accounting practices in either broad terms based on general notions of progress and improvement, or on more narrow technical/functionalist grounds such as ‘usefulness for decision making’ and/or ‘enhanced accountability’...

Traditionally, when conducting accounting research in which accounting is depicted as a technical practice, the model adopted would try to “separate out two domains called accounting and the environment, and then to conduct the analysis in terms of this prior distinction” (Hopwood, Burchell, & Clubb, 1994, p. 228). Accounting was not explored taking in consideration its social functioning or potential. Although the social was not ignored the fact is that the intermingling of the two was not properly conceived or effectively explored (Burchell, Clubb, & Hopwood, 1994, p. 540; see also Morgan & Willmott, 1993, p. 4).

As a result, little is known of how the technical practices of accounting are tethered to the social, of how wider social forces can impinge and change accounting, and of how accounting itself functions in the realm of the social, influencing as well as merely reacting to it (Burchell *et al.*, 1994, p. 540).

This explains why accounting and its relationship with the social environment “tended to be stated and presumed rather than described and analysed” (Burchell *et al.*, 1994, p. 540). Although during the 1970s a literature emerged with a particular concern for the impact of social change in accounting, the attempts to explicate and characterize the processes involved in the interaction of accounting with its social context were almost non-existent (Burchell *et al.*, 1994, p. 541).

Accounting as a social and institutional practice

Different authors have already developed “the notion that wider social practices can both connect and construct organizations” (Bhimani, 1994, p. 407; see, for example, Powell & DiMaggio, 1991; Zucker, 1988). In what concerns accounting, it has been noted that “the evolution of accounting goes on at a more macrosociological level than is commonly assumed” and that accounting rules can be considered “not as features of particular organizations, but as properties of institutional domains, national societies, or now the evolving world” (Meyer, 1986, pp. 348, 354). Investigations on accounting change have started to shed some light on how accounting techniques are shaped by wider societal shifts (Bhimani, 1994, p. 400; see also Miller, 1991; Miller & O’Leary, 1987, 1989, 1993, 1994). As noted by Bhimani (1994, p. 433) “the story that accounting has to tell is also one of changes in socioeconomic thought and the politico-cultural order”. The economic, social, and organizational contexts became crucial sources of explanation for accounting change. As argued by Miller (1994, p. 20):

... if we are to understand fully how particular ways of accounting have emerged, and why such significance is accorded them, we have to move beyond the boundaries of the organisation and examine the social and institutional practice of accounting.

The role played by accounting in shaping organizational activities and social interaction was also addressed by Hopwood (1990, p. 9), who argued that accounting “can influence perceptions, change language and infuse dialogue, thereby permeating the ways in which priorities, concerns and worries, and new possibilities for action are expressed”.

This social conception has in the last decades expanded significantly the domain of accounting (Hopwood, 2005, p. 285; Miller, 1994, p. 27-28; Potter, 2005, p. 265). In particular, a body of accounting literature which portrays accounting as a social and institutional practice has developed influencing the directions of accounting research. This made possible the interrogation and examination of accounting through the use of a number of different cultural, social and political agendas (Hopwood, 2005, p. 585). Accounting researchers adopting this perspective “typically demonstrate an appreciation for the pervasive and enabling characteristics of accounting and an awareness of the importance of local, time-specific factors which shape accounting change within particular instances” (Potter, 2005, p. 265).

Nowadays, rather than being perceived as a mere technical practice, accounting is increasingly regarded as a social and institutional practice (Burchell *et al.*, 1980; Carnegie & Napier, 1996, 2002; Hopwood & Miller, 1994; Miller, 1990; Miller, Hopper, & Laughlin, 1991; Miller & Napier, 1993; Napier, 1989; Potter, 2005; Previts, Parker, & Coffman, 1990a). As a result “attention has been directed to the ways in which accounting exerts an influence on, and in turn is influenced by, a multiplicity of agents, institutions, and processes” (Miller, 1994, p. 1). According to Miller (1994), there are at least three different aspects of this view of accounting as a social and institutional practice: accounting as a technology; the language and meanings, that is the *rationales*, intrinsic to accounting; and the domain of accounting. It is considered that these three dimensions of accounting are complementary. The emphasis on accounting as a technology means that accounting is considered as “a way of intervening, a device for acting upon activities, individuals and objects in such a way that the world may be transformed” (Miller, 1994, p. 2). The emphasis on the rationales of accounting means that accounting practices are more than numerical computations of costs, profits, losses, and returns; and that “accounting practices are endowed with a significance that extends beyond the task to which they are applied” (p. 3). On the accounting domain attention is given “to the ways in which the ‘economic’ domain is *constituted and reconstituted* by the changing calculative practices that provide a knowledge of it” (Miller, 1994, p. 4).

From the mid 1980s, increased calls have been made for accounting to be studied in its social and institutional contexts, where attention is placed on the organizational aspects of accounting practices, their symbolic meaning, rather than emphasising the technical

matter of accounting (Miller, 1994, p. 8). This call was the result of the need to address institutional pressures arising from bodies, such as the State and professional associations, appealing to accounting as a way of demonstrating the rational nature of organizational processes. This call was also the result of the application of the intellectual agendas of other disciplines, such as sociology and political science, to the study of accounting which was being regarded as a broadly based social discipline rather than as a timeless collection of techniques (Miller, 1994, p. 9). The result was that:

Whether one was interested in conducting field studies of accounting in action, historical analyses of the changing forms of accounting practices, or even conventional analyses based on contingency theory, the conclusion was the same. Accounting could not and should not be studied as an organizational practice in isolation from the wider social and institutional context in which it operated. (Miller, 1994, p. 9)

As argued by Hopwood *et al.* (1994, p. 228; see also Hopwood, 1983), “accounting is intimately implicated in the construction and facilitation of the contexts in which it operates. It cannot be extracted from its environment like an individual organism from its habitat”. According to Power and Laughlin (1996, p. 446), expert practices of calculation cannot be regarded as neutrally representative. The fact is that accounting assists to construct the reality within which it operates and its professionals reproduce a system of knowledge which shapes preferences and, at the same time, influences the boundaries of individual and collective decision making (Power & Laughlin, 1996, p. 447; see also Arrington & Puxty, 1991, pp. 51-52; Hines, 1988; Morgan & Willmot, 1993). As pointed out by Burchell *et al.* (1994, p. 544):

Rather than simply reflecting the context in which it operates, accounting has a power to influence its own context. Difficulties and disputes within accounting can engender accounting developments and a perception of crisis both internal and external to the specifically accounting domain. Accounting thereby is seen to give rise to developments which shape the context in which it operates. The environment of accounting can become, in part, at least, contingent upon the accounting of it.

The concern with the social and institutional practices of accounting became important not only in the accounting discipline but also in other disciplines, mainly in sociology and organization theory (Miller, 1994, p. 9). In particular, institutional theorists portrayed accounting as a key element in the myth structure of rationalized societies. As argued by Meyer (1983b, p. 235), “accounting structures are myths... they describe the organization as bounded and unified, as rational in technology, as well controlled and attaining clear purposes”. Independently of its efficacy, “the myths of accountants were

held to have become part of the taken-for-granted means to accomplish organizational ends” (Miller, 1994, p. 9). Depicting accounting as a social and institutional practice allows us to elaborate different analysis of accounting in organizations and society by using the same tools of organization theorists and sociologists. As pointed out by Miller (1994, p. 11):

One could study modern accounting as a ceremonial function that legitimates organizations with the mythical ‘users’ of accounting information... One could study the origins of particular accounting practices in relation to their roles as rational institutional myths. One could study the impact of particular forms of accounting on organizations as an institutional process, rather than being limited to asking questions of their presumed efficiency effects. One could seek to explain organizational change in terms of isomorphic tendencies with collectively valued elements. And one could study the ways in which different environments determine the amount of accounting done in a particular society or organization, rather than tacitly accepting that this derives from intrinsically necessary technical work processes (Meyer, 1986).

The institutional perspective, according to which accounting is part of the institutionalized and rationalized structure of a society, assisted in changing the previous emphasis in accounting as a functional and neutral response to organizational imperatives, and has contributed to a broadening of the accounting research agenda (Miller, 1994, p. 11). Although the analysis of accounting within organizations continues to be important, it is necessary “to move beyond the boundaries of the organization and examine the social and institutional practice of accounting” in order to be able “to understand fully how particular ways of accounting have emerged, and why such significance is accorded to them” (Miller, 1994, p. 20).

This conception of accounting inspired a number of approaches to accounting research different from the traditional accounting scholarship characterized by a positivist methodological perspective and an emphasis on quantitative methods (Baker & Bettner, 1997; Laughlin, 1999; Lodh & Gaffikin, 1997; Morgan & Willmott, 1993). Interpretive and critical methodological perspectives emerged based on the social and institutional conception of accounting (see Baker & Bettner, 1997; Chua, 1986; Laughlin, 1995). Accounting researchers adopting an interpretive perspective attempt “to describe, understand and interpret the meanings that human actors apply to the symbols and the structures of the settings in which they find themselves”, while accounting researchers adopting a critical perspective apply “a particular point of view regarding the research question” (Baker & Bettner, 1997, p. 293). The main difference is that although critical research may be recognised as interpretive, it does not purport to take a “neutral” stance as

usually interpretative research does (Baker & Bettner, 1997, p. 293). In the words of Baker and Bettner (1997, p. 294) “accounting’s essence can be best understood through its impact on individuals, organizations and societies. Hence, it is important that accounting research make increasing use of interpretive and critical perspectives”.

Within the interpretive and critical accounting research a number of different theoretical approaches borrowed from other disciplines have been adopted by accounting researchers to provide the theoretical and methodological perspectives for accounting research analysis.¹² As pointed out by Lodh and Gaffikin (1997, p. 438):

...each of these competing approaches contains value-based assumptions, beliefs, forms of rationality, tools and tribulations, tactics, epistemic and ideological strands in “the doing of research” (Chua, 1988b) which set the criteria for investigating a particular phenomenon. Not all these perspectives are equally satisfactory or arbitrary and depend on differing features of the phenomenon (phenomena) to be investigated.

The social and institutional conception of accounting for accounting history research is closely correlated with the so called “new” accounting history research. Accounting should be studied in the contexts in which it operates, while the adoption of a theoretical perspective, drawn from different disciplines can provide rich insights into the dimensions of accounting, beyond the notion that accounting is a mere technical practice which tends to be explained by “traditional” accounting historians as influenced by economic rationales alone. This dichotomy is explored further in the next section.

New and traditional accounting history

During the last decade or so accounting history research has increased significantly in its importance as a research field in accounting and also in the number of publications (see, for example, Fleischman & Radcliffe, 2005; Napier, 2006). The research field has gone through some transformations with new research topics, research approaches, and mainly through the use of different theoretical perspectives and methodological approaches from other disciplines, thereby increasing the potentialities and dimensions of the investigations undertaken or in progress (Carnegie & Napier, 1996, p. 7; Fleischman &

¹² Lodh and Gaffikin (1997, p. 438) investigated the diversity of critical research and identified ten alternative theoretical approaches used by critical researchers. These included, among others, political economy (including Marxian) approaches (Bryer, 1994, 2005; Tinker, 1980), Habermasian critical theory (Broadbent, Laughlin, & Read, 1991; Laughlin, 1991), Foucauldian approach (Burchell et al, 1985; Hopwood, 1987; Hoskin & Macve, 1988), Giddens’s structuration theory (Conrad, 2005; Roberts & Scapens, 1985), and Gramsci’s concept of hegemony (Goddard, 2002, Richardson, 1989).

Radcliffe, 2003, p. 1, 2005, p. 61; Poullaos, 1998, p. 701). Together with the traditional conception of accounting history, interpretive and critical perspectives have been more readily adopted by many accounting history researchers, especially in the past 15 years. In this section the definition of accounting history and the different research perspectives are briefly analysed in order to understand the relevance and possibilities of the research in the field and the positioning of this CIAH study within accounting history research perspectives.

Schools of thought in accounting theory

In 1970 the Committee on Accounting History of the American Accounting Association defined accounting history as:

... the study of the evolution in accounting thought, practices, and institutions in response to changes in the environment and societal needs. It also considers the effect that this evolution has worked on the environment. The ends of accounting history are both intellectual and utilitarian. (American Accounting Association, 1970, p. 53)

The intellectual aim of accounting history research has to do with the study of the process by which accounting thought, practices, and institutions developed through the identification of the environmental factors that induce change in accounting and how accounting change influences the environment. This aim also contributed, according to the Committee, to a better understanding of economic and business history. On the utilitarian side, accounting history provides an understanding of the origins of concepts, practices, and institutions in use today, which may provide insights for the solution of modern problems (American Accounting Association, 1970, p. 53).

Although the statement of the Committee on Accounting History was an early and generally influential attempt to define and stimulate accounting history research, the statement was subject to criticism. The main criticisms relate to the restricted vision of accounting history investigations, which have mostly focussed on commercial entities, and the typical focus within Western communities on recent nineteenth and twentieth century studies. Through time different accounting history researchers provided other definitions of accounting history (see, for example, Goldberg, 1974, p. 410 and Littleton, 1966, p. 361). Although these sorts of definitions were recognised as helpful for a period of time, recently they have been criticised because of their conception of progress as the essence in accounting history research, under which problems are solved, challenges are surpassed

while uncritically accepting the general notion that everything improves with time (Napier, 2001, p. 16; see also Napier, 1989). As mentioned before, this notion of progress implies, according to researchers influenced by social sciences conventions, an incorrect judgment of values, since what is progress for some may be the opposite for others, especially those affected by accounting as an instrument of power and control (Napier, 2001, p. 26; see also Carnegie & Napier, 1996, p. 7).

The role of accounting history for the earliest writers, as pointed out by Carnegie and Napier (1996, p. 10; see also Napier, 2006, p. 450), was to enhance the status of a discipline that could be seen merely as a neutral, if not benign, technical practice. Further, through time accounting history research on the origins of accounting, as a generic activity or as a specific technique, such as the DEB method, was used as a way to demonstrate the value and relevance of specific accounting methods (Carnegie & Napier, 1996, p. 10; Yamey, 1980, p. 91). Accounting history was also used by professional accounting associations to justify the status of their practitioners, and by academics to justify the status of accounting as a university discipline (see, among the others of the genre, Brown, [1905] 2003; Hatfield, [1924] 1977; Carnegie & Napier, 1996, p. 11). In addition, accounting history was useful because it put today into perspective while the use of information from the past could help to find solutions for present problems (Carnegie & Napier, 1996, p. 13). Whilst such purposes may be regarded as relevant today, “much current historical research is motivated by a desire to gain a deeper understanding of how and why accounting comes to be implicated in different arenas” (Carnegie & Napier, 1996, p. 29).

Different research directions and approaches in conducting accounting history research have been suggested through time. Although with some differences the main fields and approaches proposed are not very different and can be summarized as: studies of surviving business records, biographical studies (of individuals or groups of individuals), studies of accounting institutions, accounting in the public sector; comparative international accounting history, and innovative research methods in accounting history (see American Accounting Association, 1970; Carnegie & Napier, 1996; Previts, Parker, & Cofman, 1990b).

The conception of accounting as a social and institutional practice and the adoption of interpretive and critical perspectives in studying accounting’s past have created new

possibilities for accounting history research and its scholars as well as emerging scholars in the field. During the last 15 years or thereabouts claims have been made to privilege a “new accounting history”, which has been defined as a “loose assemblage of often quite disparate research questions and issues” (Miller *et al.*, 1991, p. 396). This new conception is rather different from the traditional one:

Rather than viewing the history of accounting as a natural evolution of administrative technologies, it is coming increasingly to be viewed as the formation of one particular complex of rationalities and modes of intervention among many, a complex that has itself been formed out of diverse materials and in relation to a heterogeneous range of issues and events. (Carnegie & Napier, 1996, p. 7)

In particular, it is generally accepted that historical research has to consider the contextual factors of the period under investigation (Previts & Bricker, 1994, p. 627), since:

... each age is a unique manifestation of the human spirit, with its own culture and values. For one age to understand another, there must be a recognition that the passage of time has profoundly altered both the conditions of life and the mentality of men and women – even perhaps human nature itself – and that an effort of the imagination must be made to relinquish present-day values and to see an earlier age from the inside. (Tosh, 1991, pp. 12-13)

In studies on accounting’s past, accounting is best understood in the contexts in which it operated, as a phenomenon local in both space and time (Carnegie & Napier, 1996, p. 7). In summary, accounting information provided by accounting systems is essentially a social product that only has meaning in the contexts in which is produced (Loft, 1986, p. 138).

Accounting history research perspectives

According to Carnegie & Napier (1996, p. 7) “accounting history is mature enough” allowing the division of researchers into “schools” according with the different modes of study and the distinct problematizations of the history of accounting. Thus,

Labels such as “traditionalist”, “antiquarian”, “post-modernist”, “Foucauldian”, “critical historian”, “Marxist” are pinned to those identified as members of different groups or even embraced with pride. (Carnegie & Napier, 1996, p. 7)

These different branches of research present some problems of classification (Fleischman & Radcliffe, 2003, 2005; Oldroyd, 1999, p. 87), and while some refer to “alternative” accounting research (Broadbent & Guthrie, 1992), others refer to “new accounting history” (Boyns & Edwards, 2000; Carmona, Ezzamel, & Gutiérrez, 2004;

Funnell, 1996, 1998, 2001; Johnson, 1986; Miller *et al.*, 1991; Napier, 2001; Stewart, 1992), and certain others to “critical” or “radical” accounting history (Chua, 1986; Fleischman, Kalbers, & Parker, 1996a; Fleischman, Mills, & Tyson, 1996b; Fleischman & Radcliffe, 2003; Fleischman & Tyson, 1997, 2003; Laughlin, 1999; Merino & Mayper, 1993), in contrast with the “traditional” accounting history. Nonetheless, the classifications can be generally summarized through the distinction between “new” and “traditional” accounting history.

The traditional accounting history perspective was evidenced in the report of the Committee on Accounting History of the American Accounting Association (1970), and underpinned the discussion found in a number of works, including Goldberg (1974), Johnson (1975), Parker ([1981] 1984) and Yamey (1981). Under this perspective accounting is essentially influenced by economic factors alone while accounting history is closely related with economic history. The traditional view also adopts an evolutionary description of the general history of accounting, with a particular emphasis on the evolution of DEB (Hopwood, 1981). Littleton (1933) also adopted this traditional perspective of accounting history. According to Carnegie and Napier (1996, p. 12; see also Johnson, 1986, p. 68), Littleton exerted a strong influence on subsequent accounting historians and can almost symbolize the caricature of the “traditional historian”, whose concern is with the mechanical, procedural and technical aspects of accounting. As pointed out by Carnegie and Napier (1996, p. 15):

Many of the leading traditional accounting historians came from a background in which the dominant role of accounting was viewed as being (either in actuality or in potentiality) a technology of economic decision making. (...) Although aware of the importance of context and environment, it was natural for the traditional accounting historians to judge historical accounting records in terms of their ability to provide information useful for decision making, as implied by their economic models. The decision-making approach to accounting has had deep influence... However, an over-reliance on the economic decision making model meant that alternative, noneconomic views of accounting tended to be eschewed if not positively denigrated.

A different perspective emerged in which the concern started to be with understanding the processes underlying accounting change, the social, economic and institutional factors that both facilitate and constrain it, and its consequences for organizational and social functioning (Hopwood, 1981, p. 295). The conception of accounting as a social and institutional practice has had reflections in accounting history research, through the recognition that there was “a real need for more historical studies of

the development of accounting” in order to obtain a fuller understanding of accounting change (Burchell *et al.*, 1980, p. 23). It also broadened the arenas in which accounting is understood and brought new actors to the analysis, such as the state and institutions, such as employer collectives, trade unions, the academy, the media, among others (Napier, 2006, p. 458). The new accounting history can be seen, according to Hopwood (1985, p. 365), as a reaction to:

... a tendency for technical histories of accounting to be written in isolation of their social, economic and institutional contexts. Accounting seemingly has been abstracted from its social domain with any of the understandings that are available tending to present a view of the autonomous and unproblematic development of the technical.

New accounting historians are not broadly receptive to the traditional approach of explaining specific modes of accounting by reference to economic rationales exclusively (Carnegie & Napier, 1996, p. 7). Although, as already noted, new accounting history is defined as a “loose assemblage of often quite disparate research questions and issues” (Miller *et al.*, 1991, p. 396), researchers within this perspective have in common several features (Carnegie & Napier, 1996, pp. 7-8). New accounting historians perceive accounting as a social and institutional practice that needs to be understood in the contexts in which it operates, as a phenomenon local in both space and time. New accounting historians see accounting more as a cultural phenomenon than simply as a technical practice, and are “more likely to see accounting as an instrument of power and domination than as a value-free body of ideas and techniques for putting into effect and monitoring contracts freely entered into between equals” (Carnegie & Napier, 1996, p. 8; see also Funnell, 2001; Hopwood, 1987, p. 213). New accounting historians also reject the conception of accounting history as a narrative of progress, avoiding the notions of “progress”, “evolution” and “origins” in their analysis. Together with the alternative methodologies and theoretical perspectives adopted, the new accounting history provides a positive encouragement for studying different periods of time, locations, entities, industries, activities, individuals and ideas in which accounting was implicated (Carnegie & Napier, 1996, p. 15).

Within the interpretative and critical accounting research tendency, new accounting historians make use of a number of different theoretical approaches borrowed from other disciplines to provide a range of theoretical perspectives and methodological approaches for accounting history research analysis (Laughlin, 1999, p. 75; Napier, 2006). The

diversity of approaches reflects the origins of accounting historians that have come from, and drawn upon, a variety of disciplines including anthropology, economics, history of science, organization theory, and sociology (Miller *et al.*, 1991, p. 396). The theoretical approaches used are diversified and they include critical sociology of the professions¹³, sociology of professions¹⁴, institutional theory¹⁵, understanding accounting in its social and organizational context¹⁶, Marxism/labour process¹⁷, Weber concepts¹⁸, Foucault concepts of archaeology, genealogy, power/knowledge, disciplinary power and governmentality¹⁹, Giddens concepts of time/space ordering and dynamics of modernity²⁰, social constructivism²¹, critical theory of the Frankfurt School²², Latour concepts and critical theory of modernism²³, gender theory²⁴, and political economy of accounting²⁵, among other perspectives. Notwithstanding the significant diversity of theoretical perspectives, when analysing the paradigms used in accounting history research usually three predominant paradigms are identified: Neoclassicism, Foucauldianism and Marxist/Labor Process (Cooper & Puxty, 1996; Fleischman & Radcliffe, 2003, 2005; Fleischman *et al.*, 1996a,b; Fleischman & Tyson, 1997, 2003; Napier, 2006).

As pointed out by Napier (2006, p. 445), the diverse collection of methodological approaches that constitutes the new accounting history and which addresses a wide range of problems has made possible the posing of new questions about the past of accounting.

¹³ See, among others, Carnegie & Edwards (2001), Chua & Poullaos (1998, 2002), Larsson (2005), Preston, Cooper, Scarbrough, & Chilton (1995), Sikka & Willmott (1995), Simmons & Neu (1997), and Walker (1995, 2004a).

¹⁴ See, among others, Carpenter & Dirsmith (1993), Chua & Poullaos (1993), Kirkham & Loft (1993), McKinstry (1997), and Mills & Young (1999).

¹⁵ See, among others, Bealing *et al.* (1996), Carpenter & Dirsmith (1993), Carpenter & Feroz (2001), Covaleski & Dirsmith (1995), and Takatera & Sawabe (2000).

¹⁶ See, among others, Bhimani (1993), Bougen, Ogden, & Outram (1990), Maltby (1997), Miller & O'Leary (1990), Power (1992), and Walker (1998).

¹⁷ See, among others, Armstrong (1895, 1987), Bryer (1993, 2000a, 2000b, 2005), Cooper & Taylor (2000), Neimark & Tinker (1986), and Oakes & Covaleski (1994).

¹⁸ See, among others, Bryer (2005), Chua & Poullaos (1998), and Colignon & Covaleski (1991).

¹⁹ See, among others, Boland (1987), Burchell *et al.* (1985), Burrell (1987), Carmona, Ezzamel, & Gutiérrez (1997), Carmona, Ezzamel, & Gutiérrez (2002), Hooper & Kearins (1997), Hoskin & Macve (1986, 1988), Jeacle & Walsh (2002), Loft (1986), Miller (1986, 1990, 1991), Miller & Napier (1993), Miller & O'Leary (1987), Neu (2000), and Radcliffe (1998).

²⁰ See, among others, Carmona *et al.* (2002) and Jones & Dugdale (2002).

²¹ See, among others, Davis, Menon, & Morgan (1982), Suzuki (2003), and Takatera & Sawabe (2000).

²² See, among others, Gallhofer & Haslam (1991), Moore (1991).

²³ See, among others, Jeacle (2003), Miller (1990, 1991), Quattrone (2004), and Robson (1991, 1994).

²⁴ See, among others, Kirkham (1992) and Kirkham & Loft (1993).

²⁵ See, among others, Arnold & Ammond (1994); Tinker & Neimark (1987), Toms (2002), and Uddin & Hopper (2001).

The understanding of what counts as accounting has broadened, a greater awareness of how accounting is intertwined in the social has emerged, voices from below have been allowed to speak, while accounting has been seen to be implicated in wider arenas, with networks of practices, principles and people constituting varieties of “accounting constellations”. (Napier, 2006, p. 445)

However, more important than the potentially divisive classification of present day accounting historians into the “traditional” or “new” categories is the enhanced use by accounting historians of “a range of methodological approaches appropriate to the issues being examined” (Napier, 2006, p. 469). As pointed out by Baker and Bettner (1997, p. 305), “it would be foolish to maintain that there exists one universal theory that effectively explains and predicts all of the social, cultural, and ethical differences observed in our natural and fabricated worlds”. Indeed, “new” accounting historians are required to use the works of “traditional” accounting historians in further developing the literature, rather than to ignore such contributions and, therefore, reinvent the field as a result.

Summary

The four sections of this chapter have positioned this historical case study within the existing literature on the diffusion of accounting and the literature on the adoption and use of DEB in public administration and have identified the underlying conception of accounting adopted while positioned the investigation within the realm of new accounting history research.

As explained, this study adopts a CIAH approach and views accounting as a technology which is transferred from one jurisdiction to another. As illuminated in section 2, accounting history research has primarily focused attention on investigations in the private sector while lately there has been an increased interest in historical studies of public sector accounting, especially in Britain. However, there is a lack of in-depth studies on the adoption of DEB within central government in Europe which highlights the contrasts, differences, influences and possible interdependencies between similar accounting reforms since most of the studies on the adoption of DEB within central government are on a country-by-country basis.

Although the prevailing conception of accounting for the study of accounting diffusion and the adoption and use of DEB within public administration is the consideration of accounting as a mere technical practice, as shown in section 2, more

recent accounting literature adopts a conception of accounting as a social and institutional practice, as further developed in section 3. This conception of accounting had also consequences in accounting history research with the development of the so called “new” accounting history research. Accounting history research has broadened from the consideration of the context in which accounting practices are situated and by the adoption of diversified theoretical perspectives and methodological approaches, drawn from different disciplines which provide rich insights into the dimensions of accounting and its past.

The study of the adoption and use of DEB at the Portuguese Royal Treasury is intended to be positioned in the European context of the diffusion of accounting technology. In addition, this study contributes to the literature on public sector accounting by analysing historical accounting practices at a central government organization. This analysis will be made in the context of similar reforms in other European countries from the sixteenth century. Adopting the conception of accounting as a social and institutional practice, this interpretative historical study applies institutional theory as a theoretical construct, within the context of CIAH, to highlight the institutional pressures, affecting the accounting developments in Portugal during the period from 1750 to 1777 and within the Portuguese Empire. In the next two chapters the key theoretical perspective adopted and the methodological foundations employed are respectively presented and, in the process, their suitability and usefulness for this study are justified.

Chapter 3: Literature Review – Institutional Theory

Recognising the roles of a diversity of actors in accounting's past, such as the State, professional associations, and the academy (Burchell *et al.*, 1980, p. 23; Walker, 2004b, p. 9) and rendering visible the underlying contextual factors (Burchell *et al.*, 1985; Hopwood, 1981, 1983, 1987; Previts & Bricker, 1994) can be enhanced through the use of an appropriate interpretative perspective, as discussed in Chapter 2. As explained in Chapter 1 this study on the adoption and use of DEB at the Portuguese Royal Treasury applies Institutional Theory, specifically “New Institutionalism”, also designated as “Neoinstitutional Theory in Sociology”, as developed by Powell and DiMaggio (1991; see also DiMaggio & Powell, 1983; Meyer & Rowan, [1977]), as the theoretical framework to assist in explaining accounting developments in Portugal around the beginning of the second half of the eighteenth century by identifying firstly, the institutional pressures that affected the nature and applicability of accounting practices adopted within that central government organization and, secondly, their transfer to the colonies. Accordingly, it is important to comprehensively address the underpinnings of institutional theory and its use within accounting research, in general, and accounting history research, in particular.

This chapter comprises two main sections. The first section encompasses a literature review of the main concepts of institutional theory, in particular the three forms of institutional isomorphism, namely coercive, mimetic and normative isomorphic pressures. The second section provides an overview of the use of the theory in accounting research, with a more detailed overview of the use made in accounting history research. This review is fundamental to enhancing an understanding of the potentialities of institutional theory in accounting history research and, furthermore, it is important to establish the suitability of the theory in interpreting the findings of this study. This chapter provides the theoretical basis for the following chapters and brings to light the interpretative potential of institutional theory at the time of analysis of the primary and secondary sources available in this study.

Institutional theory

Institutionalism has different meanings in different disciplines²⁶; however, according to DiMaggio and Powell (1991, p. 1) the term itself “purportedly represents a distinctive approach to the study of social, economic and political phenomena”. In organizational theory and sociology, institutionalism “comprises a rejection of rational-actor models, an interest in institutions as independent variables, [and] a turn toward cognitive and cultural explanations” (DiMaggio & Powell, 1991, pp. 8-9). Accordingly, one of the main contributions of institutional theory is to provide “explanations of phenomena that do not reflect the behaviour of rational actors driven by clearly perceived interests”, which is accomplished by focusing instead on the taken-for-granted nature of organizational forms and practices (DiMaggio, 1988, p. 7). Institutional theorists have contributed significantly to a better understanding of the relationship between organizational structures and practices and the wider social environment in which organizations are located (Beckert, 1999, p. 777). Underlying most research on institutional theory “is an assumption that intra-organisational structures and procedures, including accounting, are largely shaped by external factors rather than cost-minimising objectives” (Moll *et al.*, 2006). A general overview of the key concepts of institutional theory is presented in the next subsection, followed by a more detailed analysis of the three forms of institutional isomorphism. These two subsections will provide, on one hand, a general comprehension of institutional theory and its interpretative potentialities in the analyses of organizational change and, on the other hand, a detailed comprehension of the notion of isomorphism and the different mechanisms through which isomorphic pressures can be exerted. In general this section provides the basis for the analysis of the use of institutional theory within accounting research made in the next section and also provides an assessment of the usefulness of institutional arguments within this study that are analysed in more detail in the next chapter on methodology.

²⁶ As already mentioned, this work draws upon New Institutionalism in social science and, in particular, a branch which has made a mark on organizational theory which is closely associated with sociology (DiMaggio & Powell, 1991, p. 1; Tolbert & Zucker, 2003), also designated as “New Institutional Sociology” or “Neoinstitutional Theory in Sociology” (Scott, 2001). For a general discussion of institutional theories of organization, see Zucker (1987). For a discussion of institutional theory within the field of political science see, for instance, Hall and Taylor (1996), Kato (1996) and March and Olsen (1984, 1989, 2005). For a discussion on the use of institutional theory in economics refer to, for instance, North (1981) and Williamson (1981). Furthermore, see Scott (1987, 1995, 2001) for a discussion of the different forms of what has been referred to as institutional theory. For a discussion of the various organizational and sociological theories, including institutional theory, see Covaleski *et al.* (1996). For an overview of institutional theory and its relevance to accounting research, refer to Carruthers (1995) and Moll, Burns, and Major (2006). For an overview of institutional theories in management accounting refer to, among others, Ribeiro and Scapens (2006) and Scapens (2006).

Introduction to institutional theory

Institutional theorists began in the 1970s to pay more attention to the importance of symbolic aspects of organizations, such as social and cultural aspects, and their environments. The cultural elements, that include values, norms, rules, beliefs, and taken-for-granted assumptions, “provide blueprints for organizing by specifying the forms and procedures an organization of a particular type should adopt if it is to be seen as a member-in-good-standing of its class” (Barley & Tolbert, 1997, pp. 93-94). Therefore, institutionalism considers that history plays an important role in the institutional analysis of a process or organization, and defends a holistic and contextual analysis of the events under research (see Berger & Luckmann, 1967; Covalleski *et al.*, 1996; Galaskiewicz, 1991; Gupta, Dirsmith & Fogarty, 1994; Perrow, 1986; Powell, 1988; Scott, 1987; Selznick, 1957). Perrow (1986, pp. 157-158) claimed that “for institutional analysis, the injunction is to analyse the whole organization. To see it as a whole is to do justice to its ‘organic’ character. Specific processes are, of course, analyzed in detail, but it is the nesting of these processes into the whole that gives them meaning”. Therefore, in order to understand specific practices or processes within the organization it is necessary to take into consideration the entire organization, its history and the context in which it is integrated.

One aspect that differentiates the institutional approach from the theories of organizational environments (like the contingency theory or resource dependence that rather place more importance on the technical requirements, resource streams, information flows and influence relations) is the importance attributed to cultural elements, such as symbols, cognitive systems, normative beliefs, and the source of such elements. Here, according to Scott (1987), the cultural or institutional elements were put in contrast to technical elements. This was a consequence of the differentiation between technical environments and institutional environments. Scott and Meyer (1992, p. 140; see also Scott, 1992) defined technical environments as “those within which a product or service is exchanged in a market such that organizations are rewarded for effective and efficient control of the work process”. In specifying institutional environments, Scott and Meyer (1992, p. 140), stated that these “are characterized by the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy...”. Further, according to Tolbert (1985, p. 1) institutional environments include “the understandings and expectations of appropriate organizational form and

behaviour that are shared by members of society”. In institutional environments organizations are rewarded²⁷ not for the quantity and quality of the output, but for establishing correct structures and processes (Scott, 1991, p. 167; Scott & Meyer, 1992). Nonetheless, Powell (1991, p. 186) called attention for the perspective that institutional and technical factors are dimensions along which environments vary, and both place pressures on organizations “to which they must be responsive in order to survive”.

Therefore, institutional theorists consider that no organization is a technical system alone. Rather, organizations exist in an institutional environment that defines and delimits social reality, while there are multiple institutional environments which vary across time and space (Scott, 1987, p. 508; Scott & Meyer, 1991, p. 111). The activities of a diverse set of organizations and the homogenization of these organizations results in the creation of an organizational field. DiMaggio and Powell (1983, p. 148) defined organizational field as comprising “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and the other organizations that produce similar services or products”²⁸. Thus, across time and space, organizations of like genre “provide a context in which individual efforts to deal rationally with uncertainty and constraint often lead, in the aggregate, to homogeneity in structure, culture, and output” (DiMaggio & Powell, 1983, p. 148).

According to Oliver (1997, p. 700), institutional theory views organizations as operating “within a social framework of norms, values, and taken-for-granted assumptions about what constitutes appropriate or acceptable economic behaviour”. Hence, under institutional theory attention is not focussed on environmental elements such as the market, the location of resources and customers, and the number and power of competitors. Instead, an emphasis is placed upon the role and impacts of other types of actors, particularly the State and the professions (Scott, 1987, p. 499; see also DiMaggio, 1991; Greenwood & Hinings, 1996). These actors, as the “great rationalizers of the second half

²⁷ Compliance with institutional norms and requirements can be related with different rewards that may result from organizational conformity, as enunciated by Oliver (1991, p. 150): increased prestige, stability, legitimacy, social support, internal and external commitment, access to resources, attraction of personnel, fit into administrative categories, acceptance in professions and invulnerability to questioning.

²⁸ There are several levels of analysis at which institutional theories can be applied. Scott (2001, p. 83) identified six levels: world system, society, organizational field, organizational population, organization, and organization subsystem. The level of analysis is very important since some concepts may work well at some levels and present some limitations or difficulties in explaining at other levels of analysis (see, for example, Ribeiro & Scapens, 2006).

of the twentieth century” according to DiMaggio and Powell (1983, p. 147), are influential in shaping organizational life, both directly by imposing specific constraints and particular requirements and also indirectly by creating and promulgating new rational myths. In the particular case of the State there is a recognition by institutional theorists that the structure of the State itself and its relation to, and penetration of, society will influence organizational structures and institutional forms and, as a consequence, there is a call to bring “the State back in as an important institutional actor” (Scott, 1987, p. 509). According to various institutional theorists (DiMaggio & Powell, 1983; Gupta *et al.*, 1994; Meyer & Rowan, [1977] 1991; Scott, 1998) government and professional settings provide contexts where institutional forces tend to be the most powerful. Nonetheless, it is argued that State actors are more likely to employ coercion in pursuing their ends and, furthermore, are more likely to attempt to create a formal organization network to carry out their purposes. On the other hand, “professions are expected to rely primarily on normative or mimetic influences and to attempt to create cultural forms consistent with their own aims and beliefs” (Scott, 1987, p. 509).

The urge for legitimacy is an underlying theme in institutional development. A threshold is reached, as innovation spreads, where the adoption of particular practices provides legitimacy rather than necessarily improves efficiency or performance (Meyer & Rowan, [1977] 1991; Moll *et al.*, 2006; Orrù, Biggart, & Hamilton, 1991). Suchman (1995, p. 574) defined legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions”. Institutional theorists argue that legitimacy can be achieved by conforming to current conventional practice and external pressures (Chalmers & Godfrey, 2004, p. 97; Scott, 1987). New practices, according to Selznick (1957, p. 17), become “infused with value beyond the technical requirements of the task at hand”.

The main focus of the institutional framework concerns the organization’s relationship with the institutional environment, with the effects of social expectations on an organization, and with the incorporation of these expectations in organizational characteristics (Dacin, 1997, p. 48)²⁹. As claimed by Pfeffer and Salancik (1978, p. 3),

²⁹ The institutionalized expectations can be expressed in a broad class of elements such as rules, blueprints for action, standard operating procedures, impersonal prescriptions, rationalizing techniques, formalization and also documentation (Gupta *et al.*, 1994, p. 268; see also Meyer & Rowan, [1977] 1991; Scott, 1987).

what happens in an organization is a reflection of the environment and particular constraints from that same environment and not only a function of the organization, and its structure, leadership, procedures, or goals. The question is not to determine whether institutions are efficient or not, independent of whether they are profit oriented or not, “but to develop robust explanations of the ways in which institutions incorporate historical experiences into their rules and organizing logics” (DiMaggio & Powell, 1991, p. 33). Nonetheless, and as pointed out by Dacin (1997, p. 46), institutionalists recognize “that institutional arguments alone are insufficient to fully explain organizational behaviour and are perhaps better positioned as complementary to exchange and efficiency perspectives”. It is necessary to consider the possibility that institutional pressures may operate simultaneously with other forces.³⁰ That is, although the “theoretical distinctiveness” of institutional arguments is “a focus on the role of cultural understandings” (Tolbert & Zucker, 2003, p. 180), it does not mean that other mechanisms are excluded (Scott, 2001, p. 132). It is necessary to consider the possibility that institutional pressures may operate simultaneously with other forces, as has been demonstrated, for example, by accounting research that has combined institutional theory and resource dependency theory (Abernethy & Chua, 1996; Carpenter & Feroz, 2001) and combined economic and institutional perspectives (Granlund & Lukka, 1998).

Jepperson (1991, p. 149) believed that “institutions are socially constructed, routine-reproduced (*ceteris paribus*), program or rule systems. They operate as relative fixtures of constraining environments and are accompanied by taken-for-granted accounts”. Institutionalization more than an outcome, as was considered at the beginning by pioneering institutional theorists, is “the process through which components of formal structure become widely accepted, as both appropriate and necessary, and serve to legitimate organizations” (Tolbert & Zucker, 1983, p. 25; see also, Abernethy & Chua, 1996; Carpenter & Dirsmith, 1993; Covalleski & Dirsmith, 1988a; DiMaggio, 1988; Meyer & Rowan, [1977] 1991; Scott, 1987; Zucker, 1991). According to Jepperson (1991, p. 150), there are three carriers of institutionalization, namely formal organization, regimes and culture, of which the latter two are primary types of informally organized

³⁰ For the combination of contingency theory with institutional theory see Gupta *et al.*, 1994.

institutionalization.³¹ By considering institutionalization as a political process, which “reflects the relative power of organized interests and the actors who mobilize around them”, what becomes institutionalized will depend on the power of the organizational actors “who support, oppose, or otherwise strive to influence it” (DiMaggio, 1988, p. 13) and their translation and use of societal expectations (Covaleski *et al.*, 1993, p. 67; Dillard *et al.*, 2004, p. 510; see also Clegg, 1989). It was only during the last decade that institutional researchers started to give attention to deinstitutionalization processes through which institutions weaken and disappear, that is, institutional change “that witness[es] the deinstitutionalization of existing forms and their replacement by new arrangements, which, in time, undergo institutionalization” (Scott, 2001, pp. 181-184; see also, Lawrence, Winn, & Jennings, 2001; Oliver, 1992). While DiMaggio and Powell (1983) identified coercive, mimetic and normative pressures in the institutionalization process, Oliver (1992) identified political, functional and social pressures that may precipitate deinstitutionalization. Regardless the consideration of the process of institutionalization and deinstitutionalization by institutional theorists, Tolbert and Zucker (2003) argued that there are still important questions neglected within institutional research, such about the determinants of variations in levels of institutionalization. It is necessary, according to Tolbert and Zucker (2003, p. 186), to clarify the conditions and processes that lead structures to become institutionalized, thus leading to a number of questions to be answered, such as the following: who acts to cause change, and its diffusion to multiple organizations, and why.

Institutional theorists support the view that formal organizational structures usually “arise in highly institutionalized contexts” (Meyer & Rowan, [1977] 1991, p. 41). This view is important since it helps to understand why an organization sometimes incorporates in its formal structure some practices or procedures without considering or neglecting the effect on efficiency or work outcomes. Institutional theorists are sceptical about the exclusive use of technical reasons to justify the adoption and maintenance of practices or procedures. It is considered that technical explanations are used to hide significant political and cultural factors (Carruthers, 1995, p. 316 and others, such as Meyer & Rowan, [1977] 1991). Meyer and Rowan ([1977] 1991, p. 44) argued that:

³¹ Jepperson (1991, p. 150) used the term *regimes* to speak about “institutionalization in some central authority system – that is, in explicitly codified rules and sanctions – without primary embodiment in formal organizational apparatus”.

Many of the positions, policies, programs, and procedures of modern organizations are enforced by public opinion, by the views of important constituents, by knowledge legitimated through the educational system, by social prestige, by the laws, and by the definitions of negligence and prudence used by the courts. Such elements of formal structure are manifestations of powerful institutional rules which function as highly rationalized myths that are binding on particular organizations. (...) They must, therefore, be taken for granted as legitimate, apart from evaluations of their impact on work outcomes.

Accordingly, the explanation for the incorporation of different elements in the formal structure of an organization is that an organization which specifically incorporates practices and procedures in its formal structure that are institutionalized in society effectively increases its legitimacy and its survival prospects (DiMaggio & Powell, 1983; Galaskiewicz & Wasserman, 1989, p. 455; Meyer & Rowan, [1977] 1991, p. 50; Scott, 1987, 2001; Tolbert & Zucker, 2003, p. 178; Zucker, 1987, p. 443). Accounting practices, personnel selection, employee appraisal among other technical procedures, “become taken-for-granted means to accomplish organizational ends”, and as institutionalized techniques they “establish an organization as appropriate, rational, and modern. Their use displays responsibility and avoids claims of negligence” (Meyer & Rowan, [1977] 1991, p. 45). In order for organizations to survive they need more than just material resources and technical information, “they also need social acceptability and credibility” (Scott, 2001, p. 58).

Notwithstanding, possible conflicts between institutionalized rules and efficiency can be solved by the organization through a certain gap, known as “decoupling”, between its formal structure and the work activities (Meyer & Rowan, [1977] 1991). Decoupling refers to the situation in which an actual organizational practice is different from the formal organizational structure or practice; thereby meaning that “the [adopted] practice is not integrated into the organization’s managerial and operational processes (Dillard *et al.*, 2004, p. 509, and others, such as Carmona & Macías, 2001; Geiger & Ittner, 1996). The advantage of decoupling is that possible inconsistencies and anomalies of technical activities are effectively hidden from public view and it is assumed that formal structure is really working as set or predetermined. Further, decoupling may happen “when there are high symbolic gains from the adoption of the practice but equally high costs associated with its full implementation (Scott, 2001, p. 173). In addition, decoupling may still occur “due to conflicts with the efficient running of everyday operations” (Ribeiro & Scapens, 2006, p. 99). Recent studies have found that public sector accounting systems implemented to satisfy government mandates are rarely used for internal decision-making and control

(see, for example, Covaleski & Dirsmith, 1991; Geiger & Ittner, 1996; ter Bogt & van Helden, 2000). These studies, as stated by Geiger and Ittner (1996, p. 550), “conclude that the primary use of elaborate, mandated management accounting systems is legitimating the organization’s activities to external constituencies by creating the impression that the agency is well-controlled and demonstrating that resources are being used rationally”.

Initially, institutional theorists concentrated on the processes of legitimization and social reproduction while later, as the literature developed, they focussed more on issues of change, power³² and efficiency (see Scott, 2001; see also Beckert, 1999; DiMaggio, 1988, DiMaggio & Powell, 1991; Oliver, 1991, and Powell, 1991) and such issues are frequently emphasized by accounting research that is informed by institutional theory (see, for example, Abernethy & Chua, 1996; Collier, 2001; Covaleski *et al.*, 1993; Soin, Seal, & Cullen, 2002). Attention was then devoted to the “ways in which both individuals and organizations innovate, act strategically, and contribute to institutional change” (Scott, 2001, p. 75). In particular, attention was turned to the tendency to deemphasize human agency (Beckert, 1999, p. 778; Lawrence *et al.*, 2001; Oliver, 1991; Scott, 2001, p. 193). Although institutional theory rejects the efficiency assumptions of rational-choice theories, it takes into consideration efficiency, legitimacy and power within the analysis in order to obtain a better understanding of institutional change (Beckert, 1999, p. 792).

DiMaggio and Powell (1991, p. 27) claimed that the incorporation of power into institutional arguments starts with two observations: (1) actors in key institutions realize considerable gains from the maintenance of those institutions; (2) unstable organizational fields and ill formed established practices mean that successful collective action often depends upon defining and elaborating widely acceptable rules (p. 27). According to DiMaggio and Powell (1983, p. 157) and others³³, attention should be focused on two forms of power in order to overcome the limitation of institutional theory to explain systematically the role of power and self-interest behaviour in the development of formal organizational practices (in which accounting is included). One form is the power to set premises, to define norms and standards which shape and channel behaviour. Another form is the power to define models of organizational structure and policy which can prevail for

³² Nonetheless, according to Collier (2001, p. 466), “power is implicit, rather than explicit in much of the institutional literature”.

³³ See, for example, Covaleski & Dirsmith (1995), DiMaggio (1988), and Oliver (1991).

years without being questioned. Power, therefore, is an important concept in attributing an acceptable definition to the term “institution”. Thus, Stinchcombe (1968, p. 107) provided a definition of institution as “a structure in which powerful people are committed to some value and interest”³⁴. Similarly, recognising the roles played by powerful figures, Powell (1991, p. 191) pointed out:

[E]lite intervention may play a critical role in institutional formation. And once established and in place, practices and programs are supported and promulgated by those organizations that benefit from prevailing conventions. In this way, elites may be both architects and products of the rules and expectations they have helped devise.

The observation that organizations are integrated in an institutional environment, are structured by phenomena in their own environment, and structurally reflect a constructed reality lead to the focus of institutional research on the tendency for organizations to become isomorphic within institutional environments (Berger & Luckmann, 1967; Meyer & Rowan, [1977] 1991). Isomorphism is, accordingly, defined as “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio & Powell, 1983, p. 149), that is, it refers to the adoption by an organization of an institutional practice (Carpenter & Feroz, 2001, p. 566; Dillard *et al.*, 2004, p. 509).

Two key types of isomorphism have been identified, namely competitive and institutional (Fennell, 1980; Meyer, 1983a). Competitive isomorphism relates essentially with free and open market competition scenarios. In addition, competitive isomorphism is not considered to be suitable for analysing public sector organizations (Carpenter & Feroz, 2001, p. 566; DiMaggio & Powell, 1983, pp. 149-150; Frumkin & Galaskiewicz, 2004), especially those which operated in contexts not touched by the so-called “New Public Sector Management” which has emerged in the past 20 years or thereabouts. Alternatively, institutional isomorphism relates essentially to the fact that other organizations are the “major factors that organisations must take into account” (Aldrich, 1979, p. 265; also see DiMaggio & Powell, 1983, p. 150). Accordingly, institutional isomorphism is intended to

³⁴ For a definition of institution refer to Scott (1995; 2001). Institutions are characterised by Scott (1995, p. 33; 2001, pp. 48-50) as being “composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and recourses, provide stability to social life”, which are transmitted by various types of carriers and operate at multiple levels of jurisdiction, from the world system to more localized interpersonal relationships.

be a useful tool for understanding the politics, ceremony and other features of organizational life, especially in the public sector³⁵.

Forms of institutional isomorphism

Placing their analysis at the organizational “field” or sector, DiMaggio and Powell (1983, p. 150) identified three key forms³⁶ of institutional isomorphism. These are known as coercive isomorphism, mimetic isomorphism and normative isomorphism. The authors acknowledged that all three forms intermingle in empirical settings, but emphasised that they tend to derive from different conditions and provide different outcomes (1983, p. 150). According to Mizruchi and Fein (1999, p. 657), the three forms of institutional isomorphism “are rooted in different conceptions of how behaviour diffuses” and, in effect, they tend to “represent three broad theoretical orientations”. These three mechanisms that lead to institutionalization have been extended by Powell (1991, p. 191) through the examination of the “avenues of institutional reproduction”, and by Scott (1995, p. 34; 2001, p. 51) through the discussion of the “three pillars of institutions”. An alternative typology has been proposed by Lawrence *et al.* (2001), by exploring the temporal dimensions of these dynamics. Lawrence *et al.* (2001) identified four mechanisms of institutionalization: influence, force, discipline, and domination. The authors argue that each form of power has specific implications for the pace of institutionalization and for the stability of the effected institution.³⁷

³⁵ Frumkin and Galaskiewicz (2004) examined whether public sector organizations are more or less susceptible to institutional pressures when compared with non-profit or business sectors organizations. The authors concluded that governmental organizations are more vulnerable to all types of institutional forces than other organizations, while institutional pressures are more sporadic on for-profits and nonprofits organizations.

³⁶ DiMaggio and Powell (1983) made the distinction between types of isomorphism and the mechanisms by which isomorphism occurs. According to Mizruchi and Fein (1999, p. 659) “given this distinction, we should refer to coercive, mimetic, and normative isomorphism as processes or mechanisms, rather than types or forms of isomorphism”. Nonetheless, DiMaggio and Powell subsequently referred to the three processes as types, and future works on institutional theory began to use those terms (types or forms) when speaking about the three processes or mechanisms of isomorphism. This study uses the term “forms” while acknowledging the importance of the processes or mechanisms through which isomorphism occurs.

³⁷ For this study the original forms of isomorphism, as developed by DiMaggio & Powell (1983), are the pressures addressed. This study concerns the adoption and use of DEB at the Royal Treasury, during the period from 1761 to 1777, and, more broadly, the transfer of accounting technology to country and Empire. However, the study is not concerned with the entire lifespan of the Royal Treasury until 1832. Therefore, the complete process and pace of institutionalization of this technique throughout the Portuguese public administration until the possible moment when deinstitutionalization of the accounting practice within the field may have occurred is not under investigation.

Coercive isomorphism results from formal and informal pressures exerted on organizations by other organizations upon which they are dependent as well as cultural expectations in the society in which organizations function (DiMaggio & Powell, 1983, p. 150). Such political and cultural influences may be experienced as force, as persuasion or as invitations to join a cartel or other collude. Coercive isomorphism stems from political influence and the question of legitimacy. Formal and informal pressures exerted by certain organizations upon a dependent organization along with cultural expectations in the society where that specific organization operates result in coercive isomorphism. Some pressures may be attributed directly to government mandate, such as in the case of some accounting practices and procedures³⁸ (see, for example, Carmona & Macías, 2001; Carpenter & Feroz 2001; Carruthers, 1995; Covaleski & Dirsmith 1988a; Núñez, 2002). Carpenter and Feroz (2001, p. 573) considered the resource dependency perspective as a particular form of coercive isomorphism that can influence a government's choice of accounting practices (see also Mizruchi & Fein, 1999; Pfeffer & Salancik, 1978). Nonetheless, adherence to coercive pressures “may be largely ceremonial [but this] does not mean that they are inconsequential” (DiMaggio & Powell, 1983, p. 150).

Mimetic isomorphism does not derive from coercive authority but emerges under uncertainty as a powerful force that encourages imitation. As stated by DiMaggio and Powell (1983, p. 151), “when organizational technologies are poorly understood (March and Olsen, 1976), when goals are ambiguous, or when the environment creates symbolic uncertainty, organizations may model themselves on other organizations”. Organizations will model themselves on similar organizations in their field whose practices are considered to be legitimate or successful (Galaskiewicz & Wasserman, 1989; Tolbert & Zucker, 1983). Management techniques, such as accrual based financial reports and/or accrual budgeting within public sector management or, more generally, activity-based costing, are likely to spread through mimetic isomorphism, thus reducing the risk of potentially embarrassing questioning of organizational management procedures (Carruthers, 1995, p. 317; Christensen, 2003; Granlund & Lukka, 1998; Major & Hopper, 2004). While such techniques are commonly advocated, implemented and defended as legitimate organizational practices, the “actual efficiency” of these techniques within

³⁸ Budgeting has been identified by DiMaggio and Powell (1983) as one specific form of coercive isomorphism that government organizations very often require to adopt and practise for funding. Covaleski and Dirsmith (1988a) studied the budgeting process of a large university through the lens of institutional theory, for instance.

specific contexts does not need to be demonstrated, even where such advantages are asserted (Palmer, Jennings, & Zou, 1993, p. 104). However, this tendency for mimetic behaviour to arise should not overemphasize the degree of environmental determinism, since it can involve some strategic dimension when deciding who to copy and what to mimic and when to do so (Abernethy & Chua, 1996, p. 597).

The third source of institutional isomorphism is normative and stems primarily from professionalization where individuals of a similar calling assemble and become organised in order to establish, promote and practise a cognitive base and to legitimise their activities (DiMaggio & Powell, 1983, pp. 152-153). Normative isomorphism is derived from two key aspects of professionalization. Firstly, formal education and the legitimation in the cognitive base through discipline specialists within Universities and, secondly, through the growth and elaboration of professional networks that span organizations and across which new models and practices diffuse rapidly (DiMaggio & Powell, 1983, p. 152; see also Carmona & Macías, 2001; Carpenter & Feroz, 2001; Galaskiewicz & Wasserman, 1989; Granlund & Lukka, 1998). Such mechanisms, as claimed by DiMaggio and Powell (1983, p. 152), “create a pool of almost interchangeable individuals who occupy similar positions across a range of organizations and possess a similarity of orientation and disposition that may override variations in tradition and control that might otherwise shape organizational behaviour”.

Each form of isomorphism may occur in the absence of any empirical evidence that the underlying organizational reforms enhance organizational efficiency or performance. Nevertheless, what is important is for the underlying reforms to be perceived as legitimate. They tend to become prized for their similarity to those adopted previously within other organizations in designated fields (DiMaggio & Powell, 1983, p. 153). Furthermore, like organizations that have yet to emulate such reforms tend to be perceived as less legitimate than those that already apply the underlining practices. The work of DiMaggio and Powell (1983) suggests that institutional pressures on public institutions to adopt specific accounting practices may stem from the laws or other impositions by the State from whom those organizations are dependent, from accounting education or from uncertainty within the environment. Further, one important aspect is that these processes of isomorphism can operate with or without the conscious choice of the decision maker (Galaskiewicz & Wasserman, 1989, p. 455).

But isomorphism with the institutional environment does not result only from the connectedness with other organizations. As stated by Dacin (1997, p. 50), “isomorphism can result from pressures exerted by broader societal expectations as well as from organization-organization interdependencies” and, over time, the presence and effect of institutional pressures can fluctuate significantly. DiMaggio and Powell (1983) also drew attention to the fact that it may not always be possible to distinguish between each of the three forms of isomorphism that are in operation in a particular situation, and that two or more forms of isomorphism may operate at the same time, thus creating difficulties in determining which forms of institutional pressures are most influential or more influential in any particular investigation.

Institutional theory and accounting

The previous overview of institutional theory exposes the possible usefulness of the theoretical framework in rendering visible the contextual factors under investigation in accounting history research, since it emphasises the importance of symbolic aspects of organizations, such as social and cultural aspects, and their environment, in contrast to a focus on technical elements exclusively. Accordingly, institutional theory reveals itself useful to the study of accounting in the contexts in which it operates, and it “implies that the interests, objectives, and actions of those external to any given organization may also be critically important in understanding accounting choice” (Carpenter & Feroz, 1992, p. 620; see also Moll *et al.*, 2006). According to Collier (2001, p. 468; see also Scott, 1998), “accounting systems are one of the most important conventions connecting institutionally defined beliefs systems with technical activities”. Accounting techniques have the “capacity to become taken for granted organizational routines”, which is consistent with the emphasis of institutional theory on the “the symbolic and ritualistic properties of rational-formal systems of rules” (Power & Laughlin, 1996, pp. 459-460). As mentioned previously, accounting structures are myths which “describe the organisation as bounded and unified, as rational in technology, as well-controlled and as attaining clear purposes” (Meyer, 1983b, p. 235) and assist to legitimise an organization within its institutional environment.

The potentialities of institutional theory in the field of accounting research can be demonstrated through the increased number of accounting studies that have applied this theoretical lens to explain a range of accounting phenomena. In the following subsections an overview of the use of institutional theory in contemporary accounting research in general and in the particular case of accounting history research is provided.

Contemporary accounting research and institutional theory

Studies of contemporary accounting using institutional theory as a theoretical construct have been set in a number of different organizations belonging to different organizational fields. These include public sector and non-profit organizations³⁹, professional and regulatory organizations⁴⁰, for-profit organizations⁴¹, and also financial organizations (banks)⁴². The topics which have been studied to date cover an array of different areas of accounting research, such as: cost accounting, accrual accounting, accounting practices/change, accounting control system, accounting profession, management accounting practices/change, social and environmental reporting, financial reporting, voluntary derivative financial instrument disclosure, performance measurement, budgeting, auditing, funding, and financial analysis. Through these works it has been demonstrated by the researchers how institutional theory was useful in elucidating the use of accounting practices in organizations, in particular, and within society more generally. Institutional theory, by functioning as an analytical and explanatory tool and by taking into consideration the wider social environment and its influence in an organization's formal structure, has served to enrich research analysis in accounting. Within contemporary accounting research institutional theory has assisted in conceptualising the analysis, particularly by focusing on the dynamics of processes of accounting change and the key drivers of that change (see for example, Burns, 2000; Chung *et al.*, 2000; Fogarty & Rogers, 2005; Granlund & Lukka, 1998; Modell, 2003; Tsamenyi *et al.*, 2006).

³⁹ See, for example, Abernethy & Chua (1996), Ansari & Euske (1987), Berry, Capps, Cooper, Ferguson, & Hopper, & Lowe (1985), Brignall & Modell (2000), Broadbent, Jacobs, & Laughlin (2001), Christensen (2003), Collier (2001), Covalleski & Dirsmith (1988a), Covalleski *et al.* (1993), Geiger & Ittner (1996), Lapsley & Pallot (2000), Modell (2003), Rahaman, Lawrence, & Roper (2004), and Seal (1999).

⁴⁰ See, for example, Bealing (1994), Dirsmith, Heian, & Covalleski (1997), Fogarty (1996), Fogarty & Rogers (2005), Greenwood, Suddaby, & Hinings (2002), Gupta *et al.* (1994), Hines, McBride, Fearnley, & Brandt (2001), Mezas & Scarselletta (1994), and Rollins & Bremser (1997).

⁴¹ See, for example, Al-Twajry, Brierley, & Gwilliam (2003), Burns (2000), Chalmers & Godfrey (2004), Chung, Gibbons, & Schoch (2000), Granlund & Lukka (1998), Mezas (1990), and Tsamenyi, Cullen, & González (2006).

⁴² See, for example, Hussain & Hoque (2002), and Soin *et al.* (2002).

Through the lens of the institutional perspective these studies have collectively demonstrated that accounting practices represent means through which organizations can accomplish external legitimacy and document institutional compliance with external requirements (see, for example, Ansari & Euske, 1987; Chalmers & Godfrey, 2004; Covalleski & Dirsmith, 1988a; Fogarty, 1996; Geiger & Ittner, 1996; Gupta *et al.*, 1994; Rahaman *et al.*, 2004; Rollins & Bremser, 1997). Particularly insightful for accounting research are the concepts of legitimacy, institutional isomorphism, decoupling, and the notions of power and self-interest involved in the process of institutionalization of accounting practices. These have been the main concepts used to date by contemporary accounting researchers and which have assisted in highlighting the institutional pressures that are exerted through the actions of different actors in the process of institutionalization of accounting practices (see, for example, Burns, 2000; Christensen, 2003; Covalleski & Dirsmith, 1988a; Covalleski *et al.*, 1993; Dirsmith *et al.*, 1997; Granlund & Lukka, 1998; Hussain & Hoque, 2002; Lapsley & Pallot, 2000).

Historical accounting research and institutional theory

Although institutional theory is an influential research framework in accounting research, as the previous analysis has shown, it still remains largely underused in accounting history research (Carmona & Macías, 2001, p. 142). Notwithstanding, during recent years institutional theory has been adopted in a number of historical studies in accounting. Such studies have been set in a number of countries including the United States⁴³, Spain⁴⁴, the United Kingdom⁴⁵, United Kingdom and the United States⁴⁶, Sweden and Norway⁴⁷, and France⁴⁸. Takatera and Sawabe (2000) also applied institutional theory in elucidating the use of accrual accounting generally during the nineteenth century as an example of socially constructed reality where the variability of cash flows was transformed to the relative order of periodic income smoothing. The authors argued that the accrual

⁴³ See, for example, Bealing *et al.* (1996), Carpenter & Dirsmith (1993), Carpenter & Feroz (1992, 2001), Covalleski & Dirsmith (1995), Covalleski, Dirsmith, & Rittenberg (2003), Eden *et al.* (2001), Fogarty, Zucca, Meonske, & Kirch (1997), and Siegel & Rigsby (1998).

⁴⁴ See, for example, Carmona & Donoso (2004), Carmona *et al.* (1998), Carmona & Macías (2001), and Núñez (2002).

⁴⁵ See Jack (2005).

⁴⁶ See Power (1992).

⁴⁷ See Bergevärn *et al.* (1995).

⁴⁸ See Bhimani (1994) and Touron (2004).

accounting system should be interpreted as a historically evolved social institution, creating a shared situational framework for the actions of individuals within and without organizations.

Historical accounting studies of this genre relate to a broad period of time that spans from the sixteenth century to the twentieth century, with a significant concentration of research in the last century. Set in the sixteenth and seventeenth centuries was the study by Carmona and Donoso (2004). The paper examined the case of the Royal Soap Factory of Seville during the period from 1525 to 1692. The Factory was a monopoly granted by the King of Castille to the Duke of Alcalá in 1423, while the right to set pricing policy and the responsibility for on-going decision making on prices was placed in the hands of the local government. Drawing on insights from institutional theory, and placing cost accounting at the interface of business organizations and the State, the authors found that the process of cost determination and pricing decision making provided credibility to the parties before their external constituents. Furthermore, the paper focused explicitly in “a neglected area in institutional theory: the role of human and organizational agency in the establishment and development of societal norms” (Carmona & Donoso, 2004, p. 131).

Known studies set in the eighteenth century involved France (Bhimani, 1994) and Spain (Carmona *et al.*, 1998, and Núñez, 2002). Bhimani (1994) used and made reference to institutional theorists when considering that accounting practices need to be understood in the environment in which they are developed, and are influenced by environmental factors. The paper explored changes in accounting practices in the French Company of Saint-Gobain, taking in consideration the social pursuits of bourgeois and noble shareholders. The analysis took in consideration the institutional changes in economic thinking from mercantilism to economic liberalism, and concluded that both internal and external forces shape organizational accounting. Unlike the current study set in Portugal on accounting practices within central government, the Spanish studies were concerned with the accounting of government-owned monopoly institutions, as commercial enterprises. Núñez (2002) analysed the administration system of the Gunpowder Monopoly in New Spain for the years 1757 to 1787. Institutional theory provided the theoretical framework for analysing the effects of institutionalized environments on the organizational structure and its expression through a process of bureaucratization as a mean of establishing organizational rationality. Institutional theory highlighted the importance of accounting as

a supplier of rationality and as a system of rational beliefs the use of which in organizations legitimates the survival of a specific organizational structure. In this case, the State used legitimate coercion through the promulgation of regulations, instructions and royal decrees in the establishment of the organizational structure at the gunpowder factory.

Within a similar period (1760-1790) Carmona *et al.* (1998) studied the financial and cost accounting system at the state-owned monopoly Royal Tobacco Factory of Seville (RTF). Institutional theory assisted in contextualizing and interpreting the changes in financial and cost accounting practices, demonstrating its usefulness in longitudinal and historical research. In a situation characterized by changes in the institutional context as well as in the structure, location, and production technology, the RTF engaged in multiple scenarios of control in order to signal external visibility, by reflecting superior performance and high levels of efficiency. There was an increased focus on manufacturing and also more extensive use of accounting calculations, as consequence of coercive isomorphism exerted by the State.

The same organization was the object of another study by Carmona and Macías (2001) in a different period of time (1820-1827) and, consequently, in a different organizational context. Institutional theory was used as the theoretical construct in examining the cost and budgeting systems that were enforced by the State, through both coercive and mimetic mechanisms. Nonetheless, there were found to be differences in the reporting practices of the RTF. While RTF regularly reported budget information to the regulatory body, it only provided cost data on an inconsistent basis. This was a response by the RTF with the minimum effort employed in order to garner legitimacy, which implied a level of compliance with budgeting requirements while largely dismissing pressures to report cost data as part of the process of decoupling.

Apart from the study by Takatera and Sawabe (2000), and Carmona and Macías (2001), only two other known studies were set partly in the nineteenth century (Bergevärn *et al.*, 1995; Covaleski & Dirsmith, 1995). Covaleski and Dirsmith (1995) applied institutional theory and a political-bureaucratic rhetorical analysis as the conceptual framework to study the rhetorical strategies used by the Progressive Governor of Wisconsin to justify the adoption of an “ensemble of calculative practices and techniques”. The process by which these techniques were institutionalized reflected the relative power

of interest groups and was thus “profoundly political”, for the period of 1890 to 1910. Trying to understand how accounting becomes institutionalized, Bergevärn *et al.* (1995) elaborated a comparative historical study of municipal accounting in Sweden and Norway from 1837 to the 1990s. The findings showed that the institutionalization of accounting may take the form of ideological or hierarchic learning processes, and that irrespective of the mode of learning, the norms are closely associated with the environment of the accounting system. The study showed that in these two countries the institutionalization processes were different, and that ideas associated with a new accountable sector were being diffused in different ways in two similar countries in the same region of the world, as a result of the different past institutionalization processes that were identified.

Other historical studies involving institutional theory have been primarily set in the USA during the twentieth century. A number of these USA studies involved state governments or their agencies. Carpenter and Feroz (1992) analysed the adoption of generally accepted accounting principles (GAAP) in New York State with the objective of identifying institutional, organizational, and economic factors that preceded, motivated, and affected the decision to adopt GAAP within this State government, using a combination of four theoretical perspectives: agency theory, traditional-rational theory, political-power theory, and institutional theory. The three institutional pressures comprising coercive, mimetic and normative isomorphism were found too have been influential in the process of adopting GAAP. The findings showed that the most compelling explanation was gained from institutional theory, using insights from the political-power perspective. USA state governments also served as objects of the study by Carpenter and Feroz (2001) who examined the factors influencing whether state governments adopted GAAP in aftermath of the 1975 municipal bond market crisis. Institutional theory was used to explore how institutional pressures exerted on four state governments influenced the decision to adopt or resist the use of GAAP. Resource dependency was considered to be a form of coercive isomorphism while pressures to adopt GAAP were fuelled by perceptions that this adoption was a symbol of sound fiscal management.

The professionalisation of accounting and accounting regulation are other issues that have interested accounting historians, particularly USA researchers. Bealing *et al.* (1996) used institutional theory, in particular Oliver’s (1991) strategic actions that

institutions may take in responding to institutionalized pressures, to study early strategies of the Securities and Exchange Commission (SEC) to achieve legitimacy and to thus survive as the key US corporate regulator during the period 1934 to 1940. According to Bealing *et al.* (1996, p. 334) “it appears that in order for the SEC as an organization to become legitimated, institutionalized, and taken-for-granted as part of the regulatory arena, it had to take part in building up and, in turn, institutionalizing a framework of social control applied to the accounting profession as well as reporting entities”. Fogarty *et al.* (1997) used the theory to illustrate how a state accountancy board, namely the Ohio State Board of Accountancy, served to legitimate both the profession and its own existence to the public during the 1980s.

Other twentieth century USA studies involving the use of institutional theory have focused primarily on the accounting profession or Federal Taxation authorities. Siegel and Rigsby (1998), for instance, examined the national diffusion of education and professional experience requirements and explained how the development of these requirements for public accountants during the period 1915 to 1985 was supported by a central agency, the American Institute of Certified Public Accountants (AICPA), which was found to be instrumental as a key actor in every step of the institutionalization process. In addition, the development of the accounting profession in the twentieth century, particularly the adoption of statistical sampling by auditors, was the subject under investigation by Carpenter and Dirsmith (1993). The findings demonstrated that the adoption of statistical sampling by auditors was not simply a technical phenomenon but involved a redefinition of auditors’ professional jurisdiction away from fraud detection towards attestation of the fairness of financial statements, resulting from auditors’ self-interest.

Auditing was also the subject of two other studies (Covaleski *et al.*, 2003; Power, 1992). Covaleski *et al.* (2003) used the sociology of professions construct, institutional theory, and outsourcing literatures to examine the dramaturgy of exchange relations among the then Big Five public accounting firms, the AICPA, the Institute of Internal Auditors (IIA), and the SEC, with respect to the outsourcing of internal audit services to international external audit firms. Rather than being a process of institutionalization or de-institutionalization, the authors found that there had existed a process of re-institutionalization whereby the Big Five public accounting firms actively sought to reconstitute their professional field or jurisdictional domain so that they could perform the

internal audit services for their external audit clients. Power (1992), on the other hand, argued that sampling emerged as a claimed “technique” in auditing in both the UK and the USA much later than is commonly imagined. Using institutional theory, the author explained that “statically based sampling develops to rationalise practices that had been in place for some years and to invest auditing with a new scientific authority” and that “the history of development in auditing technique may be decoupled from changes in audit objectives” (p. 37). Set also in the USA, Eden *et al.* (2001) examined the evolution of transfer pricing regulation in North America from 1917 to end of the twentieth century, and, in the process, developed a model of cross-border diffusion of standards, applying both institutional theory and the logic of embeddedness.

France and the UK have also provided settings for historical, twentieth century studies of this genre. Based on the published accounts of three French firms in the period before 1973, Touron (2004) explained the phenomenon of accounting choice through the lens of institutional theory and concluded that the adoption of US GAAP by French firms in the period before the creation of the International Accounting Standard Committee (IASB) was not an innovation, but simply an imitation. Jack (2005) examined the UK agricultural gross margin accounting, within a theoretical framework that embraces Giddens’s theory of structuration and new institutionalism in sociology. The analysis of the transmission and maintenance of the agricultural gross margin accounting suggested that it persisted through the dominant advisory group within the industry. The development of private commercial consultancy in the industry and the decline of the university based government advisory schemes led to simplified management accounting practices that were resistant to change.

From this overview it is the case that institutional theory constitutes an accepted and acceptable framework for informing historical accounting research, specifically in addressing the pressures which impacted upon organizations, in their local, time-specific context, and the way these pressures affected accounting (Bergevärn *et al.*, 1995; Bhimani, 1994; Carmona *et al.*, 1998; Carmona & Macías, 2001; Núñez, 2002). Although coercive isomorphism exerted by the State has generally been found to be the most prominent institutional pressure in these studies, other forms of institutional pressures have been identified as co-existing, such as mimetic and normative isomorphism (see for example, Carmona *et al.*, 1998; Carmona & Macías, 2001; Carpenter & Feroz, 2001, 1992; Núñez,

2002; and Touron, 2004). Importantly, from the overview it is emphasised that institutional theory has assisted in highlighting the importance of accounting as a supplier of rationality and as a system of rational beliefs whose use legitimates the survival of specific organizational structures (see, for example, Bealing *et al.*, 1996; Carmona & Macías, 2001; Fogarty *et al.*, 1997; Núñez, 2002). Within accounting history research, accounting practices have been perceived as playing a key legitimizing role in organizations (Carmona & Macías, 2001, p. 145; see also Covalski *et al.*, 1996). This legitimizing role of accounting results largely from the association of financial accounting practices with the presentation of accurate or reliable information which faithfully represents past transactions and other past events (Dirsmith, 1986, p. 317; Nuñez, 2002, p. 280). The notion of auditing assists in reinforcing this role. Therefore, “organizations are pushed into incorporating practices and procedures defined by extended conceptions over what is considered rational, with a view to increasing their legitimacy and their possibility of survival” (Meyer & Rowan, [1977] 1991; Nuñez, 2002, p. 280).

Accordingly, accounting is seen as device for organizations to incorporate rational conceptions of their institutional environments in their formal structure (Meyer, 1986, p. 353), since accounting represents a legitimate form of language: “it provides a set of techniques to control and organize certain activities and offers a vocabulary through which organizational objectives, procedures and politics are established” (Nuñez, 2002, p. 280). Therefore, accounting is cast as a rational system providing information useful for making economic decisions (Carpenter & Feroz, 1992, p. 617), therefore this belief in rationality and the associated usefulness of accounting information for economic decision making provides accounting with the capacity to legitimize organizational structures. According to Carmona *et al.* (1998, p. 118), “accounting practices are myths that partially form and sustain societal beliefs concerning ideas such as rationality, efficiency, etc.” and institutional theory can assist in highlighting the role of accounting as a form of organizational practice, or belief system in change situations in organizations.

In the case study investigation by Nuñez (2002, p. 280), accounting “also acted as a system of beliefs which provided a rational character to organizational activities, allowing monopolistic bureaucratic organization to be legitimated towards the dominant agent of the environment: the absolutist power”. Therefore, accounting acted in “dual manner: as a system of rational beliefs or ‘rational myth’, and as one of the elements which shape the

organizational structure” (Nuñez, 2002, pp. 280-281). In the case of the public sector, although the implementation of new accounting and reporting practices in the public sector have often been viewed as a means of improving productivity and efficiency of public sector organizations, the emphasis has been directed to the symbolic, power and legitimation roles of accounting information (Carpenter & Feroz, 1992, pp. 613-615). However, it is in the pursuit of enhanced public sector efficiency and accountability, as intended outcomes, that efforts have been made to import private sector management practices into the public sector, such as use of generally accepted accounting principles (Carpenter & Feroz, 1992, p. 613).

The different accounting history studies have shown that institutional theory can assist in contextualizing and interpreting developments in accounting, especially changes to accounting practices within particular organizations, constituting a useful framework to be applied in historical accounting research. In addition, this overview has shown that this current study is unique in focussing on public administration within central government. Previous works have concentrated mainly on the USA and, more generally, on the twentieth century. Therefore, this study broadens the application of institutional theory in accounting history research to a different country and to a different time period context.

Summary

In contemporary accounting research it is recognised that accounting as a social and institutional practice needs to be investigated and analysed in the contexts in which it operates. In this study of accounting practices at the Portuguese Royal Treasury and in the Portuguese Empire it is recognised that it is fundamental to comprehend the social, economic and political environment of the period under study to obtain a comprehensive understanding of the measures adopted by the Portuguese government and the way these affected accounting developments. Accounting is “one of the major formal sets of symbols available to organizational actors for ordering and interpreting their experience” (Boland & Pondy, 1983, p. 224). Although accounting may be perceived as a value-free body of ideas and techniques, notwithstanding, “accounting is symbolic not literal, vague not precise, value loaded not value free, dealing with meanings not just things, [and] it tries humans as moral agents” (Boland & Pondy, 1983, p. 229). Accordingly, accounting should be studied

by reference to such precepts. Institutional theory, as discussed, provides the means of so doing.

Institutional theory requires a focus on the symbolic aspects of organizations, such as social and cultural aspects, and their environments, defends a holistic and contextual analysis and emphasises the role and impacts of other types of actors, such as the State, in organizational structure. Therefore, institutional theory “focuses on environmental (macro-sociological) factors that can be a determinant of decision making in organizations” (Carpenter & Feroz, 1992, p. 623). These features of institutional theory make it a most suitable theoretical framework for this historical Portuguese study of accounting’s past in country and Empire. In particular, the notions of legitimacy and also isomorphism, in its three forms, namely coercive, mimetic and normative, are central to this study in order to contribute to a fuller understanding of the events and acts associated with the adoption and use of DEB at the Portuguese Royal Treasury and the transfer of accounting technology to the Portuguese colonies.

Accordingly, in this study DEB will be shown to have served to legitimise the Portuguese Royal Treasury. The institutionalization of DEB, both in private and public sector in eighteenth century Portugal, may be seen as a political process dependent on the power of organizational actors who supported, opposed, or otherwise strived to influence its adoption and on-going use and diffusion.

The methodology, research methods, the justification of the theoretical framework adopted in this study will be presented in the following chapter based on the literature review presented in Chapter 2 and also in this chapter.

Chapter 4: Research Methodology

When conducting empirical research an “inevitable truth” is faced by researchers, as pointed out by Laughlin (1995, p. 65), “that all empirical research is partial and incomplete and that theoretical and methodological choices are inevitably made whether appreciated or not”. The elaboration of this current study of accounting development in the public sector across both time and space implies that methodological and theoretical choices have been made. Having already reviewed the relevant literature relating to this study in chapters 2 and 3, this chapter addresses the methodological and epistemological perspective adopted as well as research directions, the research method employed, the archival sources used and the theoretical foundations of this work as found in the following sections.

Methodological and epistemological perspective

A research perspective which views the world as being socially constructed and subjective is adopted in this study (see, for example, Chua, 1986; Covalleski & Dirsmith, 1990). Consequently, accounting has to be analysed and interpreted within its organizational, economic and social contexts (Burchell *et al.*, 1985; Hopwood, 1981, 1983, 1987; Scapens, 2004, p. 261), since there is the “recognition of accounting as an organizational and social phenomenon” (Napier, 2006, p. 458; see also, Hopwood & Miller, 1994; Miller & Napier, 1993; Miller *et al.*, 1991; Napier, 1989; Previts *et al.*, 1990a). Historical studies are an important source for understanding the roles of accounting in organizations and society (Napier, 2006, p. 445). As pointed out by Hopwood (1977, p. 277):

...accounting has had, and hopefully still has, the potential of being a responsive and adaptive calculative technology that can relate to and facilitate broader processes of enterprise and social development (...) encourages us to consider the institutional process that can both facilitate and constrain the development of accounting.

Indeed, accounting is not just a product of society but is actively implicated in constituting that society (Loft, 1986; Napier, 2006). According to Covalleski & Dirsmith (1990, p. 545), “accounting serves as a myth or symbol that is complicit in the construction of a fluid, social reality”. Similarly, as claimed by Ansari and Bell (1991, pp. 8-9):

... along with music, art and literature, social institutions, such as accounting and control systems, are seen as symbolic forms through which a society expresses its collective world view. To understand these institutions, we must first understand how the acquired world views used by individuals shaped such systems and what they come to symbolise for them.

The research perspective adopted has implications in the way this work is developed, in the research methods employed and the theoretical perspectives adopted. Given the methodological choices made in this work, observers are more than likely to regard this study as one of a genre falling under the banner of the “new” accounting history⁴⁹. Accordingly, it is generally agreed that accounting research of this genre, as proposed by Laughlin (1999, p. 73), should provide:

... a critical understanding of the role of accounting processes and practices and the accounting profession in the functioning of society and organisations with an intention to use that understanding to engage (where appropriate) in changing these processes, practices and the profession.

In the trend of the “new” accounting history, an interpretative perspective or approach is adopted in the study of accounting practices within central government in Portugal, in the context of similar reforms in other European countries. Specifically, this study, as explained earlier, examines the adoption and use of DEB at the Portuguese Royal Treasury and, more broadly, the transfer of accounting technology within the context of country and Empire. The interpretative perspective will help in describing, analyzing and inferring the meanings of events under study (Baker & Bettner, 1997, p. 305). As stated by Lodh and Gaffikin (1997, p. 439),

... the rationality of “the doing of research” in accounting can be classified, interpreted and understood only in relation to a particular context by choosing a particular perspective or “world view” that is based on certain value-based assumptions about “ontology”, “epistemology”, “methodology”, and the purpose of the research....

Therefore, and as addressed in previous chapters, accounting history is enhanced by locating the analysis within the specific context in which the object of the research emerges and operates, and consequently, implicitly or explicitly, it is written following a paradigm (Carnegie & Napier, 1996, p. 8; Previts & Bricker, 1994, p. 626). As in any study, the paradigmatic groundings followed in conducting research need to be outlined, “so that they [the readers] can form judgments as to whether the past or the historian is speaking to them

⁴⁹ See, for example, Carnegie & Napier (1996), Fleischman *et al.* (1996b), Fleischman & Radcliffe (2003), Fleischman & Tyson (1997), Funnel (1996), Laughlin (1999), Miller *et al.* (1991), Napier (1989), and Oldroyd (1999).

at key junctures” (Fleischman & Tyson, 2003, pp. 31-32). In this study, the importance attributed to the contextual analysis is apparent in the adoption of institutional theory, as an interpretive lens, to inform the findings of the local, time-specific accounting policy and practice in Portuguese central government. This study is, therefore, intended to fall within the ambit of studies which demonstrate a critical and interpretative tendency (Carnegie & Napier, 1996).

Research directions

Different research directions and approaches in conducting accounting history research have been suggested through the years (see Carnegie & Napier, 1996; Previts *et al.*, 1990b). Studies of surviving business records, biographical studies (of individuals or groups of individuals), studies of accounting institutions, accounting in the public sector; comparative international accounting history, and innovative research methods in accounting history have been proposed. Within the governmental sector, a call to direct research endeavours at better understanding the emergence of political institutions, particularly administrative institutions was made (March & Olsen, 1989, p. 17). In effect, this means enhancing an understanding of how “meaning is constructed and interpreted in emerging political institutions, and the manner in which regulations develop through history-dependent processes” (Bealing *et al.*, 1996, p. 317).

Traditionally, accounting history research has concentrated on investigations in the private sector, but recently there is an increased interest in historical studies of public sector accounting (Carnegie & Napier, 1996, p. 26). Historical research benefits greatly from the propensity of the public sector to preserve primary research records, when compared with private entities. Although there has been, within public sector accounting research, as shown in Chapter 2, a focus on local government, mainly in Britain (Carnegie & Napier, 1996, p. 26; see, for example, Coombs, Edwards, & Greener, 1997; Edwards *et al.*, 2002; Edwards & Greener, 2003), the potential for accounting history research at the central government, both at the national and cross-national levels, is considerable. Contextualized analysis of public sector accounting practices, the role of the State in the diffusion and implementation of accounting practices, principles and ideas, as well as political, social and economic motivations shaping public sector accounting systems can result from the research into the history of public sector accounting.

In particular, the research on the history of public sector accounting can be enriched by conducting comparative international studies, as suggested by Carnegie and Napier (2002), and as addressed earlier in Chapter 2. Although studies at a national or local basis are important contributions to accounting history, the international dimension gives us a “full understanding of accounting’s past”, since “accounting concepts, techniques and institutions have been diffused through both space and time” (Carnegie & Napier, 2002, p. 689), and can assist in highlighting important linkages, parallels and contrasts. Besides embracing accounting as a social and institutional practice and emphasising the necessity of studying accounting in the contexts in which it operates, CIAH takes culture as a key explanatory variable for identifying and explaining “similarities and differences between accounting systems, rules, ideas and practices, and the roles of accountants” (Carnegie & Napier, 2002, p. 699).

This investigation addresses the call made by Carnegie and Napier (1996, 2002) in the context of CIAH and concentrates on the study of public sector accounting, both in Portugal and in Europe as well as in the Portuguese Empire, as mentioned before, with the Portuguese Royal Treasury as the case organization under investigation, for the period of time comprehended between 1761, when it was established, until 1777, which corresponds to the end of the government of the Marquis of Pombal. A contextualized comparative international analysis is adopted in order to obtain a more comprehensive understanding about the implications and linkages of accounting developments in the public sector between different European countries and Portugal, and about the process of diffusion of accounting technology within the Portuguese Empire.

Research methods

Qualitative research methods are considered to be useful for studying the symbolic roles of accounting in organizations and society (Covaleski & Dirsmith, 1990; see also, Chua, 1986; Kaplan, 1984, 1986; Tomkins & Groves, 1983). More specifically, field research applying qualitative methods is considered to improve our understanding of accounting’s role “in the social construction of a fluid, subjective reality” (Covaleski & Dirsmith, 1990, p. 543). On the specific case of accounting history research, Previts *et al.* (1990b) described a number of research methods, both qualitative and quantitative, giving

a particular emphasis to the application of econometrics and quantitative methods to historical research. Nonetheless, the fact that a qualitative or a quantitative method is adopted does not imply that a research method is superior to the other. Regardless of the subject matter being studied, “neither quantitative nor qualitative research is superior to the other”, since both can be systematic and scientific (King, Keohane, & Verba, 1994, p. 5). Within accounting history, the case study method is considered by Previts *et al.* (1990b, p. 149) as having a considerable potential for conducting research. Although traditionally considered as a qualitative method, “research case study is more than just qualitative research, and something other than a simple qualitative technique. It is, rather, a basic way of thinking about complex issues”, which may or not involve quantitative material (Post & Andrews, 1982, p. 18).

Case study research, however, is not free of criticism. The value of case studies has been challenged since the results of this research method are not generalizable when compared with statistical studies (Lukka & Kasanen, 1995, p. 71; see also Post & Andrews, 1982). In addition, methodological issues are raised when conducting case study research related with the purposes of its use. Questions – such as, to what extent must information be collected systematically? How does one distinguish fact from interpretation? – need to be considered when conducting case study research (Post & Andrews, 1982, p. 16).

Within the “case research” methodologies (Post & Andrews, 1982, p. 2), this work adopts what is identified as a descriptive and explanatory case study⁵⁰, in which the accounting practices adopted at the Portuguese Royal Treasury, in the form of DEB, based on surviving accounting records and the particular accounting policy instructions issued to the colonies for application at a distance from Lisbon are the object of investigation. A better understanding of the content, processes, and contexts of the practice of accounting in the Portuguese public sector for the period under study are the objectives for adopting the case study method in a qualitative historical research (Berry & Otley, 2004, p. 238). The combination of the descriptive and explanatory case study using the theoretical perspective identified is intended to explain the possible reasons for the observed accounting policies

⁵⁰ Following the characterization of Yin (2003), this research strategy would be designated as “History”. Like the “case study” strategy “History” would try to answer the research questions *How* and *Why*, there would be no control of behavioural events, but what distinguishes this two research strategies is the focus on contemporary events or on past events.

and practices at the case institution. The case study method, by allowing the researcher to study the phenomenon within its organizational context (Yin, 2003), permits a better understanding of the nature of the causal processes established between accounting, organizations and the socio-political context in which they are immersed (Núñez, 2002, p. 277). Nonetheless, this also restricts the possibilities of generalization in accounting research, since social context and institutions of accounting change over time and space (Lukka & Kasanen, 1995, p. 84). The use of the case study method in accounting history research implies that the researcher is an “outsider” (Scapens, 2004, p. 264), in which the researcher has no contact with the participants in the case and cannot influence them. Nonetheless, by relying heavily on primary and secondary sources, the subjectivity of the researcher cannot necessarily be put aside when selecting and interpreting the evidences. Moreover, the researcher, the context in which the phenomena is studied, and the research approach used to study the phenomena are “intimately intertwined”, instead of being independents (Covaleski & Dirsmith, 1990, p. 566; see also Fleishman & Tyson, 2003, p. 41). Even the seemingly basic, apparently neutral, task of selecting the documents to be analysed in an archive and their importance for the research, is a subjective action (Fleischman & Tyson, 2003, p. 41).

Archival sources

By assuming that the strength of historical research in accounting comes from its firm basis in the “archive”, this work adopts a wide interpretation of what constitutes the “archive” for accounting research (Carnegie & Napier, 1996, pp. 8, 28). Although recognizing that the account books are a privileged archival source for accounting historians, other forms of record keeping need to be considered, such as letters, laws, reports, news, memoirs, diaries. Thus, this case study will be based on the analysis of readily-available primary and secondary sources. Primary sources will be the ones produced by participants in, or contemporary observers of, the events under investigation. Secondary sources are the interpretations produced by those not contemporary of the historical events. These sources will be used, in combination, in this study.

A considerable number of the primary sources available for this study are found at the *Arquivo Histórico do Tribunal de Contas* [National Audit Office Historical Archive], where a considerable collection of the *Erário Régio* [Royal Treasury], totalling 5,369

documents pertaining to the period of time of functioning of the Royal Treasury during 1761 to 1832 is available. This collection includes the original accounting books as well as original books containing non-financial information, such as relating to the appointment of employees, legislation and instructions, and also, correspondence of the *Tesoureiro Mór* [General Treasurer], of the four main *Contadorias Gerais* [General Control Offices], and between offices. This collection was reorganized after 1969 and some books that were not able to be identified as belonging to a specific section of the Royal Treasury were classified as *Livros de Repartições Não Identificadas* [Books of Non-identified offices] (see Moreira, 1977, p. vi). For the purpose of this major study, the books of the collection concerning the first years of functioning of the Royal Treasury, until 1777, were examined. These books are used mainly to obtain information about the specific accounting system implemented at the Royal Treasury, enabling the identification of DEB practices, and also about the accounting policies that were issued by the Royal Treasury for application in the colonies. Surviving books of accounting records that were prepared in the colonies were not available in the above-mentioned archives in Lisbon and, accordingly, were not examined in this study. Indeed, this type of investigation is outside the scope of this study and justifies by itself a further, independent study. In addition, most of the information available for the period after the Pombalism era until the demise of the Royal Treasury, in 1832, was not analysed in this study, but constitutes an important source for future research.

Primary sources are also used to investigate the social, political and economic context, as well as to obtain pertinent information relating to the measures adopted by the Portuguese government, and also to obtain information about specific and important environmental actors for the period under study. This sources are available mainly at the *Biblioteca Nacional* [National Library] where an important collection of the period, including government as well as private manuscript documents from different personalities are available, with a significant collection belonging to the Marquis of Pombal. Information is also available at the *Arquivos Nacionais da Torre do Tombo* [National Archives Torre do Tombo], which holds important archival sources of the period under investigation, both from public entities, such as the Board of Trade, the School of Commerce and the *Real Mesa Censória* [Royal Censorship Board] and also from private personalities, mainly businessmen of the time.

Concerning the secondary sources, these can be classified in two groups. First, there are the sources used to complement the primary sources, mainly to obtain a more comprehensive understanding of the social, economic and political context. Among these are the contributions on the Portuguese history of the eighteenth century, and also about the “paradox” figure of Pombal. In this group are also the contributions relating to the European history of the time period under study, and about the accounting practices adopted in different European countries, which helped to contextualize the Portuguese case and to determine possible influences between countries. Second, there is the group of secondary sources used in the literature review on accounting development and on institutional theory, which helped in defining the methodology followed in this work. These were mainly concerned with the diffusion of accounting knowledge, accounting development in the public sector, accounting as a social and institutional practice, accounting history perspectives as examined in chapter 2, and on institutional theory and its use in both historical and contemporary accounting research as addressed in chapter 3. In addition, during the elaboration of this study contacts with prominent accounting historians from different European countries were established in order to assist in obtaining relevant information for the purposes of the research.

With this combination of primary and secondary sources it is expected to have the necessary and appropriate information to analyse the proposed subjects of this work and to answer the study’s two major research questions.

Theoretical foundations

As mentioned in Chapter 2, the posturing of economic rationales to explain the adoption of specific modes of accounting has held strong support among accounting historians (for example, Chatfield, 1977; de Roover, 1937; Edwards, 1989; Littleton, 1966; Luft, 1997). More recently, a focus on studying accounting in the contexts in which it operates (Burchell *et al.*, 1985; Hopwood, 1981, 1983, 1987) has contributed to the emergence of an enhanced perception of accounting as a social practice, rather than a mere technical practice, (see Hopwood & Miller, 1994; Meyer, 1986; Miller *et al.*, 1991; Miller & Napier, 1993; Napier, 1989; Previts *et al.*, 1990b), thus leading researchers to challenge the use of economic rationales alone to explain specific modes of accounting. A different number of researchers started, since the 1980s, to adopt diverse theoretical and

methodological approaches to investigate the role of accounting practices in society (Baxter & Chua, 2003; Covalleski & Dirsmith, 1990; Covalleski *et al.*, 1996; Laughlin, 1995). The advent of these perspectives, drawn from sociology, political science and other disciplines, have assisted in enhancing and broadening an understanding of the nature, role, uses, and impacts of accounting. Indeed, accounting is increasingly seen as an instrument of power and control rather than as a value-free body of ideas and practices (Carnegie & Napier, 1996, 2002; Hopwood, 1983, 1987; Napier, 2006). In particular, the use of theoretical approaches in accounting history studies can help “to reveal the multifaceted nature and richness of accounting in history” (Walker, 2004b, p. 7; see also Parker, 1999). As claimed by Walker (2004b, p. 9):

... theoretical perspectives (broadly defined) in accounting history are important in providing organising and analytical frameworks for projects, in suggesting hypothesis, delimiting research objectives and the attendant scope of evidence-gathering, in offering coherence for writing and in the formulation of conclusions.

Institutional theory

Institutional theorists, as discussed in chapter 3, represent one group of researchers that perceives the world as subjective and tries to understand it from the perspective of the organizations made subject to examination (Hopper & Powell, 1985, p. 446). Accordingly, accounting is seen, by institutionalists, as a social practice and, more particularly, as a means of legitimising organizations and their activities through the construction of appearances of rationality and efficiency (see, for example, Carpenter & Feroz, 1992; 2001; Carpenter & Dirsmith, 1993; Carruthers, 1995; Covalleski & Aiken, 1986; Covalleski & Dirsmith, 1988a,b; Covalleski *et al.*, 1996; Meyer, 1986). As addressed in chapter 3, institutional theory is considered to be a useful tool for obtaining a better understanding of the phenomena being investigated taking in consideration its broader context (DiMaggio & Powell, 1991; Greenwood & Hinings, 1996; Hussain & Hoque, 2002; Moll *et al.*, 2006; Ribeiro & Scapens, 2006). Within accounting history research, institutional theory constitutes a framework that can assist the researcher to render visible the contextual factors of the events under investigation (Carmona & Macías, 2001; Covalleski & Dirsmith, 1995).

The adoption of institutional theory within this accounting history study can assist in broadening our knowledge about how specific accounting practices, such as DEB as the

major accounting method of concern in this study, emerged and were subsequently sustained, and indeed diffused, as well as how they also tend to become standardized across national boundaries. In addition, the fact that institutional theory places an emphasis on cultural elements, such as symbols, cognitive systems, normative beliefs, and the source of such elements, can assist in obtaining a broad understanding of the accounting change undertaken within Portuguese public administration. A more traditional stance would focus on the technical requirements associated with the adoption of the new accounting practices, neglecting possible institutional pressures exerted by the State, and other agents, and also emanating from the social environment and the world models prevailing at the time. In fact this study may contribute simultaneously to institutional theory literature, since, as posed by Scott (2001, p. 214):

... institutional frameworks are particularly supportive of historical and comparative studies. It remains true, however, that up to the present time, we have been overly timid and modest in our theoretical conceptions and research designs. The number of theoretically informed, systematic, comparative (cross-cultural) studies of organizations remains minuscule, as does the number of studies of organizations or fields that extend over significant periods of time.

The contribution can also be made at the level of the process of institutionalization of structures since historical research using archival data, as a prime concern in this study, can render valuable insights into the historical context and cultural changes involved and the way these influence the process of institutionalization (Tolbert & Zucker, 2003, p. 184).

Institutional concepts

Institutional theory reveals itself very useful as an interpretative lens in accounting research, as addressed in chapter 3. Its use in accounting history research, although in a limited way until now, has already proved to be very helpful when a contextual analysis is undertaken, especially when trying to analyse the role of accounting in organizations and society, and when accounting is used as an instrument of power by different institutional actors. It is within government and professional settings that institutional forces tend to be powerful (DiMaggio & Powell, 1983; Meyer & Rowan, [1977] 1991), providing the State with increased importance as an institutional actor, where government organizations become important units of institutional analysis. In fact, studies have confirmed that governmental organizations are more vulnerable to all three types of pressures than other

organizations (Frumkin & Galaskiewicz, 2004, p. 283). However, usually public sector organizations are studied as being the ones exercising pressures, and not as the ones being pressured, as it happens in this study. As stated by Framkin and Galaskiewicz (2004, p. 286), “essential features of public sector organizations make them not just capable of generating pressures but also potentially very vulnerable to these same pressures”. Therefore, it is in studies such as this study, where the State was a dominant institutional actor, exercising pressures over a governmental organization where institutional theory can be validly employed.

During the eighteenth century Portugal, as will be shown in the next chapter, was influenced by the mercantilist policies and enlightenment ideals coming from Europe and the State assumed a key role in the social, economic and cultural context of the country. Several reforms were implemented affecting all aspects of the society with the objective of bringing the country close to the most developed nations of Europe. In order to accomplish its objective the Portuguese government, through the action of the Chief Minister, the Marquis of Pombal, used all the means at its disposal in trying to emulate the successful measures adopted elsewhere in Europe. Accounting was object of specific measures and was perceived by the Portuguese State as an important instrument in the development of commerce, industry and even in public administration of the country, which could not be neglected.

The actions implemented by the Portuguese State were the result of the determination and power of one person – the Marquis of Pombal – who played a central role at all levels of Portuguese society as Chief Minister, as will be shown in the next chapter. As later argued by institutional theorists, it is not possible to neglect the role of key institutional actors in the political process of institutionalization (Beckert, 1999, p. 778; DiMaggio & Powell, 1991, p. 27; Lawrence *et al.*, 2001; Oliver, 1991; Scott, 2001, p. 193), since what becomes institutionalized will depend on the power of the organizational actors who support, oppose, or even struggle to influence it. It is important to clarify the conditions and processes that lead accounting practices, such as DEB, to become institutionalized (Tolbert & Zucker, 2003, p. 186) and to be apprised of the role played by the Marquis of Pombal in promoting accounting change and the diffusion of accounting practices to multiple organizations, both in Portugal and within the Portuguese Empire. The Marquis of Pombal can be described, following the notion introduced by DiMaggio

(1988, p. 14), as an “institutional entrepreneur”, who is recognised as an agent who has an interest in specific institutional structures, “someone who commands resources which can be applied to influence institutionalized rules, either by committing those resources to the support of existing institutions or by using them for the creation of new institutions” (Beckert, 1999, p. 781). Institutional entrepreneurs can support processes of socialization of actors and the mobilization of ‘subsidiary actors’ within the organizational field as strategies for institutional change (Beckert, 1999. p. 781; DiMaggio, 1988, p. 15). As described by Schumpeter (1934, p. 132, and as quoted by Beckert, 1999, p. 786), the entrepreneur is “the innovator who leaves behind routines. (...) devotes his attention to new options, he takes over unusual tasks, and realizes new combinations in the production process, against the adaptive pressures of his/her surroundings”.

Besides the notions of institutionalization and institutional agents, the concepts of legitimacy and isomorphism are particular useful to enhance an understanding of the actions of the Portuguese government at the beginning of the second half of the eighteenth century. The fact that accounting, particularly the DEB system, was considered as a successful method among important businessmen and used in the most developed nations of Europe, including in managing public finances, embodied the system with such a taken-for-granted value, as will be shown in the following chapters, that it was perceived by the State as able to legitimize new organizations created by the State, such as the Royal Treasury. The value attributed to this system was such that measures were implemented for the method to be known and used both in public and private activity.

The notion of isomorphism, as developed by DiMaggio and Powell (1983), and the three forms of institutional pressure – coercive, mimetic and normative isomorphism – are useful categories for understanding the actions of organizational actors and can be applied both today, in contemporary research, and in the past, historical research, as previous studies have shown (see, for example, Abernethy & Chua, 1996; Carmona *et al.*, 1998; Carmona & Macías, 2001; Carpenter & Feroz, 1992, 2001; Núñez, 2002). As argued by Miller (1994, p. 11), it is possible to try to explain organizational change in terms of isomorphic tendencies with social accepted and prized elements. In this historical case study research the concept of isomorphism is particular useful to understand the actions of the Portuguese government in what regards the process of emulation of the most developed nations. Using the three forms of institutional pressures the State played a key role in the

transfer of DEB to Portugal, and particularly within Portuguese central government, and the transfer of accounting technology to the Portuguese colonies.

Another useful institutional concept is decoupling. The notion of decoupling is operationalized by opposing symbolic change demonstrated by organizations and the operating processes adopted in the organization. In some circumstances, such as high costs of implementation or lack of the required financial or human resources for implementation, the decision may be “decoupling operating processes from symbolic change” (Abernethy & Chua, 1996, p. 597). As will be demonstrated in this study, organizations may want to signal the adoption of new accounting techniques in its formal structure, but due to difficulties in the practical implementation, when putting into practice the new accounting procedures may restrict the adoption to specific levels of the organization. This restricted implementation may not be known to external parties who may mistakenly believe that the new techniques are applied generally within subject organizations.

Historical accounting research and institutional theory

According to the overview made in the previous chapter, historical accounting research shows that the need to understand accounting practices within the context in which they are developed and how external and internal forces may shape organizational accounting is facilitated by the use of institutional theory as a theoretical framework (Bhimani, 1994; Carmona *et al.*, 1998; Carmona & Macías, 2001; Carpenter & Feroz, 2001; Covalleski & Dirsmith, 1995; Nuñez, 2002). The importance of accounting as a supplier of rationality and as a system of rational beliefs whose use legitimates the survival of a specific organizational structure was also highlighted by the theory (Bealing *et al.*, 1996; Carmona & Macías, 2001; Fogarty *et al.*, 1997; Núñez, 2002). Institutional theory also helped highlighting how processes of change in accounting practices and procedures provided credibility, visibility and legitimacy to the parties involved in the process before their external constituents (Bealing *et al.*, 1996; Carmona & Donoso, 2004; Carmona *et al.*, 1998; Carpenter & Dirsmith, 1993; Carpenter & Feroz, 2001; Covalleski *et al.*, 2003; Fogarty *et al.*, 1997; Power, 1992; Siegel & Rigsby, 1998; Tournon, 2004). Specific accounting practices and procedures were adopted in order for a specific organization to be seen as adopting the proper measures and therefore to legitimate its existence and/or action

towards their external agents (Bealing *et al.*, 1996; Carpenter & Feroz, 1992; Fogarty *et al.*, 1997; Nuñez, 2002)

Institutional pressures and the way they impact historical accounting practices have been examined through the notion of isomorphism. Among the three forms of isomorphism the most prominent form found in studies to date is coercive isomorphism that was exerted by the State (see, for example, Carmona *et al.*, 1998; Carmona & Macías, 2001; Carpenter & Feroz, 1992, 2001; Núñez, 2002). The prominence of coercive isomorphism seems to be related with the emphasis placed on the public sector within the analysed accounting history research studies, where the State was an important institutional agent. This is consistent with institutional theorists' argument that state actors are more likely to employ coercion in pursuing their ends (Scott, 1987, p. 509, 2001, p. 115; Wahyudi, 2004, p. 70).

In addition, the historical distinctiveness of these studies may also provide constrains to the identification of the different institutional pressures. Coercive pressures can be readily identified when exercised through written documents, such as laws, usually preserved along the centuries. On the other hand, mimetic pressures can be difficult to determine since it may be difficult to find conclusive evidence that some accounting practices were being mimicked, and from whom, when a long period of time has passed by, such as centuries ago, and documents may have been lost and the contact with participants in the events is no longer possible. Normative pressures may be easier to determine in the past as long as there were formal professional and educational organizations whose documentation has survived. However, if the time period under investigation precedes the development of certain organizations, such as professional accounting bodies of the modern era, it will be very difficult to determine if there were any prevailing normative pressures in local, time-specific historical contexts. While all three forms intermingle in empirical settings (DiMaggio & Powell, 1983, p. 150), it is necessary to be aware that in historical studies the temporal distance from the events may complicate the gathering of evidence of the existence of normative and mimetic pressures.

Accounting history studies also contributed back to institutional theory by focusing in a neglected area by institutional researchers: the role of human and organizational agency in the establishment and development of societal norms (Carmona & Donoso, 2004, p. 131), as previously identified by institutional theorists (DiMaggio, 1988; Scott,

2001, p. 193). Another important contribution is related with the analysis of the institutionalization process, argued by institutionalists as requiring further in depth investigation (Tolbert & Zucker, 2003). As analysed, the process of institutionalization of accounting practices reflects the relative power of interest groups and is thus “profoundly political” (Covaleski & Dirsmith, 1995, p. 147), and in similar situations the institutionalization may be different as a result of different past institutionalization processes (Bergevörn *et al.*, 1995). Historical accounting studies have also contributed to combine institutional arguments with other frameworks, such as: sociology of professions, agency theory, traditional-rational theory, political-power theory, and Giddens’s theory of structuration; and find that compelling explanations can be gained from this combination (Carpenter & Feroz, 1992, 2001; Covaleski *et al.*, 2003; Eden *et al.*, 2001; Jack, 2005). The contribution encompasses also the broadening of the organizations object of analysis under institutional theory, such as: government-owned monopoly companies, city state governments, municipal governments, professional bodies, accounting/auditing profession, private companies, and agriculture and industry, beyond the traditional non-profit organizations studied by early institutional theorists.

As mentioned earlier, the current study is unique in focussing on public administration within central government, in eighteenth century Portugal in the context of country and Empire, a hitherto unexplored setting in the literature on institutional theory in accounting history. In addition, it also adopts a comparative international perspective by drawing upon other preceding European experiences, such as in Spain, The Netherlands, Sweden, Germany/Austria, and France in the adoption and use of DEB within central government. Previous works in accounting using institutional theory have been concentrated mainly in the USA and in the twentieth century while more contemporary studies were concerned with the accounting of government-owned monopoly institutions, as commercial enterprises. The accounting history studies focused in the eighteenth century (Bhimani, 1994; Carmona *et al.*, 1998, and Núñez, 2002) were local and time specific studies, therefore, they were not located within the CIAH research analysis adopted in this study.

Consequently, the work broadens the application of institutional theory in accounting history research to a different country, to a different time period context, and to a different organization. Additionally, central government organizations, as the Royal

Treasury, are usually studied as being the ones exercising pressures, and not as the ones being subjected to the same pressures. This study distinctively studies a newly formed central government organization, its specific accounting practices, policies and procedures, and pressures exerted upon it and by it during the period of this study. Governmental organizations have been identified as being more vulnerable to all three types of pressures than other organizations (Frumkin & Galaskiewicz, 2004, p. 283). However, when analysing past periods difficulties arise in obtaining credible evidence of normative and mimetic pressures, as will be shown in this study.

In particular, the use of the notion of isomorphism is considered both at the organizational level, but also at a more broader level than what it was used in previous studies set in the eighteenth century. Previous studies used the notion at the organizational level, such as the Royal Tobacco Factory (Carmona *et al.*, 1998), and the Gunpowder Monopoly in New Spain (Núñez, 2002, 1999), concentrating on the pressures exerted by the State on particular monopoly trading companies. Distinctively, in this study the notion of isomorphism is analysed both at the European/Portuguese level with the Portuguese State acting to implement a broader process of isomorphism in which different measures were put in action, and also at the organizational level with the Royal Treasury being coerced and exercising coercion over the colonies to adopt specific accounting practices. The measures adopted were underpinned with the objective, on one hand, to transfer accounting technology to Portugal and, on the other hand, to institutionalize and diffuse accounting technology in the country and Empire, and specifically within public administration. Although the study could be focused on only one level of analysis, as in previous studies, “change processes are best examined by designs that incorporate multiple levels of analysis. Social actions and structures exist in dualistic relation, each constraining and empowering the other” Scott (2001, p. 203).

Transfer of accounting technology

As mentioned before, this study besides focusing on the institutionalization of DEB through the Portuguese public and private sector, particularly its adoption at the Portuguese Royal Treasury on its establishment in 1761, tries also to broaden this analysis to the European context, looking for similar developments in other European nations and possible influence and transfer of accounting technology from those nations to Portugal.

Consequentially, the analysis assumes an international perspective by analysing the multinational context that was determinant for what happened at the national level. To organize and summarize this multinational analysis and to a better perception of all the factors involved in the international transfer of accounting knowledge the framework of questions developed by Jeremy (1991) of *International Technology Transfer* reveals itself very useful.

While some authors see nation-states as products of their own histories and internal forces, disregarding the influences of other nation-states, this study, similar to that of Meyer *et al.* (1997, p. 150), views nation-states as “more or less exogenously constructed entities – the many individuals both inside and outside the State who engage in State formation and policy formulation are enactors of scripts rather than they are self-directed actors”. Thus, the international technology transfer framework can assist in depicting possible influences among nation-states, since isomorphic developments have been reported in studies of many other nation-states features (Meyer *et al.*, 1997, p. 152). Nonetheless, it is important to acknowledge that diffusion processes between nation-states work at different levels and through a variety of linkages, what may involve some incoherence and result in a certain degree of decoupling “because nation-states are modelled on an external culture that cannot simply be imported wholesale as a fully functioning system” (Meyer *et al.*, 1997, p. 154; see also Meyer & Rowan, [1977] 1991).

Referring once more to the international technology transfer framework, Jeremy (1991, pp. 3-5) suggested a set of five questions to guide in the study of the transfer of any particular technology. Carnegie and Parker (1996, p. 25) summarized these questions to accommodate their use in the transfer of accounting technology, as presented in Chapter 2. This framework of questions will be specifically used in Chapter 9 in addressing accounting change within the context of country and Empire, specifically Portugal and her colonies. Indeed, a sixth question is posed in this study, specifically in relation to the transfer of accounting technology to the Portuguese colonies under the direction of the Royal Treasury until 1777 at the end of Pombalism. The sixth question is stated as follows: “Were there any consequent flows of the technology to other jurisdiction from the receptor economy?”. Importantly, the posing of this additional sixth question confirms the premise in this study that accounting is a technology and, like any other technology, is transferred from one jurisdiction to another. Accordingly, the complete set of questions used in this

study in providing an overview of the transfer of accounting technology within the content of country and Empire is detailed as follows:

1. What inhibiting factors were there, technical and non-technical?
2. What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection, the speed of transfer of the technology?
3. What was the rate of adoption, the networks of distribution into the receptor economy, the hindrances faced by carriers of the new technology?
4. Was the incoming technology reshaped by economic conditions, social factors, conditions in the physical environment?
5. Were there any reverse flows of the technology?
6. Were there any consequent flows of the technology to other jurisdiction from the receptor economy?

The diffusion of innovations across national and cultural boundaries is a process that resembles a communication model, with source, message, channel, receiver and effects, and is influenced by opinion leaders (Jeremy, 1991, p. 3). Therefore, the structure provided by the series of questions presented above shall be applied as a structure to elucidate the diffusion process within country and Empire.

Summary

This study adopts a research perspective which views the world as being socially constructed and subjective, consequently accounting is considered to be a social and institutional practice, the study of which is to be undertaken in the contexts in which it operates. Accounting is not just a product of society but is effectively and actively implicated in constituting that society, thus it is important to understand the context in which it operates. In conformity with trends of the “new” accounting history, an interpretative perspective is adopted in this study to assist in describing, analyzing and inferring about the adoption of DEB at the Portuguese Royal Treasury, in the context of similar reforms in other European countries, and the subsequent transfer of accounting technology within the Portuguese Empire.

Acknowledging the diversity of research directions, approaches and methods, this study is located within the field of public sector accounting under the notion of CIAH, and adopts a descriptive and explanatory case study. This study also applies a wide interpretation of what constitutes the “archive” for accounting research, and, although recognizing that the account books are a privileged archival source for accounting historians, other forms of record keeping are examined as appropriate, such as letters, laws, reports, news, and memoirs as well as the accounting policies that were issued for application in the Portuguese colonies. A combination of primary and secondary sources is used in this study, thus assisting to provide the necessary information for conducting this study and answer to its two major research questions.

In this study, besides the importance attributed to the contextual analysis, institutional theory is used as an interpretive lens to inform the findings of the local, time-specific accounting policy and practice in Portuguese central government. The notions of institutionalization, institutional agents, legitimacy, decoupling and isomorphism, as developed by institutional theorists, are particularly useful to understand the actions of the Portuguese government in the period between 1750 and 1777.

Accounting history research has shown that the theoretical framework is useful for conducting historical research, in particular when the state was a dominant institutional actor of the social context, and that accounting history research can also contribute back to institutional theory. Coercive pressures have been found to be the most prominent form of institutional pressures among historical accounting research studies in the public sector to date that have applied institutional theory. As indicated, the historical distinctiveness of accounting history research creates a situation in which the temporal distance from the events may complicate the gathering of evidence of the existence of normative and mimetic pressures.

Notwithstanding, this study is unique by broadening the application of institutional theory in accounting history research to a different country, to a different time period context, and to a different organization. In addition, the notion of isomorphism is considered both at the organizational level, but also at a broader level than what it was used in previous studies. The CIAH dimension of this study will be organized and summarized through the use of the framework of questions developed by Jeremy (1991),

which will provide a better global perception of all the factors involved in the international transfer of accounting technology from different European countries to Portugal and from Portugal, by means of the Royal Treasury, to the Portuguese colonies. Indeed, a sixth question has been added to the initial five questions to analyse the transfer of accounting technology to the Portuguese colonies under the direction of the Royal Treasury. Broadly, a structure is provided by the six questions to elucidate the accounting diffusion process within country and Empire.

In the next chapter the social, political and economic context within which the accounting developments under investigation occurred is presented with a particular emphasis on the rise to power of the Marquis of Pombal as a key environmental agent who, as Chief Minister from 1756, governed the country until 1777.

Chapter 5: Social, Political and Economic Context, Incorporating the “Pombalism” Period

Portugal has a long and rich history. Knowledge of this past generally assists in enhancing an appreciation and understanding of historical events as well as augmenting an understanding of how such events assisted in shaping subsequent happenings. The study of accounting practices is no exception and its investigation extends beyond the boundaries of the organization and is set within the social, political and economic context in which those practices were adopted and used. The consideration of the social, political and economic context is not restricted merely to the beginning of the second half of the eighteenth century, dating from 1750 to 1777, as the period of analysis of this study, and which includes the initial years of functioning of the Royal Treasury (1761-1777). It is important to gain, in addition, an appreciation of the major trends of Portuguese history dating from the fifteenth century in order to be able to better understand the meaning and importance of the events that took place within the particular historical period under analysis.

As has happened with other European countries, Portugal and its development has been influenced by social, political and cultural models prevailing at different periods of time around the world, particularly those emerging in Europe. Within the period of analysis, the beginning of the second half of the eighteenth century, and for some time before, mercantilist policies and enlightenment ideals were prominent in Europe and, of course, these models became influential in Portugal. It is important to understand the reforms implemented in Portugal at the time at the light of these worldwide models and the way these models influenced the Portuguese responsible for governing the country. Since, as identified by Oliver (1997, p. 700), organizations have to be studied within the social framework of norms, values and taken-for granted assumptions about appropriate economic behaviour in which they were immersed.

This chapter comprises three parts. The first part introduces the concepts of mercantilism, enlightenment and absolutism in order to provide an understanding of the Portuguese economic, political and social contexts that are developed in the following sections. The second section addresses key social and economic developments and comprises an overview of the Portuguese economic and social context within which the

accounting developments under investigation occurred, dealing with a period of approximately 250 years up to the 1750s. The following section comprises the rise to power of the Marquis of Pombal as a key environmental agent who, as Chief Minister from 1756, governed the country as a powerful, well-travelled and well-educated politician for the following 21 years. The understanding of Pombal's life and career and his actions while Chief Minister, in particular, is fundamental to provide an adequate understanding of the accounting change that occurred in the second half of the eighteenth century, both within public administration and in the domain of private business.

Mercantilism, enlightenment and absolutism

In exploring the wider economic and social context for this study, it is important to take into consideration, as mentioned before, “worldwide models [which] define and legitimate agendas for local action, shaping the structures and policies of nation-states and other national and local actors in virtually all of the domains of rationalized social life” (Meyer *et al.*, 1997, p. 145). Models such as mercantilism, enlightenment and absolutism prevailed in Europe for the time period of this study, and exerted influence throughout the European nation-states. Portugal was no exception. As pointed out by Meyer *et al.* (1997, p. 145), “world models have long been in operation as shapers of states and societies” and the institutionalization of these world models can help to explain some key features of national societies. Moreover, these models can help to understand the “interrelations of accounting and the state” and in developing an “understanding of accounting change” (Miller, 1990, p. 316). As will be indicated in this study, “the construction and elaboration of governmental programmes are processes that often call upon the calculative practices of accounting to make their objectives operable” (Miller, 1990, p. 316). Next, an overview of the concepts of mercantilism, enlightenment and absolutism are presented.

Mercantilism

From the fifteenth to the eighteenth centuries the development and diffusion of new accounting techniques, new methods of using capital, and new organization of property by private business were also accompanied by a more intervenient state concerning economic affairs, which became known as Mercantilism (Coornaert, 1967, p. 220). Mercantilism was the dominant economic premise during these centuries and consisted of a mixture of

beliefs, theories, and practices that were aimed at enabling wealth accumulation by the State, especially through the accumulation of precious metals and combined with the use of monetary policies for economic management (Chatfield, 1977, p. 78, 1996c, p. 415; Coornaert, 1967, p. 239; Denis, 1974; Macedo, 1971c, pp. 271-275). Its dogma was based on State intervention in economic life that was intended to advance and reinforce the power of the State (Filius, 1983, p. 443; see also Mann, 1995). One characteristic of the mercantilist policy adopted by the different European nations was the extensive government regulation of international trade (Irwin, 1991, p. 1296) and the creation of state-chartered monopoly companies for facilitating the advent and development of commerce between Europe and other regions of the world. Examples of these companies are the English East India Company (1600) and the Dutch United East India Company (1602) (Irwin, 1991; O'Brien, 2000) as well as several other similar companies that followed these prominent entities of the era.

A movement for strengthening and reorganizing the internal administration and government was a characteristic of all the European countries during the overseas expansion (Coornaert, 1967, p. 226), which was also a characteristic prevailing during the period of investigation in this study, namely in the initial years of the second half of the eighteenth century. But there were differences in the way States tried to accomplish mercantilist objectives. For instance, in England the role played by the merchants in trade was largely based on their own initiative. Specifically, they lobbied, harangued and even bribed to obtain what they wanted, and the companies were created by the merchants with royal encouragement (Wilson, 1967, p. 530). In France the situation was different. The merchants could discuss the business and economic practices of their country, but they would not publicly question the policy of the King (Wilson, 1967, p. 530). In France even the organization of trade was a question of authority and the companies were, in general, created by the King with the co-operation of the merchants. While benefiting the merchants, the overall objective of the arrangements adopted was to benefit the State itself (Wilson, 1967, p. 530; see also Denis, 1974). The most complete form of industrial mercantilism is considered to be the one represented by the doctrines and practices as advocated by Colbert. Colbert argued that the political power of a nation was profoundly connected with the commercial expansion and, therefore, the political supremacy would only be obtained by the effective development of exports (Grande Enciclopédia Portuguesa e Brasileira, 1981, p. 975). In Portugal, the policy embraced was closer in nature to that

adopted in France, albeit also influenced by British economic policies, characterized by the intervention of the State with the co-operation of the merchants, which was much more pronounced as a regime during the reign of *D. José I* in the second half of the eighteenth century (see Macedo, 1971c, pp. 272-274; Pombal, 1777, p. 298).

Enlightenment

The Enlightenment constituted an integrated cultural and intellectual movement, that represented “a tendency towards critical enquiry and the application of reason” (Black, 1990, p. 208; see also Behrens, 1985; Coppieters, 1993; Gay, 1969; Hof, 1995; Israel, 2001; Mephram, 1988a,b)⁵¹. Usually it is considered that the Enlightenment period is comprehended as prevailing generally in Europe between 1650 and 1800 (Snyder, 1955, p. 7). In Scotland, for instance, the duration of the Enlightenment is commonly considered to have spanned the period dating from the Act of Union (1707) to the death of Sir Walter Scott (1832) (Mephram, 1988a, p. 151). However, the eighteenth century is commonly referred to as the “Age of Enlightenment”. The classification of enlightened government implies a redefinition of the State action. Not a single sector of the social life could be left untouched by the action of the State (Falcon, 1982, p. 134).

The enlightenment sought to implement the passage from theory to practice, from critics to reforms, with the motivation to improve the situation within societies at different levels, such as at the education, social and political levels (Coppieters, 1993; Gay, 1969; Hof, 1995, p. 11). Since it was considered that the society and the State needed new personnel with a higher degree of qualification, the reform of the educational system became one of the most important tasks of the rulers of the Enlightenment. But to implement the objectives of the enlightenment, the State had to face the mentality and the privileges that groups in society had accumulated during centuries, such as the Church in general, particular religious institutions, corporations, universities, the nobility, which collectively made it difficult to administer a country and very difficult, if not almost impossible, to stimulate and operationalize important innovations. As a result there was a

⁵¹ Although there are various ways of interpreting European Enlightenment, depending on the importance attributed to French or English authors and ideas, this study adopts the definition provided by Israel (2001) who views the “Enlightenment as a single highly integrated intellectual and cultural movement, displaying differences in timing, no doubt, but for the most part preoccupied not only with the same intellectual problems but often even the very same books and insights everywhere”.

concerted attempt to establish a clear dominion of the King, or the State, and overcome the difficulties to implement new measures (Hof, 1995, p. 172).

Absolutism

The dominion of the central authorities supported by both mercantilist policies and enlightened ideals is referred as absolutism. Absolutism can be defined as a form of government which is not hampered by parliamentary institutions, but where there is the voluntary submission to laws and the acknowledgement of the rights of subjects (Maxwell, 1995, p. 158; see also Black, 1990, p. 329; Hartung, 1957; Serrão, 1996a, pp. 193-195). Under this classification are the “states generally seen as powerful entities characterised by rulers who dictated policy and dispensed with representative assemblies, central governments that sought to monopolise power and coerce opponents, and the growth of centralising institutions, such as the court, the standing army and bureaucracy” (Black, 1990, p. 329). This form of government was adopted by the monarchs of most of the European states, except Poland, Britain and The Netherlands, who “strove to promote their sovereignty by amassing power over policy and resources within the State, and by competing with other states for influence and territory” (Woloch, 1982, p. 1). Generally it is accepted that this political regime started in the second half of the fifteenth century and ended with the French Revolution, in 1789, although it was manifested in different countries, in different ways, at specific points in time (Macedo, 1971a, pp. 8-14). While in Britain the political regime was, since 1688, characterized by a dualistic form of government constituted by the King and the parliament (Fonseca, 2000, p. 631).

Hartung (1957) made the distinction between absolutism – a form of government which is not hampered by parliamentary institutions, but which voluntarily submits to laws and acknowledges the rights of subjects – and despotism which is equivalent to unchecked tyranny. In the opinion of Maxwell (1995, p. 158), Portugal was a hybrid case, “part-absolutist, part-despotic”. The expression “enlightened despotism” is generally used to describe the form of government that prevailed in many European states in the decades before the French Revolution, in particular, combining attacks on clerical power and privileges (especially those of the Jesuits), the support of religious toleration, the legal reforms, the abolition of torture, and the widespread interest in educational reform and development (Black, 1990, p. 378; see also, Bluche, 1968; Hartung, 1957; Hof, 1995;

Macedo, 1971b, pp. 290-292; Marques, 1984, pp. 321-324). Although initially applied in Prussia by Frederic II after 1740, this political system was rapidly adopted in Austria, Russia, Sweden, Italy, Spain and Portugal, with specific adaptations in each country (Bluche, 1968; Núñez, 2002, pp. 275-276). In the case of Spain, enlightened despotism reforms were in place during the eighteenth century and were intended to promote the development of production and commerce, establish a solid national economy and protect from foreign competitors (Núñez, 2002, p. 275). In order to achieve these objectives the “state was to be strengthened and centralized and public administration [was to be] made efficient” (Núñez, 2002, p. 276).

Economic and social context

Portugal by the late fifteenth century/early sixteenth century was a leading colonial power, assuming this position as a major trading nation possessing strong navigation capabilities (see, among the others, Boxer, 1969; Godinho, 1962, 1981; Livermore, 1976; Peres, 1959; Serrão, 1980). Favourable conditions offered by the country’s Kings, such as consent to use of weapons, exemptions from taxes, privileges to trade certain products, provision of special security arrangements and the affording of private property rights served to stimulate the arrival and retention of foreign merchants (Marques, 1984, p. 124; Rau, 1984c, p. 203; Serrão, 1990, p. 320). Merchants were drawn from England, The Netherlands, Germany, Spain, and France as well as from Italy, which was the most significant provider of foreign merchants to Portugal (Amorim, 1929, p. 79; Rau, 1971, 1984c). Portuguese merchants also played a role in this commercial activity and many generated and maintained considerable wealth (see, for example, Rau, 1984a,b; Boxer, 1969). Such commercial developments assisted in making Lisbon one of the most important navigation ports of Western Europe and contributed to the growing prosperity of the country.

During the sixteenth and seventeenth century commercial development was concentrated around the Atlantic due to the maritime discoveries and Portugal, Spain, Holland, England, and France became the leading nations in the international trade during the Discoveries (Vlaemminck, 1961, p. 132; see also Coornaert, 1967; Parry, 1967). However, Portugal’s influence as a colonising nation was overshadowed by the progressive rise of other major European colonial powers. A major reason for this change, together

with a general downturn in trade revenues, was the advent of the Portuguese Inquisition in 1531 and its effects which prompted a significant number of Portuguese Jews, who had played an important role in Portuguese discoveries, to depart the country, often to never return to Portugal (Kayserling, 1971; Livermore, 1976, p. 147; Nogueira, 2001; Rodrigues & Craig, 2004, p. 341; Rodrigues *et al.*, 2003; Tavares, 1995). This loss of influential merchants resulted in the departure of much capital from Portugal, both financial and intellectual, and the depletion of the country's entrepreneurial skills and related development potential (Kayserling, 1971, pp. 147, 199; Marques, 1984, p. 120; Rodrigues *et al.*, 2003, p. 100; Serrão, 1980, pp. 256-263). In addition, Portugal lost its independence to Spain in 1580, thereby beginning one of the most disturbed political periods in Portuguese history (Livermore, 1976; Serrão, 1990). Under the dominion of Spain, Portugal saw its role in international trade languish. Spain was at the time fighting against the military and overseas dominion of France, which had the ambition of European hegemony while competition from the Dutch India Companies was affecting trade with Brazil and India (Serrão, 1994, p. 25). Progressive economic degradation accompanied the country's political volatility (Irwin, 1991; Marques, 1973, p. 430; O'Brien, 2000; Serrão, 1990, pp. 145-251; Serrão, 1996a).

The Spanish dominion over Portugal was characterized by the administrative separation of the two empires. The Portuguese laws and language were preserved, the King had to hear the Portuguese councillors in all the matters related with Portugal and the Portuguese territories, and only Portuguese servants could be appointed to those territories (Boxer, 1981, p. 119; Schaub, 2001, p. 25; Serrão, 1990, p. 16). In addition, Spanish merchants could not trade within the Portuguese Empire, and the Portuguese could not trade within the Spanish (Boxer, 1981, p. 119). While Portugal has resumed its independence from Spain in 1640, and maintained its colonial empire, the country was unable to recover its previously held position as a premier trading nation in Europe and, indeed, it struggled to compete with other nations in Europe (Marques, 1973, p. 361; Nogueira, 2001, p. 303; Serrão, 1994, p. 25, 1996a; Sideri, 1978, p. 37). In the opinion of Marques (1973, p. 361), Portugal became less capable of effectively organizing such a large empire. If before a strong royal authority had been sufficient, at that time the reduced demographic resources, the lack of defence equipments, and the eventual inexistence of an entrepreneur bourgeoisie made it very difficult for Portugal to effectively compete with other nations (Cortese, 1971, p. 17; Marques, 1973, p. 361).

The country's situation during the seventeenth century was aggravated by the constant threats of war with Spain, and the disputes with other European nations over its colonies (Boxer, 1981, p. 120, 1969; Cortesão, 1971, p. 15; Marques, 1984, pp. 181-182; Martins, 1972; Serrão, 1996a). The political support of France during the twenty years after restoration of its independence from Spain ceased. As a result, Portugal established an alliance with England which provided both political and economic support that would increase significantly during the first half of the eighteenth century (Azevedo, 1961, p. 8; Bairoch, 1989, p. 20; Fisher, 1984; Marques, 1973, p. 377, 1984, p. 351; Serrão, 1996a, pp. 64, 230; Sideri, 1978, p. 39). Nonetheless, the economic standing of many other European countries continued to improve as they invested heavily in international trade, while the on-going Portuguese Inquisition continued to have adverse affects on the livelihoods of many influential businessmen and their families, thus progressively weakening the bourgeoisie and throwing Portugal to "abysm and ruin" (Kayslerling, 1971, p. 284; also see Nogueira, 2001, p. 76; Serrão, 1990, p. 322, 1996a, p. 83). The Inquisition, through the censorship of an increasing number of books, especially those concerning the protestant doctrine, also brought about a detachment of the country's citizens from general social movements that were developing momentum within Europe, thus resulting in the suppression of intellectual creativity and even certain hostility to innovation (Dias, 1952, pp. 292-297; Fonseca, 2000, p. 640; Marques, 1984, pp. 134-138). Important scientific works, such as those of Galileo and Newton, were known in Portugal by only a small and clandestine intellectual community in the last years of the seventeenth century (Dias, 1972, p. 5; Fonseca, 2000, p. 642).

The eighteenth century was a particularly agitated period for Europe. With France as political leader and England leading industrial development of Europe, soon two rival groups – one associated with France and Spain and the other with England and Austria – were formed. As a consequence several wars happened, like the War of Succession between Spain and Austria and the War of the Seven Years (Serrão, 1996b, p. 12). The big states fought for the control of portions of the world's resources. Nevertheless, most of continental Europe remained rural (Foreman-Peck, 1990, p. 15), with a significant part of the population working in agriculture. Industry was characterized by small units, reduced specialization either in machinery or labour, and training was acquired on the job. Skilled labour was in short supply, and the possibility for the countries that wanted specialized

workers was to bribe workers to migrate from other countries (Black, 1990, pp. 44-45). During this period, in Europe, some of the most influential books on the role of government and the Monarch were inspired by Bodin's idea of sovereignty, such as *The Leviathan* (1660) by Thomas Hobbes, and *Patriarcha; or The Natural Power of Kings* (1680) by Robert Filmer (Fonseca, 2000, p. 641). These particular works advocated the absolute power of the Monarch, without restrictions (Fonseca, 2000, pp. 631-642; Franklin, 1972). This absolute conception of the State, known as absolutism, prevailed in Europe during the eighteenth century and was complemented by government practices that were inspired by rationalist and enlightened principles. These practices consisted of the centralization of the administrative structure, the creation of a loyal and competent bureaucracy and the divisionalisation of the governmental functions (Falcon, 1982, p. 134; Maxwell, 1995, pp. 18-19). Usually these practices were accompanied by a reform of education and a growing professionalization in government and administration (Black, 1990, p. 378).

Throughout the first half of the eighteenth century the European enlightenment only slowly began to penetrate in Portugal, during the reign of *D. João V* [King John V] (1706-1750). During this period enlightenment ideals tended to migrate from France, through print media, such as newspapers and magazines, and by diplomatic means, as well as through the activities of travellers and merchants (Caeiro, 1980; Coelho, 1962, p. 198; Israel, 2001, p. 528; Serrão, 1996a, pp. 208-212, 1996b, p. 11). Around the end of the seventeenth century and the beginning of the eighteenth, the role of the King increased significantly. He possessed all the authority and the capacity to exercise it (Macedo, 1971a, p. 13). This was reinforced by the fact that the Portuguese Courts were not assembled between 1698 and 1821. Following the French model, *D. João V* sought to expand his power base and endeavoured, with limited success, to modernize the country's public administration, thereby reinforcing in Portugal an absolute monarchy regime (Livermore, 1976, p. 208; Marques, 1984, p. 351; Serrão, 1996a, pp. 195, 325-326). Despite such political reforms and the attempts made by enlightened Portuguese who were living abroad to influence affairs in Portugal, the strong conservatism, cultural backwardness, and religious intolerance which existed provided a weak base for the adoption of enlightenment ideals (Cunha, 17--⁵²; Dias, 1952; Fonseca, 2000, pp. 643-678; Pombal, 1741, 1742).

⁵² This manuscript was written by D. Luis da Cunha (1662-1740), who was at times the Portuguese ambassador to England, The Netherlands, Spain and France, who enjoyed close relations with Pombal, and

During the first half of the eighteenth century Portugal benefited from the flow of diamonds and gold from Brazil, thus making the Portuguese Court one of the richest in Europe (Livermore, 1976; Maxwell, 1995; Serrão, 1996a). Brazil was the largest and most important of all the Portuguese colonies of the Portuguese empire, which around this time included the Madeira and Azores islands, and territories in Asia, Africa and South America (Livermore, 1976, pp. 208-209; Schneider, 1980, p. 7). Nevertheless, by 1750 Portugal's importance in Europe had decreased significantly; the economy was under-industrialized in comparison with other European nations, and a significant part of the country's commerce had, by then, become controlled by foreign merchants (Azevedo, 1929; Birmingham, 1993; Black, 1990, p. 75; Livermore, 1976; Macedo, 1951, p. 114; Marques, 1984; Mauro, 1991; Maxwell, 1995; Pedreira, 2005; Serrão, 1996b). Previously, under the actions of *Conde da Ericeira* (Count of Ericeira) there had been an attempt to stimulate Portuguese industry, through the establishment of new factories. However, such actions were not a success due to the commercial treaties with foreign nations, mainly England⁵³, and because of the ease of deriving wealth from gold and silver extracted in Brazil, which inhibited a concentration upon the development of national production at home (Azevedo, 1961; Fisher, 1984; Francis, 1966; Macedo, 1951, 1982; Magalhães, 1967; Marques, 1984, pp. 284-287; Mauro, 1991, p. 250; Maxwell, 1995, pp. 41-43; Pedreira, 2005, p. 194; Serrão, 1996a, pp. 373-377). Meanwhile, European trade rose in volume during the century, benefiting from the colonial and trans-oceanic trade and the imports of sugar, tobacco, cotton and rice. Leading nations, such as England and Holland, tried to control this activity through the foundation of chartered trading companies (Black, 1990, pp. 63-64). The interest in trade grew significantly as did the pressure upon governments to take a key role in the economy and its development, being characteristic of mercantilism that prevailed even during this century.

who was a proponent of mercantilist and enlightened ideals and policies (see Falcon, 1982; Maxwell, 1995). The exact date of elaboration of the manuscript, following the indications of the National Library, is unknown.

⁵³ Since 1661 Portugal was politically associated with England in opposition to the coalition between France and Spain. This political alliance resulted in an intensification of commercial trade between England and Portugal. These relations were reinforced, in 1703, with the Methuen Treaty that provided Portuguese wine special conditions for export to England (that is, a reduction in taxes), while preference was given to English textiles in Portugal without restrictions to importations. This, together with other factors, such as the richness in gold, resulted in a negative stimulus to Portuguese production, while the English trade increased significantly, with a positive balance of trade to England (see, for example, Azevedo, 1961; Fisher, 1984; Francis, 1966; Macedo, 1951, 1982; Marques, 1984, pp. 289-290; Mauro, 1970, 1991; Maxwell, 1995, p. 41-43; Serrão, 1996a, pp. 229-232).

In the eight years before 1750 the King *D. João V* was incapable, due to his health problems, of commanding the absolute government that he had established or to delegate that function in a strong chief of government (Livermore, 1976, p. 211; Schneider, 1980, p. 9). The foreign politic of the period, which would continue along the century, was essentially a politic of European equilibrium, based on the support of England and, consequently, distant from France and Spain (Macedo, 1951, p. 104). The socio-economic conditions in Portugal around 1750 were characterized by a powerful nobility and an influential Church, namely by means of the Jesuits, as well as complexity in public administration and, at this time, a political crisis that was brought on by the illness of *D. João V* (Macedo, 1971b, p. 291; Marques, 1984, p. 321). However, the slow uptake of European developments and ideals in Portugal, originating largely from France, aided by the influence of Portuguese living abroad who were in direct contact with different cultures, favoured the emergence of a cultured and enlightened elite in the second half of the eighteenth century. By 1750 a new scenario was created with the nomination of the new King *D. José I* (King Joseph I) (1750-1777), and the appointment of an enlightened diplomat, Sebastião José de Carvalho e Mello, later known as *Marquês de Pombal* [Marquis of Pombal], to the post of Foreign Affairs and War Minister in 1750.

The reign of *D. José I* from 1750 was marked by an increased intervention by the Monarch, which resulted in a new phase of absolutism, characterized by the unlimited power of the King, known as “enlightened despotism”, as described earlier. The political and administrative reforms that were conducive to strengthening the power of the King, and which led to the modernization of Portuguese economy and society, started mainly after 1755. On 1 November 1755 an earthquake causing a tsunami and massive fires devastated Lisbon⁵⁴. Most of the city of Lisbon was destroyed, including the commercial centre of the city and most of the infrastructure related to commercial record-keeping and record-housing. The *Casa dos Contos* [Customs House], the institution responsible for public finances before the establishment of the Royal Treasury in 1761, was destroyed as well as the documentation stored there (Birmingham, 1993, p. 65; Mendonça, 1758, p. 129; Serrão, 1996b, pp. 27-33). Notwithstanding, the earthquake became an opportunity to implement important economic reforms and reduce the Portuguese dependency on

⁵⁴ There is no precise number of those who died, but some authors advance a number between 5.000 and 15.000 (Gorani, 1945; Livermore, 1976; Pereira, 2007, p. 5).

England, and, importantly, created conditions for political change to occur (Pereira, 2007, pp. 1-2 and 20). Pombal, who was at the time Foreign Affairs and War Minister⁵⁵ from 1750, assumed control of all the measures required to be implemented to face the destruction and restoration in Lisbon, increasing his reputation and connectedness (Marques, 1984, p. 353; Serrão, 1996b, p. 28) and, on the death of the Chief Minister in 1756, Pombal ascended to this position. Soon after, in 1759, *Sebastião José de Carvalho e Mello* became Count of Oeiras and in 1770 he became Marquis of Pombal. Pombal's leadership resulted in the adoption of many important economic and social reforms in the country during a phase in Portugal's past that is now known as "Pombalism" (Falcon, 1982; Marques, 1984, Serrão, 1996b).

The next section provides an outline of the life and career of Pombal, and portrays his rise to prominence as a dominant political figure, whose actions influenced profoundly all aspects of Portuguese society, including the dissemination of accounting practices in both the private and public sectors. He is indeed a large and central figure in Portugal's history.

Pombal: a key environmental agent

A focus on Pombal, as a powerful political figure, is central to understanding key facets of the distinctive and novel programme of the Portuguese government during 1756 and 1777. As argued by institutional theorists, the power, support, or opposition of important organizational actors affects the policies adopted and also the practices that become institutionalized, based on their identification and interpretation of societal expectations (see, for example, Covalski *et al.*, 1993, p. 67; DiMaggio, 1988, p. 13).

Life and career

Pombal was part of the enlightened Portuguese elite, the seeds of whose influence were initially sown during the first half of the eighteenth century and, more specifically, he

⁵⁵ Since 1736 there were three secretaries of state, later ministers, divided in Home Affairs, Foreign Affairs and War, and Overseas and Marine (Livermore, 1976, p. 211). Between 1750 and 1755 the government was led by Pedro da Mota e Silva, as the Chief Minister. Pombal's roles and actions, however, were influential as he participated actively in all the decisions and measures adopted, as occurred in the case of the establishment of the Company for Trade with Asia (1753) and, accordingly, he won the trust of the King (Serrão, 1996b, pp. 27, 36).

was part of a group of officials and diplomats who were concerned with understanding the imperial organization and economic practices which they believed were the reasons for the power and wealth of France and Great Britain (Marques, 1984; Maxwell, 1995; Serrão, 1996a). Although Pombal was a graduate in Law of the University of Coimbra, his diplomatic career took him initially to London, where he represented the Portuguese Crown from October 1738 until May 1743, and during a further period of six months in 1745, and also to Vienna, from 1745 to 1749 (Barreto, 1986, p. xxvi).

As was the case for Portuguese diplomats in general, the period of time Pombal spent abroad allowed him to have access to nationals of other countries, different literature and other ideas and, therefore, to develop an understanding of economy and society in many prominent European countries, particularly in England, France and in The Netherlands (Serrão, 1996b, pp. 98-100). Pombal was interested in the “causes, techniques, and mechanisms of British commercial and naval power” (Maxwell, 1995, p. 6), as well as such features of other European countries, such as France and The Netherlands. In particular, Pombal wanted to understand the commercial and military superiority of other European nations and the economic and political weakness and military dependency of Portugal, expecting to learn how to change the Portuguese situation. From the list of books that Pombal had accumulated in his personal library in London (see Appendix A for details) it can be seen that he had a significant number of books relating to trade and trading companies, along with many books by important writers and thinkers of that period (such as Montesquieu, Voltaire and Thomas Mun). Most of the books were written in the French language. Different authors pointed out that Pombal was not comfortable with the English language, although he had lived in London for several years (see Azevedo, 1990, p. 35; Maxwell, 1995, p. 6, Schneider, 1980, p. 10). Later, Pombal wrote that in spite of the time he spent in England he was not able to learn English (Pombal, 1777, p. 290).⁵⁶

From his writings while living in London, Pombal believed that “all the nations of Europe augmented themselves in the past, and are still augmenting today, by reciprocal imitation. Each observes carefully the actions of the others. Therefore, all nations benefit from using the information that is collected by their ministers concerning the useful inventions of other nations” (Pombal, 1742, p. 158). In Pombal’s own words, as translated,

⁵⁶ Cheke (1946, p. 49) claims that French was the tongue of diplomacy, and it was unnecessary, and sometimes unwelcome, that a diplomat spoke the native language of the country where he was residing.

his “most interesting duty in London was this careful observation” (Pombal, 1742, p. 158), which allowed him to have a detailed appreciation of the British position (Francis, 1985; Maxwell, 1995). In particular, Pombal focussed on augmenting an understanding of the commercial relations between England and Portugal. This is demonstrated in the manuscript *Relação dos Gravames* [Report on Grievances], authored by Pombal in 1741 while he was living in London. This provocative title reflects Pombal’s angst at economic exploitation by England. Pombal (1941) criticized the “unfair advantages the British enjoyed in Lisbon and Oporto, advantages for which, Pombal claimed, Portuguese merchants in Britain had gained no reciprocal privileges” (Maxwell, 1995, p. 7). Europe itself provided a setting for the development of ideas and technology which, as they become known and useful, were eligible for adoption, modification or abandonment within individual countries in the region. Processes of isomorphism (DiMaggio & Powell, 1983, p. 149), therefore, operated between European nations during Pombal’s reign, who himself was one of the key “agents” in this imitation process in Portugal for country advancement purposes.

During this period Pombal developed important contacts and connections with foreign businessmen, attended “conferences with important professors of commerce” (Pombal, 1742, paragraph 37), gained admission to the Royal Society of London, and fostered close links with many members of the Portuguese enlightened elite who were living abroad, mainly in Paris, Rome and London, many of whom influenced his thinking and shaped the mindsets behind the subsequent reforms that he implemented in Portugal as Chief Minister (Dias, 1984; Israel, 2001, p. 537; Leite, 1982; Serrão, 1982, 1996b, pp. 241-242). The period of time spent in Vienna was also important in the construction of Pombal’s thought (Serrão, 1996b, p. 22). Although Correia (1965, p. 96) concluded that it is not possible to state with confidence that the measures implemented by Pombal were a direct influence of his stay in Vienna, Pombal nevertheless had close contact with important figures of the government in Vienna. One of these figures was the Marquis of Prié, Austria’s minister for The Netherlands and the individual responsible for the organization of the Company of Ostende and also for the development of commerce between The Netherlands and India (Correia, 1965, p. 89). The period of time Pombal spent in Austria also allowed him to be in contact with the Enlightenment ideals that were put into practice by the Empress Maria Theresa of Austria (1744-1749), and by the

Cameralist⁵⁷ movement that characterized Germany and Austria at that time (see Leite, 1982, pp. 487-514; Maxwell, 1995, pp. 8-9; Serrão, 1996b, pp. 22-25).

Based on his observations, Pombal considered that it was necessary to create large and solid commercial houses, stimulate the creation of new industries, and to provide Portuguese merchants, as he believed that they did not generally possess sufficient commercial knowledge, with an adequate education in commercial affairs. He also believed that State intervention was required in order to initiate and progress such developments (Pombal, 1742). Pombal further considered that the commercial success of France and Britain, in particular, as well as some other European countries, was more directly related to the effective leadership and actions of statesmen, the economic policies adopted and the creation of monopolistic trading companies, rather than to the entrepreneurship of merchants (Pombal, 1742). Indeed, Pombal argued that Portugal should create companies similar to the entities that were created in England, France and in The Netherlands (Pombal, 1742). In this particular case, Pombal suggested to the Portuguese government the creation of a company for conducting trade with India, similar to the British one, and supported with the advice of a British man, John Cleland, who had been a high official of the British East India Company, had accounting knowledge and spoke Portuguese, and offered the Portuguese documentation about the plans and operations of the company (Barreto, 1986; Maxwell, 1995).

Portugal under the leadership of Pombal

While the King devoted his time to hunting and religious observances, Pombal yielded supreme power, consolidated by enlisting into the government persons of his trust (Leite, 1982; Livermore, 1976; Maxwell, 1995; Ribeiro, 1934). The authoritarian and sometimes ruthless character of Pombal was so strong that all subjects concerned with the administration of the nation, regardless of their rank, were assigned to his supervision (Chagas, 1867, pp. 543-544; Fonseca, 2000, p. 688; Ribeiro, 1934, pp. 211-228; Schneider, 1980, p. 209). Notwithstanding his public duties, Pombal operated his own private businesses and, according to Ratton (1813, p. 140), “he reserved Sunday mornings for the businesses of his house, in which he meet in the chamber of his control office,

⁵⁷ Cameralism was the German and Austrian form of Mercantilism, and the main concerns were with organizing, directing, and managing public lands, taxes, and public finances (see, for example, Filios, 1983).

methodically organized with books that were prepared using the DEB system, with all the persons in charge of the administration of his properties and businesses”.

Pombal’s main actions in leading the country were influenced by “worldwide models” (Meyer *et al.*, 1997, p. 145) prevailing in Europe at that time, that is, by enlightenment ideals, and mercantilist policies and by the experiences of several European countries based on his own observations and also those of others (Marques, 1984; Serrão, 1996a,b), as is evidenced by the following statements:

... I applied myself with all the care (as far as my small talents allowed) to choose the books that best taught Political Arithmetic⁵⁸, State Economy; and to study them as well as the commercial and navigation laws.

... these notions that I kept on my memory were the reason why he [the King] remembered me to become a Minister of State...(Pombal, 1777, p. 257).

In particular, the knowledge Pombal acquired while abroad determined his preference for the French mercantilism⁵⁹, but taking into consideration the influence of the British industrial model (Dias, 1984, pp. 142-150, 212-213; Rodrigues & Craig, 2004)⁶⁰. From his own writings, Pombal held a strong admiration for French public administration, particularly the actions of French Statesmen, as indicated in the following statements:

...lately France with the King Louis XIV having the help of the important Minister Jean Baptiste Colbert (facing the opposition against the novelties) made all the useful establishments of Commerce and Navigation, in what imitated all the others mentioned before [cities of Genoa and Venice, Hansa cities, The Netherlands, and England] (Pombal, 1777, p. 256).

... and from all of this [talking about the French measures related with industry and commerce] came as a natural consequence all the measures that the King adopted (imitating the example that the King Louis XIV had practiced with Colbert), and made me the honour of serving him and help with my diligences to establish the manufactures and industries of this kingdom... (Pombal, 1777, p. 298).

⁵⁸ For an understanding of the significance of “political arithmetic” see Miller (1986, pp. 86-88).

⁵⁹ Three major groups of mercantilist thought can be identified (Macedo, 1971c). First, the Spanish-Italian, which was characterized by the prohibition of precious metals going out of the country, forbidding the entry of foreign manufactures and regulating money exchange. Second, the French mercantilism, in which the stockpiling of precious metals was to be obtained by stimulating and reorganizing industry and stimulating exports. Since France did not possess mines of precious metals, the French mercantilism “helped to make France a nation of state intervention *par excellence* and placed responsibility for such policies firmly with the central government” (Miller, 1990, p. 332). In France, mercantilism eventually became known as Colbertism (Filios, 1983, p. 443). Third, the Anglo-Dutch mercantilism, under which, the main concern was a favourable balance of trade through the activities of industry and commerce as the main instruments to accomplish it.

⁶⁰ In their study on the foundation of the Portuguese School of Commerce, Rodrigues and Craig (2004) point to the importance of English mercantile influences on the creation of the School, based upon Pombal’s stay in London and particularly his contacts with John Cleland and his impressions of the views of Malachy Postlethwayt, a writer on mercantilism. Notwithstanding, the authors also refer to the “French mood and French influences [that] were very popular in Portugal” (p. 342).

Indeed, according to Serrão (1982, p. 412), “France was for the Portuguese of that time the exemplary school of culture and civilization. All things that were associated with France were defended even if they were contrary to the national spirit”.

The legislative measures implemented by Pombal were considerable in number and diverse in nature and influenced all aspects of Portuguese society, particularly at the religious, economic, educational, fiscal, and administrative levels. Among the considerable number of key measures implemented by Pombal, which served to define and reflect the Pombalism phase of Portugal’s economic and social development, are the following:

- Establishment of several monopoly trading companies to be responsible for the commercial trade with the Portuguese colonies and within the country⁶¹;
- Establishment of the Board of Trade (1756);
- Advent of the School of Commerce (1759);
- Establishment of the Royal Treasury to organize public finances, with Pombal as the “General Inspector” (1761);
- Abolishment of slavery in Portugal (but not in the colonies) (1761);
- Establishment of the College of Nobles to provide the children of the nobility with professional skills in government or in military service (1761);
- Reform of the army with recourse to officials trained in Austria and England (1765);
- Creation of the first group of professors for public schools (1772);
- Reform of the University of Coimbra with the first lessons of medicine and science (1772), and
- End of the distinction between “New Christians” and “Old Christians” (1773).

It is within the rationales provided by mercantilism, absolutism and enlightenment prevailing at the time that these disparate measures can be understood. The Portuguese government followed the mercantilist doctrine that assumed that “the State should

⁶¹ These companies comprised the following: *Companhia de Comércio com a Ásia* [Company for Trade with Asia] (1753); *Companhia Geral do Grão-Pará e Maranhão* [General Company of Grão-Pará and Maranhão] (1755); *Companhia da Pesca da Baleia no Brasil* [Company of Whale Fishing in Brazil] (1756); *Companhia Geral da Agricultura das Vinhas do Alto Douro* [General Company for the Culture of the Vineyards of Alto Douro] (1757); *Companhia Geral do Pernambuco e Paraíba* [General Company of Pernambuco and Paraíba] (1759); and *Companhia da Pescaria do Atum e Sardinha no Algarve* [Company of Tuna-fish and Sardine in Algarve] (1772).

encourage trade and industry by granting monopoly patents to investors and by chartering companies with exclusive franchises to perform certain services or to exploit particular overseas areas” (Chatfield, 1977, p. 78). Following the mercantilist principle of monopoly, the Portuguese government decided to create monopoly trading companies and privilege a reduced number of businessmen and, accordingly, to generate a small but competitive elite merchant class (Marques, 1984, p. 292; Maxwell, 1995, pp. 69 and 74; Pedreira, 1995; Serrão, 1996b, pp. 99-100).

In order to implement all these measures and to reinforce the State’s power, one fundamental aspect to be managed was an improvement of the State’s finances. The increase of State income was to be obtained through a more efficient collection of public money (with the creation of the Royal Treasury with a centralized system of accounting, as will be discussed later, the reduction of smuggling, an increase in taxes) and through economic development (Fonseca, 2000, p. 703; Macedo, 1951). Through such initiatives and by implementing a mercantilist policy, Pombal endeavoured to develop commerce and industry, to reduce importations and consequently restrict the amount of gold that went abroad to pay for imported goods and, at the same time, to create a powerful class of Portuguese businessmen with the necessary skills and capital resources to compete with the foreign businessmen (Macedo, 1971c, 1982; Maxwell, 1995, p. 67; Pedreira, 1995; Serrão, 1996b, pp. 191-205).

Among the different measures implemented by Pombal to stimulate industry and commerce were specific developments in accounting practice and education. The innovations in accounting introduced by the Portuguese government can “help to render operable the broad programme of government embodied in mercantilism” (Miller, 1990, p. 332). One of these measures was the establishment of the Board of Trade by Royal Decree 30 September 1756⁶², to assist in the creation of new factories and to more effectively organize commerce. Several factories were created under the supervision of the Board of Trade and, in at least a number of these establishments, DEB was adopted, sometimes with the assistance of foreign accountants from other European countries. One of these factories was the Royal Silk Factory, which became state-owned in 1750, came under the

⁶² Alvará [Royal Decree] 30 September 1756: Estatutos da Junta do Comércio [Statutes of the Board of Trade], in *Arquivos Nacionais da Torre do Tombo* (ANTT) [National Archives Torre do Tombo], Maço 66, N° Ordem 129, Caixa 212.

supervision of the Board of Trade and was required by its statutes to adopt DEB⁶³. Pombal (1775, p. 246) confirmed that accountants were “ordered to come from Venice and Genoa, for an amount of *um conto de reis e três mil cruzados* of fees”. As occurred for significant number of workers, sourced mainly from France, England and Italy, the State paid immigrants to live in Portugal to work and teach their profession to the Portuguese (Carvalho, 1982; Maxwell, 1995; Pedreira, 2005, p. 198; Serrão, 1996b, p. 194). This is also confirmed by the Italian and French accountants who were at the service of the Portuguese monopoly companies and manufactures. The Company of Grão-Pará and Maranhão (1755) employed a French bookkeeper, whose name was Darnaud, to instigate the adoption of the DEB system (Ratton, 1813, p. 181). Further, the Board of Trade (1756) employed an Italian merchant (Nanceti) as its bookkeeper, who was succeeded by another Italian bookkeeper (Avondano), while the third appointed bookkeeper was a Portuguese who was a graduate of the School of Commerce, thus acquiring his skills through training in Portugal (Ratton, 1813, p. 201). The Real Fábrica da Covilhã [Royal Factory of Covilhã] (1758) employed also an Italian merchant as bookkeeper, and a British, Pedro Bray, as manager (Serrão, 1996b, p. 194).

Another important measure was the establishment of the School of Commerce, by Royal Decree of 19 May 1759, to improve the educational level of Portuguese businessmen. The school was part of a broad educational reform, both at the secondary and university level, as developed by Pombal, and prompted by the expulsion of the Jesuits who controlled the different levels of Portuguese education. The objectives of the reform were to bring education under the control of the State, secularize instruction, and standardize the curriculum (Carrato, 1977; Maxwell, 1995; Serrão, 1996b). The importance of the School of Commerce can be ascertained by the commitment of the government in the establishment of the School of Commerce, with Pombal personally involved by attending the exams and the opening of the courses (Rodrigues *et al.*, 2004). Moreover, it is asserted that the School of Commerce was the *world's first* government-sponsored school to specialize in the teaching of accounting (see, Rodrigues & Craig, 2004; Rodrigues *et al.*, 2007; Rodrigues *et al.*, 2004). The students were inculcated in commercial subjects, particularly Arithmetic, Algebra and Geometry; Exchange, Weights and Measures from different countries; Insurance as well as the DEB system (Rodrigues *et*

⁶³ *Alvará* [Royal Decree] 6 August 1757, Estatutos da Real Fábrica das Sedas [Statutes of the Royal Silk Factory], point V.

al., 2004). After the course, graduates obtained work in different areas, such as in business houses as bookkeepers, or within commercial, military and religious establishments (see Rodrigues *et al.*, 2004, p. 65), or in public organizations such as the Royal Treasury. Pombal (1775, p. 246) claimed that:

...the school of commerce have made arithmetic so common, that when a post of bookkeeper, that before was ordered to come from Venice and Genoa, for an amount of *um conto de reis e três mil cruzados* of fees, is now available, there is a number of twenty or more candidates skilled in the bookkeeping of mercantile books...

As stated by Rodrigues *et al.* (2004, p. 64), and confirmed by the Letter of Law of 30 August 1770, “the school significantly improved the cultural level and technical knowledge of merchants, public employees and society in general ... and became a very important stepping-stone to a career in commerce or the public service”.⁶⁴ Under the Letter of Law of 30 August 1770 all merchants, bookkeepers, cashiers, business houses, corporations, and public or private societies had to be registered with the Board of Trade and minimum qualifications to be earned from the School in order to hold certain public posts were specified (Rodrigues & Craig, 2004, p. 330), consequently mandating a knowledge of DEB to hold such posts from that time. Rodrigues *et al.* (2003) argued that the letter of law “was one of the first regulatory controls on the occupation of accountancy in Portugal” which appears to have arisen in a era where there were few or even no recognized private schools of commerce in the country (see also Rodrigues & Craig, 2004, p. 343).

On addressing what was described as the “Colbert case”, Miller (1990, p. 323) stated:

Whilst the events that prompted these varied innovations may have been disparate, and whilst individually they doubtless served quite varied purposes, the key moment is that at which they are drawn together and deployed in the name of “the state”.

⁶⁴ Before the establishment of the School of Commerce it is very difficult to secure evidence on how DEB was taught on any other formal basis, such as by private educational institutions or by certain individuals who were skilful in using the method and who may have provided intensive instruction to Portuguese organizations. Notwithstanding, some years after the establishment of the School of Commerce it was advertised in a Lisbon newspaper that a Portuguese fellow offered his services to be a cashier in a business house and organize the account books by DEB (*Hebdomadario Lisbonense*, 1766, n° 25), and that it was established an academy where, among other subjects, DEB was taught (*Hebdomadario Lisbonense*, 1766, n° 38).

And, in the Portuguese case, the key moment was the rise to power of Pombal who wanted to transform and develop Portugal to the level of the most important nations in Europe. The fact that Pombal had power resulting from his post as Chief Minister is not sufficient to explain the outcomes of his government. As stated by Burns (2000, p. 570, quoting Mintzberg, 1983, p. 25), “a basis of power in itself is not necessarily sufficient to achieve intended outcomes; it is important that individuals act”, and Pombal acted. In Pombal’s own words, he intended “to make the Portuguese Crown a powerful and brilliant one” (1777, p. 85). His wide ranging initiatives and actions were, however, controversial (Serrão, 1982, 1996b, pp. 19 and 85). Among other things, he has been described as the “Paradox of the Enlightenment” (Maxwell, 1995). Pombal’s leadership was described by one of his closest collaborators in the years after his demise as follows: “[Pombal] wanted to civilize the nation and at the same time to enslave it. He wanted to spread the light of philosophical sciences and at the same time elevate the royal power of despotism” (quoted in Boxer, 1969, p. 191).

In spite of all these measures, Portugal slowly recovered from the massive destruction caused by the Lisbon earthquake. In the first years of Pombal’s administration Portugal benefited from a relative prosperity resulting from the colonial trade. However, after 1762 the economic situation changed, due in part to the decrease in production of gold and diamonds and aggravated by the war with Spain, and an economic crisis commenced that would last for some years, with repercussions for the State finances and also for production and commerce (Macedo, 1951, p. 159, 165; Falcon, 1982, p. 464; Silva, 2005). The gold coming from Brazil reduced drastically around 1762, there was also a decline in slave and sugar trade (with England, France and Holland independent from the sugar from Brazil and with their own supplies) and a general stagnation of commerce was experienced. As early as 1762 the *décima* or tithe was raised from 4 1/2 per cent to 10 per cent. In 1763 new duties were imposed on sugar, cocoa, pepper and dried cod (Livermore, 1976, pp. 232-233; see also Silva, 2005).

Although the second half of the eighteenth century was marked by the British industrial revolution, its effects took some time to propagate to certain other countries, including Portugal. According to Macedo (1951, p. 209), it cannot be claimed that the Marquis successfully created a newly industrialised country, nevertheless, various important industrial units were established during this period. The measures implemented

by the Marquis related to agriculture were almost exclusively concerned with Porto Wine, but conditions in Portuguese agriculture generally continued to be less than buoyant (Schneider, 1980. p. 242).

In conclusion, during the Pombalism era the State strengthened its absolutist character and tried to control more closely all the aspects of social life through the different government institutions. Following mercantilist policies and enlightened ideals the Portuguese government, under the strong leadership of Pombal, implemented a diversified set of measures aiming to develop the country and stimulate commerce. Particular attention was devoted to public administration, and with the establishment of a new organization with new accounting practices and procedures it was intended to improve the situation of the Portuguese public finances.

Summary

This chapter provides understanding that although Portugal has played an important role during the Discoveries, the importance as a major player in international trade did not provide the country with the necessary industrial, agricultural and commercial development and skills to face the strong competition of emergent European nations. Contributing to this situation was the Portuguese Inquisition, which weakened the entrepreneurial skills base of Portuguese merchants and detached the country from the important intellectual developments happening in Europe, and also the quantities of diamonds and gold coming from Brazil which provided the necessary money to import all the goods the country needed. Through the centuries to the early 1750s, those responsible for the administration of the country were not able, although attempts were made, to change the situation.

These conditions only started to change with the rise to power of a diplomat with strong ideals and convictions of what actions to take in order to develop the country to the level of the most developed nations of Europe. Pombal played a key role in all the reforms implemented in Portugal in the beginning of the second half of the eighteenth century. Among the different reforms adopted, accounting assumed a significant role and specific measures were put into practice in order to improve commercial and accounting knowledge of Portuguese merchants and also of public employees. Accounting change in central

government was part of a major reform within Portuguese public administration, which resulted in the adoption of DEB at the Royal Treasury in 1761, as will be explained in chapter 7.

The action of the Portuguese government, in the figure of Pombal was so strong in all dominions of Portuguese society that the period after 1750 in Portugal is seen as the “very embodiment of the Enlightenment” (Maxwell, 1995, p. 17). However, as in other countries, in Portugal the principles of rationality and economic progress, which were characteristics of enlightenment, were more related with the enhancement of State power and not the extension of individuals’ freedom (Maxwell, 1995, p. 160), in what became known as enlightened despotism.

In the following chapter, Chapter 6, an overview is presented of the reforms implemented by different European countries that resulted in the introduction of DEB within central government. This overview will assist in contextualizing the Portuguese reforms and will permit the identification of common features of similar changes, the motivations underlying those changes and possible influences of reforms implemented in one country in later developments of the genre in other countries.

Chapter 6: Double Entry Bookkeeping within Central Government in Europe

The study of the diffusion of accounting within Europe to the time of writing has most commonly been made on the basis of examining facets of accounting development in specific countries without endeavouring to establish common features of similar changes across countries, the motivations underlying those changes and possible influences of certain developments or reforms implemented in one country over those adopted in other countries, as mentioned in Chapter 2. There exists considerable potential for future research under the notion of CIAH, as discussed earlier, especially within public sector accounting and particularly within Europe among other locales.

It is important to elucidate the trends that have characterized accounting change within public administration throughout the centuries. It is important to enhance an understanding of how accounting practices applied mainly in commercial organizations became recognised as appropriate for public sector administration across both time and space. Although several centuries may separate past reforms from reforms and discussions arising in the public sector around the world today, the study of past reforms may help to enhance an understanding of the difficulties that have arisen and which may continue to arise on proposing accounting change in the public sector.

Although the study of accounting in the public sector covers the analysis of different types of organizations, the prime focus in this study is upon the central government level. Accordingly, this chapter is intended to provide a general idea of similar accounting reforms that were implemented by European central governments during the centuries, ranging from the sixteenth to the nineteenth centuries, at the higher level of the administration of public money, that is, at the level of the royal finances. The examination of the use of DEB in public administration within local municipalities or within city states, such as Genoa (see Mills, 1994, pp. 81-82; Vlaeminck, 1961, pp. 101-102; Yamey, 1984, p. 135), Amsterdam (ten Have, 1976, p. 18), Venice (Zambon, 2000, p. 367), Naples, Sevilla, and Valencia (Hernández Esteve, 1986), is beyond the scope of this work. Since the case study organization in this study is the Portuguese Royal Treasury, this chapter will identify and discuss similar reforms in other European countries within public entities that

were responsible for managing public finances within central government, trying to identify the motivations for such reforms, the way they were implemented, the difficulties faced by those in charge of the reforms, the success or not of such reforms and the possible connections between different reforms. This analysis is intended to assist in understanding and better contextualizing the key Portuguese accounting reform within central government in 1761.

This chapter is organized into two key sections. The first section identifies the first advocates of the use of DEB within public administration and the specific European nations where similar reforms to the one adopted by the Portuguese Royal Treasury were found to be undertaken until the nineteenth century. There follows a country by country analysis which seeks to identify the motivations, difficulties, and the major influences upon the reforms adopted. Although several years, in some cases centuries separate the different accounting reforms from one country to the next, it is possible to discern similarities in the processes that lead to the introduction of DEB within central governments of several European countries.

The early use of double entry bookkeeping in European public administration

Before the late 1590s, DEB was a technique that was readily associated with merchants as a means of accounting for their commercial activities. While its use within public administration for local government purposes has been traced to as early as 1340, where it was applied by the *Massari* of Genoa, the initial adoption of the technique for public finances within central government appears to have occurred in Spain in 1592. As mentioned in Chapter 2, early advocates of the use of DEB within central government believed that the technique offered a means of improving administration and enhancing control within central government organizations based on observations of its effective use by merchants (Hernández Esteve, 1984; Lemarchand, 1999; Vlaemminck, 1961). However, it was only during the eighteenth century that calls for the use of DEB in an array of different contexts, such as religious entities and non-profit organizations, as well as for managing public finances, became widespread (Lemarchand, 1994, p. 137; Vlaemminck, 1961, pp. 184-205).

Early authors advocating the use of DEB for non-commercial purposes, and specifically within the central government organizations, as mentioned in chapter 2, included Simon Stevin (1608) in The Netherlands with the book *Livre de compte de Prince à la manière d'Italie*⁶⁵; and for France, Claude Irson (1678) with the book *Méthode pour bien dresser toutes sortes de comptes a parties doubles... composée de l'ordre de Monseigneur Colbert*⁶⁶; and also Bertrand-François Barrême (1721) with the book *Traité des parties doubles ou méthode aisée pour apprendre à tenir en parties doubles les livres du commerce et des finances; avec un traité de finance*⁶⁷. As far as can be ascertained, Stevin (1608) is the earliest accounting writer to formally propose the adoption of DEB for public administration within central government. Stevin argued that the method would provide precise information on the amount of money in the hands of the treasurers, since the method provided that information about the cashiers of important merchants (Vlaemminck, 1961, p. 187). DEB was conceived as a sophisticated instrument of supervision (see Lemarchand, 1999, p. 226; Volmer, 1996, p. 565). Barrême stated that “double entry bookkeeping was appropriate for recording the full details of complex activities” (Barrême, 1721, Preface), and he considered that it was easier to prepare the books of the General Treasurer than for a businessmen for commercial purposes, since the latter had a higher diversity of operations (Barrême, 1721, p. 300). Both Stevin and Nicolas Barrême were personally involved in the reforms that resulted in the adoption of DEB in their respective countries (Vlaemminck, 1961; Lemarchand, 1999). The reforms implemented by different countries in Europe that lead to the use of DEB within central government were, in general, adopted by the Royal Treasury, as the organization responsible for controlling public finances.

Other independent European countries followed the Spanish in adopting DEB within central government organizations in assisting to reform public administration. Some authors make a brief reference to The Netherlands where DEB was adopted for the administration of the royal finances in 1604, followed by Sweden which did so in 1623 (Filius, 1983, p. 444; Forrester, 1990, p. 310; Sandin, 1991, pp. 283-284; ten Have, 1956,

⁶⁵ See, for example, Amorim (1968), Lemarchand (1999), ten Have (1956), Vlaemminck (1961), Volmer (1996), and Zurdo (1996).

⁶⁶ See, for example, Amorim (1968), Lemarchand (1999), and Vlaemminck (1961).

⁶⁷ See, for example, Amorim (1968), Chatfield (1977), Lemarchand (1999), Vlaemminck (1961), Zurdo (1996). The book was edited by the grandson of Bertrand-François Barrême, namely Nicolas Barrême (Lemarchand, 1998, 1999). Although the authorship is usually attributed to Bertrand-François Barrême, there exist some doubts about possible contributions by other members of the family (Lemarchand, 1998, p. 544).

pp. 244-245; Vlaemminck, 1961, pp. 185-188). There are some references, in addition, to the possible adoption of DEB in the Austro-Hungarian Empire around 1703, but only in 1760 was DEB adopted in Germany in the administration of the Imperial Treasury (Filius, 1983, p. 444; Forrester, 1990, p. 307). In the case of Spain, financial difficulties, experienced for a number of reasons, demanded a new accounting system. Such reasons included the lack of professionalism of public officials, frauds, administrative disorganization and bureaucracy, as well as the need for monies to finance its participation in wars in order to maintain or enhance its position as a leading nation, which were compounded by the rapid growth of the *Real Hacienda*. Such factors were all influential in the formation of perceptions that it was necessary to implement an “efficient, complete, closed, coherent, unitarian” accounting system which could provide dependable and timely information (Hernández Esteve, 1992, p. 554). Accounting was seen by the Spanish crown as an information and administration instrument that could be useful in managing public finances (Hernández Esteve, 1992, p. 554).

In the next section the reforms implemented in Spain, The Netherlands, Sweden, Germany/Austria, France and England, are outlined in chronological date order as summarized in Table 1. The Portuguese case will be examined in more detail in the next chapter.

Table 1: First time adoption of DEB in European Central Government

Country	1 st Introduction	Organization	Interruption	Re-Introduction
Spain	1592	<i>Real Hacienda</i> [Royal Treasury]	1621	
The Netherlands	1604	Royal Finances		
Sweden	1623	General Ledger of the Kingdom	1654	1659
Germany/Austria	1703	Imperial Treasury	1715	1760
France	1716	Royal Treasury	1726	1808
Portugal	1761	Royal Treasury		
England	1831-1832	Royal Treasury		

Country-by-country analysis

Spain

According to Hernández Esteve (1992, p. 538), Spain was the first European nation to implement DEB in managing public finances at the *Real Hacienda* [Royal Treasury] in 1592. However, this development does not signify that DEB was unknown within Spanish public administration before 1592. In fact, this central government reform was preceded in

the use of the method by certain branches of the public administration, such as in the case of the *Casa de la Contratación de las Indias de Sevilla* [Seville Trade House for Indies] from at least 1555 (Hernández Esteve, 1998a, p. 69; see also Hernández Esteve, 1986, 1996, 1997; Donoso Anes, 1997; Donoso Anes, 1996, 2002) and other public offices and city halls before 1592 (Hernández Esteve, 1986, p. 19). According to Hernández Esteve (1986, p. 20),

in the Spanish public administration of the sixteenth century it was more than usual to use double entry bookkeeping to record separated financial operations. However, it had never been attempted to construct with such proceedings an accounting system which included all the dimensions of the *Real Hacienda*.

The adoption of DEB at the Spanish Royal Treasury seems to have been stimulated by the amplitude and dimension of the Spanish empire. The former accounting system did not provide the information that was required to properly administer the empire, and was not compatible with the new administration requirements during a time when the country was confronted with financial problems (Hernández Esteve, 1998b, p. 67). The adoption of DEB at the Spanish Royal Treasury was preceded by the use of the system in private business, since the system was imposed upon bankers and merchants by Royal laws that were issued in 1549 and 1552 respectively (Donoso Anes, 1996, p. 120; 2002, p. 94; see also Hernández Esteve, 1985a, 1986, 1992). Indeed, the development of accounting practices in Spain, with the early introduction of DEB in central government organizations, may be connected to Italian businessmen. The information available indicates that the method may have been initially transferred to Spain by Italian merchants (Donoso Anes, 1994, p. 116; Hernández Esteve, 1998b, p. 67). This may have happened as a result of the close contact between Spain and Italy since the Middle Ages, due to the Spanish conquests in Italy and the trade with Italian merchants, many of which settled in Spain (Donoso Anes, 1994, p. 116).

Notwithstanding, the method was perceived as appropriate for use in private business and, therefore, the King forced private businessmen to apply it, and subsequently introduced the method in the organization of the Royal Treasury. The Spanish Kings at the time paid particular attention to private methods of administration and control that were developed by important businessmen and bankers (Hernández Esteve, 1986, p. 15). The adoption of DEB at the Spanish Royal Treasury was also preceded by the use of the method in Naples by 1554 in the central administration of this city state, while under the

administration of the Spanish Crown. Based on the success of the accounting system applied in Naples the persons in charge for its application proposed to the Spanish King the use of DEB at the *Real Hacienda* (Hernández Esteve, 1986, p. 21).

However, the decision to introduce DEB at the royal finances took some time, faced resistance from different persons within the administration of the kingdom, and was preceded by discussions about the suitability of the method for public finances (Hernández Esteve, 1986, p. 8). Ultimately, the power exerted by the King led to the adoption of DEB within Spanish central government with the *Real Hacienda* adopting the method in 1592. The “transference” from private business to central government was under the direction of a well-known and important businessman who was an expert in DEB, namely *Pedro Luis de Torregrosa*, who was appointed by the King, in 1592, to implement DEB for the Royal Finances (Hernández Esteve, 1985b, 1986, 1992). Torregrosa was one of the most important and powerful businessmen of Seville in the second half of the sixteenth century, with contacts with different merchants from different nations, but mainly with Italian merchants (Hernández Esteve, 1986, pp. 43, 44).

The introduction of DEB within the *Real Hacienda* was motivated by the belief that the method would allow the comprehension at any time of the global situation of public finances, and enable effective control over how the monies were collected and spent (Hernández Esteve, 1986, p. 10). In the words of Hernández Esteve (1986, p. 11), the accomplishment of this objectives was based on the “intrinsic virtues of double entry bookkeeping” as an universal, closed and integrated system, and in its reliability and capacity to prevent fraud, that were held at the time.

The use of the DEB system at the *Real Hacienda* was abandoned in 1621⁶⁸ (Hernández Esteve, 1986), although, according to Hernández Esteve (1998b, p. 69), some branches of the Spanish public administration may have continued to use the system. Apparently, the expectations regarding the introduction of DEB were not accomplished and with the rise to power of a new King the system was abandoned (Hernández Esteve, 1986, p. 47). According to Donoso Anes (1996, pp. 138-142), new attempts were made subsequently to introduce DEB in certain branches of the public administration,

⁶⁸ Although the person in charge for implementing the system had died in 1607 the method continued to be used until 1621 (Hernández Esteve, 1986, p. 176).

nonetheless, the method by the eighteenth century was considered to be a novelty stemming from France, and the attempts did not gather any momentum (see also Hernández Esteve, 1985c).

It is important to remember again that Portugal had been under the Spanish dominion for the period from 1580 to 1640. However, while DEB was adopted at the Spanish Royal Finances between 1592 and 1621, there is no evidence to suggest that Spain exercised any clear influence on Portuguese financial recording systems. This circumstance may be due, at least in part, to the existence of an agreement between Portuguese and Spanish authorities to preserve all the Portuguese institutions, thus maintaining the autonomy of the Portuguese crown in the architecture of the Spanish Monarchy (Boxer, 1981, p. 119; Schaub, 2001, p. 25; Serrão, 1990, p. 16), as mentioned earlier.

The Netherlands

Chronologically, The Netherlands has been found to have followed Spain in the implementation of DEB for public finances. The accounting author, Simon Stevin, played an important role in the adoption of DEB in accounting for the public finances of the Dutch Republic. Stevin was employed at early age in a mercantile office in Antwerp and years later he had a prosperous career in the public service (Brown, [1905] 2003, p. 136). Stevin became a friend and instructor of the Prince of Orange and, for the course of the instruction, Stevin prepared a two volume book on mathematics (Brown, [1905] 2003, p. 137; ten Have, 1956, p. 241). In the second volume of his book, which was about DEB, Stevin (1608)⁶⁹ recommended the use of DEB in managing the public finances. The book was dedicated to The Duke of Sully, who collaborated with Colbert to reorganize the finances of France (Brown, [1905] 2003, p. 137), thus proposing the system not only to The Netherlands but also for other jurisdictions, as it was the case of France. Earlier, Stevin established a system of accounts by DEB for the administration of the Royal domains which commenced in January 1604 (ten Have, 1956, p. 244; see also Vlaeminck, 1961, pp. 185-188). Stevin, as mentioned before, wrote that he “assume[d] and believe[d] truly that it would be possible for the sovereigns to follow in this subject

⁶⁹ According to Stevelinck (1970, p. 53), the examples provided in the book were dated from 1600 which was possibly the year in which the book was written.

[finances] the procedures of the merchants and know the amounts of money in the hands of the treasurers with the same exactitude that the important merchants know about their cashiers” (quoted in Vlaemminck, 1961, p. 187). He considered also that supervision in municipalities and governments was weaker than in private business and that this should be modified by the application of an effective DEB control system (Volmer, 1996, p. 565). Nonetheless, single entry bookkeeping continued to be applied by the stewards at lower levels within central government because, according to Stevin, it was impracticable to give instruction in DEB to all the officials involved (Stevin, 1608; ten Have, 1956, p. 244).⁷⁰

Sweden

Although only scarce information is available in the English language regarding the accounting system within Swedish central government, it is known that seventeenth century Sweden was influenced, in many different aspects, by the most developed nations at that time, especially by The Netherlands (Sandin, 1991, p. 283). In 1623, a similar system to the Dutch public accounts by DEB, known as “The General Ledger of the Kingdom of Sweden”, was adopted in Swedish government accounting (Filius, 1983, p. 444; Forrester, 1990, p. 310; ten Have, 1956, p. 244). The Dutch accountant and merchant, Abraham Cabiljau, was responsible for the introduction of the new system in Sweden (Filius, 1983, p. 444; Forrester, 1990, p. 310; Sandin, 1991, p. 283). He organized “all the figures for the Swedish state together in one book, a general ledger” (Sandin, 1991, pp. 283-284). There had been, however, previous attempts to introduce DEB in order to obtain a better overall view of the Swedish economy, but these did not gather any momentum (Sandin, 1991, p. 284). Except for short periods of time, such as between 1654 and 1659, similar general ledgers to those originally adopted were prepared until recent times (Sandin, 1991, p. 284). In the case of Sweden, accounting developments within central government were subsequently adopted by some cities. Stockholm was the first to adopt DEB within local government in the country in 1643 (ten Have, 1956, p. 245).

⁷⁰ Information was not found regarding the following years after the implementation of DEB within public finances.

Germany and Austria

Cameralism was the German and Austrian form of Mercantilism and was applied during the seventeenth and eighteenth centuries. It concerned primarily the “organising, directing and managing of royal/or public lands, privileges (such as the mint *et al.*), taxes and other contribution-payments by the King’s subjects, and the administration of public finances” (Filius, 1983, p. 443). The Cameralists dominated the teaching of bureaucrats who served the benevolent despots during this period (Forrester, 1990). However, with respect to the education of businessmen, this was practical and personal at the time, there was no formal education and, as was the case in other countries, the knowledge was invariably acquired in the family business or through business and family links abroad (Forrester, 1990, p. 289). The basic characteristic of the cameralist accounting method is the separation of money management from other tangible assets (Filius, 1983, p. 443). Cameralist accounting, according to Filius (1983, p. 444), “was, however, not in double-entry but in single-entry form”. However, Forrester (1990, p. 307) states that cameralist accounting “has been described as single-entry book-keeping with disputed relationship to double”. During 1703 to 1715, reforms of the Imperial Treasury were attempted by its President, Count Starhemberg. The application of DEB by this organization was short-lived (Forrester, 1990, p. 304). Indeed, bank bookkeepers who participated in attempts to balance the Imperial Treasury’s books “worked by 15 years without ever achieving a balance” (Forrester, 1990, p. 304).

The system was transplanted in Austria, Germany and Italy on the initiative of Maria Theresa who was then Queen of the Austro-Hungarian Empire (Filius, 1983, p. 444). In the case of Austria, although a school of commerce and navigation was established under the regime of the Queen of the Austro-Hungarian Empire in 1744, it was only in 1817 that a commercial section was created in this school where DEB was taught, and specially its application to the accounting of the State and municipalities (Leautey, 1886, pp. 564-565). Around 1760, DEB was adopted again at the Imperial Treasury. Its re-adoption had been “informed by the experience at the beginning of the 18th century, also by text-books such as Justi’s but considerably by experiments carried out on a smaller, estate scale as by Auersberg in Bosnia” (Forrester, 1990, p. 307). The person in charge for the experiment was called Puechberg, and in 1760 he “became the Chief Bookkeeper to the Imperial Camera; and two years later his first [bookkeeping] book appeared” (Forrester, 1990, p. 307).

France

The adoption of DEB in France went through several stages characterized by intentions to introduce the system, by attempts which resulted in the adoption of DEB within central government for a short period of time, and by effective and longstanding adoption of DEB within public administration. According to Nikitin (2001, p. 78), three periods can be identified to describe the introduction of DEB in administering the French public finances.

The first period, stretching approximately over the Ancien Régime, is characterized by intentions and attempts. The second period embraces the scene of decisive battles and is much shorter and takes in the Revolution and Empire periods. The last period starts with the Restoration (of Monarchy in 1815) and witnesses the birth of a modern public sector accounting system, formally completed with the law of 31 May 1838.

During the first period, as identified by Nikitin (2001), there were intentions that produced no practical results, but others resulted in the adoption, even if for a short period, of DEB in French central government. According to Barrême (1721, Preface), Jean Baptiste Colbert in the seventeenth century advocated the use of DEB in the administration of the King's affairs, but his proposal was not able to be implemented due to the lack of skilled persons with the knowledge to apply DEB.⁷¹ The central adoption of DEB in French public finances was made in 1716 but was short-lived and ended in 1726 (Lemarchand, 1999, p. 226). According to Lemarchand (1999, p. 225), DEB was used as an "attractive technical innovation" in an attempt to reform financial administration, and this accounting change was not restricted only to the technical aspects, it was connected with a fundamental organizational change. The objective was to substitute a model of decentralized contractual relations⁷² by a centralized bureaucratic administration, in which accounting was seen as an instrument of supervision (Lemarchand, 1999, p. 226).

⁷¹ According to Miller (1990, p. 318), the "Colbert period" coinciding with the reign of Louis XIV (1661-1683) was a period of innovations in both accounting and practices of government and the reforms implemented "evidence a centralizing tendency within French administration that produced effects over the following century and more".

⁷² The administration of public finances was not controlled by the government. The collection of money was made through private agents who had bought their office. They were not public employees or civil servants. In fact, the government did not possess the necessary administrative organization to collect taxes, to borrow, to hold royal funds or to spend them (Behrens, 1985, p. 77; Bosher, 1970, p. 6).

DEB was already used in France, since it was applied during the seventeenth century by French businessmen and in the textile industry, followed by its application in semi-public enterprises, such as at the *Compagnie des Indes Orientales* in 1664 (Lemarchand, 1994, pp. 120-123). The seventeenth century in France was also a period of intensive publication of books on DEB, while the teaching of accounting by private teachers was also a common way to acquire accounting knowledge (Lemarchand, 1998; Miller, 1990). According to Lemarchand (1999, p. 231), DEB was perceived at the time as reflecting “the order kept between honest merchants all around the universe, among whom there is neither dispute nor fraud”. DEB was seen as the “cornerstone of the accounting of many merchants insofar as it enabled, on the one hand, to account for the results (profit or loss) of a period and, on the other hand, to check the validity of accounts” (Nikitin, 2001, p. 78). Those interested in implemented DEB in public finances were driven by the possibility to check the validity of the accounts (Nikitin, 2001, p. 78).

Antoine, Claude, Joseph and Jean Paris, four brothers “who were among the most famous *financiers* of the period” in France, were responsible for the French public finances accounting reforms (Lemarchand, 1999, p. 226). The Paris brothers were familiar with the method, which they used in their own business, and were respected for their administrative abilities. After having introduced the method in a local municipality, they became the promoters of its introduction at the national level (Lemarchand, 1999, p. 230). The Paris brothers conceived accounting as a sophisticated instrument of supervision, and this way it was deemed to be useful for the administration of the French finances (1999, p. 226).

The main goals of the reforms were to speed the collection of the receipts and to decrease interest costs to be paid by the Treasury. However, the reform was gradual. In the first instance, DEB was applied in accounting for taxes only. From 1723, it was applied in accounting for expenses. When Cardinal de Fleury became the head of the government in 1726, the attempt to rationalize Royal finances was interrupted amid strong opposition to such developments from the financiers and their supporters. The justification seems to be that although “theoretically perfect on paper, but burdensome and too expensive, *administrations en partie double*..., could not rival a decentralized organization, endowed with the efficiency conferred by the powerful motive of personal interest in flawless harmony with the pursuit of general interest” (Lemarchand, 1999, p. 239). Although the method was recognised as useful in the administration of the Royal finances, the

opposition and criticisms at the Court led to the interruption of the reforms (Lemarchand, 1999, p. 234). It was, accordingly, abandoned in 1726. As Marion (1914, p. 137, cited in Lemarchand, 1999, p. 234) claimed “in all things, good and bad, the new government made its duty to do the exact opposite of the previous one”.

Within the second period identified by Nikitin (2001), some attempts to reintroduce DEB at the French public finances were made, without success, in particular between 1788 and 1791 (Lemarchand, 1999, p. 240; Nikitin, 2001, p. 79). It was a period of major political revolution and the different laws imposing the adoption of DEB in public finances did not gather any momentum (Nikitin, 2001, p. 80). It was not until 1808, in what was identified as the third period by Nikitin (2001), that DEB was reintroduced in the public finances within central governmental as part of the creation of a modern public sector accounting that would be completed in 1838 (see, for example, Nikitin, 2001, pp. 78-80). According to Nikitin (2001, p. 96), while previous attempts to introduce DEB in public accounts “aimed only at introducing a more efficient monitoring of cash-flows and a better control of the Treasury over the ‘accountants’”, the reform of the beginning of the nineteenth century intended “to ensure the exercise of better control by Parliament over public finances” (p. 77).

The person responsible for the reintroduction of DEB in France was Nicolas-François Mollien who was appointed initially to help redress the “weak and drained public funds” (Nikitin, 2001, p. 81). Thereafter, Mollien became the individual responsible for the “caisse d’amortissement (sinking fund)” introducing DEB in this body and, in 1806, was appointed by Napoleon as Treasurer Minister and as Count of Empire in 1808 (Nikitin, 2001, p. 81). One of Mollien’s initial tasks was to “improve the speed and efficiency of the tax collection processes of the State” (Nikitin, 2001, p. 81). On a decree prepared in 1807 and reinforced in 1808 by Mollien, it is established that “Receivers General will keep a detailed ledger with double-entry bookkeeping in which they will record all the operations day by day, article by article, whatever the nature of those operations, be they for the treasury or any other public administration” (in Nikitin, 2001, p. 82). Within this third period DEB was effectively adopted and was again confirmed in 1822 in an order which described the way ministers should keep the books (Nikitin, 2001, p. 86).

England

Although Britain had been admired for the parliamentary regime established in 1688, such as by the French intellectuals of the eighteenth century, the situation was different with respect to public accounts (Nikitin, 2001, p. 87). The adoption of DEB was very slow in Britain, not only in private businesses but also in the British public sector, in which more significant efforts only happened at the beginning of the nineteenth century (Edwards *et al.*, 2002, p. 646; Parker, [1989] 1994, p. 591; Yamey, 1977, p. 17). According to Nikitin (2001, p. 87), “since the Reign of Queen Anne (1701-1714), no complete statement had ever been made up of the total Income and Expenditure of the country”. It was during the 1820s that the English Parliament sought to adopt a more effective system for controlling central government finances (Edwards & Greener, 2003, p. 51). The importance of accounting among British businessmen influenced the accounting system to be adopted within central government (Edwards *et al.*, 2002, p. 638; Edwards & Greener, 2003, pp. 51-52, 56). The need for more rationality and improved control of government expenditure resulted in a change of the accounting technique that was used until that point (Edwards *et al.*, 2002, p. 639; Edwards & Greener, 2003, p. 51; Nikitin, 2001, p. 88). However, while there was agreement that an accounting change was needed, there was no consensus about the suitability of DEB for recording public money and about the extent to which the method should be applied (Edwards *et al.*, 2002, pp. 646-650; Edwards & Greener, 2003, p. 62).

During several years different commissions were appointed to elaborate on the accounting system to be adopted within British central government (Edwards & Greener, 2003, p. 55). On the 29 April 1828, a commission of three persons was nominated to:

... suggest such alterations as may appear to be necessary, with a view of establishing a more uniform system of keeping the public accounts, [...] and directing our particular attention to the consideration as to how far it may be practicable and advantageous to employ the mercantile system of double entry in keeping the public accounts. (Appendix to the report of the commissioners, 1929, reproduced in Coombs *et al.*, 1997, p. 95; see also Edwards *et al.*, 2002, p. 641; Edwards & Greener, 2003, pp. 51, 55).

According to a previous report, “the principal and most prominent defect” of the accounting system that had been in place was that it could not provide a Balance between the Income and the Expenditure of the year (Report from the selected committee on the public accounts of the United Kingdom, annually laid before parliament, 31 July 1822,

reproduced in Coombs *et al.*, 1997, pp. 2-10). It was expected that the new accounting system could provide such information. As developed by Nikitin (2001, p. 89), the new system should:

... replace “the various, complicated and expansive modes now in use”. The new system had to bring “accuracy, simplicity and perspicuity”. It also had to facilitate examination, to afford information on every transaction, to ease the substitution of a clerk who had resigned or been promoted, and be understood by every man of account. Moreover, the use of double-entry would ascertain the correctness of every other book by a general balance of the Ledger, and the correct balancing of books kept by double-entry must include, not only the money actually spent, but also the liabilities of the establishment.

After a strong debate about the use of DEB and about the different books and forms to be used, the Board of Treasury decided to approve the adoption of DEB gradually in the different administrations, from around 1829 (Edwards & Greener, 2003, p. 61; Nikitin, 2001, p. 89). The exact date the method was introduced at the Treasury is not known, but according to Edwards and Greener (2003, p. 60) “it appears that double entry bookkeeping may have been introduced at least in some parts of the Treasury well before 1829”.

Consistent with the mechanism of mimetic isomorphism, the case for adopting DEB in British public accounts seems to have been influenced by the French reforms adopted from the beginning of the nineteenth century, when the House of Commons appointed, in 1831, Sir John Bowring to prepare a report on the public accounts of different European countries to encourage the reform of the accounting method in central government (Edwards & Greener, 2003, p. 54; Nikitin, 2001, p. 90). The report on France was, according to Nikitin (2001, p. 90), “very well documented” from the perspective of the history of the French finances. It included not only information regarding the changes implemented in the beginning of the nineteenth century from 1808 onwards, but also delved further into the past and mentioned the initial reforms, involving the adoption of DEB, that were implemented in 1716 as explained above (Nikitin, 2001, p. 90). The French influence, as well as from other countries, in the British adoption of DEB was also reported by other commissioners, as quoted in Nikitin (2001, p. 91; reproduced also in Coombs *et al.*, 1997, pp. 167-172; Edwards & Greener, 2003, p. 56):

The revenues of no Government has been safely administered, the accounts of no Government have been intelligibly kept, the Business of no Government has been promptly and satisfactorily dispatched, until the commercial system has been introduced, with its order and uniformity, into the different departments. Several of the Governments of Europe have adopted this method after repeated and vain attempts to accommodate by other means the dissimilar usages of their various

public offices to one general system; and there is no instance of any government having abandoned the mercantile practice, after having once employed it. On the contrary, every government that has introduced it has borne testimony of its adaptation to National concerns, and its complete efficiency for all fiscal and financial operations and records. (...) The system of accounts as adopted in France has afforded perfect security against default and dilapidation...

It is interesting to observe that the influence was mutual, since the French reforms implemented by Mollien in the beginning of the nineteenth century were based on the British banking model. In words not much different from those used earlier by Pombal (1742, p. 158), Mollien in a letter of 1831 that was sent to Bowring argued that:

Public improvement cannot march everywhere with equal pace; but it is evidently progressive where the productions of reason and intelligence begin to be considered as objects not less worthy of exchange among great nations than the material productions of industry – and this emulation is decidedly more advantageous to nations than hostile rivalry. (quoted in Nikitin, 2001, p. 92)

Regardless of the opposition and the difficulties in implementing a new system within central government departments, gradually DEB was adopted in England and, by 1844, it was widespread within British public departments (Edwards & Greener, 2003, p. 63). However, it was recognised that certain modifications could be suggested in the different departments, what was not a problem as long as they did not deviate from the general principle (Edwards *et al.*, 2002, p. 653). Similar to what took place in other European countries, such as The Netherlands and France, and subsequently in England, DEB was not adopted immediately within central governments at all levels of public finances. Nonetheless, while in England the introduction of DEB occurred progressively across time, in the other countries, as shown, its adoption was restricted for a number of years, to only some levels of public finances, and was abandoned at some stage and later reintroduced.

Summary

Although the interaction between accounting and the State is still an under-explored research field within accounting history literature, there is, however, an increased interest in the subject. As presented in this chapter, studies developed during recent years have demonstrated that there have been in the past important interactions between public and private sector practices, involving similar motivations underlying the adoption of specific accounting systems within central government and possible influences between reforms implemented in different countries.

As believed by early advocates of the use of DEB within central government, DEB was adopted as a means of improving administration and enhancing control within central government organizations based on its effective use by merchants. In fact, governments were generally found to have adopted DEB at their respective Royal Treasury based on the method's successful use by merchants. Spain had even mandated the adoption of the method by bankers and merchants prior to its first time adoption at the *Real Hacienda* in 1592. The use of the method for public administration at the central government level was, therefore, supported by leading businessmen, such as in Spain, France, Sweden, and England, who were among its leading proponents. Recognising institutionalization as a political process (Dillard *et al.*, 2004), the endorsement of specific accounting practices, such as DEB, illustrates the roles played by certain key individuals in the adoption processes and, therefore, the power of the organizational actors in institutionalisation processes.

In most of the cases the motivation for the accounting change within central government was related with deficiencies of the previous accounting method which did not provide the required information to administer the country, financial difficulties experienced by the government which prompted the necessity to control better the public expenses, combined with frauds and misconduct of the persons in charge for managing public money. Spain around 1592 was confronted with financial difficulties and the former accounting system did not provide the information that was required to properly administer the empire. To face these problems it was believed that DEB was the appropriate method to assist in overcoming the problems, since it would allow the comprehension at any time of the global situation of public finances, and provide for effective control of monies collected and expended. In France's reforms commencing in 1808, DEB was part of a major reorganization of public administration and was viewed as a more efficient method to control public money and face the financial difficulties. Similar financial difficulties prompted accounting change in England.

The initial adoption of DEB within central government in some countries was not a straightforward process. There was in some cases previous discussion about the suitability of DEB to be used in central government, as it was the case of Spain and England. In some of the cases, DEB was not fully adopted immediately, rather being adopted only at some

levels of public finances, as it was the case of The Netherlands and France, or progressively within the different public departments, as it happened in England from around 1829. Associated with the generally slow process of adoption of DEB was usually the lack of skilled persons with knowledge and experience in DEB, which conditioned the implementation of the system. In addition, the adoption of DEB within the Royal Treasury was preceded by the adoption of the method in certain branches of public administration, such as in Spain, France and England.

The initial adoption of the technique was short-lived in some countries, especially in Spain and France. As mentioned earlier, the method was abandoned in Spain in 1621, because the expectations regarding the introduction of DEB were not accomplished and with the rise to power of a new King the system was interrupted. Although later attempts were made to introduce again the method within Spanish public administration, by the eighteenth century DEB was considered, as mentioned earlier, to be a novelty stemming from France. In the case of France's first experience in using DEB at its Royal Treasury, the method appears to have been halted in 1726, primarily for political reasons rather than for any serious underpinning technical shortfalls.

Besides common features presented by the different reforms, even though in some cases there are a significant time distance between them, it is possible to identify influences of the accounting practices and reforms between different countries. In the case of Sweden, the country was by the seventeenth century influenced in different aspects of social life by The Netherlands. This influence resulted in the adoption in Sweden of a similar system to the Dutch public accounts by DEB, which was under the responsibility of a Dutch accountant and merchant. In the case of England, there was a gathering of information about the use of DEB within central government in different European countries. In particular, attention was devoted to the reforms implemented in France, both in 1716 and later in 1808. The fact is that the use of the method within central government by other European nations, even if the method had been interrupted after its initial adoption, helped to justify the suitability of DEB for administering the country's public accounts. Thus, it confirms that accounting as a technology was transferred from country to country, as part of an attempt to spread the use of practices that were recognised as suitable for large-scale operations within central government.

As shown, Portugal followed a number of other European countries in the adoption of DEB within central government. By the time Portugal adopted DEB at the Royal Treasury, in 1761, certain other countries had previously applied the method in managing public finances within central government, while others, such as England, adopted DEB within central government after the Portuguese reform. In the next chapter, the adoption of DEB at the Portuguese Royal Treasury in 1761 and the accounting practices implemented at the same organization during the Pombalism period, specifically dating from 1761 to 1777, are examined.

Chapter 7: The Adoption and Use of DEB at the Royal Treasury

As addressed in Chapter 5, among the different measures implemented by Pombal to stimulate the economic and social development of the country and to improve the State's finances was the establishment of the Royal Treasury with a centralized system of accounting. The conjunction of natural causes in the form of the Lisbon earthquake in 1755, which destroyed the Customs House, along with the necessity at the time to enhance control over the finances of the State created the conditions for the establishment of a new organization with new accounting and administrative procedures.

On its advent the Royal Treasury became immediately immersed in the wider institutional environment upon which its existence depended and with which it was required to interact. The adoption of new accounting systems in organizations such as the Royal Treasury in 1761 cannot be studied effectively in isolation of the pressures exerted within the institutional environment in which they are immersed. As pointed out in Chapter 2, Meyer (1986, p. 348) directed attention to the fact that the evolution of accounting occurs at a more macrosociological level than is commonly assumed and accounting rules cannot be considered only as features of particular organizations, they have to be considered as properties of more macro level domains. In the case of the Portuguese Royal Treasury it is important to understand the motivations underlying the decision to adopt a new accounting system in 1761 and to elucidate the application of the new system in the central government of the country and Empire in the period until 1777. In this chapter, attention is placed upon the adoption and use of DEB in the context of Portugal within the broader European context.

Based on what was developed in the previous chapters, mainly in chapters 5 and 6, this chapter addresses, on the one hand, the adoption of double entry bookkeeping within the Royal Treasury on its establishment in 1761, and the institutional pressures exerted over the new organization. On the other hand, it analyses the accounting practices adopted at the Royal Treasury during the period from 1761 to 1777 both at the General Treasury Office and at the General Control Offices.

The adoption of DEB at the Royal Treasury

The adoption of DEB at the Royal Treasury, Portugal, is a unique case. Unlike what happened in Spain in 1592 (Hernández Esteve, 1985a, 1986, 1992, 1998a,b) and also in France in 1716 (Lemarchand, 1999), where DEB was initially adopted as a new method in a pre-existing organization, in Portugal the method was adopted on the creation of a completely new organization under specific circumstances. The Royal Treasury superseded *Casa dos Contos* [Customs House] that was effectively destroyed by the Lisbon earthquake and which was perceived as inefficient and incapable of handling public monies without corruption (Rau, 1951; see also Azevedo, 1971; Ratton, 1813; Santareno, 1998). The Customs House was the first Portuguese public organization responsible for the administration and supervision of the finances of the State, and was established around the end of the thirteenth or beginning of the fourteenth centuries. During the centuries some changes in the organization were introduced, but only in 1761, by the Letter of Law of 22 December 1761, was it formally disbanded (see Rau, 1951). The accounting system adopted by the Customs House was the charge and discharge system (Paixão & Lourenço, 1999).

By the end of the sixteenth century the question was raised about the utility of adopting DEB for administering the royal finances, however, according to Hespanha (1993, p. 204) the prevailing argument at that time was that such practices were appropriate for businessmen and were inadequate for managing the finances of the kings. In addition, by the beginning of the seventeenth century there were advertences that there was confusion in the administration of the public rents, arguing that such confusion was the result of the way the financial administration was organized (Faria, 1624, pp. 115-118, in Hespanha, 1993, p. 212). However, it was only in the eighteenth century that profound measures were implemented to change the “confusion” of the administration of the royal finances. The destruction of the Customs House by the earthquake, the perceived lost of utility or technical instrumentality of those old practices, and the succession of Pombal as the leader of the Portuguese government facilitated the deinstitutionalization of old accounting practices. The deinstitutionalization of accounting practices in Portugal was, therefore, a result of the combination of political, functional (Oliver, 1992) and natural pressures, which lead to the creation of a new organization in 1761 and the institutionalization of new accounting procedures within public administration in the country and Empire.

In the aftermath of the earthquake, it was regarded as essential to establish a new organization with improved accounting methods over those adopted by the *Casa dos Contos* (Azevedo, 1971; Rau, 1951; Santareno, 1998). Therefore, the Royal Treasury was able to apply new procedures and methods, such as DEB, without the usual tensions and difficulties that often apply when reforms of this nature are proposed for application in long-established organizations. By happenstance, the pathway for administrative reform of the Royal finances was smoothed by the creation of a completely new organization.

In other countries, such as in Spain (Hernández Esteve, 1986) and in France (Lemarchand, 1999), the key accounting change was preceded by public discussion about the suitability of DEB for use in the public sector. However, in Portugal the advantages of the method were evidently taken for granted. Despite extensive investigation, no evidence has been found to date of any public debate or discussion, including the identification of any perceived shortcomings, on the technique's adoption within the new entity. In the Law of 22 December 1761 it is mentioned that the King was advised by different "knowledgeable ministers, with conscience, and watchful of the common good, with whose advices I [the King] was satisfied" (1761 Law, p. 2). The creation of the Royal Treasury, by the Letter of Law of 22 December 1761 (referred to hereafter as "the 1761 Law"), was intended to make the collection of Rents more effective and efficient and, more generally, to assist in augmenting the wealth of the monarchy, as stated in the introduction to the 1761 Law:

... the establishment, conservation, and increase of monarchies (...) [is dependent upon] the regular, and exact collection of Rents, that constitute the public treasury; because without making effective and fast the collection of Rents, to be with the same effect, and promptly applied to their destinations...

[The Royal Treasury] is in reality public, and common; because not only the conservation of the monarchy in general depends on him, but even the daily maintenance of the States, and main persons of the Monarchy (...).

The introduction of the 1761 Law also contains a reference, without specifying any individual nations, to the example of the "Cortes Pollidas da Europa" [European Civilized Courts] that "went sometime ago through some bad experiences that diminished their strength (...) because of the division of the Rents in many items and in many offices, and because of the delay in the collection of money". The Law also points out that the situation

in Portugal was aggravated by the abuse and misconduct of the different collectors of public monies. Accordingly, the objective of the new organization was to centralize collections and payments of rents, improve the efficiency of the means of collection and also rationalize all the procedures related to dealing with public monies. All the jurisdictional power that was dispersed through the different representatives of the financial administration was to be concentrated at the Royal Treasury in the figure of its President – the Marquis of Pombal (1761 Law, Title 2). At the same time, by a Letter of Law of the same day, 22 December 1761, the *Conselho da Fazenda* [Royal Council], was restructured. The intention was to concentrate in this institution the legal authority concerned with the collection and administration of royal properties, with jurisdiction to solve disputes and other problems that could arise concerning the collection and payments of the Royal rents, which were previously distributed by different offices. In the case of legal executions, the current accounts elaborated by the Royal Treasury were acceptable evidence for the Royal Council to take all legal actions.

With the establishment of the Royal Treasury, the King “decided to make his people enjoy the same benefits that at the present are enjoyed by the people of other European Monarchies...” (the 1761 Law). As stated later by Pombal:

The objective in establishing the Royal Treasury was to create a public bank capable of paying the Royal expenses... To put in practice this important system it was necessary to use, in many parts of the Royal Treasury, the mercantile system observed in the houses of big commerce. (Pombal, 1777, p. 20)

Although the creation of the Royal Treasury was intended to centralize the collection of receipts and payments and lead to enhanced efficiency in the collection of public monies, no key technical reasons appeared to be prominent or specifically promoted in relation to the organization’s specific adoption of DEB from its formation. Importantly, the method was regarded as fundamental to the successful instigation of the new organization given the acceptance of DEB within prominent houses of commerce which, accordingly, became influential in Portugal, as was the case in other European countries as illuminated in Chapter 6, thus conferring the legitimacy of the method for Portuguese central government administration purposes. DEB was seen at the time as reflecting “the order kept between honest merchants all around the universe, among whom there is neither dispute nor fraud” (Lemarchand, 1999, p. 231). This serves to illustrate how “the technical advantages of double entry were subordinate to the symbolic ones” (Carruthers &

Espeland, 1991, p. 55) and, accordingly, the method assisted to construct an aura of legitimacy around the new organization.

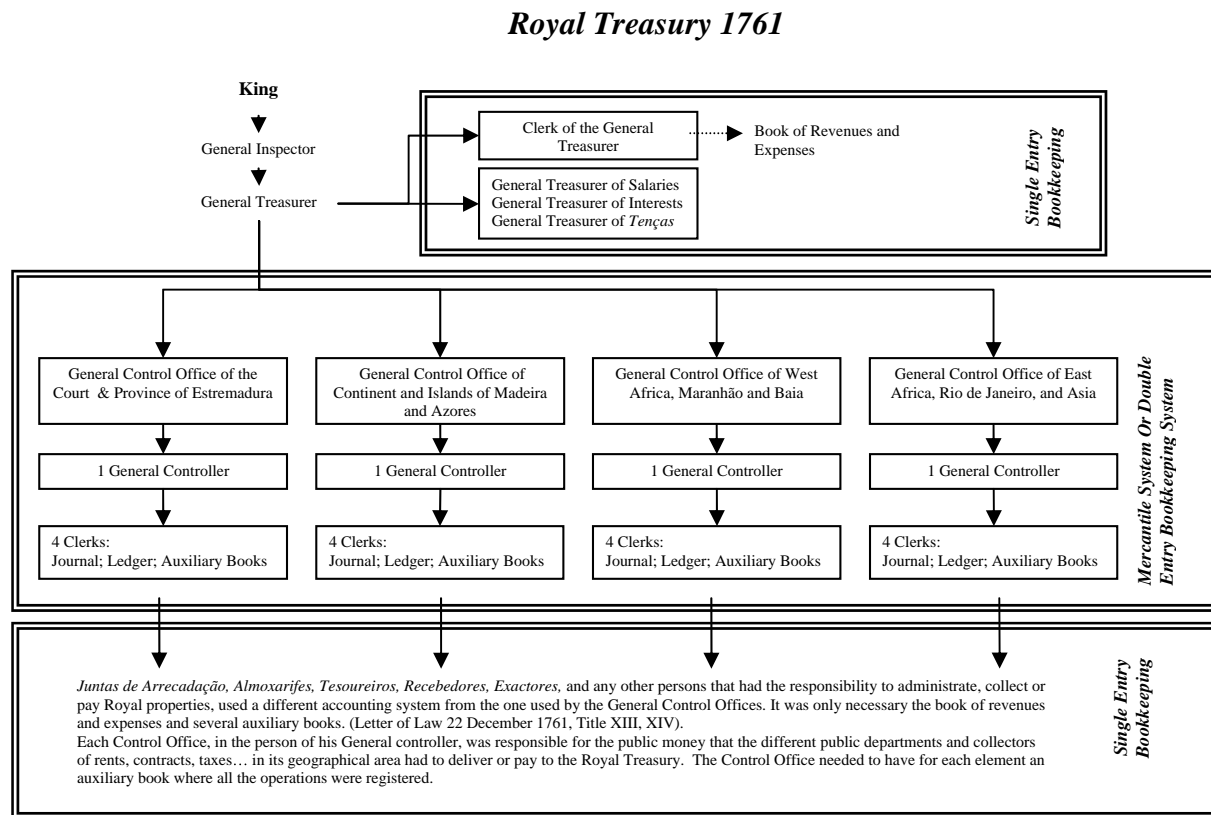
Institutional pressures: the Royal Treasury in 1761

Attention is now turned to the identification of institutional pressures on the Portuguese Royal Treasury in 1761 on its formation, with an emphasis on the external forces exerting influence on the organization's adoption of DEB from that date and the extent to which the technique was applied within the organization's structure. The analysis, which follows, will show that coercive pressures were particularly important in the adoption of DEB at the Royal Treasury. Notwithstanding, evidence of decoupling in the application of the technique, as required by the 1761 Law at the Royal Treasury, is reported upon. Consideration follows of the prevalence or not of mimetic and normative pressures, as other institutional pressures, on the first-time adoption of DEB within Portuguese central government.

Coercive isomorphism: the 1761 Law

The organization of the Royal Treasury established by the 1761 Law, was intended to centralize all the State's payments and receipts of money, as previously mentioned, and to place such affairs under the supervision of one person, the *Inspector-Geral* [General Inspector] of the Treasury, as presented in Figure 1. A considerable importance was attributed to the new accounting system to be adopted from formation, and to the individuals to be employed in applying the new accounting method. As will be outlined, and as indicated in Figure 1, DEB was initially *required* by the 1761 Law to be adopted at the level of the four *Contadorias Gerais* [General Control Offices], while single entry bookkeeping was applied at the other different levels. Consequently, the government instilled coercive isomorphism by promulgating a letter of law where it was specified the method and requirements to be used in the accounting system of the Royal Treasury.

Figure 1: Organizational structure of the Royal Treasury on its establishment



The 1761 Law established the structure of the Royal Treasury, as presented in Figure 1, and was written in different sections, that were known as Titles, where the organization and functioning of the new entity was established, as summarized below:

- The extinction of the Customs House and the creation of a General Treasury, as the collector and dispenser of public monies (Title I).
- The creation of the posts of *Inspector-Geral* [General Inspector] of the Treasury, who would be the highest authority and would represent the King (Title II); *Tesoureiro Mór* [General Treasurer], who would be the responsible for all the departments of the Treasury, and who had to present the financial situation of the treasury to the King weekly (Title III); and the *Escrivão do Tesoureiro Mór* [Clerk of the General Treasurer], with the function of registering, in the appropriate book, all the revenues and expenses (Title IV).

- The segmentation of the Treasury into four *Contadorias Gerais* [General Control Offices], in accordance with the exact division of the Empire, as presented in Figure 1.⁷³
- The creation of the posts of *Contadores Gerais* [General Controllers]⁷⁴, one for each of the General Control Offices, and which should be filled by “persons who have the necessary skill in the mercantile calculation, who understand, and practice the keeping of the Books by Double Entry, and persons of trust, ...” (Title V).
- The advent of *Escriturários* [Clerks], who should be “persons of trust, and instructed in the form, of writing clean, and orderly the mercantile Books by the mentioned method of Double Entry, without the necessity of being experts in the Art of keeping the books...”, in order to support the General Controllers (Title VI), and several other posts (Titles VII, VIII, IX, X).
- The adoption of the DEB System was compulsory in each of the four General Control Offices of the Treasury: “the method for the collection [of public monies] should be the mercantile system, ... which at present is followed by all the civilized Nations of Europe, as the most simple and clear, and the most conclusive to organize the administration of the big amounts, without subterfuges” (Title XII).
- The compulsory elaboration of weekly summaries of the situation of the treasury, and balances of revenues and expenses, both semi-annual and annually, and the annual close of the accounts (Title XV).

In summary, the Portuguese government exercised coercive pressures through its legislative power to not only require the Royal Treasury to adopt DEB but also to mandate a knowledge and understanding of the technique for those holding senior positions within such public organization.

⁷³ Each of these General Control Offices was served by several *Juntas de Arrecadação* [Collection Houses], and other entities or persons with responsibility for the collection of public moneys. As will be developed in Chapter 8, The *Juntas de Arrecadação* [Collection Houses] were the offices responsible for the administration, collection and expedition of all the matters related with the Royal Treasury at the colonies, promoting the effective collection of all the income administered by them or third parties (Paixão, 1998, p. 5).

⁷⁴ The General Controller was the person in charge for the *Contadoria* [Control Office], who was responsible for all dealings with the collectors under their geographical jurisdiction and who was required to prepare the account books by DEB.

Decoupling

As explained, DEB was only adopted within the four General Control Offices at the Royal Treasury. Within the 1761 Law, the objective was to emphasize the adoption of a recognized accounting method that was followed by the most developed nations in Europe and particularly by the large houses of commerce, but when operationalizing the method its application was restricted to the main four general control offices, therefore “decoupling operating processes from symbolic change” (Abernethy & Chua, 1996, p. 597). As mentioned in Chapter 4, such gaps in the application of procedures and methods within organizations may not be known to external parties who may mistakenly believe that the new techniques are applied generally within subject organizations.

A key factor which assists in explaining the restricted adoption of DEB at the Royal Treasury can be found in the instructions sent to Pernambuco, in Brazil (see AHTC, ER, Book 4233, pp. 151-155), and to S. Tome & Prince islands (AHTC, ER, Book 5322, pp. 7-23), as will be further addressed in Chapter 8. From the instructions it seems that the restricted adoption of DEB at the four General Control offices in Lisbon was related to the relatively small number of people who had knowledge of, and experience in, the implementation and effective use of DEB. When Pombal was nominated General Inspector of the Royal Treasury, by Royal Decree of 29 December 1761⁷⁵, it was necessary to make part-time appointments to the positions of General Treasurer, Clerk of the General Treasury, and General Controllers, because of the reduced number of skilled persons for the available positions. All the appointees were merchants who were permitted to continue to develop their private activity as businessmen (Pedreira, 1995; Ratton, 1813). The post of General Treasurer was filled by José Francisco da Cruz, who was a prominent merchant in the city of Lisbon and who had been involved in the creation of the *Depósito Público* [Public Deposit] and who was an administrator of the Company of Grão-Pará and Maranhão, and deputy of the Board of Trade⁷⁶. The post of Clerk of the General Treasury

⁷⁵ See AHTC, ER, Book 405, p. 44.

⁷⁶ José Francisco da Cruz and his brother, Joaquim Ignácio da Cruz journeyed to Bahia, Brazil and became administrators of a Tobacco Warehouse. Later, the first named brother established his own business while his brother became the cashier of a wealthy businessman. Both of them returned to Lisbon sometime before the earthquake of 1755 (Gramoza, 1882, p. 125). Their younger brother, Anselmo da Cruz Sobral, ventured to Genoa, in 1755, to learn about commerce (ANTT, *Habilitações para a Ordem de Cristo*, Letra A, Maço 11, doc.7), where he had a partnership with an Italian business house (Gramoza, 1882, p. 130). In 1760 he returned to Portugal, created his own commercial house, became involved, together with his two older brothers, in the public administration and ultimately became one of the most important Portuguese businessmen in Lisbon (Pedreira, 1995, pp. 164-165).

was filled by João Henriques de Sousa, who was also the person responsible for the implementation of the accounting system. He was, at the time, the first teacher of the School of Commerce, and also an inspector of the Board of Trade, as well as an important merchant in Lisbon. He became the General Treasurer of the Royal Treasury on 31 May 1781⁷⁷. The initial General Controllers were António Caetano Ferreira, Baltazar Pinto de Miranda, Manuel Pereira de Faria, and Luís José de Brito. The first three were important merchants in the city of Lisbon (Pedreira, 1995, p. 164). As had happened in other European countries, such as in Spain, France (1716), Sweden, and England, the adoption of DEB at the Portuguese Royal Treasury was supported by leading businessmen.

The restricted application of DEB at the Royal Treasury was consistent with the experience within central government elsewhere in Europe, as discussed in Chapter 6. In the case of The Netherlands the adoption of DEB had been confined to certain levels of its respective Royal Treasury since it was impracticable to give instructions in DEB to all the officials involved (Stevin, 1608; ten Have, 1956, p. 244). Furthermore, in the case of France the method had not been implemented for administering the Royal finances, as advocated by Colbert (1661-1683), prior to its first-time adoption in 1716 due to the lack of skilled persons with the knowledge to apply DEB (Barrême, 1721). When the method was effectively introduced at the French Royal Finances it was initially only applied in accounting for taxes and, from 1723, in accounting for expenses (Lemarchand, 1999). Both Stevin (1608) in The Netherlands and Barrême (1721) in France confirmed that the lack of widely held skills and experience in using DEB had inhibited its widespread adoption within the central government of these two countries. The shortage of specialised accounting skills in Portugal at the time contributed to the concentration upon DEB at the central administrative level only of the Royal Treasury in 1761. The School of Commerce had also yet to produce many graduates with the appropriate technical skills required to use DEB effectively at other levels within the organization. These problems would have

⁷⁷ See AHTC, ER, Book 461, p. 410. The information available seems to confirm that João Henriques de Sousa acquired knowledge of DEB while working with Italians and through books of instruction on the subject. It is known that he was sent by his father, at the early age of seven, to the house of a French tailor master (Michel Leboutoux) to be raised and educated, where he stayed for five years. When his father died, Sousa, aged 12, was sent to work in an Italian commercial house in Lisbon that was owned in partnership by two Florentines, Enea Beroardi and Girolamo Paulo Medici (ANTT, *Habilitações para a Ordem de Cristo*, Letra J, Maço 25, nº 2). Sousa worked for this firm from 1732 to 1741, first as a clerk and then as a bookkeeper. Subsequently, he became bookkeeper of the Macau Company for a short period, after which he went to Buenos Aires to reside, staying there for about nine years. In 1755 Sousa returned to Lisbon where he was a businessman, becoming one of the most important Portuguese businessmen in that city (ANTT, *Cartório da Junta do Comércio*, Livro 372; Pedreira, 1995, pp. 164-167).

become less acute as the School of Commerce matured as an organization, thus releasing more graduates for appointment at the Royal Treasury and other organizations, both in the private and public sectors in Portugal. Decoupling was a key means by which the Portuguese government was able to avoid the initial difficulties of implementing the new method due to the lack of knowledgeable and skilled persons on the adoption and use of the DEB system. It also assisted in alleviating the perceptions, as will be outlined in the next chapter, that the adoption of DEB would impose higher costs and was not necessary to ensure the accuracy of the accounts (see AHTC, ER, Book 4233, pp. 152-153).

Other institutional pressures

In what follows there is a discussion of the prevalence or not of mimetic and normative pressures, based on available evidence, on the adoption of DEB at the Royal Treasury. The evidence gathered indicates that mimetic and normative pressures, unlike coercive pressures, were not influential at this new public organization.

Mimetic isomorphism

The identification of institutional pressures on particular organizations, such as the Royal Treasury, necessarily involves determinations of the extent to which such organizations mimic others. As mentioned in Chapter 6, before the late 1590s, DEB was a technique that was readily associated with merchants as a means of accounting for their commercial activities. While its use for public administration within local government has been traced to as early as 1340, the earliest adoption of the technique for public finances within central government (that is, the Royal finances) appears to have been in Spain in 1592 (Hernández Esteve, 1992, p. 538). After Spain, The Netherlands, Sweden, France and Germany also adopted DEB within public finances as explained in Chapter 6.

By the 1761 Law (Title XII), DEB was argued, as indicated earlier, to be the accepted accounting system by “the civilized Nations of Europe”, and was perceived “as the most simple and clear” system, especially for large commercial organizations. That the method was applied in effectively managing the affairs of successful businessmen, especially within large organizations, was evidently taken for granted in contemplating the adoption of the accounting system at the Royal Treasury as a major public organization within Portuguese central government. While DEB had previously been adopted within

central government within other European countries, as addressed previously, Spain and France, as two of the most influential countries in Europe during this time, were not, however, applying DEB in 1761. In the case of Spain, there is no evidence to suggest that this country exercised any clear influence on Portuguese financial organization during the time Portugal was part of the Spanish dominion in the period 1580 to 1640. As mentioned in Chapter 6, although new attempts were made in Spain after 1621 to introduce DEB in certain branches of the Spanish public administration, by the end of the eighteenth century the method was considered to be a novelty stemming from France and, in view of such perceptions, such attempts did not gather any momentum (Donoso Anes, 1996, pp. 138-142).

France's first attempt to adopt DEB in central government occurred in 1716 and was disbanded in 1726. Although a period of 45 years separates the initial adoption of this reform in France to the year of the adoption of the method at the Portuguese Royal Treasury, the French experience might have been important in the Portuguese reform. In all, there are three reasons for making this observation, although the evidence to support this proposition specifically in the case of the Royal Treasury appears to be generally sparse and the case outlined is considered to be weak.

Firstly, and as mentioned before, there was a strong influence of French culture in Portugal, an admiration of the regime of Louis XIV, including recognition of his personal power and the ceremony of his court, as well as regard for the patronage of learning and culture by the crown and the centralization of government (Coelho, 1962; Livermore, 1976, p. 208). In his writings, Pombal constantly referred to France of the late seventeenth century and early eighteenth century, as an exemplar in public administration within Europe (Pombal, 1742, 1777). In the case of DEB, the admiration for the method was linked to the successful use of "the mercantile system... in the houses of big commerce" (Pombal, 1777, p. 20) as was also in the case of France (Lemarchand, 1999, p. 231). For France, this transfer was confirmed by Forbonnais (1758, p. 430) who wrote "we proposed first, even if with time we forgot it, to improve this situation with the union of double entry to Finances... for a long period of time businessmen were the only ones to use this system". Such views may have played some role in the selection of the accounting method to be adopted at the Portuguese Royal Treasury as well as in other organizations. The second reason relates to the influence of French books on accounting in Portugal. Such books were

evidently acquired and presumably read by at least some prominent Portuguese merchants based on books found in certain literary collections (see Appendix B). This influence of foreign books is related with the lack of Portuguese books on the subject, since the first Portuguese book on DEB was not written until as late as 1758 by João Baptista Bonavie (Amorim, 1968, p. 122; Hernández Esteve, 1985b). Finally, French books about accounting by DEB, the application of DEB in public finances, and about the French reforms, were found in Pombal's and João Henriques de Sousa's surviving libraries (see Appendix A and B) and may have, therefore, conditioned their thinking.⁷⁸ Although, the third factor does not imply that Pombal himself was knowledgeable about DEB or personally skilled in its application he was, according to Ratton (1813), familiar with the method since it was applied in the accounting books that were prepared in managing his private businesses and properties during his time in office as Chief Minister.

Examples of the books held in the libraries of Pombal and Sousa that make references to the French experiments include the work by Barrême (1721) and Forbonnais (1758). In introducing his book, Barrême states:

Messrs Paris have introduced this magnificent arrangement in the farms and in *recettes générales*: nothing is as beautiful as the plan that they traced; nothing is so appropriate, to the real interest of Her Majesty, as its achievement. (Barrême, 1721, preface)

In the case of Germany/Austria, although attempts were made in 1715 and around 1760 to introduce DEB, no evidence has been found to the time of writing which demonstrates that the reforms of the German/Austrian Imperial Camera may have influenced the reform at the Portuguese Royal Treasury. As mentioned in Chapter 5, although Pombal had been ambassador in Vienna and had important contacts with important government figures, and with the enlightened ideals followed in the Court of Vienna and the Cameralist reforms on education, there are no evidence to indicate that he knew about the attempt in 1703-1715, and later in 1760, to adopt double entry bookkeeping at the Imperial Camera.

As indicated, under the 1761 Law DEB was perceived to have been adopted by all “the civilised nations of Europe” which provided a general basis for the adoption of the

⁷⁸ For more information on the international influence and importance of some of the French accounting books found in the libraries of Pombal and Portuguese businessmen see Miller (1990) and also Lemarchand (1998).

method at the Royal Treasury, even though there are no available primary records to support the mimicking by Portugal of any single country's accounting developments including experiments at the central government level involving DEB. According, there is insufficient evidence to mount a case, within the context of public administration, that mimetic pressures were influential in the adoption of DEB at the Royal Treasury in 1761.

Normative isomorphism

As mentioned earlier, the Portuguese government under the leadership of Pombal established the School of Commerce in 1759. Under the law that created the School, DEB was required to be taught within the second year of its commerce course which comprised a structured program of three years' duration. Accordingly, the Portuguese School may have functioned as a source of normative isomorphism through legitimizing the cognitive underpinnings of DEB and by creating, in due course, "a pool of almost interchangeable individuals" (DiMaggio and Powell, 1983, p. 152) with a common set of knowledge. This knowledge was to be applied in administrative settings by the graduates of the school after 1763, both within the private and public sectors, including at the Royal Treasury as apprentices in the first instance in this organization and later as full employees.

During the period before the establishment of the School of Commerce in 1759, knowledge of DEB tended to be introduced to Portugal by foreign merchants who established branches in their business in Portugal, such as in Lisbon and Porto. Foreign merchants were, according to Rodrigues and Craig (2004, p. 341), "the almost exclusive possessors of bookkeeping knowledge in Portugal". In this context, a local profession of accountancy in Portugal, as it was later known, had yet to be contemplated while, at best, the occupation of specialised bookkeeper was only beginning to emerge as an identifiable occupational group (Rodrigues *et al.*, 2003). As far as can be ascertained, no organised occupational group or other network of technical specialists was exerting any identifiable pressures in Portugal for accounting reforms as the genre that were adopted at the Royal Treasury. Therefore, based on the establishment of the School of Commerce only two years prior to the formation of the Royal Treasury, it is apparent that normative pressures, while difficult to identify at the time of writing based on a lack of available evidence from around the mid 1700s, were not influential in the case of the Royal Treasury. Indeed, the absence of strong normative pressures contributed to decoupling in the initial application of the method, as explained, on the organization's formation. According, there is

insufficient evidence found in this study to mount a case that normative pressures were influential in the adoption of DEB at the Royal Treasury in 1761.

Discussion of the findings

In order to understand accounting change at a given organization it is necessary to examine the institutional environment in which the organization is located. The Royal Treasury was established under sweeping reforms initiated by Pombal immediately following the devastating Lisbon earthquake in 1755 which not only destroyed the city but also effectively brought about the demise of the Customs House and virtually destroyed all of its records. The creation of the Royal Treasury, together with other measures, resulted in the centralization of the administrative structure bringing together what was previously separated into different offices; the advent of a loyal and competent bureaucracy specifying the functions and qualifications for each function or post, and the division of the governmental functions, all of which were characteristics of an enlightened European government. As a new agency, the Royal Treasury was effectively able to overcome the problem of structural inertia and resistance to change that appears to have been evident in the case of the French fiasco manifest in abandoning DEB within 10 years of its introduction in 1716. Notwithstanding, the Portuguese reforms, in general, were clearly concerned with modernizing the State, and were seen as an important step, among others, for bringing the country closer to the most developed countries of Europe.

The study provides support for the view that the adoption and use of accounting practices is associated with the quest for social acceptability and credibility. The adoption of DEB was intended to legitimize the new organization by constructing an appearance of rationality and efficiency, based on the experience in the use of the method by many important business houses in the most developed European nations, thus acquiring a “taken-for-granted quality of institutionalized practices” (DiMaggio, 1988, pp. 4-5). It had also been applied in managing public finances, firstly in Spain and within certain other central governments including France, based at least in part on the perception of the method as an efficient and successful technology among businessmen (see Hernández Esteve, 1986; Lemarchand, 1999; Vlaeminck, 1961). In fact, the apparent importance attributed to accounting practices and knowledge by Pombal and his government seems to add support to the view that DEB assumed a pre-eminent role.

More specifically, the 1761 Law itself illuminates an appreciation that DEB was connected with a system of rational beliefs which underlined the method's adoption at the Royal Treasury. The rationale is related to the belief that the mercantile system was equally useful for public administration, as it was "the most simple and clear, and the most conclusive to organize the administration of the big amounts, without subterfuges", as argued by the 1761 Law (Title XII) and also by Pombal himself (1777). It was believed that by centralizing the collection of revenues and payments of the expenses at the four general control offices and by adopting the DEB method, centralization would be enforced, thus avoiding the problems of the previous central government organization which was perceived as inefficient and incapable of handling public monies without corruption (Rau, 1951). In addition, it was believed that the system would enhance the systematic control of revenues and expenses through the preparation of regular summaries and balances of revenues and expenses, as ordered in the 1761 Law (Title XV).

Improving administrative controls and increasing the public purse by means of a more centralised approach to administration involving the use of DEB, was perceived as a sound and dependable approach to introduce at the Royal Treasury, especially given the method's adoption at large commercial establishments within Europe. According to Tinker (2004, p. 460), accounting "is a public mentality for efficiency and control, through which the dictates of capital and accumulation are interpreted and imposed". During the Pombalism phase in Portugal, accounting became instrumental in serving the objectives of mercantilist policies of wealth accumulation by the State. Therefore, the government employed coercive pressures in pursuing its ends and DEB was part of the measures implemented by the Portuguese government that would assist the country to emulate the most developed European nations.

However, in the specific case of the establishment of the Royal Treasury the lack of evidence of mimetic and normative pressures suggests that such pressures were not influential, as explained. The time distance from the events of 1761 to the time of writing acts as an impediment in obtaining pertinent evidence, based on depleted surviving primary records, which would assist in fully identifying all relevant influences. Mandating DEB and specifying and inculcating the skills of those who would implement the new accounting system under the 1761 Law arose under a process of coercive isomorphism

exerted by the State, while decoupling was apparent due to the relatively small number of Portuguese who were skilled at that time in using DEB.

Accounting practices adopted at the Royal Treasury between 1761 and 1777

As explained, the 1761 Law resulted in the initial use of DEB within the four general control offices, specified the administrative procedures that should be followed in the collection of public money and the accounting books that should be used by the different sections of the Royal Treasury. The implementation of the system required the employment of persons with knowledge and experience in the system. As a result of the shortage of suitably qualified persons in the use of DEB, businessmen were appointed for the post of general controllers as a part time job, as mentioned previously. Based on the information provided in Chapter 5, it could be expected that the knowledge these persons gained on DEB had been acquired in practice while engaging in commercial activity. Since the system was being applied to a prominent central government organization, some adaptations may have been necessary due to the specific characteristics of public sector organizations. Although one could expect that written instructions about the way the system should be applied at the general control offices were prepared, no evidence have been found of the existence of such documents during extensive research conducted in the archives. However, it is possible, from the collection of books belonging to the Royal Treasury, to access the original accounting books prepared by the General Control Offices and the books prepared by the General Treasurer.

Based on the accounting books belonging to the Royal Treasury that were prepared during 1761 to 1777, the remaining section addresses the way the accounting system was structured and implemented within the organization at the higher levels of the Office of the General Treasurer and the four General Control Offices during the Pombalism era. It was found that DEB was not further diffused within the Royal Treasury from the time of its initial adoption in 1761 until 1777.

The nature of the accounting system in use

According to the prescriptions of the 1761 Law there were two main department levels within the Royal Treasury: The General Treasurer's Office and the four General

Control Offices. For the two levels, there were prescribed and implemented different accounting systems and, accordingly, different sets of books had to be prepared. Next, the accounting systems implemented in the two department levels are analysed.

The General Treasurer's Office

The 1761 Law established the books and the procedures that should be followed by the General Treasurer and by the Clerk of the General Treasurer. It was stated that all the revenues and expenses of the Royal Treasury, received on a weekly basis from the General Control Offices, should be attributed to the General Treasurer in a book numbered, signed and personally closed by him, thus making the General Treasurer personally accountable for the entries recorded. In addition, the General Treasurer needed also to have a Cash Book of the Coffer where all the entries and exits of money were to be registered. The information required for each annotation of revenue and expense was specified (date, name of the person, description and the amount) (1761 Law, Title, III and IV). Through the analysis of the books preserved belonging to the General Treasurer it is evident that the accounting system was organized around the Book of Revenues and Expenses⁷⁹ and the Cash Book⁸⁰. With the exception of the years 1762⁸¹ and 1764, the books are elaborated on a semi-annual basis. There is a book for each semester, one from January to June, and another from July to December. During the period of this study the elaboration of these books remained unchanged.

In the Book of Revenues and Expenses there was found, on the left page on opening, the revenues by chronological order and, on the right page, the expenses also in chronological order. Therefore, DEB was not adopted in this Book or in any other books, based on surviving records, of the General Treasurer. The entries of the revenues are numbered and are signed by the General Treasurer and by the Clerk of the General Treasurer, while the expenses are also numbered but are signed by the Clerk of the General Treasurer and by the person that received the amount registered. All the entries made in the Book of Revenues and Expenses were also registered in the Cash Book. In the Cash Account Book, while the expenses were identified with the number assigned to each of them in the Book of Revenues and Expenses, the revenues did not have the corresponding

⁷⁹ See AHTC, ER, Books 1-142.

⁸⁰ See AHTC, ER, Books 155-173.

⁸¹ The closing term of the accounts for the year 1762 mentioned that it was not possible to make the balance of the accounts in July due to the war with Spain (AHTC, ER, Book 1).

number of the Book of Revenues and Expenses. For the year 1762 there was also reference in the Books of Revenues and Expenses to a Book of Revenues and Expenses for values of past years.⁸² This was done since it was necessary to register values and take the accounts of the time before the creation of the Royal Treasury due to the destruction of the Customs House by the earthquake, which complicated the process of collecting the public money. These sums were recorded under the title *Rendimentos Pretéritos* [Past Incomes]. The Cash Book was used, in effect, as a current account of money received and spent which had besides the entries of the Book of Revenues and Expenses of the year the entries of the amounts received regarding previous years. These books were prepared with the information sent from the four General Control Offices.

In addition, during the years of this study the General Treasurer Office also used the same system of books for different types of incomes. This was intended to avoid the mixing of income sources of different varieties. It was the case, for example, of the Patriarchal Church, and also the House of the Portuguese Queens, for which was used a Book of Revenues and Expenses and a Cash Book, after 1769 and 1770, respectively⁸³.

Relating the Balance of the accounts, while this should be done, according with the 1761 Law, on a semi-annual basis, for the year 1762 it was only possible to do it once the year had finished, as mentioned previously. The Balance of accounts for the year 1762 was made on the 5 January 1763, and is taken as an example of the process of balancing the accounts. In the following years the same procedures were followed on a semi-annual basis. The main objective was to determine the amount of money that existed at the Royal Treasury. First, the revenues and the expenses inserted in the book of current Revenues and Expense, that is, the values of the year 1762 were examined. The expenses registered in the book were confronted with the documents of the expenses delivered by the General Treasury. After being confirmed and approved the documents were cut twice with a scissor, as a sign they had been checked. The Final Balance was obtained by calculating the difference between the revenues and expenses of the Book of current Revenues and Expenses (3.029.556\$518 – 2.873.138\$966), in the amount of 156.417\$552. To this value was summed the balance of the book of revenues and expenses of previous years, in the amount of 154.121\$779. The global balance of 310.539\$331 was then reconciled with the

⁸² The books of Past Incomes were not found at the AHTC.

⁸³ See AHTC, ER, Books 330-346, 350-357.

balance of the Cash Account of the Ledger Book of the four General Control Offices, confirming that the sum of the four cash accounts was equal to the value determined by the Books of Revenues and Expenses of the General Treasurer. Afterwards, it was confirmed if this value corresponded to the effective money in the Coffer of the Royal Treasury.

Although the balance of the accounts was made at the end of the year, not any financial statements, such a “Balance Sheet” and a “Profit and Loss Account” or “Income Account” were found and, more than likely, none were prepared. However, cash accounts statements and revenues and expenses statements were found to be presented instead within the books themselves. This made it difficult to analyse the components of the revenues and expenses of the public finances, however, this kind of information, most apparently, was not needed. Based on the books of revenues and expenses of the General Treasurer for the period 1761 to 1776, Tomaz (1988, p. 362) completed and presented a classification analysis of the components of the revenues and expenses of the Royal Treasury.

Table 2: Components of the revenues and expenses of the Royal Treasury 1761-1776

Custom-house and consulate	24%
Tobacco	17%
Taxes from gold	12%
<i>Décima</i> or tithe	11%
Various incomes	10%
Collection houses	7%
Transfer tax	6%
Incomes from the colonies	5%
Diamonds	5%
Brazil-wood	3%
Total	100%

Source: Tomaz (1988, p. 362)

From the table it is evident that about 50 per cent of the total income originated in the Portuguese colonies, which included income from the following sources: tobacco, taxes from gold, collection houses, income from the colonies, diamonds, and Brazil-woods.

The General Control Offices

The 1761 Law established the books and the procedures that should be followed by each of the four General Control Offices. At this level the method should be DEB composed of one Journal Book, one Ledger Book and several Auxiliary Books for each of the collection houses and for each of the different incomes: Contracts, Rents, Rights or

Taxes (Title XII). One of the objectives with the DEB system and the books established was to ensure that “at any moment, when the different collectors arrive to the Royal Treasury, to have without losing any time the current debit and credit account, the balance of each one of them” (Title XII).

The different books should be numbered, signed and closed. The Ledger and the Journal was to be signed by the General Inspector and the auxiliary books by the General Controllers but without signing their own books. At any time the person responsible for writing the original entries in a book was not, however, to be responsible for checking the same book as this subsequent process was to be undertaken by another individual as a means of control, thus avoiding the practice of one person certifying his own work (Title XII). Even the type of paper that was to be used in the different books was specified in the Law. Together with the 1761 Law there was a list of the auxiliary books that were to be used in each of the four general control offices. It was necessary to ask for the permission of the King to add an additional book or to cancel one of those books (Title XII). Each of the four general treasurers had to prepare two balances of revenues and expenses, one semi-annually and the other annually, in which they had to describe monies received and expended as well as the balance of Cash on hand (Title XV). The amounts of Cash existing in the four general control offices had to be cross-checked with the Cash Book of the General Treasurer, as described before.

From the accounting books of the general control offices it is evident that, as established in the 1761 Law, the Ledger and Journal books were central to the operation of the accounting system⁸⁴. Besides these two key books there existed a Waste-Book and several auxiliary books that were also specified for preparation under the 1761 Law. Taking as an example the books of the General Control Office of the Court and Province of Estremadura for the year of 1762 and 1763⁸⁵, the use of the *Borrão do Diário* [Waste-Book] was confirmed, where the entries were similar to those made in the Journal, but in a more simplified way. In the *Diário* [Journal] in each entry the debit and credit accounts were indicated together with the amounts on the right side of the page and the description of the operation. In the Journal of the first years there were no sums at the end of the pages.

⁸⁴ See AHTC, ER, Books 537-541, 546-549, 550-572, 2699-2701, 2716-2725, 2731-2791, 3976-3977, 3981-3988, 3997-4005, 4154-4155, 4160-4163, 4167-4174.

⁸⁵ AHTC, ER, Books 537, 546, 550-553.

At the end of the year the book was not closed, the entries of the next year followed separated only by the date. The *Razão* [Ledger] presented all movements registered in the Journal, made on the debit and credit sides of the accounts and at the end of the year Revenues and Expenses accounts were closed, and the difference between the debits and the credits transferred to the “Royal Treasury” account. The final balances of the other accounts, specifically creditors’ or debtors’ accounts, were determined and transferred to a new account in the next fiscal year. Several current accounts, the ones with a small number of entries, were used to make the registers of several years, for example, as found to be the case in 1762, 1763, and in 1764. In these cases the registers of one year were clearly identified and separated from the registers belonging to another year. For each year it was determined the final balance of that current account which was transferred to the Royal Treasury Current Account.

Besides these books there were several auxiliary books for the different incomes, for example, for the Income derived from Tobacco, Sugar and Wine, where all the information concerning the specific income was registered chronologically. However, while some of the auxiliary books listed in the 1761 Law for this General Control Office have survived, it is not possible to be sure whether all of the books listed were, in fact, prepared. What is evident is that other auxiliary books besides the ones mentioned in the law were used in the different general control offices.

From the analysis of the Ledger books it was found that the concept of account as a means of classification of specific revenues and expenses, as illustrated in Appendix C, based on the use of double entries was applied at the General Control Offices. The Ledger account with double entries, on the debit and credit of each account, substituted the description of the operation in text format made chronologically by revenues and expenses, as practised in the books at other levels of the Royal Treasury where DEB was not used, such as in the Book of Revenues and Expenses of the General Treasurer. Nonetheless, the accounting system applied did not have the objective of recognising and representing the property of the State. The main objective was to ensure that there was in place an adequate system of control over cash flows and an accurate record of debtors’ and creditors’ amounts. Therefore, the supervision and control function was the dominant one in the administration of the public accounts, as had happened in previous reforms in other European countries, such as France in 1716 (Lemarchand, 1999). Another characteristic of

the system implemented was the absence of a capital account, considered by some accounting historians as a necessary condition for a complete DEB system (see de Roover, 1937; Yamey, 1996). The DEB system adopted at the Royal Treasury used revenues and expenses accounts, personal accounts (debtors and creditors) and a cash account, as can be seen from Appendix C. There were no accounts for other resources, such as Property and no such of a Capital Account. This situation was not exclusive of public sector organizations. The system of accounts of the Silk Factory of Portugal for the period 1745 to 1747, when it was a private owned company, was also characterized by the lack of Property and Capital accounts (see Carvalho *et al.*, 2007).

Another aspect concerns the financial statements that should be prepared on a regular basis. At the Royal Treasury there were not any financial statements among the surviving public records of the era which were prepared under the principles of accrual accounting, as known today and, as indicated earlier, there was no evidence of the preparation or use of Profit and Loss Accounts and Balance Sheets. The evidence shows that cash accounts statements along with debtors' and creditors' accounts were the statements prepared. The objective was to determine the amount of money received and spent each year and the amount in the coffer of the Royal Treasury and to have information on the debtors and the creditors of the Royal Treasury. The balance of the cash account at the general control offices was made semi-annually, by the beginning of July and January, with the closing declaration made after the balance determination, and signed by the General Inspector. The closing of the ledger book of each of the general control offices was made regularly at the end of the year. The information that was transferred to the General Treasurer Office was the one from the Cash Account.

Given the nature of the accounting system used at the General Treasurer's Office and at the General Control Offices, some common and distinctive features with previous reforms can be identified. Similar to the French reforms of 1716, the "new accountancy borrowed from the merchant model its concept of account as a permanent unit of classification and as a mean of compiling accounting information... based on a mechanism of systematic double entries" (Lemarchand, 1999, p. 241). In addition, the system implemented at the Portuguese Royal Treasury, similar to the Spanish and French reforms, was not intended to represent the State's property at any given date or to measure periodic profit. Rather, the objective was to centralize the administration of public finances, provide

an accurate representation of the cash flows arising over any given accounting period, to increase the speed of collection of public money and to better control the collectors of public money (Hernández Esteve, 1986, p. 10; Lemarchand, 1999, p. 231). In the case of the French reforms of the beginning of the eighteenth century, it was necessary to prepare a day-book of revenues and expenses and also a common coffer to where all the money collected was to be entered (Lemarchand, 1999, p. 231), as was required at the Portuguese Royal Treasury. While under the Spanish reforms the system was based on the use of multiple Journals which were later compiled into a single general Journal (Hernández Esteve, 1998b, p. 94), in the Portuguese case each of the four General Control Offices had to prepare a Journal, but these were not integrated into a single general Journal. Instead, the information provided by the four General Control Offices was integrated in the Book of Revenues and Expenses of the General Treasurer. Notwithstanding, when comparing the Portuguese reforms with the cameralist accounting system adopted in Germany/Austria, a difference was found regarding the non recording of materials or tangible assets within the Portuguese system, contrary to the cameralist accounting system (Filios, 1983, p. 448).

Difficulties in implementing the procedures of the new Law

The Royal Treasury experienced difficulties in making the different collectors of taxes follow the procedures established by the new organization. The General Control Office of Continent and Islands of Madeira and Azores in some years, such as during 1762 and 1765, enacted several letters advising the collectors of taxes under its jurisdiction to follow the determinations of the 1761 Law, mainly in what concerns delays in delivering monies (AHTC, ER, 1762, Book 3609, pp. 1, 33-33). The written orders alerting the collectors were usually enacted by the corresponding General Control Office. If the situation persisted it was the President of the Royal Treasury, Pombal himself, who would send a written document which detailed the problems identified and the sanctions imposed in case the situation was not solved, usually the suspension of the official involved with such shortcomings from the post held (AHTC, ER, 1764, Book 849, p. 1). The main difficulty was linked to the collectors not sending the information required within the time established in the 1761 Law. The letters normally argued that there was a “wrong interpretation [...] of the established in the law and instructions sent” (AHTC, ER, 1764, Book 849, p. 2).

Around 1770 an order was issued by the General Treasurer where it was established that the Ledger Books prepared until 1768 by the General Controller of each of the General Control Offices should be prepared instead by the clerk of the higher level within each of the four offices (AHTC, ER, Book 849, p. 41). It was considered that the clerks had the necessary knowledge to prepare the books and consequently the General Controllers would be released from this task in order to deal with other matters. However, in 1772 a letter was sent to the four General Control Offices alerting to the incorrect administrative procedures adopted by some of the clerks, stating that they must change their occupational behaviour and perform correctly their tasks and to do so on a timely basis (AHTC, ER, Book 849, pp. 212-214). In the case of the General Control Office of The Corte and Province of Estremadura there was a report about the wrong procedures adopted by some collectors stating what they should do to correct the situation. It was mentioned that in the recording of revenues in a particular year there were items belonging to other years, thus making it difficult to have a clear idea of the amounts belonging to each year and the amounts that should be sent to the Royal Treasury at the end of the year (AHTC, ER, Book 849, pp. 412-420).

Although the objectives of the 1761 Law were to increase the collection of public money and improve the state of public finances, the results were not immediately accomplished. In fact, through the years, as outlined in chapter 5, there was a need to stimulate commerce and industry in order to improve the collection of public income. In the case of Madeira, for example, a collection house was created in 1775 which was to be responsible for managing public monies on the island. In the instructions sent to Madeira the stimulation of commerce and industry was specifically encouraged as a key means of increasing state revenues (AHTC, ER, Book 3717, pp. 1-51). The collection house was required, at the end of each year, to send information to the Royal Treasury providing details of the changes that occurred in commerce, industry and agriculture (p. 24). Furthermore, in the case of the colonies, as will be developed in the next chapter, some changes were made to the administration of public money and orders were sent to follow those established in the 1761 Law.

Discussion of the findings

The accounting method and key administrative procedures adopted at the Royal Treasury on its establishment remained virtually unchanged during the period analysed, thus confirming the rational belief underlying the initial adoption of DEB, that is, that the method was appropriate for public administration purposes as it was for the big houses of commerce. The adoption of DEB was initially adopted only at the level of the four general control offices and even though the initial shortage of skilled persons in DEB had impacted the level of application of the method at the Royal Treasury, there was no further diffusion of the method within the organization itself until 1777. No evidence was found that the DEB system was not corresponding to the objectives for which it was adopted, as was found to have happened in Spain by 1621. In addition, no evidence was found of the levelling of any criticisms relating to the suitability of the method for a central government organization, as had happened in France in the period to 1726.

During Pombal's term of government and in the initial years after his demise no evidence was found of the method being subjected to questioning or being opposed within the Royal Treasury. Rather, there was a certain constancy and immutability of the measures adopted during the period. The accounting system adopted at the public finances was not modified; in fact, all the detected deviations from what was prescribed within the letter of Law were identified for correction and were required to be corrected. A similar basis of operation happened at the School of Commerce and the way subjects were taught. Although through the years following its establishment new instructors were admitted to the School of Commerce, they were required to teach by the same manuals and follow the order established since the beginning (ANTT, Board of Trade, book 123, page 153). In the case of public finances, the only exception to the restricted use of DEB was found in the collection house of Angola, where the application of DEB commenced, according with instructions sent from the Royal Treasury, in 1772, as will be examined further in the next chapter. As pointed out by Beckert (1999, p. 787), "if there is social stability in early stages of institutionalization, it can be assumed that this is due more to the exercise of *power*, than that it is based on *institutionalized* rules". Confirming this continued exercise of power were the letters issued by the General Controllers, and even by Pombal himself, alerting to instances of non-compliance with the orders and instructions sent to the different jurisdictions within country and Empire. Special emphasis was devoted to the obligation to rectify the problems identified in order to avoid the punishment of the persons responsible

for the administration and record-keeping, thus, making use of coercive power, resulting from the hierarchical structure of the Royal Treasury.

Institutional pressures

As argued in the discussion of findings in the previous section, on the establishment of the Royal Treasury coercive pressures were exerted by the State through the 1761 Law by imposing the adoption of DEB at the four general control offices and specifying the skills of those who would implement the new accounting system. However, due to the relatively small number of Portuguese who were skilled at that time in using DEB there was evidence, as discussed earlier, of decoupling operating processes from symbolic change. The effects of coercive institutional pressures continued to be important through the Pombalism period and were exerted through letters and instructions. As was found to be the case on the initial adoption of DEB, mimetic and normative pressures were weak at best and, therefore, were not influential in the years after the establishment of the Royal Treasury. During the period dating from 1761 until 1777, no major changes were introduced to the accounting system prescribed in the 1761 Law. Although difficulties in implementing the Law were found, the result was always redressed by attempts to reinforce compliance with the 1761 Law. In 1768, the general controllers who, according to the 1761 Law were to be skilled in DEB and were to be the ones preparing the main books of the accounting system, were released from undertaking this duty, which was transferred to the clerks of the control offices, demonstrating that learning on the job was taking place and, therefore, more skilled persons on DEB were seemingly available at the Royal Treasury. Notwithstanding this change to the 1761 Law, the requisites and procedures in preparing those books remained the same and were reinforced, as discussed, by flagging for attention the specific instances where there arose a lack of responsibility on the part of the clerks.

The lack of skilled persons in DEB bookkeeping was considerably reduced after 1763 with the availability of increasing numbers of graduates from the School of Commerce constituting a group of skilled persons with a common set of knowledge in commercial subjects. These students applied their knowledge within both the private and public sectors, including at the Royal Treasury (AHTC, ER, Books 407, 408, 409, 438, 461 and 492). Decrees were issued allowing the graduates from the School of Commerce to

place into practice the theoretical knowledge they had acquired at the School as apprentices at the Royal Treasury. While they would be compensated, in monetary terms, for working at the Royal Treasury, the apprenticeship would not give them the possibility to contest a permanent post at the Royal Treasury or any other public organization. Hence, apprentices were free to accept any job opportunity on completion of their apprenticeship (AHTC, ER, Book 407, pp. 289-290). Not all of the apprentices became permanent employees of the Royal Treasury (AHTC, ER, 1770, 1772, Book 461, pp. 46, 55). The number of apprentices at the Royal Treasury became, some years after its establishment, considerable, working itself as a potential source of normative isomorphism. As argued by Subtil (1993, p. 173),

It is significant that after the maturation period of the Royal Treasury, around 40 per cent of the employees were, precisely, apprentices. A body of apprentices apt to assure the reproduction of bureaucratic practices is an undeniable sign of inculcation of new habits and procedures.

Notwithstanding, this training and apprenticeship system did not seemingly stimulate local time-specific normative pressures that were capable of extending DEB to other departments of the Royal Treasury, including to the Portuguese colonies. In fact, although a group of persons with practical knowledge of DEB as acquired at the Royal Treasury became available, they were not used to implement the method at other levels of the public finances. Even in the case of the colonies, as will be addressed in Chapter 8, these qualified employees were sent from Lisbon to help implement new accounting and administrative procedures, but were not required to implement or monitor a full DEB system as was applied at the four general control offices from 1761. Hence, normative pressures were weak at best and, therefore, were, not influential in the diffusion DEB to other levels of the public finances. Decoupling the operationalization of DEB from symbolic change continued to exist and remained influential until at least 1777, even though a growing group of persons with the necessary qualifications had become available and even though some of them became apprentices and later employees at the Royal Treasury during 1760s and 1770s.

Summary

The creation of the Royal Treasury and the *Conselho da Fazenda* [Royal Council] resulted in the centralization of the administrative structure bringing together what before

was separated through different offices. In addition, the attempt to create a loyal and competent bureaucracy specifying the functions and qualifications for each function or post (from the lowly rank of door-keeper to the most senior rank of General Treasurer), and the division of the governmental functions (collection and administration of the Royal properties) were also characteristics of an enlightened government. To enhance the administration and collection of public money was regarded as important for improving the financial situation of the country. Special attention was devoted to stimulating commerce, which is confirmed by the importance of commercial activities to the total of the revenues of the State. From the analysis of the Revenues and Expenses of the Royal Treasury for the period 1761 to 1776, it was evident that about 62 per cent of the revenues were derived from commercial activities what confirms the importance of the mercantilist policy followed by the State. In addition, more than 50 per cent of the revenue base was related to operations in the colonies, with Brazil playing a prominent role in the public finances (Tomaz, 1988, pp. 366-367).

The reform was oriented to instigating more ordered and effective controls of the revenues and expenses, which was seen as a necessary measure in order to modernize the State, and was seen as an important step to bringing the country closer to the most developed countries of Europe. According to the 1761 Law, the reforms would contribute to diminishing the gap between Portugal and the other European nations but, more significantly, it would contribute to strengthening the absolutist character of the State (Macedo, 1951, p. 48; Tomaz, 1988, p. 356). DEB helped in legitimizing the new institution by constructing an appearance of rationality and efficiency, because it was considered to be adopted by the most important business houses and in the most developed nations, thus effectively demonstrating that Portugal was implementing the measures that would help in advancing the country to an elevated level among the most developed European nations. As in other countries, the adoption and institutionalization of DEB at the Portuguese Royal Treasury reinforces the argument by Miller (1990, p. 329), as discussed in Chapter 2, that accounting practices hold out a central premise within programmes of government, that is, the effective administration of public money can be achieved in practice by following certain practical routines and procedures. In addition, the adoption of DEB at the Royal Treasury helped to institutionalize the system within Portuguese public administration, and was used as an example for later adoption in other public organizations. This was the case of the Mint in Lisbon that in 1769 was coerced by Royal

Decree to adopt DEB in keeping the accounts of that public organization, “as practiced in the Royal Treasury” (Royal Decree 13 October 1769).

Notwithstanding, while some historians claim that Pombal only tried to solve the problems of the moment, without having a comprehensive plan with clear strategic objectives (Macedo, 1951), others considered that the administrative and financial reforms had clear objectives and a strong political range (Tomaz, 1988, p. 355), and that the administrative and financial measures implemented were very similar to the French and English reforms (Capela, 1993, p. 204). In the opinion of Macedo (1951, p. 48), the creation of the Royal Treasury “reveals well the intention to create a bureaucracy strictly dependent of the State and at the same time the wish of putting at the disposal of the centralized power the majority of the fiscal resources of the country”.

The decision to create the Royal Treasury cannot be separated from the diversified set of measures implemented by the Portuguese government to change the situation of the country within the context of specific social, cultural and economic ideals prevailing at the time. Under institutional theory, the consideration of the three forms of institutional pressures are central to appreciating the institutional pressures exerted upon the Royal Treasury within Portuguese society during the period studied. Coercive pressures were found to have been instrumental in the adoption of DEB at the Royal Treasury. However, the historical nature of this study made it difficult, due to the time distance from the events, to gather evidence of normative and mimetic pressures, if any prevailed at the time. At best, such pressures were weak, as discussed, and were not revealed to be instrumental on the establishment of the Royal Treasury in 1761 and also in the period of time that followed until 1777. Nonetheless, decoupling was found to be necessary due to the lack of skilled persons in DEB on the adoption of the method in 1761. Decoupling continued to be a feature of the system employed until 1777, evidently because the system was largely satisfactory in meeting the needs of the organization. Therefore, the evidence presented in this chapter confirms that governmental organizations are not just capable of generating pressures, as will be developed in the next chapter regarding the pressures exerted by the Royal Treasury over the colonies, but are also vulnerable to such pressures themselves. As a public sector organization the Portuguese Royal Treasury was directly impacted by government decisions and was vulnerable to the pressures exerted by the government.

In the next chapter the administration of the Portuguese Empire, the accounting policies issued to administrate and control the colonies at a distance and the institutional pressures exerted within the colonies are discussed and analysed.

Chapter 8: Accounting Policy within the Portuguese Empire (1761-1777)

As mentioned in Chapter 1, this cross-national study is also concerned with augmenting our knowledge and understanding of the transfer of accounting technology from Portugal and her colonies in the period between 1761 and 1777 and elucidating the institutional pressures exerted in the colonies, such as by the State, especially by means of the Royal Treasury. The initial adoption of DEB at the Portuguese Royal Treasury, on its establishment in 1761, was a crucial first step, as explained earlier, in the institutionalisation of the technique within that organization and also ultimately throughout the public administration of the entire country. It also provided a platform for the development and adoption of accounting policies and systems for the administration of the Portuguese colonies. As identified in chapter 4, this study makes use of a sixth question to further extend the use of the transfer of accounting technology construct, especially in the context of the Portuguese colonies. This question is restated as follows: “Were there any consequent flows of the technology to other jurisdictions from the receptor economy?”. The “other jurisdictions” under consideration in this study are the Portuguese colonies.

In the eighteenth century Portugal continued to maintain a significant colonial empire, which included the Madeira and Azores islands and which extended to territories in Asia, Africa and in South America, including Brazil which, as a source of diamonds and gold, made the Portuguese Court one of the richest in Europe (Livermore, 1976, pp. 208-209; Maxwell, 1995; Schneider, 1980, p. 7; Serrão, 1996a). Accounting and control systems were a fundamental element in the administration of the Portuguese Empire. Whether such systems during this period of seventeen years from 1761 were based on DEB principles has not, until this investigation, been specifically subject to examination. A complete, in-depth examination requires access to surviving accounting records of the era, if any are available for examination, that were prepared by the administration of each of Portugal’s colonies between 1761 and 1777. As such a comprehensive study has yet to be undertaken this study has focused attention on identifying and examining the available evidence of accounting policies that were issued by the Royal Treasury for application in the Portuguese colonies. Whilst accounting policies can be considered to be an expression of intended or recommended practices, in the absence of evidence of actual practices, based on surviving accounting records, it cannot be assumed or implied that the Portuguese

colonies actually adopted the policies issued, either in full or in part or even at all times, within the time constraints that were intended to be applied. However, by elucidating the relevant accounting policies that were found to have been issued by the Royal Treasury during this era, in endeavouring to provide important preliminary evidence in responding to the additional question posed above, this study provides a basis for further studies, if any, that may be informed by surviving accounting records, to be located for examination, of the nature of the actual specific accounting practices within one or more of the former Portuguese colonies. Notwithstanding, the specific accounting policies issued by the Royal Treasury were intended to impose upon the colonies the particular accounting practices that were to be adopted in the financial administration of the colonies.

The structure of this chapter is as follows. Firstly, an examination is made of the context in which the Portuguese Empire emerged from around the beginning of the sixteenth century through to the second half of the eighteenth century during the Pombalism period. The next section examines how Portugal administered its colonies and specifically addresses the role of the Royal Treasury in the administration of the country's colonies. There follows an examination of the specific accounting policies which were to be applied in the administration of the Portuguese Empire. These policies were identified following an extensive review of available archives containing surviving records of the Royal Treasury that pertain to the period 1761 to 1777. Next, a discussion of these findings is presented, in which the institutional pressures exercised by the Royal Treasury over the Portuguese colonies are investigated and elucidated.

Portugal and its colonial empire

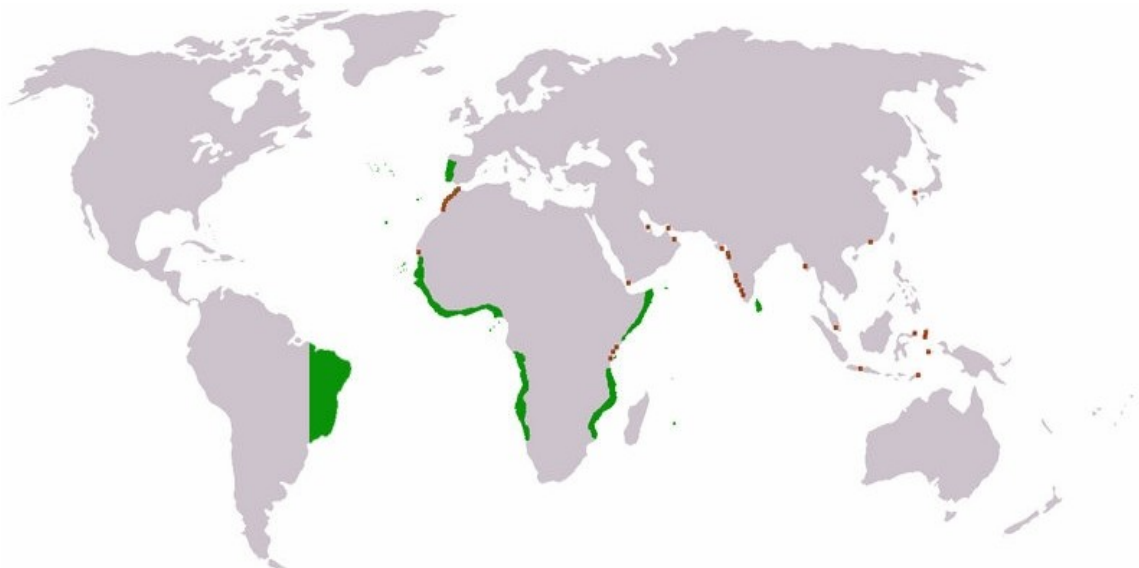
Before 1750

It was by the end of the fourteenth century that the Portuguese started with the first expeditions that would be part of the Discoveries period that changed the knowledge of the world and the way international trade was transacted. The conquest of Ceuta, in 1415, and the discovery of Madeira (1418) and Azores (1432) islands marked the beginning of the expansion of the Portuguese territory (Boxer, 1981; Livermore, 1976; Marques, 1998; Serrão, 1980). The discoveries, although financed by the Portuguese, had a strong impact in Europe and they had an international feature, since a significant number of people from

other countries, mainly Italians and particularly from Genoa, participated in the expeditions (Marques, 1998, pp. 37-39). By the beginning of the fifteenth century Portugal was a homogenous country and capable of triumph over its larger and sometimes more prominent, neighbours (Marques, 1998, p. 47). Portugal was a dynamic state with capable rulers, possessed well organized marines and soldiers, and was well established in the international trade (p. 47). The Portuguese advantage in the overseas discoveries resulted also from the location of the country at the extreme West of Europe over the Atlantic and from the lack of participation in wars, contrary to the engagements in wars by other European nations (Boxer, 1981, pp. 26, 30). The discoveries were stimulated by three factors: discover of new territories, economic profit and Christian evangelization (Marques, 1998, p. 125; Boxer, 1981, p. 41).

By the middle of the sixteenth century Portugal dominated the coastline territories of a considerable portion of the world and the prevailing international trade – superior to any other European country – assuming its position as a major trading nation (Boxer, 1981, p. 17 Godinho, 1962, 1981; Livermore, 1976; Peres, 1959; Serrão, 1980). The Portuguese overseas empire included territories in Asia, Africa, and South America, while one of the main characteristics of the Empire in the sixteenth century was its high dispersion (Boxer, 1981, p. 69), as illustrated in Figure 2.

Figure 2: The Portuguese Empire in the sixteenth century



Source: http://pt.wikipedia.org/wiki/império_português (access on 16/01/2006)

From a privilege situation at the beginning of the sixteenth century, Portugal saw its influence and affluence decline during the reign of *D. João III* [King John III] (1521-1557). The competition from other nations was increasing considerably. Spain was a direct rival, while England, France, The Netherlands, and Denmark were also increasing their participation levels in the discoveries and in the development of international trade (Marques, 1998, p. 131; Boxer, 1981, p. 17). Notwithstanding the increased competition, Portugal was able to maintain for most of the sixteenth century a strong position in international commerce with the East (Boxer, 1981, p. 59). Notwithstanding, difficulties emerged and when compared with Spain, Portugal had a smaller number of inhabitants, consequently less men were available for the overseas trips in comparison with other European countries while the country had access to a limited number of ships. Portugal was also dependent on the products manufactured by many European countries (Boxer, 1981, p. 70). A major factor influencing the diminished significance of Portugal as a colonising nation was the advent of the Portuguese Inquisition in 1531, as mentioned in Chapter 5, which resulted in the departure of much capital and the depletion of the Empire's entrepreneurial skills (Kayserling, 1971, p. 199; Livermore, 1976, p. 147; Marques, 1984, p. 120; Nogueira, 2001; Rodrigues & Craig, 2004, p. 341; Rodrigues *et al.*, 2003, p. 100; Serrão, 1980, pp. 256-263; Tavares, 1995).

The situation was aggravated with the loss of the country's independence to Spain from 1580 to 1640 (Livermore, 1976; Serrão, 1990). During this period the Portuguese overseas territories were under attack by the Dutch, and the international situation changed with The Netherlands and England expanding their position in international trade during the seventeenth century (Boxer, 1981, pp. 117-120). The superiority of The Netherlands and England in terms of economic resources, including the number of men and the availability of ships resulted in the loss of some of the previously strong Portuguese positions in Asia and Africa (Boxer, 1981, p. 124; Magalhães, 1998a). The situation was aggravated by the inability of the Portuguese to adopt innovations in terms of tactics, equipment and in the preparation and deployment of men for dealing effectively with increased competition (Boxer, 1981, p. 127), which resulted in the loss of the country's previously held position as a major trading nation in Europe, as addressed in Chapter 5 (Marques, 1973, p. 361; Nogueira, 2001, p. 303; Serrão, 1994, p. 25, 1996a; Sideri, 1978, p. 37).

By the end of the seventeenth century the importance of the Portuguese Empire had decreased considerably. Through time the Portuguese administration and exploration of overseas commerce and the country's territories had become ineffective and inflexible, placing Portugal in a disadvantageous position to compete effectively with the other European nations (Boxer, 1981, p. 21). It was only with serious difficulties, due to the competition from other European countries, the reduced number of men, the lack of economic resources and the strong conservatism of the Portuguese, that Portugal was able to maintain some of its previously held positions in Asia, Africa and America (Boxer, 1981, p. 150; Kayserling, 1971, p. 284; also see Magalhães, 1998b, p. 45; Nogueira, 2001; Serrão, 1990, p. 322, 1996a, p. 83).

Following the tendency of the previous century, the Portuguese economy in the eighteenth century developed within the Atlantic, from the triangle Lisbon-Angola-Brazil, where Brazil, as the most large and important colony, assumed a central role in the economic and political fabric of Portugal (Boxer, 1981, p. 154; Livermore, 1976, pp. 208-209; Marques, 1984, p. 427; Moreira & Pedrosa, 2004, p. 47; Schneider, 1980, p. 7; Serrão, 1996b, pp. 150-154). The Portuguese economy was dependent from the export of sugar and tobacco from Brazil, and from some Portuguese products (salt, wine and fruit) to pay the imports made from Europe, mainly from England (Boxer, 1981, p. 155; see also Azevedo, 1961; Fisher, 1984). In addition, the discovery of gold and diamonds from Brazil made the Portuguese Crown one of the richest in Europe and had important repercussions in the administration of the Portuguese Empire (Boxer, 1981, p. 162; Livermore, 1976; Maxwell, 1995; Serrão, 1996a). There was a stimulation of the colonial trade, a shortage of labour work, thus increasing the need for African slaves, a movement of persons in Brazil from the coast to the interior, and mass immigration from Portugal to Brazil (Boxer, 1981, p. 162; Magalhães, 1998a, p. 22; Schwartz, 1998a, pp. 86-103, 1998b, pp. 104-120). Nonetheless, as mentioned in chapter 5, the economic situation of the country by the end of the first half of the eighteenth century was not a favourable one, with most of the wealth coming from Brazil being used to pay the imports arriving from England (Azevedo, 1961, p. 8; Boxer, 1981, p. 166).

After 1750

As developed in Chapter 5, the reign of *D. José I* (1750-1777), through the action of his Chief Minister – Pombal – provided a new orientation toward the problems of Portugal and its overseas territories. This period was characterized by the re-emergence of the importance of the Portuguese colonial dominions, with Brazil, in particular, and Angola as the most important colonies (Schwartz, 1998a, p. 93; Serrão, 1996b, p. 141). There was a clear attempt to integrate and connect the territories dispersed throughout the world and to put the colonies in permanent connection with the metropolis. By controlling the colonies and the overseas commerce Pombal intended to reduce the Portuguese dependency on England and transfer the commerce in the hands of foreign merchants to the Portuguese merchants (Maxwell & Silva, 1986, p. 336; Schwartz, 1998a, p. 93). To accomplish this objective different Viceroy and Governors were appointed to administer the Portuguese colonies. The individuals appointed to these key posts most typically closely shared Pombal's ideals and, accordingly, they became known as "Pombalism Governors" (Bellotto, 1986, p. 277; Magalhães, 1998a, p. 35; Serrão, 1996b, p. 139).

Other measures were implemented in order to improve the financial situation of the country and to enhance commerce, as addressed in Chapter 5, which also had implications for the Portuguese colonies. One of these measures was the establishment in Portugal of the Board of Trade (1756), to help in the creation of new factories and to better organize commerce in the country and also within the colonies. Another was the creation of the Royal Treasury (1761), to help increase the State income through a more efficient collection of public money, both in Portugal and in the colonies. With the advent of the Royal Treasury a new and more centralized organization for administering public finances emerged with a new accounting system for use in Portugal, with implications for accounting in the Portuguese colonies. It was expected that the collection of rents would be better controlled while the administrative confusion, the slowness in processing and the number of mistakes would at least be reduced and, as a result, the country's revenues would increase under the new public finance system (Magalhães, 1998a, p. 35). Another measure was the creation of monopoly trading companies which had important implications in the commercial and financial administration of the colonies, particularly in

Brazil⁸⁶ (Arruda, 1986, pp. 157-158; Schwartz, 1998a, p. 94; Serrão, 1996b, p. 140). The objective of establishing such companies was to develop the economy of Brazil, and consequently of the Portuguese Empire, through the monopoly in trading African slaves and exporting colonial products (Schwartz, 1998a, p. 94; see also Boxer, 1981, p. 191; Serrão, 1996b, pp. 176-180).

In summary, the administration of the colonial dominions was at the centre of the mercantilist policy followed by the Portuguese Government. The colonies provided the effective implementation of protectionist measures and at the same time functioned as markets for the products of the metropolis, provided new opportunities for developing commercial and business activities and were suppliers of specific products for the colonizer (Maxwell & Silva, 1986, p. 336; Rego, 1967, p. 181; Schwartz, 1998c, p. 139).

The administration of the Portuguese Empire

The administration of the colonies in the Pombalism period reflected the enlightened despotism put in practice by Pombal in Lisbon. The administration of the colonies went through important changes in the ways it was organized and through the actions of the Governors who were appointed to the colonial territories and who were oriented towards, and conditioned by, an authoritarian conception of power as the image of what Pombal was exercising in Portugal (Magalhães, 1998a, p. 35).

As mentioned before, among all the Portuguese colonies Brazil was the most important and consequently was devoted much attention on the part of the Portuguese government. Notwithstanding this focus of attention, Angola also played an important role during Pombalism. Besides being the most important source of slaves for Brazil, Angola was the natural route for the commercial trips to India and for a more intense commerce with Brazil (Serrão, 1996b, p. 152). Although the other colonies in Africa and Asia were not forgotten in the reforms implemented by Pombal, the reforms had considerably less of an impact in the development of those territories (Boxer, 1981, p. 193; Magalhães, 1998b, p. 53). In fact, the Portuguese possessions in Africa, during the eighteenth century were, in general, no more than a reservoir of slavery labour force for Brazil (Cortesão, 1971, p. 23;

⁸⁶ The companies created specifically for Brazilian colonial trade were the *Companhia Geral do Grão-Pará e Maranhão* [Company of Grão-Pará and Maranhão] (1755) and the *Companhia Geral do Pernambuco e Paraíba* [Company of Pernambuco and Paraíba] (1759).

Magalhães, 1998c, p. 60). One of the first measures of the Pombalism period was, following the example of England, to end with the “overseas areas” which implicated the subordination of some territories to others, like it was the case of Angola with Brazil, Mozambique with India, Guinea with Cape Verde, and Timor with Macau (Rego, 1967, p. 19; Serrão, 1996b, p. 139). Pombal believed that all the colonies should be oriented towards the metropolis instead of being subordinated to other colonies (Rego, 1967, p. 19).

Another key measure employed, as mentioned earlier, was the appointment of persons of Pombal’s trust and who shared his ideals and ideas for the government of the most important overseas territories (Bellotto, 1986, p. 277; Magalhães, 1998a, p. 35; Rego, 1967, p. 19; Serrão, 1996b, p. 139). This happened in Angola which was part of the plans of the Portuguese government to expand the Portuguese colonization in Africa and to connect Angola with Mozambique (Magalhães, 1998c, p. 70). To develop this expansion, Governors were appointed with the capacity to implement the administrative reforms promulgated by Pombal and these leading officials were required to use their initiative in order to develop the colonies (Cortesão, 1971, p. 291; Magalhães, 1998c, p. 70; Serrão, 1996b, p. 150). One of these individuals was Francisco Inocêncio de Sousa Coutinho, described by some historians as the typical “Pombalism” Governor, who was appointed by Pombal for the post of Governor in Angola from 1764 to 1772, and who tried to develop the industry, agriculture and commerce in order to make Angola more than a reservoir of slaves for Brazil (Boxer, 1981, p. 193; Magalhães, 1998c, p. 70; Rego, 1967, p. 171; Serrão, 1996b, p. 152). Notwithstanding such initiatives, the exports of Angola reduced significantly after 1766 and the reforms implemented by the Governor Sousa Coutinho did not produce the expected results in developing the colony (Marques, 1984, p. 432).

In the case of Mozambique, the colony became, after a long period of subordination, economically independent of Goa, and a Governor was appointed for the territory, although Pombal’s reforms did not produce important changes (Boxer, 1981, p. 193; Magalhães, 1998c, p. 72; Serrão, 1996b, pp. 154-157). In fact, the abandonment of some African colonies was so pronounced that when the *Companhia Geral do Grão-Pará e Maranhão* [General Company of Grão-Pará and Maranhão] was established, in 1755, it became responsible for the administration of Cape Verde. The company was responsible for the administration, defence, and for the revenues of the Crown in that colony (Magalhães, 1998c, p. 67). For the territories in Asia there was created a monopoly trading

company, *Companhia de Comércio com a Ásia* [Company for Trade with Asia] (1753), under the influence of Pombal, in order to develop commerce within that part of the world. The Lisbon earthquake in 1755 unfortunately destroyed most of the ships owned by the company. The company never recovered from this loss and ceased to operate in 1760 (Magalhães, 1998b, p. 52). After this time, the Portuguese possessions in Asia were almost disregarded in the reforms of Pombal, who concentrated most of the attention on Brazil as the most resource-rich colony in the Portuguese Empire (Magalhães, 1998b, p. 52).

The reforms of Pombal concerning the colonies faced different obstacles. The biggest problem was linked to distance which “blocks, delays and complicates the administrative activity” (Bellotto, 1986, p. 265). In fact, one of the obstacles to the politics of centralization came from the slowness in communications and transport, a characteristic of the European colonial expansion. Several administrative and diplomatic problems resulted from the time necessary in the communication process between Lisbon and Brazil, a consequence of the voyage of three months that was necessary at the time to cross the Atlantic (Bellotto, 1986, p. 265). But the distance was also a problem within the colonies. In the most extensive ones, as it was the case of Brazil, it could be difficult to reach the most remote areas (Russell-Wood, 1998, p. 171). The distance problems had direct consequences in the authority delegation and in the autonomy of colonial governments in distant areas of the empire. For Brazil these difficulties lead to the conclusion that a unique and centralized administration was not possible. The decision taken was to implement a political centralization based in Portugal. Nonetheless, within Brazil the administration was to be made through different levels of administration and with different administrative structures (Bellotto, 1986, p. 265), which had repercussions in the organization of the accounting system adopted in this colony. Another problem was related to the lack of a large and qualified group of persons for holding the public administration posts. Since the higher posts in the administration of the empire were occupied by a relatively small group of nobles, there were problems of family interests and pressures from specific groups with specific interests (Russell-Wood, 1998, p. 171).

In Portugal, jurisdiction over the colonies was not a function of only one public organization or council. The most important, before the eighteenth century, was the “Conselho Ultramarino” [Overseas Council], responsible for the matters related with the colonies. During Pombalism other public entities were created with jurisdiction over the

colonies, and the political decisions of the Overseas Council were transferred to the General Control Offices of the Royal Treasury (Russell-Wood, 1998, p. 169). The Portuguese Empire was not structured with a uniform administrative model. The Empire was characterized by the territorial dispersion and the decision was to have in the same period of time different administrative structures in the different territories (Hespanha & Santos, 1993, p. 398). At the same time there were colonies with municipal institutions of the European style, with captaincies, with fortresses, and in others specific administrative structures were arranged (Hespanha & Santos, 1993, p. 398).

In the case of Brazil, although the Viceroy was the top authority, his authority over the Governors of the different “Capitanias” [Captaincies] was, in practice, somewhat limited due to the administrative structure in which Brazil was organized and the power the different Governors of the different regions possessed (Bellotto, 1986, p. 279; Bethencourt, 1998, p. 241; Russell-Wood, 1998, p. 178). The Governors and General Captains of the different captaincies in Brazil, and the Governors of all the other colonies, were required to report upon their actions to Lisbon about different matters. The Governors were to write letters to Lisbon about the political, commercial, military, and financial conditions and the situation of the royal revenues. To guide their action each Governor received instructions from Lisbon on his appointment (Bellotto, 1986, p. 279; Bethencourt, 1998, p. 241; Russell-Wood, 1998, p. 178). The administrative system was additionally composed of military and juridical authorities. In the case of Brazil, at the local level the administrative organization was a responsibility of each City Hall (Bellotto, 1986, p. 280). The complexity of Brazil was also the result of the number of administrative regions in which the colony was divided. Brazil was divided in nine regions with governments of different levels in each of the regions (Rego, 1967, p. 155).

The creation of the Royal Treasury, in 1761, resulted also in the revision of the entire tax system of the colonies, not only at the level of the organizational structures involved but also the employees involved and the ways the money was collected (Bethencourt, 1998, p. 238). In Brazil and in the other colonies, as a result of the decision to centralize the collection of public moneys, there was created during the 1760s/70s the “Juntas da Fazenda” [Collection Houses]. These were the big and centralizing organizations responsible for the collection of public moneys (Bellotto, 1986, p. 282). The Collection Houses were composed by a “Capitão General” [General Captain], an

“Ouvidor” [Magistrate], a “Provedor” [the person responsible for the administration of the Collection House], a “Tesoureiro” [Treasurer], a “Contador” [Controller], and a “Escrivão da Fazenda” [Clerk] (Bellotto, 1986, pp. 284-288). They were, usually, separated in two departments: the Office of the Treasurer and the Control Office. The function of the collection houses was to collect the taxes and rents of the Crown in each Captaincy, reporting directly to the Royal Treasury (Bethencourt, 1998, p. 238). The task of collecting the public money was not a simple one due to the number of taxes that had to be collected, the contracts of public rents that they had to manage, and the expenses made within their designated responsibility (Bellotto, 1986, pp. 284-288). In the case of Angola, the administrative system was not as complex as was the case in Brazil, since Angola was divided into only two administrative regions while Brazil comprised nine independent governments and several subordinated governments and captaincies (Rego, 1967, p. 155). The higher authority was the Governor and General Captain and all the other administrative levels were subordinated to that individual (Russell-Wood, 1998, p. 170). As part of the centralization policy adopted by Pombal, the appointment for different posts in the financial and judicial administration, as it was the case of Clerks, was made directly by the Crown in Lisbon, since these agents were the intermediary level of the power of the King (Bethencourt, 1998, p. 246).

With all the difficulties and differences in the administrative structures of the Portuguese colonies it was necessary to implement an effective control system that was supported with the use of an appropriate accounting method. This was established by the Letter of Law of 22 December 1761, as mentioned in Chapter 7, which created the Royal Treasury and defined the method to be applied at the level of the four General Control Offices of the Royal Treasury. Evidence of the accounting policies that were adopted by the Royal Treasury for application in the colonies is examined in the next section.

Evidence of accounting policies within the Portuguese Empire

During intensive examinations of the Royal Treasury archives at the National Audit Office no surviving accounting books, such as books of revenues and expenses, cash books, journals and ledgers that were prepared in administering the Portuguese colonies during the period 1761 to 1777 were found. These searches revealed that the only surviving accounting records pertaining to the colonies at the archives were some of the

periodic reports of revenues and expenses and lists of debtors which constituted the outputs of the accounting systems that were put in place within those colonies. It was not possible, of course, to establish whether these reports were prepared under single or DEB systems. Initially, it was thought that the original books of accounts maintained in administering the Portuguese colonies could have been located in the Royal Treasury archives. However, such original accounting records, should they have survived until the time of writing, would have more than likely remained located in the former Portuguese territories. Nonetheless, and importantly, it was possible to access the accounting instructions that were issued by the Royal Treasury in the period 1761 to 1777 for application in the different colonial jurisdictions. This chapter presents preliminary evidence based on the accounting policies issued and identifies, as far as possible, the prescribed accounting practices to be followed and the local, time-specific institutional pressures that were evident in the colonies. The evidence presented will also be used in seeking to respond, in the next chapter, to the additional question, described as question six, as stated above.

The system prescribed for the Colonies

The rules established by the 1761 Law also had repercussions in the Portuguese colonies. Based on the instructions that were sent to the different colonies it is possible to acquire knowledge of the accounting system that should have been implemented in the colonies. Generally the bookkeeping system specified for adoption by the Collection Houses was to be similar across the Portuguese colonies, with the notable exception of Angola, particularly after 1772, which was considered to be a special case among the Portuguese colonies at that time, thereby justifying the use of a different accounting system from that prescribed for adoption in the other colonies.

Usually the instructions sent to most of the Portuguese colonies focused on the same aspects, looking almost as a copy of each other. The instructions identified the particular control and administration procedures that were to be followed at the colonies. Attention was called for the 1761 Law as the basis for the procedures that were to be implemented in the colonies:

The method that His majesty usually order to be applied in the administration of his Royal Property, consists in the exact application of the Laws of 22 December 1761, not only in what regards to the books and the bookkeeping method to be used in them, but also in what regards with the time periods, and the way the entrance and exit of the money should be made, and about the exercise of

the jurisdictions... laws that his Majesty ordered to be applied in all the overseas dominions in what was applied to them. (AHTC, ER, Book 5322, S. Tome, p. 7)

Although the 1761 Law was the basis for the accounting practices to be adopted at the colonies, according to the orders sent to the Empire, the system to be applied in most of the colonies was found to be different from the system that was applied, as already discussed, at the four General Control Offices of the Royal Treasury. Within the colonies usually, as mentioned earlier, a Collection House was established which comprised two offices, namely the Office of the Treasurer and the Control Office. As shown in Table 3, the system that was specified for application in the colonies included a Book of Revenues and Expenses of the Treasurer of the Collection House, in which the revenues were registered on the left page and the expenses on the right page⁸⁷. Each revenue recorded and each expense registered would give origin to a document that would serve as the basis for the entries made later in the General Book of Revenues and Expenses of the Control Office, in which the entries were made chronologically, without separating revenues and expenses. Each week an extract of the book of the Control Office was to be elaborated and sent to be compared with the book of the Treasurer, assuring that there was mutual control over what was done in the two departments under the responsibility of different persons.

In the Control Office of each Colony there was also to be the Book of Current Accounts of the Renters and Treasurers, and a Book of Current Accounts of the Royal Incomes, as well as auxiliary books of the different expenses. There was also to be a General Balance Book of the Revenues and Expenses and annually the Collection Houses were to send an extract of this book to the Royal Treasury, in the first ship that went to Lisbon. The revenues were to be registered on the right page and their explanation was to appear on the left page, followed by the expenses recorded in the same way and, in the end, the remaining amounts in the Coffer were to be described. A second extract with the debts to the Collection House was to be sent on the second ship going to Lisbon. The bookkeeping system to be adopted was intended to provide information about the total amount of each income that was supposed to enter the coffer, what really entered and what was extracted as expenses and what part was deferred to the following year (AHTC, ER, Book 4233, p. 153).

⁸⁷ Leading some persons to state that DEB was applied.

Table 3: Books to be used at the Colonies according with Instructions sent by the Royal Treasury

Books	Colony	India ER 4024 1769	S. Tome ER 5322 1770	Rio de Janeiro ER 4055 1767	Minas Gerais ER 4072 1772	S. Paulo ER 4061 1774	Bahia ER 4218 1767	Pernambuco ER 4233 1769
Office of the General Treasurer:								
- Book of revenues and expenses		X	X	X	X	X	X	X****
Control Office								
- Book of revenues and expenses		X	**	X	X	X	X	
- Book of current accounts of the Renters, Treasurers, Collectors... before 1761		X		X	X	X	X***	
- Book of current accounts of the Renters, Treasurers, Collectors... between ...		X (1762-1769)		X (1762-1767)	X (1762-1772)	X (1762-1774)	X*** (1762-1767)	
- Book of current accounts of the Renters, Treasurers, Collectors... after ...		X (1770)	X	X (1768...)	X (1773...)	X (1775...)	X** (1768...)	X
- General book of the expenses before 1761		X		X	X	X	X	
- General book of the expenses between ...		X (1762-1769)		X (1762-1767)	X (1762-1772)	X (1762-1774)	X (1762-1767)	
- Expense Book of the Ecclesiastic Sheet ...		X (1770)		X (1768)	X (1773...)	X (1775...)	X	X
- Expense Book of the Military Sheet		X		X	X	X	X	X
- Expense Book of the Civil Sheet		X		X	X	X	X	X
- Expense Book of the Extraordinaire		X		X	X	X	X	
- Book of the current accounts of the royal revenues before 1761		X		X	X	X	X	
- Book of the current accounts of the royal revenues between ...		X (1762-1769)		X (1762-1767)	X (1762-1772)	X (1762-1774)	X (1762-1767)	
- Book of the current accounts of the royal revenues after ...		X (1770...)		X (1768...)	X (1773...)	X (1775...)	X (1768...)	X
- Book of the General Balance Sheet of the Rents and Expenses*		X	X	X	X	X	X	X

* Together with the General Balance that should be sent to the RT at the end of the year it was also necessary to send a list of the Debtors to the Royal Treasury.

** Instead of a book of revenues and expenses of the Control Office the adoption of a Journal was recommended in the case of S. Tome.

*** In the case of Bahia there was a book to register the monetary values of the current accounts and another book to register the quantities of the materials of the current accounts. This separation between monetary values and quantities by different books was not found previously.

**** Since in the Collection House of Pernambuco was usual to receive gold and this could not be summed to money there should exist a book of revenues and expenses specifically to make the annotations regarding the gold (p. 95). There should exist also another book of revenues and expenses of the confiscated properties belonging to the Jesuits (p. 96).

In the case of S. Tome & Principe and Pernambuco evidence was found of some specificity. Since the jurisdiction was established at the same time the instructions were sent, in 1769, a decision was made not to create an Office of the Treasurer and a Control Office but only the Office of the Treasurer (AHTC, ER, Book 5322, S. Tome, p. 12; Book 4233, Pernambuco, p. 93). Thus, in the case of S. Tome, instead of a book of revenues and expenses of the Control Office the adoption of a Journal was recommended which was to contain all the revenues and expenses in sequence without separating them (AHTC, ER, Book 5322, S. Tome, p. 12). Although the number of auxiliary books was not specified, it was mentioned that it was necessary to have books “corresponding to the ones of the General Control Offices of the Royal Treasury” to know the situation of the different collectors and incomes (AHTC, ER, Book 5322, S. Tome, p. 11). In the case of Pernambuco, the Treasurer was to prepare three books of revenues and expenses since it was considered necessary to separate the money, the gold, and the confiscated properties of the Jesuits. Different auxiliary books were prescribed to be adopted by the Treasurer of Pernambuco, as described in Table 3. As Lisbon officials of the Royal Treasury were not sent to Pernambuco to assist in implementing the system prescribed by the instructions, it was suggested that in case of any doubts the bookkeeper of the so called “General Company” in Brazil should be consulted (p. 103).⁸⁸

The auxiliary books recommended for adoption in the colonies were current accounts with the debit entry for the payments and the credit for the received money. It was mentioned that “it must be observed that not even one sum of the Journal can be forgotten to be taken to the auxiliary accounts to which it belongs, because if any are missing the accounts cannot be true and correct” (AHTC, ER, Book 5322, S. Tome, p. 15). The instructions provided also evidence of the interrelations between the different books and when and how the entries should be made, such as the following advice:

Besides the sums made in the Journal, which should be made based on the annotations of the Book of Revenues and Expenses, are included in these current accounts the debits of the Contractors and Renters. For example: João “arrematou” the contract of the *Dízimos* by the price of 600\$00 per year to be paid in two payments every six months. A current account of the *Dízimos* is open and another current account for the contractor, by the time of the first payment is due an annotation is made on the debit of the Contractor, even if it is not inserted on the Book of Revenues and Expenses because

⁸⁸ The letters and the instructions sent to Pernambuco did not mention the full designation of the company, referring only to the “General Company”. From the available information it is known that in 1759 a monopoly trading company, the *Companhia Geral do Pernambuco e Paraíba* [General Company of Pernambuco and Paraíba], was established. There is the possibility that the bookkeeper involved could have been the bookkeeper of this company.

it is a requirement to satisfy and an obligation of the clerk. When João makes the first payment: this will be annotated on the book of revenues and expenses, and from there translated to the Journal, in the way mentioned above, and from the journal it will pass to the auxiliary book in the credit of the Contractor's account for adjustment of its account, and also for the credit of the Income account to be possible to know in a separate account the amount he entered on its behalf". (AHTC, ER, Book 5322, S. Tome, p. 15)

While illustrations of the use of the books that were used by the General Control Offices of the Royal Treasury were provided as examples to follow in the colonies, a specific instruction was provided not to follow the DEB system used at those General Control Offices. In a supplement to the instructions issued in 1769 for adoption in Pernambuco, Brazil (AHTC, ER, Book 4233, Pernambuco, pp. 151-155) some explanation was provided for the prescription of different accounting methods in the Portuguese colonies:

Although by the fundamental Law of the Royal Treasury, Title XII §1 has His Majesty determined that the method of collection was the mercantile, and in it the one of double entry, this Royal determination does not apply outside the General Control Offices of the same Royal Treasury: because in case of professors' death, those who were sent to all the collection houses, it would imply the suspension of the bookkeeping or it could continue with mistakes, and once these were introduced, they would cause greater confusion; and also because, implying this method a bigger expense, it is not necessary to the accuracy of the accounts, and of the balances, that are sent to the Royal Treasury.

This way it was ordered by the instructions, that were sent to Rio de Janeiro, and Bahia, that instead of a Journal regularly formed by debit and credit, would be used a Journal to register all entries and exits of the Coffers; and instead of a Ledger Book by double entry, would be used only the auxiliary books of current accounts, all that were needed. By this method, that is easy and expeditious the desired purposes are accomplished with the necessary accuracy. (pp. 152-153)

And in 1770 a similar argument was used in the instructions sent to S. Tome Island (AHTC, ER, Book 5322, S. Tome, pp. 7-23):

By the fundamental Law of the Royal Treasury, Title XII paragraph 1 has His Majesty determined that the method of collection was the mercantile, and in it the one of double entry, nonetheless because the mentioned double entry bookkeeping is an art, that cannot be practiced by all the public offices due to the lack of Teachers, and if wrongly used causes greater confusion; and also because it is not necessary to the accuracy of the accounts and balances of those public offices in which the incomes are small, and which applies almost the same reason as for the Collection Houses of the Provinces; it will be sufficient that instead of a Journal constituted regularly by debit and credit, and the Ledger Book that is an universal extract of the same Journal, by the way of the bookkeeping of all the entries and exits of the Coffers, and all actions and transactions related with the accounts of the Royal Property: and that instead of the Ledger Book there are only auxiliary books of current accounts, which may be created in numbers as necessary. By this method that is easy to follow even by the persons without the sufficient instruction on the method of keeping the accounts, it is accomplished more easily, and with the necessary accuracy the desired end described at the second paragraph.

... and at any time, in which the mentioned collectors arrive at the Royal Treasury, to know without the slightest loss of time the net account and current account of the Debit and Credit of each one of them". (AHTC, ER, Book 5322, S. Tome, p. 11)

Although the description of the books that were to be used in each of the colonies, the way they were to be prepared and explanatory examples constituted a considerable part of the instructions, information was also provided about other procedures to be followed in the colonies. Usually it was mentioned that the economic year should correspond to the civil year, to make it possible to determine the total of each income type and the total of the different expenses in each year⁸⁹. It was clearly specified when the method should start to be applied. Sometimes the books of the previous years (starting in 1761) and until the year of the new instructions were required to be prepared again in accordance with the new instructions (AHTC, ER, Book 4024, India, p. 5; Book 4072, Minas Gerais, p. 105). In many cases, Royal Treasury officials were sent from Lisbon, usually for a period of three years, as bookkeepers and clerks, to ensure the correct application of the instructions so as to assist in implementing the new system (AHTC, ER, Book 4055, Rio de Janeiro, p. 24; Book, 4072, Minas Gerais, p. 105; Book 4061, S. Paulo, p. 91; Book 4218, Bahia, p. 18). An example is provided by the instructions sent to Rio de Janeiro, in 1767:

Since the officials that are going to practice the new method of collection will arrive around the middle of the year to Rio de Janeiro, to avoid all the confusion, this new method must start only on the 1 January 1768 forward. Meanwhile the officials will be occupied in elaborating all the clarifying information of the years between 1762 and the present time, information that is described in a separated instruction, and should be sent as soon as possible to the Royal Treasury. (AHTC, ER, Book 4055, Rio de Janeiro, p. 24)

The officials were to take copies of the 1761 Law to confirm, as necessary, the procedures to be applied in the colonies (see, as an example, AHTC, ER, Book 4218, Bahia, p. 19). Special attention was devoted to the description of the procedures adopted at the Royal Treasury which were provided as an example to be followed in what was applicable to the administration of the colonies (AHTC, ER, Book 4024, India, p. 7; Book 4055, Rio de Janeiro, p. 26; Book, 4072, Minas Gerais, p. 108; Book 4061, S. Paulo, p. 94; Book 4218, Bahia, p. 25). Examples include the following:

Every week the revenues and expenses must be added and the difference compared with the money in the Coffers. This procedure is fundamental and very important for the Treasurer and all the persons that have to answer for the accuracy of the accounts. Being everything correct it must be prepared a brief balance sheet to be delivered to the Governor imitating what is done at the Royal Treasury, sending to the King a similar balance. (AHTC, ER, Book 5322, S. Tome, p. 9)

⁸⁹ AHTC, ER, Book 4024, India, p. 5; AHTC, ER, Book 5322, S. Tome, p. 8; AHTC, ER, Book 4055, Rio de Janeiro, p. 24; AHTC, ER, Book 4072, Minas Gerais, p. 105; Book 4061, S. Paulo, p. 91; Book 4218, Bahia, p. 21; Book 4233, Pernambuco, p. 93.

This practice followed at the Royal Treasury is described here to be used in what is adapted to the General Treasury of Bahia, being sufficient to prepare the balance annually. (AHTC, ER, Book 4218, Bahia, p. 25)

One important objective of the Lisbon authorities in elaborating the instructions was the standardization of methods and procedures. As stated in the 1761 Law, the objective was “that the collection of public money was not arbitrary and subject to diverse formulas, and also not to be dependent on the imagination of each of the Chiefs”. And, in the instructions it was stated that the colonies should follow the “method that is described for them to adopt which was adapted in substance and clarity from the one adopted at the Royal Treasury” (AHTC, ER, Book 5322, S. Tome, p. 12). There was also an intention to maintain control procedures in the elaboration of the accounting books by assuring that the record keeping in the books was made by different persons; each one controlling the records made by the other. Besides the control of the entries made in the books of the Treasurer and in the books of the Control Office, every week, at the same time of the elaboration of a brief balance sheet of the Treasurer, had to be prepared a similar Balance Sheet of the Control Office and both were to be compared in order to be assured that there were no mistakes (AHTC, ER, Book 5322, S. Tome, p. 13; Book 4055, Rio de Janeiro, pp. 27-28, Book, 4072, Minas Gerais, p. 110; Book 4061, S. Paulo, p. 94).

In some of the instructions, the overseas dominions were described as a source of wealth for the State. In some cases it was mentioned that the royal revenues were dependent mainly from agriculture, industry, commercial circulation, and the effective collection of the royal properties (AHTC, ER, Book 4070, Minas Gerais, p. 1; Book 4061, S. Paulo, pp. 119-126). Accordingly, specific information was provided on the procedures to be adopted in order to stimulate agriculture, increase the commerce and avoid misconduct from different agents. The effective administration of the royal properties consisted in the increase of the royal income and in their effective collection (AHTC, ER, Book 4061, S. Paulo, p. 120). To help increase the royal incomes, the collection houses were to give preference to the most successful businessmen, control the information of the contracts to be able to charge a good price for them, establish an organized and correct record keeping of the royal incomes and contracts, control the debtors and also to provide information about the ones in delay (see, as an example, AHTC, ER, Book 4061, S. Paulo, p. 124).

The exception of Angola

Although one of the objectives of the instructions issued to the colonies was the intended standardization of the accounting practices and administrative procedures among the colonies in the Portuguese Empire, one key exception was found. The Collection House of Angola, which was structured in the same way as the collection houses in the other colonies, was instructed in 1772 to apply DEB for the first time. Apart from the auxiliary books that were related to the ivory business in Angola, the Collection House was to use the same Waste-Book, Journal and Ledger system that were required to be used under the 1761 Law at the four General Control Offices of the Royal Treasury. The justification provided for the use in Angola of the same system that was applied at the central level is summarized in the following extract from the instructions sent to the colony:

... it has been determined single entry method for the Control Office of the other Collection Houses already established, for the reason of different causes. In that Collection Houses are many in number the incomes, and many the entries for the bookkeeping, but always by means of single entry of the revenues and expenses. In Angola, for the contrary, being in a reduced number the Incomes, and resulting more abbreviated a significant part of the bookkeeping through the auxiliary book (...); circumstances exist, that make necessary, or at least more appropriate, to apply double entry bookkeeping, such as the fact that the Collection House is responsible for the administration of the Royal Rights of the Slaves and Ivory; and for buying and dispatch the ivory in the name of the Royal Treasury; so, it is possible in an easy way to have success with the mentioned bookkeeping, the accounts will be more balanced, and will show better what is necessary. (AHTC, ER, 1772, Book 4193, Angola, p. 137)

Angola was under the jurisdiction of the General Control Office of West Africa, Maranhão and Bahia at the Royal Treasury. According with the list of 27 auxiliary books for this general control office prescribed in the 1761 Law, only one was to be assigned to the rents of slaves and ivory of the kingdom of Angola. From the information sent by the Royal Treasury to Angola, in 1764, it was found that Angola was required, as the other colonies, to maintain a book of revenues and expenses and was required to send annually extracts of revenues and expenses to Lisbon (AHTC, ER, Book 4193, Angola, pp. 1-2). However, soon after letters to the Governor of Angola from the Royal Treasury were dispatched complaining about the lack of clarity of the accounts of revenues and expenses sent to Lisbon (AHTC, ER, Book 4193, Angola, pp. 3-4).

In 1772 a new Governor, António de Lencastre, was appointed to Angola. Before departing for Angola, the new Governor was informed by letter that he “should obtain instruction at the Royal Treasury about the plan and system that is newly established in

Angola for the utility of the Royal Property and Commerce in general” (AHTC, ER, Book 4193, Angola, p. 101). The letter stated:

Being the Collection House of the Kingdom of Angola, of which the Governor is the President, in charge of many aspects useful to the Royal Property, and Commerce, and being necessary to preserve the activity of that Commerce, and the System, in which it was established with a precise correspondence with the Royal Treasury, it makes necessary that in the same Royal Treasury, in the specific General Control Office, be your Excellency instructed in the mentioned plan established and of the means conducive to its continuation; about which I have provided the necessary orders to the General Controller. (AHTC, ER, Book 4193, Angola, p. 101)

Subsequently, in the same year a letter was sent to the new Governor of Angola which contained the instructions for administering the colony’s Collection House, including instructions on the method to be followed in the elaboration of the accounts of Angola by the officials sent from Lisbon as appointed by the King to work in Angola (AHTC, ER, Book 4193, Angola, pp. 125-183; Book 4223, Bahia, p. 77). The instructions prescribed that the registration in the books needed to be organized in a way that would allow the determination of the totality of each income and each expense for each different year separately, starting on the first of January until the last day of December. The instructions indicated that there was to be information prepared about the following: the amount of revenues expected to enter the coffer; the effective amount of revenues that came in; what went out for expenses; what was deferred to the following years regarding the contracts established. And, a separation was required to be made about the incomes belonging to the period before 1761 and between 1761 and the establishment of the new Collection House. It is mentioned that the revenues of Angola were obtained in money mainly in the ports of America. After providing the procedures to be followed in Angola, based on what was done at the Royal Treasury, the letter prescribed the books to be adopted.

... next the necessary books to the accounting system are described, and some formalities that are familiar to the new Officials are pointed out, in order that other persons may continue with the system in case something happens to these officials, since in many circumstances the method in Angola will be different from the one applied in the other collections houses because of the different objects [that is, different income types] that it has, the administration of the ivory, and the deposit of the money from the *Mesas de Inspeção* [Inspection Departments], in which all will be reduced to a simple, clear and expeditious way, in order for the work that would be significant becomes easier to perform. (AHTC, ER, Book 4193, p. 125)

Also during 1772, a letter was sent from Lisbon to the new Governor of Angola, in response to his request for a written explanation about the administration and collection system of the Kingdom of Angola (AHTC, ER, Book 4223, Bahia, pp. 70-77). The letter

mentioned that in 1769 the state of ruin in which Angola was situated was recognized, and different laws were issued in trying to change the situation (p. 70). A summary of those laws was prepared in the letter for the new Governor of Angola. In Angola the number of the different royal income types was much lower in comparison to the number of income sources of the other colonies, however the value collected from the trade involving mainly slaves was most significant, making Angola one of the most important Portuguese colonies in economic significance terms (p. 71). Since the income from the slaves was dependent upon commerce, mainly with Brazil, it was important to stimulate commerce to avoid a reduction of the royal incomes. Due to frauds and abuses by the contractors of the slaves and ivory it was decided that the administration of the rights, as well as their purchase and shipping, would be made directly by the Collection House in Angola and not by contractors (p. 73). All these justified a different accounting method from the one used in the other colonies, but in “a precise correspondence with the Royal Treasury” (AHTC, ER, Book 4193, p. 101) and the use of DEB was regarded as more appropriate in these specific circumstances.

Books to be used by Angola (AHTC, ER, Book 4193, pp. 128-183)

As mentioned earlier, the accounting system to be adopted in Angola according to the new instructions was based on the system applied at the Royal Treasury. There was a separation in Angola, as in most of the other colonies, between the Office of the Treasurer and the Control Office. For the Office of the Treasurer the Book of Revenues and Expenses and the Book of Dispatches and Bills were prescribed for adoption. While for the Control Office were prescribed the following books: Book of Dispatches and Bills, Registration Book of the General Control Office, Waste-book of the Diary, Diary, Ledger, and several auxiliary books. The system to be implemented was organized in order for the Treasurer and the Control Office to operate with the objective of controlling each other. The instructions issued were very detailed and they described how the two departments and the different books were connected and how they were to be elaborated. Several times the procedures followed at the Royal Treasury were described in order to provide illustrative examples of what was to be undertaken in Angola.

Similar to the instructions sent to the other colonies, the instructions sent to Angola were very detailed, especially in terms of how the entries were to be made in the books and of what procedures were to be followed in order to allow the mutual control of what was

registered in the different books of the two departments – Office of the Treasurer and Control Office. For the Book of Revenues and Expenses it was prescribed that all the revenues registered in this book would originate a document that was sent to the Control Office to be signed and registered in a proper book of the Control Office. The documents of expenses had to be signed by all members of the Office of the Treasurer and sent to the Control Office to be registered in the proper book. As was the case at the Royal Treasury, the money existing at the coffer was to be counted and compared with what was registered in the cash account on a weekly basis. The Treasurer of Angola was to follow the same procedures that were adopted at the Royal Treasury, as described in the instructions, in all that could be applied within Angola. At the end of the instructions, there was presented the model of the book, as well as all the other books that were to exist in Angola, with a few examples of how the entries were to be made. In addition, the Treasurer was to have a Book of Dispatches and Bills to register the bills of exchange negotiated with Brazil, specifically Rio de Janeiro, Bahia and Pernambuco.

The instructions prescribed a larger number of books to be adopted within the Control Office. The books described with examples provided at the end of the instructions were: Book of Dispatches and Bills, equal to the one to be adopted by the Treasurer; Registration Book of the Control Office, where the documents about the revenues and expenses elaborated by the Treasurer's Office and sent to the Control Office were to be recorded. The instructions mentioned also the Waste-book, stating that "the method to be applied in this book should be double entry bookkeeping" (AHTC, ER, Book 4193, Angola, p. 137). The Diary and the Ledger were also books mentioned by the instructions. In the case of Diary it was stated that it was a "clean copy of the Waste-Book" (AHTC, ER, Book 4193, Angola, p. 138), while for the Ledger it was stated that:

... this book is elaborated accordingly with the procedures determined by the Art, in which the new officials are instructed. The main and necessary accounts of this book adapted to the Account System of the Administration and Collection of Angola are the following: 1. Royal Treasury; 2. Cash; 3. Current Royal Incomes; 4. Past Incomes until 1761, and Incomes of the intermediate years since January 1762 to the end of 1771; 5. Ecclesiastic Expense – Civil Expense – Military Expense; 6. Ivory of the Royal Property account. All these accounts must be annual.

It was described in detail, for each account, when to make debit and credit entries and how it was connected with the other accounts. The account "Royal Treasury" represented the values of resources belonging to the Royal Treasury and its balance was to

be equal to the balance of the Cash account, at the end of the year. At the end of the description of the different accounts, the instructions made the “demonstration of the objective of the method” which was stated as follows:

Practicing exactly what has been described, the result at the end of each year will be: 1st, the Incomes and Contracts debited by all owned to the Royal Treasury, and credited by all that had been paid on their account by the coffer, showing in the balances how much they still owe to be collected in the following year; 2nd, the account of the Royal Treasury credited by the amount of all the Incomes of the Royal Property of that Kingdom, and debited by their expenses, and by transference for a new account [in the following year] of the debts not collected, showing in the credit side what exactly must be sent to the Coffer of the General Treasury of the Royal Treasury; 3rd, the Cash account debited by all the enters made on the account of the Incomes, and credited by all the expenses paid, demonstrating in the balance an amount on the debited equal to the amount determined by balance in the credit of the Royal Treasury account, that is, that the determined balance really exists in the Coffer, or in papers that have the same meaning as real money [...], and confirming with the mentioned equal balance that it is the amount that should be sent to the General Treasury of the Royal Treasury. (AHTC, ER, Book 4193, Angola, p. 147)

There follows the different auxiliary books that were to be adopted by the Control Office of Angola: Book of Expenses, Book of Inventory of the Incomes, Book of Current Accounts of each of the Incomes, Book of Entries and Exits of Ivory, Book of Invoices of Ivory, Book of General Balance of the Revenues and Expenses (book that should be sent to Lisbon at the end of each year together with a description of all the debts).

The difficulties in implementing the general system to be adopted in the colonies

While much attention was devoted to standardizing the accounting system, including the collection procedures and the control system of the different Portuguese colonies, the Royal Treasury, however, experienced difficulties through the years in accomplishing this goal. Not all the procedures were followed by the various officials in different places of the world. Frequently, letters were written by Pombal himself or by the General Controllers with jurisdiction over the colonies, alerting the recipients of mistakes or the unsatisfactory execution of the instructions. In the case of Mozambique between August 1766 and July 1767, the lack of clarity in the accounts sent to the Royal Treasury was pointed out by the organization’s officials and it was further explained how it was necessary to respect the instructions and the law. The same observation was repeated again in 1770 (AHTC, ER, Book 4040, Mozambique, p. 1).

In the case of India the correspondence sent by the Royal Treasury, in April 1769, refers to the delay and decadence in the collection of the royal incomes and the negligence

and misconduct of the officials (AHTC, ER, Book 4024, India, p. 1). Among the set of measures prescribed to change the situation were the following: a determination to create a Office of the Treasurer and a Control Office; copies of the 1761 Law were sent to be applied to the extent necessary in India; and resumes of the accounts according to the method prescribed had to be sent annually to the Royal Treasury (AHTC, ER, Book 4024, India, pp. 1-59). Despite the different letters sent by the Royal Treasury, some time later the situation was not altered as expected, thus, the instructions were not properly implemented during the period from 1760 to 1770 (AHTC, ER, Book, 4024, India, pp. 59, 95). According to the letters, the way the information was elaborated would not permit a clear portrayal of the revenues and expenses and of the debts from the different persons for the different years. The same problems were identified as occurring in Brazil. In 1766, letters were sent to S. Paulo and Pernambuco stating that the books sent were not prepared according to the law, therefore, new books were required to be prepared (AHTC, ER, Book 4061, S. Paulo, pp. 1-4 and 14-15; Book 4233, Pernambuco, pp. 11-12). Again, in 1774, further letters were sent to S. Paulo pointing out that the administration and collection of public incomes was defective, and that there were undue delays in sending the books to the Royal Treasury in Lisbon (AHTC, ER, Book 4061, S. Paulo, pp. 116- 119). To face these problems a new Collection House, as existed in most other jurisdictions, was established. As in the other colonies and jurisdictions in Brazil, the Collection House consisted of two departments, namely the Office of the Treasurer and the Control Office, and was charged with the responsibility to administer the royal incomes and the contracts.

Although the instructions were detailed and prescribed the tasks to be undertaken and when in each of the Portuguese colonies, this did not imply that what was prescribed was actually implemented. In the case of S. Tome, the official responsible in Lisbon for the instructions had, at the time of writing, some doubts as to whether all that was prescribed to happen in record-keeping would actually be implemented: “For me this seems to be enough for the accounts of this collection house, because after having started these instructions, information was given to me of the local conditions, leading to doubts arising as to whether everything mentioned will be implemented” (AHTC, ER, Book 5322, S. Tome, p. 16). This raises the possibility that not everything that was written in the instructions was actually put into practice, as per the instructions issued, at the different colonies, justifying the necessity to examine the actual accounting records of the colonies, if any, to ascertain the degree to which the instructions were implemented in practice.

The unanticipated temporary exception of Pernambuco (Brazil)

A specific problem arose in Pernambuco, Brazil in 1770. A letter was written by the General Controller of the General Control Office of West Africa, Maranhão and Bahia to Manuel da Cunha Menezes, who was the Governor of the Captaincy of Pernambuco, and to Julião Lumachi, who was the bookkeeper of a Company in Brazil, described as *Companhia Geral* [General Company], as mentioned before (AHTC, ER, Book 4223, Bahia, pp. 46-58; Book 4233, Pernambuco, pp. 151-155). The evidence confirms that the bookkeeper was called upon to help implement the bookkeeping system according to the instructions sent to Pernambuco in 1769. The bookkeeper apparently took much responsibility for arranging the accounts in the Collection House and wrote to the Control Office at the Royal Treasury in Lisbon exposing his ideas about how the accounting system should be organized (AHTC, ER, Book 4223, Bahia, p. 54).

The letter sent to the Governor of Pernambuco provided advice about the accounts that he had sent to the Royal Treasury and outlined what was to be done to correct the accounts of the Captaincy of Pernambuco. The letter started by congratulating the Governor on his capacity to elaborate and organize the accounts of the Captaincy, even when he did not take with him from Lisbon persons with appropriate skills in the accounting method of the Royal Treasury, as happened in the cases of Bahia and Rio de Janeiro, in order to assist in implementing the new instructions. The letter acknowledged that the instructions sent suggested that, in case of any doubts in complying with the prescribed accounting method, the bookkeeper of the General Company could be consulted. However, two reasons were presented to justify why the services of the bookkeeper should not have been requested. First, the method was a relatively simple one and in case there was any doubt it could be easily clarified by someone within the commercial business sector. Second, from the information available there was evidence that the bookkeeper of the General Company wanted to demonstrate what he knew, and even in the simplest things, in which there was no need for elaborate methods, he changed the method from that prescribed and instead applied a DEB system. Thus, the General Controller of the General Control Office of West Africa, Maranhão and Bahia was worried with the possibility that the commercial bookkeeper wanted to complicate the system and, as a consequence, become indispensable, since there was a lack of skilled persons to

continue with the more complex DEB system that the bookkeeper was implementing in line with his experience.

The problem was the way the balance sent to the Royal Treasury was elaborated. It was considered that it was impossible for other clerks to continue the work under the DEB system that was unnecessarily adopted. In addition, the bookkeeper had communicated that he had started a Journal and a Ledger, books that were not prescribed by the instructions. The ongoing use of these books would require the availability of a teacher, who did not exist at the Captaincy of Pernambuco and was, furthermore, not considered to be necessary after all in view of the unauthorised change to the DEB method. As examples, the General Controller mentioned Bahia and Rio de Janeiro where DEB was not applied even though skilled teachers of the method were sent there. The strict application of the instructions did not require the use of DEB, which was considered to be a more expensive method and also unnecessary and, above all, it was not uniform with the method in use in the other collection houses of Brazil. As stated in the letter:

This uniformity should be such, that if an official from one Captaincy moves to another one nothing seems as new to him, and for that all the members of the Kingdom and Conquest proceed expeditiously was decided to use the simplest method as long as it was conclusive and correct (AHTC, ER, Book 4223, Bahia, p. 48).

Thus, the simple system was to be adopted to replace the DEB system that had been unnecessarily imposed, according to the instructions, and if the clerks were not capable of implementing the simpler system of accounts, requests were to be made to the King for skilled clerks to be dispatched from Lisbon in order to organize the prescribed system. As a consequence, a supplement to the instructions sent to Pernambuco was prepared in 1770 in order to correct the situation at the collection house. In the supplement it was stated that the instructions did not provide for the use of a Journal different from the book of revenues and expenses. In all the instructions sent to the colonies the Journal that was mentioned was “a pure copy (in what concerns the substance⁹⁰) of the books of revenues and expenses” (AHTC, ER, Book 4223, Bahia, p. 50). Since clerks were not sent to Pernambuco when the instructions were issued and the book of revenues and expenses was sufficient to make the entries in the auxiliary books, it “was considered unnecessary to prepare another Journal different from the mentioned book [of revenues and expenses]”

⁹⁰ The difference was in the way the information was presented, for example the date in one was in one of the margins and on the other was in the middle of the page (AHTC, ER, Book 4223, Bahia, p. 52).

(AHTC, ER, Book 4223, Bahia, p. 50). In what concerns the other books it was emphasised that the previous instructions and the 1761 Law were to be followed (p. 53). The supplement was elaborated to make clear how the Journal was to be prepared “in conformity with the practice in the collection houses of Bahia and Rio de Janeiro”. It was also stated that:

... the mentioned control office of Pernambuco extends and amplifies the method with different formulas, making insufficient the number of the appointed clerks to prepare the accounts, not only with the inconvenient of losing uniformity, but also by becoming [the elaboration of the accounts] more expensive than what is justified by the collection of public money” (p. 51).

A letter was also sent to the bookkeeper of the General Company (AHTC, ER, Book 4223, Bahia, pp. 50-58). It mentioned that the Journal and Ledger books should not have been introduced in the collection house of Pernambuco. If they were to be used, the King would have sent teachers to assist in implementing a more elaborate system, but such books were not mentioned in the instructions and at that time there was a lack of teachers of DEB in Portugal (p. 54). Therefore,

For this purpose [prepare clear and correct balances] was not considered to be necessary to adopt a strict formal bookkeeping by Debit and Credit, because if the Revenues and Expenses separated by their nature are adjusted to the totals in the book, there will be no fear that the royal income suffer lost, and therefore it will not be necessary to prepare the accounts in a more elaborated, less expeditious and more expensive way. (p. 55)

It was again reinforced that the use of DEB would require more skilled persons than was available and, in addition, it was described as a “difficult method to use in our days even in the houses of commerce”, and that the experience in Bahia and Rio de Janeiro showed that it was not necessary (p. 58).

Discussion of the findings

During the Pombalism period, the accounting and administrative procedures were perceived as a way of integrate, connect and harmonize the administration of the Portuguese Empire dispersed around the world. They were an instrument that would help to re-orientate the colonies to the metropolis and put them in permanent connection with Lisbon. However, the control and administration of the colonies was not to be accomplished exclusively through the prescribed accounting method and administrative procedures. Important was the appointment of competent individuals and of the thrust of

Pombal, designated, as mentioned earlier, as “Pombalism Governors”, to be responsible for the administration of the colonies. These Governors were important agents in the transfer and implementation of Pombal ideals and policies within the colonies.

The administration of the colonies was conditioned by an authoritarian conception of power, as the image of what Pombal was exercising in Portugal. The accounting policies and administrative procedures issued by the Royal Treasury for each of the colonies was a key means of exercising that power at a distance. In fact, the dispersion of the Portuguese colonies across the world was one of the main difficulties in administering the Empire. As a consequence of the dispersal of Portugal’s colonies, it was decided to adopt a simplified method of bookkeeping in comparison with the DEB system that was only specifically required to be used within the four control offices at the Royal Treasury and, from 1772, in Angola, as explained. Notwithstanding, the administrative systems and accounting practices that were specified to better control and administer the different Portuguese colonies were uniform among them. Therefore, accounting was an “important technology for the state” (Laughlin, 1996, p. 457), specifically in managing public finances at a distance. The key objectives within the several instructions sent to the different colonies were: to better administer an important source of wealth for the State – the colonies; to control and improve the collection of the royal incomes dispersed through the different colonies; and to standardize the administrative procedures and the record keeping of the royal incomes through the Portuguese Empire.

It is possible to understand, by reading the instructions, that the persons in charge of the public finances at the Royal Treasury understood well the kind of information they were to receive from the colonies, how it was to be prepared, and what procedures were to be followed in order to control, at a distance, the administration of the public money and properties. As this chapter has shown, the procedures and accounting methods followed at the Royal Treasury were to provide the basis for the ones prescribed for the colonies but, as explained, in a more simplified way where the DEB method was not to be applied in general. In fact, what was intended to happen in the colonies was the rolling out of the procedures and practices that were adopted at the Royal Treasury after 1761. Several times it was mentioned that the procedures adopted at the Royal Treasury were an example to be followed in such situations within the colonies. The non fulfilment of the requirements was strongly discouraged and criticized while any possible innovation or change departing

from the instructions was unsatisfactory, as happened in Pernambuco. Therefore, the system prescribed for adoption at the colonies both defined and reflected the initial choices made at the Royal Treasury, except that, excluding Angola, DEB was not required to be adopted. Consequently, the initial decision to decouple operating processes from symbolic change when operationalizing the application of DEB, determined by the 1761 Law, was maintained for the colonies, as the image of what was decided to other levels of the Royal Treasury in Lisbon.

The use of the DEB method, as shown, was not regarded as necessary for the other colonies besides Angola. What the instructions contained was intended to result in the simplification of the accounting system adopted at the Royal Treasury. It consisted in a book of revenues and expenses as adopted at the General Treasury and several auxiliary books as adopted for the General Control Offices, including current accounts of incomes and debts. Even the type of information that was required to be provided to the Royal Treasury by the colonies was similar to the information the General Control Offices had to provide to the General Treasurer. The main difference consisted in the absence of the Waste-book, the Diary and the Ledger.

The key factor to explain the restricted adoption of DEB at the Royal Treasury itself, based on the instructions sent to the colonies, was related to the small number of people with knowledge of, and experience in, DEB systems (AHTC, ER, Book 4233, Pernambuco, pp. 151-155; Book 5322, S. Tome, pp. 7-23). This shortage of qualified persons in DEB led to their concentration at the central level instead of dispersing them elsewhere within the country and also within the colonies. It was considered that the dispersion of these qualified persons through the Portuguese Empire would make it difficult for them to properly teach other people, thereby making it difficult to assure that they would make use of the method in a satisfactory way once they were dispatched, especially to the distant colonies. If this argument can be accepted in the first years of the Royal Treasury, which were also the first years of the School of Commerce, this would eventually, as can be envisaged, become less plausible as an explanatory variable taking into account the increase of graduates from the School of Commerce, as was confirmed by the Letter of Law 30 August 1770, and the appointment of graduates of the School of

Commerce, with on-going regularity, as apprentices, and later as employees, of the Royal Treasury⁹¹.

Besides the justifications given in the instructions in 1769 and 1770, the 1761 Law also provided a similar explanation when it was issued. According to the 1761 Law, the diversified nature and forms of collecting the public money, and the small number of persons instructed in using the DEB system, contributed to the decision to initially apply DEB only at the General Control Offices at the Royal Treasury in Lisbon. This restricted application of the method at the Royal Treasury seems to be consistent with what occurred in The Netherlands and in France previously, as addressed in chapter 6, where the method, once adopted for the first time, was not applied in administering public finances at all the levels of public finances, because of the limited number of persons instructed in the method (Barrême, 1721, Preface; Lemarchand, 1999; Stevin, 1608; ten Have, 1956, p. 244). The decision to restrict the application of DEB was maintained through the years even when an increased number of skilled persons in DEB was available in Portugal, both those produced by the School of Commerce and also by the Royal Treasury through experience acquired and related organizational learning, to obtain and maintain uniformity and standardization through the Empire, excluding Angola, as explained.

Based on available information, see Appendix D, it is possible to know that the clerks sent from Lisbon to assist in implementing the instructions in the different colonies were previously clerks of one of the four General Control Offices of the Royal Treasury, and consequently, skilled in keeping the books by DEB (AHTC, ER, Book 461). However, the decision made for them was not to implement DEB. It was argued that mistakes would arise from using the DEB system due to the general shortage of qualified teachers, while DEB was more expensive to use, less expeditious and not necessary in maintaining the accuracy of the accounts. While at the Royal Treasury the quest for social acceptability and credibility resulted in the adoption of DEB based on the rational belief that the system was useful for public administration as it was for private business, within the colonies this quest was not assumed. Instead, arguments of practical difficulties in implementing the system in an array of dispersed colonies associated with arguments for uniformity and

⁹¹ AHTC, ER, Books 407, 408, 409, 438, 461, and 492.

standardization under a simplified method were emphasised in the decision not to adopt the DEB system generally within the colonies.

Nevertheless, the arguments of uniformity and standardization of methods and procedures were disregarded in 1772, when a decision was taken prescribing the adoption of DEB in Angola. Based on what was described previously, Angola until the government of Pombal was underdeveloped and was seen as a dependency of Brazil (Rego, 1967, p. 62), and it was during Pombalism that measures were implemented to change the situation of the colony, mainly through the appointment of qualified Governors (Cortesão, 1971, p. 291; Magalhães, 1998c, p. 70). It was during the government of Sousa Coutinho that Angola's administrative subordination to Brazil ceased and the colony was turned to the metropolis and became an important source of slaves to Brazil. This administrative change and the commercial importance Angola acquired may help to understand why the method used at the Royal Treasury was adopted also in Angola. But the question is: why in 1772 when Sousa Coutinho ended his government?

The fact is that although Sousa Coutinho tried to change the situation of Angola, making Angola as important as Brazil (Rego, 1967, p. 172), the importance of Angola as a source of slaves to Brazil continued to increase and the metropolis government and the colonial government were particularly interested in controlling the commerce of slaves (Schwartz, 1998b, p. 106). However, after 1766, due to an economic contraction, the exports in general reduced significantly (Marques, 1984, p. 432), and consequently, an important source of royal income flow from Angola to Lisbon had diminished. In fact, the letter sent to the new Governor of Angola in 1772 (AHTC, ER, Book 4223, Bahia, pp. 70-77) mentioned the state of ruin in which Angola was situated around 1769, and the actions taken to change the situation. The letter mentioned specifically that although the number of royal incomes collected in Angola was much lower in comparison with other colonies, the value collected from the trade with slaves and ivory was most significant, thus making of Angola one of the most important Portuguese colonies for the economy of the country and Empire. Therefore, it was important to stimulate the commerce of slaves to avoid a reduction of the royal incomes and face the economic difficulties.

In addition, the frauds and abuses by the contractors of the slaves and ivory lead to the decision to administrate directly by the Royal Treasury, through the Collection House

in Angola, the rights, purchase and shipping of slaves, and not by contractors. And also, there were letters, written during the 1760s, that were sent to Angola by the Royal Treasury complaining about the lack of clarity of the accounts sent to Lisbon. The specific situation demanded, according with the letter, a precise correspondence between the accounting system and administrative procedures adopted in Angola and the ones adopted at the Royal Treasury in Lisbon. Therefore, officials trained at the Royal Treasury in the use of DEB were sent from Lisbon to assist in implementing DEB in Angola. It was believed that DEB would be easier to apply in Angola due to the reduced number of income types within the colony in comparison with the others, that the system would provide properly balanced accounts and the necessary information to the Royal Treasury for the effective administration of the royal incomes in Angola under the changed economic circumstances which existed at that time in the colony.

Coercive and normative pressures

Since the Royal Treasury was a governmental organization, it had the authority to impose organizational practices on subordinate units such as the collection houses in the Portuguese colonies. As described before, instructions and skilled officials were dispatched from Lisbon in order to implement specific accounting practices, while copies of the 1761 Law were sent through the years to most of the colonies for close examination and application, as appropriate, within the colonies. With these instructions and related informal training programs, the Royal Treasury in Lisbon was enforcing, through a process of coercive isomorphism, the adoption and use of a particular accounting system for the collection and administration of public finances in the colonies. The coercive pressures were exerted on a continuous basis, initially with the instructions sent in the name of the King by Pombal, as the President of the Royal Treasury. After, the General Controllers at the Royal Treasury would elaborate letters alerting to instances of the non-compliance with the procedures prescribed in the instructions and describing what corrective measures were to be undertaken in order to redress the errors.

The pressures to comply with the instructions did not allow any modifications to be introduced at the colonies. The instructions specified in detail what had to be done, imposing the accounting practices and procedures that were described. The collection houses in the colonies were subordinated organizations to the Royal Treasury and, as such,

almost no resistance was shown to the implementation of the mandated practices, based on the available evidence. However, this did not mean that the instructions were always strictly followed as evidence shows. As described above, after the instructions had been issued for application several letters were written from Lisbon alerting to the non-compliance with some of the instructions.

The several instructions dispatched to the colonies throughout the years constituted, in effect, as an instrument of power at the disposal of the Royal Treasury, which was used to control the finances of the colonies, to standardize procedures and create uniformity of accounting and administrative systems within the Portuguese Empire. Importantly, these coercive pressures were not intended to diffuse DEB within the Portuguese Empire. Instead, they were clear in their prohibition of the use of DEB, imposing over the colonies a simplified method derived from the DEB system that was adopted at the Royal Treasury. The colonies had no choice but to follow what was imposed upon them by the Royal Treasury. Even in the case of Angola, where DEB was prescribed for adoption from 1772, the decision made to apply the more comprehensive method was a determination of the Royal Treasury itself, and not a choice of the government of Angola, consequently coercive pressures were again identified as highly influential.

The Royal Treasury, as mentioned in Chapter 7, served Portugal and its Empire in creating a group of qualified employees who were after sent to the different colonies and other public organizations, thereby functioning at least as a potential source of normative pressures. There is information that clerks of the different General Control Offices of the Royal Treasury, with some years of experience, were sent to the colonies, to The Mint, to the Lisbon City Hall, and government factories, as shown in Appendix D.

The officials dispatched from Lisbon to the colonies, although trained in DEB, were instructed not to implement the DEB system as adopted in the four Control Offices of the Royal Treasury. Instead, they were required to assist in implementing a simplified method adapted from the one used at the Royal Treasury. Therefore, it was considered that the experience acquired at the Royal Treasury was fundamental for the successful implementation of the simplified system as prescribed generally for the colonies. At the time there was no formalized instruction in the different colonies to inculcate knowledge of bookkeeping, except through informal training provided by the trained officials sent from

Lisbon. Thus, these public employees sent from Lisbon operated as agents in the transfer of accounting technology, although not in the form of DEB, from country to Empire, in a process of normative isomorphism. In the instructions sent to Bahia (AHTC, ER, Book 4218, Bahia, pp. 19-20), in 1767, was written:

... I send you some copies of the Laws through which it was decided to establish the Royal Treasury in this Kingdom. And, I command you that you ensure that they are observed in all that is applicable in the Collection House of that State. [...] In order to put the collection of the rents, and give form to the accounts that will be prepared in the same collection house, by the method that was followed in this Kingdom, and in the mentioned Treasury: it was decided in this same occasion to send to that Captaincy a bookkeeper, and two clerks, who have the necessary instructions about what they have to do, and to whom you will provide all the help, for the immediate observation of the instructions.

For Bahia, the officials that were previously employed at the Collection House, as clerks and bookkeepers, were dismissed and replaced by the officials sent from Lisbon (AHTC, ER, Book 4218, Bahia, p. 20). Not only did the Portuguese authorities by means of the Royal Treasury set specific accounting practices and administrative procedures to be adopted in the colonies, they also took the measures to ensure that, as far as possible, the correct system was appropriately implemented by sending trained officials to implement it. This group of qualified clerks and bookkeepers were sent to most of the different colonies, replacing the ones who were there, who were not instructed in keeping the accounts by the new imposed practices. This approach can be identified as a strategy adopted by the Portuguese government to avoid “resistance to change” from the persons already working at the colonies. Once the method was implemented by the officials of the Royal Treasury the persons substituting them, after the three years period, would be “confronted” with the system already implemented.

In at least one situation – Pernambuco – as discussed earlier, in which a decision was taken not to send officials from Lisbon, the result was non compliance with the specific instructions and the unauthorised and unnecessary adoption of DEB. The exception of Pernambuco shows the importance of these officials in facilitating the implementation of the instructions. However, measures were taken to correct the situation and maintain the uniformity intended in the Empire. As a result, the non-adoption of DEB generally within the Portuguese Empire was a direct result of coercive pressures exerted by the Royal Treasury over the colonies by means of the instructions and letters, dispatched across time and space, which specified what should be done while alerting and correcting what was not properly undertaken in accordance with the prescriptions. In addition,

normative pressures were found to have been apparent through the endeavours of the trained officials sent from the Royal Treasury to assist in implementing the prescribed system in the colonies.

Summary

In the second half of the eighteenth century, the Portuguese Empire, although somewhat reduced in significance from its position in the sixteenth century, was still of considerable importance. The colonial system was the key of the mercantilist policy followed by the government of Pombal. The colonies functioned at the same time as markets for the products of the metropolis, provided new opportunities for developing commercial and business activities, and were suppliers of specific products to Portugal. Therefore, the administration of the Portuguese colonies was a major concern of the Portuguese government and specific attention was devoted to improving administration and control within the colonies during the Pombalism period, as discussed earlier. As an example of the importance of the colonies, the year 1766 was, according to Tomaz (1988, pp. 366-367), the particular year during Pombalism period which had the highest value of revenues, with 50 per cent of the total revenues originated in the colonies.

One of the main characteristics of the Portuguese Empire was its dispersion through several continents, making it difficult to control at a distance from Lisbon. The sets of instructions issued by the Royal Treasury and sent to the Portuguese colonies served as directives and, in themselves, constituted an instrument of power to facilitate control over the administration and collection of public incomes within the colonies. The control and administration of the colonies at a distance was to be accomplished through the appointment of qualified individuals sharing Pombal's ideals, through the use of an adequate accounting system for the colonies and other specific administrative procedures. Therefore, to the different jurisdictions in the Portuguese colonies Governors were dispatched capable of administering the colonies, along with instructions imposing the accounting practices and administrative procedures that had to be implemented. Together with the coercive pressures exerted through the instructions, the Portuguese Government, through the Royal Treasury, also assisted the stimulation of a source of normative pressures, by sending skilled persons who were previously trained to assist in implementing the new rules. Not any sources of mimetic isomorphism were found to be

instrumental in the accounting policies issued by the Royal Treasury and sent to the colonies, however, the procedures followed at the Royal Treasury, as explained, underpinned the less complex accounting system prescribed for adoption in the colonies.

From the instructions it is possible to conclude that the intention was to standardize the system applied at the colonies, by adopting a more simplified system than the one used at the General Control Offices, where DEB was applied. Therefore, the evidence collected confirms that the initial decision to decouple operating processes from symbolic change when operationalizing the application of DEB was maintained in the case of the Portuguese colonies, in the absence of examinations of surviving accounting records, if any, which were prepared in the colonies during this era. However, the system generally adopted in the colonies, while not using DEB, was not completely different. In fact, what was prescribed to the colonies appears to be a rolling out of the administrative procedures and accounting practices that were adopted at the Royal Treasury in 1761, except that the use of the DEB method was not deemed to be necessary. The system, therefore, was adapted to the circumstances and conditions in the colonies. The decision to adopt this system in the colonies was initially associated with the lack of skilled teachers in the implementation and use of DEB, the consideration that DEB was a method more complicated than necessary and was expensive to implement, hence a simplified approach would satisfy the information needs of the Royal Treasury.

Angola constitutes an exception to the uniformity in accounting that the instructions tried to create in the Portuguese Empire. Although initially submitted to a similar system, in 1772 the specific circumstances within the colony, as discussed, lead to the decision to adopt DEB in this colony. The arguments that DEB was not necessary for the accuracy of the colonies' accounts, that it would raise higher costs, and that the lack of skilled teachers made difficult the use of the system in the Empire were put aside in the case of Angola. Here the arguments for the use of DEB were associated with the difficult economic situation that Angola was facing after 1766. Such severe conditions affected the royal incomes and lead to the direct administration, by the Royal Treasury, of the commerce with slaves and ivory – the high value resources existing in Angola which were critically important for commerce generally in the Empire – combined with the lower number of income streams to administer thus making it easier to apply DEB in the Colony's Collection House.

Although it could be expected that through the years, with the release of graduates from the School of Commerce, the effects of the lack of skilled persons would diminish across time and, as a consequence, DEB would be introduced in the administration of the Empire, this did not happen as shown. In addition, as mentioned previously, trained persons were sent to the colonies, but the instructions continued to emphasise not to adopt DEB. The uniformity and standardization of accounting practices and the necessary information to control the Empire at a distance was accomplished with a more simplified method adapted from the DEB system applied at the Royal Treasury. Apart from establishing the administrative systems in the different colonies, the main difficulty between 1761 and 1777 appears to have been the on-going maintenance of this imposed order of uniformity throughout the Portuguese Empire.

In the next chapter a general overview of the major findings of this study of the transfer of accounting technology involving processes of accounting change within both country and Empire is presented. This overview makes use of the five questions developed by Jeremy (1991) and extends the application of these questions to the Portuguese Empire through the use of a sixth question, as developed in Chapter 4, and also as outlined earlier in this chapter.

Chapter 9: The Diffusion of Accounting within Country and Empire

It was explained in the literature review presented in Chapter 2 that accounting history studies have shown that the diffusion of accounting techniques, institutions and concepts is a complex process which cannot be explained by a single model or formula. There are many possible different mechanisms of technology transfer as well as a range of hindrances in the process. The technology transferred may not only contribute to shaping the social, political and economic context but may also be moulded itself by the local, time-specific content in place in the importing country or region.

As developed in Chapter 2 and 4, this study makes use of the framework of questions drawn from the *International Technology Transfer* as developed by Jeremy (1991) and applied to the transfer of accounting technology by Carnegie and Parker (1996). Through posing and seeking to answer these five questions and an additional sixth question introduced specifically to contemplate accounting development in the Portuguese Empire, it is expected to provide as full an appreciation as possible of the transfer of accounting technology to Portugal, specifically by means of the adoption of DEB within Portuguese central government, and its subsequent transfer to the Portuguese Empire during the Pombalism period. In fact, as explained in Chapters 5 and 7, the accounting developments within Portugal's public administration in the period under investigation are not exclusively dependent on social, political and economic factors that existed in Portugal alone, but are influenced by developments that occurred previously or simultaneously in other countries and by worldwide models prevailing at that time (see Carnegie & Napier, 2002, p. 689; Meyer, 1980; Meyer *et al.*, 1997; Thomas *et al.*, 1987). Consequentially, the analysis is based on an international perspective, as chapter 6 exemplifies, by analysing the multinational context for enhancing an understanding of what occurred at the national level. As mentioned in Chapter 2, the complexity associated with the process of diffusion of accounting can be surpassed through the portrayal of accounting as a technology and the diffusion of accounting as a process of international technology transfer, and through the use of six questions, as detailed once again hereunder, to assist in the analysis of the transfer of accounting technology within country and Empire.

1. What inhibiting factors were there, technical and non-technical?
2. What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection, the speed of transfer of the technology?
3. What was the rate of adoption, the networks of distribution into the receptor economy, the hindrances faced by carriers of the new technology?
4. Was the incoming technology reshaped by economic conditions, social factors, conditions in the physical environment?
5. Were there any reverse flows of the technology?
6. Were there any consequent flows of the technology to other jurisdiction from the receptor economy?

This framework of questions also helps to supplement the findings associated with the use of the institutional theory lens involving the identification of the processes of isomorphism at the macro level of accounting development generally within Europe, particularly in the context of Portugal as a European country. The notion of isomorphism has already been applied at the organization level within public administration, by analysing the institutional pressures exerted upon the Royal Treasury, as addressed in Chapter 7, and the institutional pressures, including those exerted by the Royal Treasury, upon the public administration of the colonies as examined in Chapter 8. The information gathered in previous chapters also permits a broader analysis of isomorphic pressures existing at the European level to be presented, as will be synthesized in this chapter. Therefore, the different measures implemented by the Portuguese government in the first years of the second half of the eighteenth century were intended to result, on the one hand, in the transfer accounting technology to Portugal and, on the other hand, to institutionalize and transfer accounting technology in eventually all sectors of the country and Empire.

This chapter contains two key sections. The first deals with a general overview of the context in which the transfer of accounting technology to Portugal occurred. The second provides a structured analysis, by providing answers to the six questions, of the process of transfer of accounting practices to Portugal and subsequently their diffusion within the Portuguese colonies.

The transfer of accounting technology to Portugal

As developed in Chapter 2, Italy is usually identified as the originating country of the DEB system, and the evidence shows that by the beginning of the fourteenth century DEB was already well established as a technique among commercial entities, and also within some municipalities in that country. From Italy the method was exported to other European countries. This European diffusion of DEB happened through the use of different vehicles of transfer. The main vehicles of transfer were constituted by manuscripts or books, merchants with branches in different countries, instruction obtained abroad or from a foreign merchant or teacher, and commercial schools. However, the scant evidence available in what concerns the transfer of DEB to Portugal before 1750 shows that these vehicles were collectively not sufficiently influential to effectively transfer the method to Portugal on a widespread basis. As mentioned previously, in the case of Pacioli's Book, while known by Portuguese mathematicians (see Almeida, 1997, pp. 67, 163; Nogueira, 2001, pp. 257, 259), the DEB method did not attract their attention or stimulate their interest.

Although some Portuguese families had business contacts in important European cities and may have used DEB as a result of such connections, the diffusion of the method seems to have been very restricted. The situation was not facilitated by the apparent lack of formal instruction within the country, forcing the Portuguese who wanted to be instructed in commercial subjects to go abroad and also to the necessity to bribe skilled foreigners to come to Portugal to work (Pombal, 1775, p. 246; Ratton, 1813, p. 261; Serrão, 1996b, p. 249). Therefore, and although Portugal had close contact with other European nations, where the method was being used, there is little evidence of the general application of the system within the country before the 1750s, as discussed in Chapter 2. Nonetheless, the situation in Portugal was somehow consistent with other European countries. In England and France, although DEB was known and used, it was only in the nineteenth century that its use became widespread, especially in public administration.

As addressed earlier, the study of the transfer of accounting technology to and from Portugal is not complete without referring to the figure of Pombal and the reforms implemented by his government. Pombal, as mentioned earlier, lived for several years in London and Vienna observing, at first hand, developments in other European countries. Later, as Chief Minister of the Portuguese Government, Pombal became instrumental in

transferring to Portugal what he believed were the best practices. On claiming that European nations augment themselves by “reciprocal imitation” and that “nations benefit, by using the information collected by their ministers about the useful inventions of others” (Pombal, 1742, paragraph 63), Pombal was effectively endorsing a general process of isomorphism for later application within Portuguese economy and society. This process was, according to Pombal (1777, pp. 84-85), what “all the civilized and polite European nations” had done, “transporting to their houses, everything they thought it was useful of imitation in their own benefit”, and this way “make the Portuguese crown a powerful and brilliant one”. He was influenced in his decisions and actions by both the French and the British mercantilism. In public administration, as mentioned earlier, he held a strong admiration for the French (Pombal, 1777, pp. 256, 298).

The evidence shows that Pombal was well aware of key developments in other European countries, particularly in France, and endeavoured to adapt the developments accomplished in those countries within Portugal. The admiration for the DEB system stemmed from the successful use of “the mercantile system... in the houses of big commerce” (Pombal, 1777, p. 20). Such views were decisive in the adoption at the Portuguese Royal Treasury, as well as in other organizations. In fact, accounting became influential in serving the objectives of mercantilist policies of wealth accumulation followed by the Portuguese government. Pombal was a man of ideas and ideals and he did not limit himself to imitating what other countries had done. Importantly, he started a process of change of the country, in which the creation of the Royal Treasury was a central element.

The action of the Portuguese government was consistent with what other European nations had done previously and also concurrently as well as thereafter, since it was common for nation-states to claim legitimacy for their actions in terms of largely common models. This shared characteristic effectively led them to mimic each other, since, in the words of Meyer *et al.* (1997, p. 163), as stated in Chapter 2, “the institutionalization of common models similarly stimulates copying among all nation-states”. Portugal, as all nation-states in the West, was immersed in a dense and competitive economic environment, political and military competition and imitation, and cultural isomorphism (Jepperson & Meyer, 1991, p. 226).

Therefore, before dealing with the six specific questions, it is important to recap on the key determinants of the institutional environment in which the Portuguese Royal Treasury emerged. These key determinants operated within three major levels as outlined in Table 4 below. As indicated, these key determinants comprise the shared European contextual factors as well as the distinctive national factors that prevailed in Portugal during the time span embraced by this study, which collectively impacted upon accounting development generally in Portugal, comprising both the public and private sectors.

Table 4: Key determinants of institutional environment

At the European level	At the Portuguese national level	At the Portuguese Central Government level
<ul style="list-style-type: none"> • Mercantilist policies • Enlightenment ideals • Absolute power of the monarch 	<ul style="list-style-type: none"> • Portuguese military and economic dependency on England • Economic difficulties (decrease of gold and diamonds production from Brazil) • Destruction of Lisbon (earthquake in 1755) • Undeveloped Portuguese industry, commerce and agriculture • Control of Portuguese commerce by foreign merchants • Lack of commercial knowledge and low educational level of Portuguese merchants • Political changes resulting from the appointment of a new king and a new prime minister • Unlimited power of the King – “enlightened despotism” 	<ul style="list-style-type: none"> • Destruction of the Customs House by the earthquake • Need of a rigorous and effective collection of public money

The European context characterized by mercantilist policies, enlightened ideals and absolutist conception of power created the setting for the development of ideas and practices and their transference within and across particular countries, as it was the case of Portugal. The particular situation in Portugal required strong measures to be taken and the Portuguese government, under the leadership of Pombal, who himself was one of the key “agents” in this process, used all the means to transfer to Portugal the perceived successful measures adopted in other European countries.

Framework of Questions

As acknowledged earlier, accounting techniques are transferred to specific settings through a range of different mechanisms and their diffusion reflects a varied set of dynamics. The process of transfer of accounting technology to Portugal and within its

Empire that was found to be in place will now be specifically identified and analysed in detail, through the use of the six questions that were previously described. The answers to these six questions constitute an additional layer of analysis, and hence a broader level of appreciation, in order to highlight how accounting technology was transferred from different European countries to Portugal and was indeed generally diffused within country and Empire as a result.

Question 1: What inhibiting factors were there, technical and non-technical?

There were a number of factors in place which inhibited the earlier adoption of DEB in Portugal. Among these factors, four major non-technical factors and one major technical factor have been identified. The non-technical factors are addressed as follows.

First, although the Portuguese language was an important international language and was spoken by a significant number of people in Portugal and in the Portuguese colonies around the world, most of the books related to commerce and accounting were written in other languages, making it difficult for a majority of Portuguese people to have readily effective access to those books. The fact that the first Portuguese book on DEB was written only in 1758, by João Baptista Bonavie, reinforces this inhibiting factor. Prior to this time, the Portuguese who desired to develop an understanding of DEB by means of self-instruction through books were required to study the method in a language other than Portuguese.

Second, the role of the Portuguese Inquisition, created in 1531, also worked as a major inhibiting factor in at least two different ways. On the one hand, it forced a considerable number of Jewish businessmen and their families to leave the country, decreasing significantly the country's capital and entrepreneurial skills. On the other hand, the censorship of an increasing number of books resulted in the suppression of intellectual creativity, and even certain hostility to innovation.

Within Portugal, especially among the upper classes, commercial activity was not seen as a dignifying way of living (Boxer, 1969), thus contributing to the lack of a strong mercantile class in Portugal around 1750 (Rodrigues & Craig, 2004, p. 341). Such views also contributed to the domination of Portuguese commerce by foreign merchants, and the

perception that Portugal did not have suitable conditions to develop industry and commerce. One reason for this mindset, as a third key non-technical factor, was the relative ease with which Portugal was able to extract wealth from its colonies, particularly gold and diamonds from Brazil, thus creating an indifference towards commerce and, accordingly, undervaluing its importance relative to certain other European nations.

The fourth key non-technical factor identified relates to the timing of the tragic Lisbon earthquake and the related destruction of the Customs House that was established around the end of the thirteenth century and the loss of its records. Through the demise of the Customs House there emerged a unique opportunity to create a new entity to manage the country's public finances. The Royal Treasury, established during a phase of renewal in Lisbon, was able to apply new procedures and methods, such as DEB, without the resistance usually associated with reforms implemented in long-established organizations, such as the Portuguese Customs House. As a result, the adoption of DEB at the Portuguese Royal finances was smoothed by the creation of a completely new organization.

At the technical level, the major inhibiting factor was the low education level and technical skill of Portuguese businessmen, merchants, artisans and workers. Portugal did not have a strong tradition in commerce, and this was reflected in the lack of education and commercial knowledge among Portuguese merchants. It was difficult for Portugal to attract suitable teachers of commerce subjects (Rodrigues & Craig, 2004, p. 341). In comparison with France during the Colbert period, there were already pedagogic mechanisms in place in that country to provide merchants the fundamental accounting knowledge, especially by means of private teaching and accounting books, which effectively released the State from delivering accounting education as a public good (see, for example, Lemarchand, 1998, Miller, 1990). Notwithstanding, in Portugal, in order to implement significant changes, and put in practice a process of isomorphism, it was necessary to create a significant critical mass with the necessary intellectual capacity or capital that was achieved, as explained, through the direct intervention of the State.

The above identified technical and non-technical factors, once diminished or overcome, enabled the process of isomorphism to emerge thus creating favourable conditions for accounting change generally to accompany and complement wider

economic and social developments. Further elucidation of this process occurs in the responses to the questions that follow.

Question 2: What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection, the speed of transfer of the technology?

Accounting as a technology is often transferred by means of people, working as agents. Historically, this transfer has involved the movement of people, with particular technical skills, among establishments. The physical transfer of accountants or those with accounting skills has, therefore, provided the means for transferring accounting techniques and thought from one country to another (Bedford, 1966, p. 2; Carnegie & Parker, 1996, p. 40). In addition, books on accounting have also been shown to be influential in the international transfer of accounting technology. However, it is not sufficient for a country to merely import books in order to transfer accounting techniques and thought. According to Carnegie and Parker (1996, p. 40), “accounting, like other technologies, is best learned from teachers and by working alongside existing practitioners”.

In the period before the advent of the School of Commerce in 1759, knowledge of DEB tended to be introduced to Portugal by foreign merchants who established branches of their businesses in Portugal, such as in the cities of Lisbon and Porto. Foreign merchants were, according to Rodrigues and Craig (2004, p. 341), “the almost exclusive possessors of bookkeeping knowledge in Portugal”. Notwithstanding, a number of these foreigners assisted in the transfer of accounting technology by employing Portuguese apprentices as cashiers and bookkeepers in their local branch operations (Pedreira, 1995, p. 209; Ratton, 1813). Another key means for the transfer of accounting technology during this period was related to the education of the youthful sons of Portuguese businessmen in other European countries, such as in France, England and Italy (Ratton, 1813, p. 261; Serrão, 1996b, p. 249). As mentioned earlier, Anselmo da Cruz Sobral, for example, was sent to Italy to study commerce. Such people, both foreigners and Portuguese alike, were directly involved, through their own businesses, in the transfer of accounting technology to Portugal.

Other individuals from outside commerce, such as Portuguese ambassadors, exerted considerable influence as agents of change. The most prominent of these individuals was, of course, Pombal. Pombal believed that by observing what other nations were doing it was possible to determine the best measures and practices and translate them to Portugal in order to develop the country and “make the Portuguese crown a powerful and brilliant one” (Pombal, 1777, p. 85). In realising this vision, Pombal appointed people to official positions who he was able to trust and who shared this vision for their country, and kept a close contact with the Portuguese enlightened elite living abroad.

Another vehicle of transfer was the introduction by Pombal of foreign accountants, and other skilled workers, who were funded by the State to assist their arrival in Portugal to work in the factories and monopoly companies and, therefore, to contribute to accounting development in the country (Carvalho, 1982; Pombal, 1775). This is confirmed by the Italian and French accountants who were employed in Portuguese monopoly companies and manufactures such as, as mentioned previously, the Company of Grão-Pará and Maranhão, the Board of Trade and the Royal Factory of Covilhã. These foreign accountants functioned as informal trainers and helped to inculcate DEB among the Portuguese, creating the conditions that would presumably stimulate mimetic isomorphism across the country in the decades and centuries ahead. However, the evidence pointing to the potential impacts of such pressures is indeed sparse.

As discussed earlier, the imported books on commerce and accounting, especially the texts published in France were also influential in the transfer of accounting technology to Portugal. Seeking to stimulate the isomorphic process through imitation, as a form of mimetic isomorphism, the Portuguese State encouraged the translation of the books of the best French authors and arranged their distribution within Portugal, especially among Portuguese businessmen (Ratton, 1920, p.x). These books provided a useful means to disseminate information. The books that were found in the libraries of Pombal and other Portuguese merchants (see appendices A and B) elucidate the genre of information that was available and which was potentially influential in inculcating knowledge of DEB in Portugal. Pombal in particular, had a significant number of books in his library, many of which he acquired while abroad, including books which dealt with French politics, commerce and public finances. He also possessed a considerable number of books about England and its commerce. In addition, important accounting books, as mentioned in

chapter 7, were found in the libraries of Portuguese businessmen and specifically in the libraries of Pombal and João Herinques de Sousa, where the DEB system is described, highlighted and its usefulness mentioned for public administration (see, once again, appendices A and B).

All these vehicles were in place simultaneously in the first years of the second half of the eighteenth century, thus contributing to the spread of accounting technology from different European countries to Portugal for adoption generally in the country.

Question 3: What was the rate of adoption, the networks of distribution into the receptor economy, the hindrances faced by carriers of the new technology?

Around the 1750s and earlier, the rate of adoption of DEB among Portuguese businessmen was low (Ratton, 1813, p. 191). As mentioned earlier, the Portuguese government under the leadership of Pombal adopted two key measures that were aimed at expanding the use of the technique in Portugal. Firstly, the School of Commerce was created in 1759. Under the law that created the School, DEB was required to be taught within the second year of its commerce course of three years' duration. As a result of these developments, the Portuguese School itself functioned as at least a source of normative isomorphism by evidently creating “a pool of almost interchangeable individuals” (DiMaggio & Powell, 1983, p. 152) with a common set of knowledge for application, in due course, in both the private and public sectors, leading to a dissemination of the same practices in different organizations and even in other jurisdictions such as in the Portuguese colonies across time as conditions provided, as explained in Chapter 8.

Secondly, using its legislative power the Portuguese government issued around this time several laws which mandated different public organizations to adopt DEB for public administration purposes. As discussed, the first central government organization affected by these laws was the Royal Treasury under the 1761 Law. A further example occurred in 1769 when the *Casa da Moeda de Lisboa* [the Mint in Lisbon], by Royal Decree of 13 October, was required to adopt DEB as well. Later, the Letter of Law of 30 August 1770, as mentioned earlier, specified the required qualifications for certain public posts, including the need for position holders to be graduates of the School of Commerce. Accordingly, knowledge about DEB became a pre-requisite for employment in key posts

within public entities. The Portuguese government used its legislative power not only to coerce different public organizations to adopt DEB but also to mandate its inculcation as required knowledge for the holding of senior positions within those organizations, evidencing a process of coercive isomorphism. In addition, the Portuguese government also used its coercive power to force other organizations, like the monopoly trading companies and factories, as it was the case of the Royal Silk Factory, to include in its statutes the use of DEB in keeping their accounts. Such skills would have migrated into private sector settings as former public employees with a background in the use of DEB moved from the public sector into privately-owned businesses.

The Royal Treasury also developed a network of distribution by its means, by training a considerable number of apprentices in the DEB system as it was applied at the Royal Treasury, including graduates of the School of Commerce, who after went to other public organizations and also for the colonies disseminating the practical knowledge they had acquired. Another important instrument of the diffusion of DEB within Portugal and Empire were the Portuguese written books that appeared after 1758. The book from Bonavie was followed by other publications where DEB was explained. In 1764 an anonymous published *Tratado sobre as partidas dobradas...* [Treatise about double entry bookkeeping], and in 1765 was published by João Henriques de Sousa the *Arte de Escritura Dobrada para instrução de José Venâncio Coutinho* [The art of double entry bookkeeping for instruction of José Venâncio Coutinho] (Amorim, 1968, p. 122). Thus, a Portuguese literature on accounting emerged facilitating the access to information on DEB to a larger number of persons within the country and the Empire. Evidently, the diffusion was also made, some years after the establishment of the School of Commerce and the Royal Treasury, through private academies, as it was the case of one academy advertised in a Lisbon Newspaper in 1767 (*Hebdomadario Lisbonense*, 1766, nº 38).

These coercive measures implemented by the Portuguese government, therefore, contributed to the adoption and use of DEB in both public and private organizations, although its initial propagation, mainly in the public sector, had been dependent upon the availability of skilled graduates from the School of Commerce. Notwithstanding, after a initial period an increased number of qualified persons in DEB became available in the country, and other mechanisms became available thereby contributing to the diffusion of

the method, such as Portuguese written books and private academies, both within the country and the Empire.

Question 4: Was the incoming technology reshaped by economic conditions, social factors, conditions in the physical environment?

In comparison with the reform of the French royal finances, DEB was reshaped when applied at the Portuguese Royal Treasury. In France DEB was adopted initially in accounting for taxes and was later, from 1723 only, applied in accounting for expenses. In Portugal at the Royal Treasury, while the use of the method was restricted to the level of the General Control Offices, it was applied in accounting for all components of the Royal finances. Accordingly, this selectivity in the implementation and use of the method within the Portuguese Royal Treasury constituted a gap between the symbolic adoption of DEB and the underlying work activities in the different levels of the royal finances. As indicated, this gap is known as decoupling under institutional theory. The method was also reshaped due to the different nature of activities within public administration in comparison with the general use of DEB for private business. The DEB system adopted at the Royal Treasury used revenues and expenses accounts, personal accounts (debtors and creditors) and a cash account, but did not have accounts for other resources, such as Property and a Capital Account. In addition, for the different lower levels of the royal finances, dispersed through the country and in the colonies generally, the decisions taken resulted in the implementation of a simplified method adapted from the DEB system that was adopted at the four General Control Offices. The simplified method involved the preparation of a book of revenues and expenses and several auxiliary books, including current accounts of incomes and debts. The main difference consisted in the absence of the Waste-book, the Diary and the Ledger. Through an examination of the specific instructions issued to the colonies, evidence of decoupling was also found for the colonies.

The non-existence of books on DEB in the Portuguese language before 1758 may have inhibited the initial refinement of the method to local conditions. Since exposure to the method prior to 1758 seems to have often occurred through languages other than Portuguese, there existed a need to translate instruction in DEB into the Portuguese language, therefore adapting to the Portuguese language and context the information provided in foreign books. Similarly, the youthful sons of businessmen who went abroad to

acquire commercial skills, were required to adapt what they had learned to the Portuguese language once they returned to Portugal. Thus, the advent from the late 1750s in Portugal of a locally written literature on DEB, in which Portuguese authors were inclined to imitate earlier foreign authors who wrote on the subject, also provided a potential source of mimetic isomorphism, although the influence of this literature, if any, is very difficult to ascertain without evidence of the actual usage and educative value of such books.

Question 5: Were there any reverse flows of the technology?

The temporal distance from the facts makes it difficult to collect evidence of possible reverse flows of the use of DEB in Portugal to other countries. However, Rodrigues *et al.* (2007) argued that the Portuguese School of Commerce provided a model for other European countries to adopt as a formal means of disseminating accounting technology in both the public and private sectors (also see Rodrigues & Craig, 2004, pp. 342-343; Rodrigues *et al.*, 2007). This possibility was hinted at by Pombal in his “Secret Observations...” (Pombal, 1775, pp. 249-250), where he claimed that Portugal achieved a situation that was recognised by the other nations, on stating that “the French and Italians do not make any ceremony in repeatedly confessing, their respect and imitation of the laws and resolutions made by the Portuguese King”. And, in particular, Pombal (1775, p. 250) mentioned that the School of Commerce was “another motive for emulation” by the other nations, since “[in 1759] it was not seen in any other court of Europe ... such a public and magnificent school”. Later in 1780 the School of Commerce was mentioned as a model for the establishment of a public school in Dijon:

One thinks that to acquire all the necessary instructions for a solid and honourable busieness, the foundation of a free school will be very important: this need was felt in Lisbon where one was created (“Projet de l'établissement d'une école gratuite de commerce à Dijon”, Dijon, 1780, p. 16. BN 8 V Pièce 11580). (Rodrigues *et al.*, 2007, p. 74)

While Pombal may have been espousing the virtues of the School of Commerce for local consumption, the teaching at the Portuguese School of Commerce may have indeed contributed to a wider acceptance of this form of teaching commercial subjects within similar schools that were subsequently established in other European nations, thus potentially manifesting a process of mimetic isomorphism in locales outside Portugal.

Question 6: Were there any consequent flows of the technology to other jurisdiction from the receptor economy?

The Portuguese colonies were, of course, under Portugal's control and influence. The Royal Treasury facilitated a transfer of accounting technology to the Portuguese colonies, as elaborated upon in Chapter 8. While the accounting system prescribed to be adopted in the colonies, with one exception in the case of Angola, was not based on the DEB method, the Royal Treasury, nevertheless, acted as a key agent in the transfer of accounting technology within the Portuguese Empire during 1761 to 1777. As developed in Chapter 8, the Portuguese Royal Treasury through legislation, instructions, letters, and the efforts of certain Royal Treasury officials who were sent to the Portuguese colonies around the world, collectively facilitated the adoption of specific accounting and administrative procedures to control at a distance public income. The decision was made not to adopt a full DEB system generally within the colonies and, instead, a simplified method was prescribed for the different jurisdictions. However, the method prescribed was a simplification and adaptation of the DEB method adopted at the Royal Treasury, mainly as a consequence of the lack of skilled persons generally in Portugal in the implementation and ongoing use of DEB. Copies of the 1761 Law and detailed information about the procedures adopted at the Royal Treasury were provided in order for the colonies to follow the approach, in what was applicable to them, of what was already in place at the Royal Treasury in Lisbon.

In addition, to assist in the transfer of accounting technology officials trained in Lisbon at the Royal Treasury were sent to the colonies for system implementation and training purposes. These officials were sent usually for a period of three years to guarantee that the instructions were correctly implemented, thus, constituting a source of normative isomorphism. In the case of Angola, while initially the system was similar to the prescribed to the other colonies, after 1772 a decision was taken to implement the same DEB system that was already in use on a restricted basis at the Royal Treasury, also with the help of trained officials that were dispatched from Lisbon.

Therefore, the Portuguese government through the Royal Treasury took all the necessary actions to guarantee that there was a flow of specific accounting procedures followed at the Royal Treasury to the Portuguese colonies. In most of the cases the system

was a simplification of DEB, while in Angola it was a full DEB system that was directly modelled on the DEB system in place at the four General Control Offices in Lisbon.

Summary

During the second half of the eighteenth century the Portuguese State appeared as a dominant element in society with the ability to encourage and impose the application of specific organizational procedures, especially in the public sector. The Portuguese State intended for Portugal to be, once again, among the most developed nations in Europe and, accordingly, adopted reforms to stimulate cultural and economic development. DEB was part of certain key reforms adopted within central government, specifically at the Royal Treasury. It soon became an institutional practice within public administration, as shown, in the course of a broader process of institutional isomorphism. Coercive pressures have been shown to have been dominant the case of the Royal Treasury while, in the case of the colonies, DEB was not required to be adopted generally and, accordingly, it was not generally adopted, based on the accounting instructions issued as shown, due to such restrictions.

As shown through the answers provided to the six questions, the process of transfer of accounting technology to and from Portugal is a complex one which has to be analysed at the European level. While the analysis at the organizational level, provided in Chapters 7 and 8, has provided insights of the institutional pressures existing at the level of the Royal Treasury, this macro analysis has provided a broader perspective of the pressures which impacted upon the transfer of accounting technology to the country and within the Portuguese Empire. The transfer involved surpassing several technical and non-technical hindrances, such as lack of Portuguese accounting books, the Portuguese Inquisition, the indifference towards commercial activity, resistance to change due to the long existence of the Customs House, and the low educational level of the Portuguese merchants. Different vehicles of transfer were involved: foreign merchants with branches in Portugal; education on commercial subjects obtained abroad; Portuguese ambassadors in important European countries; foreign accountants who were funded by the State to work in Portugal; and imported books on accounting. In the country the diffusion of accounting knowledge was made through different networks of distribution, such as: the School of Commerce; laws imposing the adoption of DEB in public and monopoly trading organizations; laws

requiring specific qualifications to hold certain public posts; apprenticeship at the Royal Treasury and the employment of the apprentices in different private and public organizations; and the emergence of a Portuguese literature on accounting.

The system transferred to Portugal and applied within central government had to be adapted to the Portuguese public administration context. In particular, the necessity to control the revenues and expenses of the Portuguese Empire spread through the world resulted in the creation of specific accounts and books to register those amounts at the general control offices in Lisbon and the development of a simplified accounting system to be implemented within the different colonies. Therefore, the decision made was to restrict the full application of the DEB system at the level of the four General Control Offices, thus providing evidence of decoupling under institutional theory. In addition, a simplified system was derived from this more elaborate system to be applied at the other levels of the Royal Treasury including within the colonies, except in the case of Angola. Another adaptation had to be made when foreign books on the subject were translated to the Portuguese language. One difficulty arose in trying to answer to the fifth question, since there is a lack of evidence of possible outflows of the DEB from Portugal to other European countries, although the educational system adopted at the School of Commerce may have provided the example to be followed by other nations. Notwithstanding, once the method was transferred to Portugal and adopted at the Royal Treasury, there was a flow of the accounting practices followed at the Royal Treasury to the Portuguese colonies, with a full DEB system applied in Angola and a simplified method, as adapted, that was transferred to the other colonies. Such developments within public administration at the Royal Treasury, as the key focus of this study, contributed to the use of DEB in other settings in the public and private sectors both in the period from 1761 to 1777 as well as in the following decades and centuries. This study, therefore, points to the strong influence of coercive pressures at the national level leading to accounting development generally in Portugal and within the Empire that was also stimulated by specific accounting change at the Royal Treasury, as a new public organization, in 1761.

In the next chapter the overview of the key findings, the contributions and implications of the study are presented, as well as opportunities for future research.

Chapter 10: Conclusion

This in-depth study has investigated accounting developments in central government in Europe by specifically examining the particular case of the adoption and institutionalization of DEB at the Royal Treasury, Portugal, and the subsequent diffusion of accounting technology to the Portuguese colonies, during the period dating from 1761 to 1777. Such developments took place during the Pombalism era in Portugal which spanned the period from 1750 to 1777. Based on examinations of different archival sources, including the surviving accounting books prepared at the Royal Treasury from its establishment until 1777 and the instructions sent to the colonies, evidence has been presented of the nature of the bookkeeping systems that were implemented and the institutional pressures that impacted upon the adoption and institutionalization of DEB at the Royal Treasury and of the transfer of accounting technology to the Portuguese colonies. The roles played by prominent institutional/individual actors in the transfer of accounting technology to Portugal, and within the Portuguese Empire, with a particular concentration upon the contributions of Pombal himself have also been examined. This CIAH study with a focus on accounting development in country and Empire has endeavoured to augment an understanding of the role of accounting within central government in Europe. Consistent with a cross-jurisdiction orientation, it has also sought to situate accounting developments in Portugal within the broader context of the transfer of accounting technology within Europe.

This final chapter presents an overview of the major findings of this study and provides a summary of the answers that were presented in previous chapters to the two major general research questions that were posed in Chapter 1. The chapter also addresses the contributions of this study and outlines opportunities for future research.

Overview of the key findings

This study has shown that the role of the Portuguese government was decisive in the process of institutionalization of DEB in Portugal during the Pombalism period. Before 1750, Portugal was undeveloped in commercial and accounting skills, as well as in industry and agriculture when compared with other European nations. During the second

half of the eighteenth century, and especially following the tragic Lisbon earthquake, the Portuguese State appeared as a dominant element in society with the ability to encourage and impose the application of specific organizational procedures both by private and public organizations. The Portuguese State intended for Portugal to be, once again, among the most developed nations in Europe and, accordingly, adopted reforms to stimulate cultural and economic development. DEB was adopted in Portugal, both by private and public organizations, later than in certain other countries, and its adoption only happened in a more intensive way when the Portuguese government became actively involved in the transfer of accounting technology within the country and Empire. Accounting change was part of certain major reforms adopted within central government and the first time adoption of DEB in the public sector at the Royal Treasury as a new agency constituted a crucial first step in the institutionalization of the technique throughout the country, particularly within public administration. The perception of DEB as a successful, rigorous and useful method within large commercial establishments became a key argument supporting the suitability of the method for use within public administration, particularly for managing public finances.

Portugal was preceded by Spain, Sweden, The Netherlands and France in the introduction of DEB for central government administration purposes. Although separated in time, some linkages, similarities and possible influences were found in the different reforms implemented by the different European countries. In common the reforms had the presumption, based on the use of the method by private businesses, of the usefulness and neutrality of DEB, which gave rise to the idea that it was helpful in preventing frauds. While DEB was generally regarded as a complex and detailed accounting method, it became widely believed that the technique offered a means of improving administration and enhancing control over public revenues and expenses within central government organizations. In addition, the role of prominent individuals was decisive in the adoption of DEB within central governments in the different European countries. However, the initial adoption of DEB at the Royal Treasury was found to be restricted, being conditioned by the lack of skilled persons with knowledge and experience in DEB. The comparative analysis of the different reforms, including Portugal, indicates that accounting as a technology was transferred from country to country, as part of an attempt to spread the use of practices that were recognised as suitable for large-scale operations within central government.

This study has shown that in the case of Portugal natural causes have precipitated the extinction of an ancient organization, the Customs House, which had been responsible for managing the royal finances for several centuries, creating the unique opportunity to establish a new organization with new methods and procedures. Therefore, the adoption of DEB within the new agency was not faced with the usual resistance to change that often arises when this genre of reform is proposed in long-established organizations. In fact, the Portuguese case constitutes a unique case when compared with previous similar reforms in other European countries, since DEB was adopted in a new agency and was, as far as can be ascertained, not preceded by public discussion about the suitability of the technique for use in the public sector. In Portugal the advantages of the method were evidently taken for granted. Indeed, the adoption of DEB at the new organization “was perceived as legitimate” and was “prized” (DiMaggio & Powell, 1983, p. 153) since its use facilitated the adoption of accounting control systems that had been adopted successfully by the big houses of commerce, and was reported as being “followed by all the civilized Nations of Europe” (1761 Law).

This study confirms that processes of accounting change are best examined by frameworks that incorporate multiple levels of analysis. On the one hand, the organizational level provided detailed and particular insights on the adoption and institutionalization of DEB at the Royal Treasury and the institutional pressures exerted over and by this organization, as addressed in Chapters 7 and 8. On the other hand, the adoption of a CIAH perspective and the use of the framework of questions to structure the analysis of the diffusion of accounting within the country and Empire, as developed in Chapter 9, provided an additional layer of analysis providing certain insights of Portuguese accounting developments that were not revealed in the analysis at the organizational level. Importantly, the adoption of an analytical approach at the wider European level provided considerable insight in this study, and helped to contextualize the reform undertaken at the Portuguese Royal Treasury. As a result, the study provided empirical evidence that confirms the observations about contemporary nation-states, as summarized by Meyer *et al.* (1997, p. 152), and which proved to be useful when studying the interrelations between accounting and the State in eighteenth century Portugal. That is, the study confirms that nation-states “exhibit a great deal of isomorphism in their structures and policies”; that they make “efforts to live up to the model of rational actorhood”, and that they are marked

by considerable “decoupling between purposes and structures, intentions and results” (Meyer *et al.*, 1997, p. 152). Therefore, the European and Portuguese contexts in the second half of the eighteenth century and the reforms implemented by the Portuguese government created a situation in which the accounting developments investigated could be fruitfully explained “in terms of isomorphic tendencies with collectively valued elements” (Miller, 1994, p. 11). However, it was also found in this study that the historical distinctiveness of accounting history research creates a situation in which the temporal distance from the events may complicate the gathering of evidence of the existence of certain institutional pressures, particularly normative and mimetic pressures.

The study also shows that the adoption and use of accounting systems by the State needs to be simultaneously understood as an instrument of power to accomplish specific ends, and as an instrument that fulfils the objectives of worldwide models shared by the State. By adopting DEB at the Royal Treasury, the Portuguese government considered that it would be possible to control better the royal finances both of the country and at a distance, by controlling the colonies dispersed through the world. It was believed that a centralized system of accounting, together with other measures, would help to make the collection of public money more efficient and consequentially would lead to an increase in the State’s income. In addition, the reform of the Royal finances, of which DEB was a part, was consistent with the dictates of efficiency, control, wealth accumulation and increase State’s power, which were characteristics of the mercantilist policy, enlightened ideals and absolutism that were followed in Europe during the eighteenth century.

However, the study would be incomplete without paying particular attention to the role played by individual actors in the process of transfer of accounting technology. In the Portuguese case the actions implemented by the Portuguese government in the beginning of the second half of the eighteenth century were, as shown in this study, the collective result of the knowledge and experience, determination and power of one person – the Marquis of Pombal – who played a central role at all levels of Portuguese society as Chief Minister. Pombal, as a key “institutional entrepreneur” (DiMaggio, 1988, p. 15), had strong ideals and convictions of what actions were to be taken in order to develop the country to the level of the most advanced nations of Europe. His stay in London, combined with his readings and his particular interest in identifying the attributes which made other European nations become leading nations were used to effectively apply a general process of

isomorphism, which was put into practice after he become the country's Chief Minister. Accounting, and particularly DEB, assumed a significant role among the reforms adopted, and specific measures were taken to diffuse DEB in Portuguese public administration, in particular, and in Portugal, in general.

In Chapter 1 the major research objective of this study was presented and two major research questions were posed. Based on the information presented mainly in Chapters 5, 7 and 8 answers to these two major general research questions were rendered. The questions are restated as follows:

What sources of institutional pressures impacted upon the adoption and institutionalization of DEB at the Portuguese Royal Treasury and affected the diffusion of accounting practices to the Portuguese colonies?

What roles were played by prominent institutional/individual actors in the process of transfer of accounting technology in eighteenth century Portugal?

Based on the evidence presented in Chapter 7 the first part of the first question regarding the adoption and institutionalization of DEB at the Royal Treasury is able to be answered. The evidence shows that the Portuguese government exercised coercive measures through its legislative power, by means of laws and decrees, to require the Royal Treasury to adopt DEB and also to mandate knowledge and understanding of the technique for those holding senior positions within such organization. However, due to the relatively small number of people who had knowledge of, and experience in the implementation and effective use of DEB, the decision was to restrict the adoption of DEB to the four General Control Offices of the Royal Treasury. Decoupling was evident, as shown, and it was a key means by which the Portuguese government was able to avoid the initial practical difficulties of implementing the new method on a widespread basis. The evidence gathered in Chapter 7 indicates that mimetic and normative pressures were evidently weak or non-existent and were, therefore, not influential on the establishment of the new public organisation. The 1761 Law explained that DEB had been adopted by all "the civilised nations of Europe" providing a basis for the adoption of the method at the Royal Treasury. However, no evidence was found to undoubtedly support the mimicking by Portugal of any other country in specifically adopting DEB within central government. The fact that the

School of Commerce was established only two years after the formation of the Royal Treasury and given the non-existence of an organised occupational group of bookkeepers or accountants at that time indicates that normative pressures were not instrumental on the initial adoption of DEB at the Royal Treasury. During the period that followed the establishment of the Royal Treasury until 1777, coercive pressures continued to be important while mimetic and normative pressures were not found to be influential in shaping the practices used at the Royal Treasury, which remained unchanged. In summary, at the organizational level, it was possible to identify that while coercive pressures were instrumental in the adoption and institutionalization of DEB at the Royal Treasury, normative and mimetic pressures were weak, based on the evidence gathered and were, therefore, not found to be influential. Evidence of decoupling was also found at the Royal Treasury as DEB was adopted on a restrictive basis at the Royal Treasury as explained.

As seen in Chapter 7, governmental organizations are not just capable of generating institutional pressures, but are also vulnerable to such pressures themselves. The Royal Treasury was vulnerable to institutional pressures exerted by the Portuguese government that resulted in the adoption of DEB. At the same time the Royal Treasury exerted pressures over the administration of the Portuguese colonies spread through the world as was addressed in Chapter 8.

Chapter 8 provided an answer to the second part of the first question regarding the transfer of accounting practices to the Portuguese colonies. Apart from demonstrating that accounting and control systems were a fundamental element in the administration of the Portuguese Empire, the Chapter provides preliminary evidence, based on the accounting policies issued by the Royal Treasury, that institutional pressures were exercised over the colonies. In fact, the instructions sent to the colonies or directives on accounting constituted an instrument of power at the disposal of the Royal Treasury to control the colonies, standardize procedures and create uniformity within public administration of the Portuguese Empire. Although coercive and normative pressures were identified as prevailing at the time, these were not intended to diffuse DEB within the Portuguese Empire. Instead, they did not impose the use of DEB in general but rather imposed over the colonies a simplified method of bookkeeping that was adapted from the DEB system that was adopted at the Royal Treasury from 1761. The adoption and use of a particular accounting system for the collection and administration of public finances in the colonies

was imposed on a coercive basis and provides further evidence of decoupling. The coercive pressures were exerted continuously, as shown, through the instructions which specified in detail what had to be done, imposing the accounting practices and procedures that were described. Coercion was also exercised, as explained, through letters alerting to the identification of instances of non-compliance with the procedures prescribed in the instructions and describing what corrective measures should be undertaken in order to redress the errors. In addition, and to certify that the instructions were properly implemented, normative pressures became more apparent through the dispatch of officials trained at the Royal Treasury to the colonies for implementation and related training purposes.

The decision to maintain the initial prescribed accounting systems at the different levels of the Royal Treasury was reinforced during the years through the identification of non-compliance and correction of deviations. Even though the initial shortage of skilled persons in DEB was surpassed with the graduates from the School of Commerce and apprentices at the Royal Treasury, the systems remained unchanged in most of the colonies, except in Angola. As shown in Chapter 8, in the case of Angola after 1772 DEB was prescribed for adoption in that colony. Coercive pressures, in particular, and normative pressures to a lesser degree were found to be influential in this instance of key accounting change, as explained. Therefore, the uniformity of the simplified system to be adopted in all the Portuguese colonies was broken in the case of Angola. The decision to introduce DEB in Angola after 1772, and thereby effectively eliminating some of the evidence of decoupling in the colonies, was justified on the grounds of the serious economic situation that the Colony was facing, which affected the royal incomes and led to the direct administration, by the Royal Treasury, of the commerce with slaves and ivory. Contributing to this decision was also the high value resources existing in Angola and their importance for the commerce of the Empire, particularly slaves, and the lower number of income types or streams to administer making easier to use DEB in that collection house. To assist in implementing DEB at this colony trained officials with expertise in DEB were dispatched to Angola from the Royal Treasury. In summary, it was possible to identify coercive and normative pressures on the administration of the colonies to the adoption of particular accounting and administrative procedures.

The information presented mainly in Chapter 5 and 7, and the information organized in Chapter 9 through the framework of questions drawn from the international transfer of technology literature, enables the second question to be answered regarding the roles played by prominent institutional/individual actors in the process of transfer of accounting technology to Portugal in eighteenth century. As mentioned before, the rise to power of the Marquis of Pombal, who, as Chief Minister from 1756, governed the country as a powerful, well-travelled and well-educated politician for the following 21 years, was fundamental in the accounting change that occurred in the second half of the eighteenth century, both within public administration and also among private business operators. As argued by institutional theorists, the power and support, or even the opposition of important organizational actors affects the measures and practices that become institutionalized and, as shown, the power and support of Pombal were determinant in the accounting change operated in Portugal.

Pombal was the underlying force behind all the initiatives occurring between 1750 and 1777, and to assist in facilitating this process he surrounded himself with a small group of important and influential businessmen, enlightened personalities, and public officials who shared his ideals to develop the country. As Chief Minister Pombal yielded supreme power and his authoritarian and sometimes ruthless character resulted in all the subjects that were concerned with the administration of the nation, regardless of their rank, to be placed under his direct supervision. Through his reading, direct observation and gleanings based on information provided by Portuguese ambassadors in different European capitals, Pombal had a considerable knowledge about what other European nations had done and were doing to remain or even become the leading nations of Europe. Pombal wanted to use that knowledge to develop Portugal and elevate the country to the level of the most developed nations of Europe. He believed that by observing what other nations were doing it was possible to determine the best measures and practices and translate them to Portugal in order to develop the country (Pombal, 1777) and for that a general process of isomorphism was effectively put in motion by his government. Pombal shared the enlightened ideals and mercantilist policies prevailing in Europe in the eighteenth century and reinforced the role of the State in the society in what became known as enlightened despotism. His wide ranging reforms touched all sectors of the Portuguese society, from the creation of new industries, the establishment of monopoly trading companies, educational reforms with an emphasis in increasing the commercial knowledge of

Portuguese businessmen, and the reform of public administration. Among the different measures implemented by Pombal were specific developments in accounting practice and education, such as the creation of the School of Commerce where DEB was taught, and the establishment of the Royal Treasury where DEB was used on a partial basis, consistent with the notion of decoupling under institutional theory.

Pombal, as Chief Minister, worked as a key agent in the transfer of accounting knowledge in eighteenth century Portugal by means of different measures. These measures included the appointment of people to official positions who he was able to trust and who shared this vision for their country; by keeping a close contact with the Portuguese enlightened elite living abroad; through the payment of foreign accountants to come to Portugal to work in the factories and monopoly companies; through the translation of books from French authors and their distribution within Portugal, especially among Portuguese businessmen. As explained, Pombal himself held foreign books on accounting in his personal library and was not a stranger to DEB as the method was applied in his own private business (Ratton, 1813), which may have served as an endorsement of DEB to other businessmen who were in contact with Pombal.

However the most important role in accounting change in eighteenth century Portugal played by Pombal and his government was in the diffusion of DEB through both private and public sector. The commitment of the government in the establishment of the School of Commerce, with Pombal personally involved by attending the exams and the opening of the courses (Rodrigues *et al.*, 2004), was decisive in the creation of a group of persons who became qualified by means of their training in DEB. Reinforcing the role of the School of Commerce, laws were issued specifying the required qualifications for holding certain public posts, including the need for position holders to be graduates of the School of Commerce, therefore possessing knowledge of DEB. Laws were also issued mandating different public organizations to adopt DEB for public administration purposes, as it was the case of the Royal Treasury which, as mentioned previously, constituted a crucial first step in the institutionalisation of the technique within that organization but also ultimately throughout the public administration of the country. The Royal Treasury was itself instrumental in the diffusion of DEB by means of apprenticeships established by royal decrees and the subsequent diffusion of the practical knowledge acquired by the apprentices in other public organizations and also in the colonies. As indicated, the Royal

Treasury specifically directed and supervised the first-time adoption of DEB in Angola from 1772.

Therefore, this study has shown that, at the broader level of analysis, important institutional pressures operated in Portugal in the beginning of the second half of the eighteenth century through which accounting knowledge, in particular knowledge of the DEB method, was introduced and diffused in the country and intimately in the colonial context, such as shown to be the case in Angola. The study also shows that key environmental agents were a major determinant in the process of isomorphism, especially by means of coercive pressures, which resulted in the adoption of DEB at the Royal Treasury. Pombal was the most prominent key agent in the process. Special attention was devoted to the central government reform and in a process of centralization of the Royal finances DEB was adopted at the Royal Treasury as a new central government agency. At the organizational level, in the particular case of the Royal Treasury, the study shows that coercive pressures were the most prominent forces to effect accounting change in public administration within Portuguese central government. Nevertheless, decoupling was a key means of avoiding initial difficulties in implementing the new system at the Royal Treasury and assisted in alleviating the perception that the widespread adoption of DEB in managing royal income would impose higher costs upon government or its people. Evidence of decoupling was also found in the case of the Portuguese colonies based on the specific instructions that were written for application generally in the colonial context.

The study has demonstrated that, the Royal Treasury, as a new agency, was effectively able to overcome the problem of structural inertia and resistance to change faced by the previous organization, the Customs House, and that appears to have been evident in the case of the French fiasco manifest in abandoning DEB within 10 years of its introduction in 1716. The creation of the Royal Treasury resulted in the centralization of the administrative structure bringing together what before was separated through different offices and in the creation of a loyal and competent bureaucracy specifying the functions and qualifications for each function or post. Above all, the Portuguese reforms in general were clearly concerned with modernizing the State, and were seen as an important step, among the others, for bringing the country closer to the most developed countries of Europe, and DEB was part of the governmental programme to accomplish that modernization.

As discussed in Chapter 9, such developments within public administration at the Royal Treasury, together with other measures such as the creation of the School of Commerce, contributed to the use of DEB in other settings in the public and private sectors both in the period from 1761 to 1777 as well as in the following decades and centuries. This study, therefore, points to the advent of key accounting change in Portugal in 1761. In other words, 1761 marks the foundation year of the adoption of DEB in Portugal on an organised basis.

Contributions of the study

As anticipated in Chapter 1, this case study has contributed to the accounting history research agenda in a number of key ways.

First, it examines the adoption and institutionalization of double entry bookkeeping in the public sector in eighteenth century Europe, under the notion of CIAH as proposed by Carnegie and Napier (1996, 2002). This study is an early application of this genre of research where the examination is not just about time but with both time and space.

Second, in viewing accounting as a technology, the study applies a framework of questions drawn from Jeremy (1991) in articulating international technology transfer from different European countries to Portugal and from Portugal to her colonies, to help contextualize the accounting change at the case study organization and within a broader setting given the CIAH orientation. Furthermore, the study expanded the framework of questions by adding a sixth question to specifically analyse possible consequent flows of the technology to other jurisdictions from the receptor economy. Hence, this study has extended the framework of questions to contemplate the transfer of accounting technology to a country as well as from country to colonies in the context of Empire.

Third, it examines the implementation and diffusion of DEB in an organizational form (i.e. central government) and a time-space intersection (i.e. eighteenth century Portugal, Europe) that are unexplored in the accounting history literature. In extending the analysis to accounting change in the Portuguese colonies, the study is further differentiated as an eighteenth century study on accounting development in country and Empire.

Fourth, the study broadens the application of institutional theory in accounting history research to a different country and to a different time period in the context of European central government. In the process, the collection of evidence of mimetic and normative pressures, as opposed to tracing and locating evidence of coercive pressures, is shown to be increasingly problematic as the time span from the historical events subject to examination extends beyond mere decades to two or more centuries.

Fifth, by analysing the initial sequence of an “instance of institutionalization” (Lawrence *et al.*, 2001, p. 627) through which DEB becomes and remains diffused across the Portuguese public administration, the study highlights for Portugal the importance of individual actors, as powerful environmental agents, making decisions that influence the institutionalization of accounting practices and creating an environment that restricts changes in future years. This case investigation shows how powerful, well travelled and well educated people, particularly Pombal, seek to gain prestige and security in the belief that they advocate the adoption of generally proven techniques and ideas within organizations, especially for legitimacy purposes. Applying the principles of enlightened despotism, Pombal played a dominant role in reforms aimed at developing and strengthening Portugal’s mercantile capability. Accordingly, this study contributes to overcoming an important limitation identified in the work of early institutional theorists (Dacin, 1997; DiMaggio, 1988; Powell, 1991) and answers to a call made by accounting researchers to give more attention to the role of individuals in a context of accounting change (Hopwood, 1974; Pihlanto, 2003).

Sixth, the study also provides some insights of processes of deinstitutionalization. In the specific case of the accounting change in Portugal, the deinstitutionalization of accounting practices was a result of the combination of political, functional (Oliver, 1992) and natural pressures. An earthquake destroyed the original organization creating the possibility to establish a completely new organization with new accounting and administrative procedures without facing the usual tensions when the change occurs in long-established organizations. The natural causes associated with political changes and demands for control and efficiency within public administration precipitated the change, which lead to the creation of a new organization and the institutionalization of new accounting procedures within public administration in the country and Empire.

Seventh, the study provides further evidence of the importance of accounting as a system of rational beliefs through which the organizational structure is legitimized and of the State as an important agent in the process of institutionalization of accounting practices. The adoption of DEB was intended to legitimize the new organization by constructing an appearance of rationality and efficiency in response to the quest for social acceptability and credibility of the reforms implemented by the Portuguese government, particularly the creation of the new agency. Accordingly, it adds support to the findings of previous investigations of accounting developments within public administration in the eighteenth century that applied institutional theory (Carmona *et al.*, 1998; Carmona and Macías, 2001; Núñez, 2002). In Portugal, DEB was perceived as a successful practice among businessmen and, accordingly, was transferred into the public sector with the State “imprinting such practices as the *only* acceptable methods” (Carpenter & Feroz, 2001, p. 566). This local, time-specific perception may assist in explaining why no evidence was found of any criticism or debate about the use of DEB at the Royal Treasury from its formation in 1761.

Finally, through the analysis of institutional pressures exerted over and by the Royal Treasury the study shows that State actors are more likely to employ coercion in pursuing their ends (Scott, 1987, p. 509, 2001, p. 115; Wahyudi, 2004, p. 70). In addition, the study has sought to provide new insights relating to “the relationship between power/actors, interests and institutions” (Beckert, 1999, p. 778), that are recognized by institutional theorists as requiring further investigation (Lawrence *et al.*, 2001; Oliver, 1991), by focusing on the role of Pombal as a powerful environmental agent laying a key role in the process of accounting change. Furthermore, this eighteenth century Portuguese study has contributed to meeting the call by Scott to “account for the predominance and power of the state” in non-typical eras and contexts (Scott, 2001, pp. 211-212).

Opportunities for future research

The possibilities for accounting history research have been highlighted by Previts *et al.* (1990b, p. 136) and Carnegie and Napier (1996, pp. 17-29), as summarized in Chapter 2, and those suggestions, which remain contemporaneous at the time of this study, included studies of accounting in the public sector as an interesting and under researched area. This

study may provide a ready model for the adoption of similar investigations in other countries in a bid to assist in the development of a literature on CIAH in the public sector (Carnegie & Napier, 1996, pp. 27-28, 2002). The study has focussed on the transfer of accounting technology to Portugal and within her Empire, particularly at the central government level, with a case study of the Portuguese Royal Treasury. Therefore, the study has highlighted the need for more CIAH studies at a more macro level on the introduction of DEB in central government organizations and its subsequent diffusion within other forms of government, including colonial government, where such an extension is appropriate. These studies would permit to highlight possible similarities, contrasts, and influences between similar reforms implemented in different countries and regions, both in the past and over more recent periods of time.

This study may also contribute to the stimulation of further avenues of enquiry on the nature and processes of accounting change in Portuguese central government. In particular, further investigation of the accounting practices at the Portuguese Royal Treasury from 1777 until it ceased to operate in 1832 is encouraged. This proposed examination may seek to assess the influence of the Royal Treasury on accounting development in public administration generally within Portugal and in its colonies during this period. This research may focus particular attention upon the interrelations between accounting and the State with an emphasis on exploring “the relays, linkages and interdependencies between the practices and rationales of accounting on the one hand, and the state defined as a loosely assembled complex of rationales and practices of government on the other” (Miller, 1990, p. 315).

Interesting and original future research may also arise from the study of surviving books of accounting records that were prepared in the colonies and not available in the archives visited in Lisbon for the purpose of conducting this study. The elucidation of the relevant accounting policies that were found to have been issued for application in the colonies during the period 1761 to 1777 provided preliminary evidence permitting a response to be made to the additional sixth question posed above. Therefore, this study provides a basis for further studies on the nature of actual accounting practices, based on surviving accounting records rather than on the policies to be imposed, within one or more of the former Portuguese colonies.

Finally, the wide range of perspectives available for conducting accounting research, and more specifically accounting history research, creates the possibility for future research to interpret differently or even criticise the phenomena and approach adopted in this volume through the adoption of different paradigms, therefore highlighting different aspects which may have been unexplored or underemphasised under the research methodology, and particularly the key theoretical perspective, adopted in this study. Nevertheless, it is trusted that this study makes a worthwhile contribution to the literature on accounting's past in Portugal and, accordingly, serves as a stimulus for future historical accounting research in Portugal and its former colonies and within Europe in general.

Appendices

Appendix A: A descriptive list of books found in the library of the Marquis of Pombal

Books	Source
? (1719). <i>Testament politique du Cardinal Du de Richelieu</i> , Amsterdam.	PBA 166
? (1650). <i>Histoire du Ministère du Cardinal de Richelieu sous Louis XIII</i> , Paris.	PBA 165
Montesquieu (1735). <i>Considerations sur les causes de la grandeur des Romains et leur décadence</i> , Amsterdam.	PBA 165
? (1684). <i>Testament politique de Jean Baptiste Colbert</i> , Haye.	PBA 166
? (1695). <i>Testament politique du Marquis de Louvois premier Ministre d'Etat sur le règne de Louis XIV</i> , Cologne	PBA 166
<i>L'Utopie de Thomas Morus</i> , Leide (1715)	PBA 166
? (1739). <i>Institution d'un Prince ; où Traité des qualités, des vertus et des Devoirs d'un Souverain</i> , Leide.	PBA 166
? (1736). <i>Essai politique sur le Commerce</i> .	PBA 166
? (1740). <i>Réflexions politiques sur les finances et le commerce</i> .	PBA 166
? (1718). <i>Mémoires sur les commerce des Hollandois dans tous les Etats et Empires du Monde. Ouvrage nécessaire a tous les Négocians</i> . Amsterdam.	PBA 166
<i>Ordonnances de Louis XIV, Roi de France et de Navarre, sur le commerce des négocians et marchands</i> , Bruxelles, 1707.	PBA 166
<i>Recueil des réglemens généraux et particuliers concernant les manufactures et fabriques du Royaume</i> . Paris (nd).	PBA 166
Dufrène de Francheville (1738). <i>Histoire générale et particulière des finances, où l'on voit l'origine, l'établissement, la perception et la régie de toutes les impositions</i> , Paris. (The history of the Indies Company is on the 3rd volume).	PBA 166
? (1739). <i>Histoire du Système des finances, sous la Minorité de Louis XV... pendant les années 1719 et 1720. Précédé d'un abrégé de la vie du Duc Régent et du Sieur Law</i> , La Haye.	PBA 166
Jacques Savary (1723). <i>Dictionnaire Universel du Commerce</i> , Paris.	PBA 166
Jacques Savary (1726). <i>Le parfait Négociant</i> , Amsterdam.	PBA 166
Jacques Savary (1742). <i>Dictionnaire Universel du Commerce: continué par le Frère de l'auteur</i> , Genève.	PBA 677
Samuel Ricard (1723). <i>Traité Générale du Commerce. Augmenté par Henri Désaguliens</i> , Paris.	PBA 166
M. de la Porte (1732). <i>La Science des négocians et teneurs de livres de comptes</i>	PBA 166
Véron de Forbonnais (1758). <i>Recherches et considérations sur les finances de la France</i> , Basle: Cramer.	PBA 677
? (1672). <i>Norte de la Contratation de las Indias Occidentales</i> , Sevilha.	PBA 677
Claude Irson (1692). <i>Arithmétique pratique et raisonnée</i> , Paris, 4 Vols.	PBA 677
Paulo Paruta (1645). <i>Historia Vinetiana</i> , Vinetia.	PBA 677
? (1737). <i>Vie the Philippe d'Orleans, petit-fils de France, Regent dy Royaume pendant la minorité de Louis XV</i> , London.	PBA 677
Boulanvilliers (1737). <i>Le Corte de Etat de la France, dans le quel on voit tout-ce qui regarde le gouvernement</i> . London.	PBA 677
Barrême (1723). <i>Les comptes faits ou le tarif générale de toutes les Monnayes</i> , Paris.	PBA 677
Barrême (1740). <i>Les livres nécessaires pour les comptables</i> , Paris.	PBA 677
Barrême (1747). <i>L'Arithmétique ou le livre facile pour apprendre L'Arithmétique de soi-même</i> . Paris.	PBA 677

[Larue] (1747). <i>Bibliothèque des jeunes Negociens, ou L'arithmétique a leurs usage</i> , Paris.	PBA 677
João Baptista Bonavie (1758). <i>Mercador exacto...</i> , Lisbon.	PBA 677
? (1732). <i>The Complete English Tradesman</i> , London, 2 Vols.	PBA 677
Domenico Manzoni (1573). <i>Libro Mercantile ordinate col suo giornale ed alfabeto, per tener conti doppi al modo di Venetia</i> , Venetia.	PBA 677
Jean Monier (1723): <i>Le Commerce rendu facile, ou l'arithmétique universelle des Négocians</i> , La Haye.	PBA 677
? (?) <i>The Modern practice of Exchequer</i> .	Caixa 33, reservados
Diderot (?). <i>Dictionnaire des Sciences</i> .	Box 33.
Voltaire (1734). <i>Lettres écrites de Londres sur les Anglois et autres sujets</i> , Basle.	PBA 167
Thomas Mun (1700). <i>Tresor du Commerce [England's Treasure by Forraign Trade]</i> , Paris.	PBA 167
Josiah Child (1742). <i>A New Discourse of Trade</i> , London.	PBA 167
? (1720). <i>Advantages of the East-India Trade to England Considered</i> , London.	PBA 167
? (1741). <i>The Trade to India Critically and Calmly Considered</i> . London.	PBA 167

Sources:

National Library, Coleção Pombalina, reservados, PBA 165: Catalogue dès livres de Sabastien Joseph de Carvalho e Mello, envoyé extraordinaire de Sa Majesté le Roi de Portugal auprès de Sa Majesté Britannique. A Londres 1743.

National Library, Coleção Pombalina, reservados, PBA 166: Catalogue où l'on trouve un secours dès livres politiques les plus remarquables qui on été composés pour l'instruction des ministres du cabinet, c'est-à-dire, ceux desquels on peut apprendre les maximes et observer les exemples pour faire qu'un Etat ait la prospérité, la richesse et la sûreté au-dedans et le respect et le pouvoir au dehors, par les moyens de l'encouragement et le l'augmentation des forces tant par mer que par terre, des sciences, du commerce et l'agriculture et la bonne administration des finances qui en proviennent..., Londres, 1743.

National Library, Coleção Pombalina, reservados, PBA 167: Catalogue dès livres de Sabastien Joseph de Carvalho e Mello, envoyé extraordinaire de Sa Majesté le Roi de Portugal auprès de Sa Majesté Britannique, pour ce qui concerne l'Angleterre, son commerce interieur et externe, ses colonies, ses corporations, sa marine, sa navigation et ses finances, la constitution et la politique des Anglois, 1743.

National Library, Coleção Pombalina, reservados, PBA 677: Cathalogo methodico de livros impressos.

National Library, Coleção Pombalina, reservados, caixa 33: Cathalogo dos livros de que se compõe a Livraria antiga situada no Plácio de Oeiras, pertencente à Casa de Pombal.

Appendix B: A descriptive list of books found in the libraries of certain Portuguese merchants

Jacques Savary (1723). <i>Dictionnaire Universel du Commerce</i> , Paris.	João Henriques de Sousa/ Domingos Bastos Viana/ João Silva Rebello e Manuel Joaquim Rebello
La science du Gouvernement	João Henriques de Sousa
Art de Tenir les livres	João Henriques de Sousa
Essai des Monnaies	João Henriques de Sousa
[Larue] (1747). <i>Bibliothèque des jeunes Négocians, ou L'arithmétique a leurs usage</i> , Paris.	João Henriques de Sousa/ Domingos Bastos Viana/ João Silva Rebello e Manuel Joaquim Rebello
La Banque rendue facile	João Henriques de Sousa
Traité du Commerce	João Henriques de Sousa
<i>Ordonnances de Louis XIV, Roi de France et de Navarre, sur le commerce des négocians et marchands</i> , Bruxelles, 1707. (?)	João Henriques de Sousa
Barrême (1721) <i>Traité des parties doubles ou méthode aisée pour apprendre à tenir en parties doubles les livres du commerce et des finances; avec un traité de finance.</i>	João Henriques de Sousa (Only the title is mentioned)/ João Silva Rebello e Manuel Joaquim Rebello
Essai sur l'Administration	João Henriques de Sousa
Republic de Veneza	João Henriques de Sousa
Elements du Commerce	João Henriques de Sousa
Commerce des Hollandois	João Henriques de Sousa
Memoirs des Finances	João Henriques de Sousa
Véron de Forbonnais (1758). <i>Recherches et considérations sur les finances de la France</i> , Basle: Cramer. (?)	João Henriques de Sousa
Negociant Anglois	João Henriques de Sousa
Le Sprit des Nations	João Henriques de Sousa
Remarq. sur le commerce	João Henriques de Sousa
La noblesse commerciant	João Henriques de Sousa
Considerations sur le commerce	João Henriques de Sousa
Richesse de L'Etat	João Henriques de Sousa
Finances D'Espagne	João Henriques de Sousa
Dissertation du commerce de France	João Henriques de Sousa
M. de la Porte (1732). <i>La Science des negocians et teneurs de livres de comptes</i>	Domingos Bastos Viana
Eléments du commerce, 1756	Domingos Bastos Viana
Postlethwayt (1757). <i>The Universal Dictionary of Trade and Commerce</i> , London.	João Silva Rebello e Manuel Joaquim Rebello
Jacques Savary (1757). <i>Le parfait Négociant</i> , Paris.	João Silva Rebello e Manuel Joaquim Rebello

Source: ANTT, *Inventário Orfanológico*, Letra J, Mç 259, caixa 1901; ANTT, *Real Mesa Censória*, Caixa 119, Caixa 123.

Appendix C: Ledger accounts of the General Control Office of the Court and Province of Estremadura for the year 1762 (AHTC, ER, Book 537)

1. *Caixa do Erário Régio em rendimentos Pretéritos* [Cash of the Royal Treasury for Past Incomes]
2. *Rendimentos Pretéritos* [Past Incomes]
3. *Caixa do Erário Régio* [Cash of the Royal Treasury]
4. *Rendimento da Casa das Carnes* [Income of the Meat House]
5. *Rendimento da Mesa do Sal desta cidade* [Income of the Board of Salt of this city]
6. *Rendimentos das Herdades desta cidade e seu termo* [Incomes of the Lands of this city and its surroundings]
7. *Rendimento das Sisas do Pescado* [Incomes of the Taxes of the Fishing]
8. *Rendimento da Casa da Fruta* [Income of the Fruit House]
9. *Rendimento do Consulado do Paço da Madeira* [Income of the Consulate of the Royal Residence of Madeira]
10. *Rendimento do Um por Cento do Ouro* [Income of the one percent of the Gold]
11. *Rendimento da Chancelaria dos Contos da Cidade* [Income of the Chancellery of the Customs of the city]
12. *Rendimento da Chancelaria Mor da Corte Reino* [Income of the Chancellery of the Kingdom Court]
13. *Rendimento do Paço da Madeira* [Income of the Royal Residence of Madeira]
14. *Rendimento da Imposição dos Vinhos* [Income of the tax of wines]
15. *Rendimento dos Portos Secos* [Income of the Dry Ports]
16. *Rendimento do Consulado da Mesa do Açúcar* [Income of the Consulate of the Board of Sugar]
17. *Rendimento da Casa da Índia* [Income of the House of India]
18. *Rendimento do Consulado Geral da Saída, e da Entrada da Casa da Índia* [Income of the General Consulate of the Exit and entry of the House of Índia]
19. *Rendimento da Alfandega do Açúcar* [Income of the Custom-house of Sugar]
20. *Rendimento do Sabão Preto* [Income of the Black Soap]
21. *Rendimento dos Azeites* [Income of Olive Oils]
22. *Rendimento das Sisas das Cavalgadas* [Income of the Tax of Beasts]
23. *Rendimento das Contribuições Aplicadas para a Mesa da Consciência e Ordens* [Income of the Contributions applied to the Board of Conscience and Orders]
24. *Rendimento da Chancelaria da Casa da Suplicação* [Income of the Chancellery of the Supplication]
25. *Rendimento da Casa da Portagem* [Income of the House of Toll]
26. *Rendimento da Alfandega do Tabaco* [Income of the Custom-house of Tobacco]
27. *Pagamentos a Diversos por Decretos para darem conta* [Payments to several by Decrees to give account]
28. *Despesas do Tesouro Geral* [Expenses of the General Treasury]
29. *Rendimento do Contrato do Tabaco* [Income of the Tobacco Contract]
30. *Despesas de Fortificações* [Expenses of the Fortifications]
31. *Pagamentos por decretos para Particulares do Real Serviço* (tratam-se de recebimentos para o Erário) [Payments ordered by decree from privates of the Royal Service]
32. *Despesas das Secretarias de Estado* [Expenses of the State General Offices]
33. *Rendimento das Sisas do Pelourinho e Adellas* [Income from the Taxes of the *Pelourinho e Adellas*]

34. *Nuno Alvares Pereira de Mello* (name of a person)
35. *Rendimento da Casa dos Cinco* [Income of the House of Five]
36. *Tesoureiro Mor da Junta dos Três Estados Luiz Gomes Peixoto* [General Treasurer of the Board of the Three States Luiz Gomes Peixoto]
37. *Despesas com os Correios expedidos das Secretarias de Estado* [Expenses with the mail posted by the State General Offices]
38. *Tesoureiro Geral dos Ordenados Francisco da Fonseca e Sousa* [General Treasurer of the Salaries Francisco da Fonseca e Sousa]
39. *Rendimento da Sisa do Termo* [Income of the Taxo of Term]
40. *Rendimento das Contribuições aplicadas para as Despesas da Relação* [Income of the Contributions applied in the Expenses of the Relation]
41. *Rendimento do Mestrado da Ordem de Santiago* [Income of the Order of Santiago]
42. *Rendimento da Alfandega e Consulado da Vila de Peniche* [Income of the Custom-house and Consulate of Peniche Village]
43. *Despesas da Junta da Administração do Tabaco* [Expenses of the Administration Board of Tobacco]
44. *Rendimento dos Quatro e Meio por Cento* [Income of the Four and a Half Percentage]
45. *Despesas da Guerra* [War Expenses]
46. *Fardamento das Tropas* [Clothing for Soldiers]
47. *Donativos gratuitos para as despesas da Guerra* [Donations for the War Expenses]
48. *Mesadas consignadas às Pessoas Reais* [Allowances of the Royal Persons]
49. *Caixa* [Cash Account]
50. *David Purry* (name of a person)
51. *Rendimento do Almoarifado das Sisas de Santarém* [Income of the Administrator of the Taxes of the city of Santarém]
52. *Rendimento do Almoarifado de Tomar* [Income of the Administrator of the city of Tomar]
53. *Rendimento das contribuições aplicadas para a Mesa da Consciência & Ordens* [Income of the Contributions applied to the Board of Conscience and Orders]
54. *Recebimento por Conta Particular de Sua Majestade* [Receivings by private account of His Majesty]
55. *Recebimento por Ordem do Ilust. e Exmo. Conde de Oeiras* [Receivings by order of the Count of Oeiras]
56. *Rendimentos Diversos* [Diverse incomes]
57. *Caixa* [Cash account]
58. *Rendimento da Casa de Serzedas* [Income of the House of Serzedas]
59. *Rendimento da Casa da Moeda* [Income of the Mint]
60. *Almoarifado da Fábrica da Pólvora* [Administrator of the Gunpowder]
61. *Rendimento do Almoarifado das Sisas de Alenquer* [Income of the Administrator of the taxes of the city of Alenquer]
62. *Rendimento da Casa de Baião* [Income of the House of Baião]
63. *Rendimento da Imposição dos Vinhos na Vila de Beiras* [Income of the tax of wines of the Beiras Village]
64. *Rendimento da Décima* [Income of the Tax Décima]
65. *Rendimento das Contribuições Aplicadas para as Despesas do Desembargo do Paço* [Income of the contributions applied in the expenses of the royal residence]
66. *Ordenados* [Salaries]

67. *Caixa* [Cash]
68. *Tesoureiro do Fisco Real da Santa Inquisição Feliciano Correa Lima* [Treasurer of the Royal Taxo f the Hole Inquisition Feliciano Correa Lima]
69. *Rendimento do Pão Brasil* [Income of the Brazil-wood]
70. *Rendimento dos Bens Aplicados para as Despesas do Conselho da Fazenda* [Income of the income applied in the Expenses of the Royal Council]
71. *Rendimento do Almoarifado das Sisas de Sintra* [Income of the Administrator of the Taxes of the city of Sintra]
72. *Despesas das Jornadas de Sua Majestade* [Expenses of the Journeys of His Majesty]
73. *Rendimento das Cartas de Jogar e Solimão* [Income of the palying cards]
74. *Despesas da Relação* [Expenses of the Relation]
75. *Despesas do Conselho da Fazenda* [Expenses of the Royal Council]
76. *Despesas das Coutadas Reais* [Expenses of the Royal Covert]
77. *Despesas da Casa de Ceuta* [Expenses of the House of Ceuta]
78. *Rendimento do Mestrado da Ordem de Cristo* [Income of the Order of Christ]
79. *Contadoria geral do Rio de Janeiro* [General Control Office of Rio de Janeiro]
80. *Erário Régio* [Royal Treasury]

Appendix D: Diffusion of Royal Treasury employees (source: AHTC, ER, Book 461)*

Name	Position
António Estanislão Courié	Appointed clerk of the General Control Office of West Africa, Maranhão and Baia in 1765. In 1767 was appointed clerk of the Collection House of Bahia.
Caetano Alberto de Seixas	Appointed clerk in the General Control Office of Continent and Islands of Madeira and Azores in 1765. In 1767 was appointed clerk of the Collection House of the Captaincy of Bahia.
Joseph Ignacio Xavier	Appointed clerk in the General Control Office of East Africa, Rio de Janeiro, and Asia in 1767. In 1771 was appointed clerk of the Collection House of the Captaincy of Pará.
Valentim Lopes de Faria	Appointed clerk of the General Control Office of the Court & Province of Estremadura in 1767. In 1770 was appointed General Controller of the Lisbon City Hall.
Joseph Valentim Duarte	Appointed clerk of the General Control Office of the Court & Province of Estremadura in 1767. In 1772 was appointed clerk of the Collection House of Angola.
Pedro António de Roy	Appointed clerk of the General Control Office of West Africa, Maranhão and Baia in 1767. After was appointed clerk of the Collection House of Pernambuco.
Luis Pereira de Carvalho	Appointed clerk of the General Control Office of Continent and Islands of Madeira and Azores in 1768. In 1774 was appointed General Controller of the Collection House of the Captaincy of Madeira.
Ignacio Antonio Ribeiro	Appointed clerk of the General Control Office of West Africa, Maranhão and Baia in 1768. In 1774 was appointed General Controller of the Collection House of the Captaincy of S. Paulo.
Mathias José Ferreira de Abreu	Appointed clerk of the General Control Office of the Court & Province of Estremadura in 1769. In 1774 was appointed General Controller of the Collection House of the Captaincy of S. Paulo
Domingos dos Santos Elvas	Appointed clerk of the General Control Office of the Court & Province of Estremadura in 1770. In 1775 was appointed clerk of The Mint in Lisbon.
João Eustáquio de Souza	Appointed apprentice in 1774, and after was appointed Controller of the Captaincy of Madeira.
João Pedro de Moraes	Appointed clerk of the Royal Treasury in 1774, and after was appointed General Controller of the Collection House of Pernambuco.
António Carvalho	Appointed clerk of the General Control Office of West Africa, Maranhão and Baia in 1774. After was appointed clerk of The Mint in Lisbon.
Francisco Ignacio de Souza e Andrade	Appointed in 1775 apprentice in the General Control Office of West Africa, Maranhão and Baia. After was appointed Controller of the Collection House of Angola.
Manoel Jozé Rodrigues Bolonha	Appointed clerk of the General Control Office of West Africa, Maranhão and Baia in 1776. In 1780 was appointed Controller of the Collection House of Pará.
João Zacharias de Prada	Appointed clerk of the Wool Factory

* There was also information in the Book 461 about the appointment of graduates of the School of Commerce to be apprentices at the Royal Treasury (AHTC, ER, Book 461, pp. 46, 51, 55-56, 76, 77, 80, 88-90, 93-95, 97).

Legislation

Royal Decree 30 September 1756: *Estatutos da Junta do Comércio* [Statutes of the Board of Trade].

Royal Decree of 14 May 1750, *Real Fábrica das Sedas* [Royal Silk Factory].

Royal Decree 6 August 1757, *Estatutos da Real Fábrica das Sedas* [Statutes of the Royal Silk Factory].

Royal Decree 19 May 1759, *Estatutos da Aula do Comércio* [Statutes of the School of Commerce].

Royal Decree of 29 December 1761.

Royal Decree 13 October 1769, *Casa da Moeda* [The Mint].

Letter of Law 22 December 1761.

Letter of Law 30 August 1770.

Archival Sources

Biblioteca Nacional [National Library]:

- *Colecção Pombalina* [Pombal Collection], reservados PBA 165, 166, 167, 677.
- *Colecção Pombalina* [Pombal Collection], reservados, caixa 33.
- *Hebdomadario Lisbonense*, 1766, nº 25.
- *Hebdomadario Lisbonense*, 1766, nº 38.

Arquivo Histórico do Tribunal de Contas (AHTC) [National Audit Office Historical Archive]:

- AHTC, *Erário Régio* [Royal Treasury], Books 1-142, 155-173, 330-346, 350-357, 405, 407-409, 438, 461, 492, 537-541, 546-549, 550-572, 849, 2699-2701, 2716-2725, 2731-2791, 3609, 3717, 3976-3977, 3981-3988, 3997-4005, 4024, 4040, 4055, 4061, 4070, 4072, 4154-4155, 4160-4163, 4167-4174, 4193, 4218, 4223, 4233, 5322.

Arquivos Nacionais da Torre do Tombo (ANTT) [National Archives Torre do Tombo]:

- ANTT, *Junta do Comércio* [Board of Trade], Maço 66, nº de ordem 129, caixa 12.
- ANTT, *Habilitações para a Ordem de Cristo*, Letra A, Maço 11, doc.7.
- ANTT, *Habilitações para a Ordem de Cristo*, Letra J, Maço 25, nº 2.
- ANTT, *Cartório da Junta do Comércio*, Livro 372.
- ANTT, Board of Trade, book 123, page 153.
- ANTT, *Inventário Orfanológico*, Letra J, Mç 259, caixa 1901.
- ANTT, *Real Mesa Censória* [Royal Censorship Board], Caixa 119, Caixa 123.

References

- Abernethy, M., & Chua, W. (1996). A field study of control system 'Redesign': the impact of institutional processes on strategic choice. *Contemporary Accounting Research*, 13(2), 569-606.
- Aldrich, H. E. (1979). *Organizations and environments*. Englewood Cliffs, N.J.: Prentice-Hall.
- Almeida, A. A. M. (1997). *Estudos de História da Matemática*. Lisboa: Editorial Inquérito.
- Al-Twaijry, A. A., Brierley, J. A., & Gwilliam, D. R. (2003). The development of internal audit in Saudi Arabia: an institutional theory perspective. *Critical Perspectives on Accounting*, 14(5), 507-531.
- American Accounting Association (1970). Committee on Accounting History. *Accounting Review*, Supplement to vol. XLV, 53-64.
- Amorim, J. L. (1929). *Lições de contabilidade geral, vol. 1*. Porto: Empresa Industrial Gráfica do Porto.
- Amorim, J. L. (1968). *Digressão através do vetusto mundo da contabilidade*. Porto: Livraria Avis.
- Anderson, R. H. (1996). The transfer of cost accounting institutions to New Zealand. *Accounting History*, 1(2), 79-93.
- Ansari, S. L., & Bell, J. (1991). Symbolism, collectivism and rationality of organisational control. *Accounting, Auditing & Accountability Journal*, 4(2), 4-27.
- Ansari, S. L., & Euske, K. J. (1987). Rational, rationalizing, and reifying uses of accounting data in organizations. *Accounting, Organizations and Society*, 12(6), 549-570.
- Armstrong, P. (1985). Changing management control strategies: the role of competition between accountancy and other organisational professions. *Accounting, Organizations and Society*, 10(2), 129-148.
- Armstrong, P. (1987). The rise of accounting controls in British capitalist enterprises. *Accounting, Organizations and Society*, 12(5), 415-436.
- Arnold, P. J., & Hammond, T. (1994). The role of accounting in ideological conflict: lessons from the South African divestment movement. *Accounting, Organizations and Society*, 19(2), 111-126.
- Arrington, C. E., & Puxty, A. G. (1991). Accounting, interests and rationality. *Critical Perspectives on Accounting*, 2(1), 31-58.

- Arruda, J. J. A. (1986). A circulação, as finanças e as flutuações económicas. In J. Serrão, & A. H. Oliveira Marques (Eds.), *Nova história da expansão Portuguesa – O Império Luso-Brasileiro 1750-1822* (pp. 155-214), vol. IV, Lisboa: Editorial Estampa.
- Ax, C., & Bjørnenak, T. (2005). Bundling and diffusion of management accounting innovations - the case of the balance scorecard in Sweden. *Management Accounting Research*, 16(1), 1-20.
- Azevedo, J. L. (1929). *Épocas de Portugal económico*. Lisboa: Clássica Ed..
- Azevedo, J. L. (1990). *O Marquês de Pombal e a sua época* (2nd ed.). Lisboa: Clássica Ed..
- Azevedo, M. A. S. (1971). Contos, Casa dos. In J. Serrão (Ed.), *Dicionário de História de Portugal* (pp. 688-689), vol. I. Porto: Livraria Figueirinhas.
- Azevedo, M. C. (1961). *A aula do comércio, primeiro estabelecimento de ensino técnico profissional oficialmente criado no mundo*. Lisboa: Edição da Escola Comercial Ferreira Borges.
- Bairoch, P. (1989). European trade policy, 1815-1914. In P. Mathias, & S. Pollard (Eds.), *The Cambridge economic history of Europe* (pp. 1-160), vol. 8. Cambridge: Cambridge University Press.
- Baker, C. R., & Bettner, M. (1997). Interpretative and critical research in accounting: commentary on its absence from mainstream accounting research. *Critical Perspectives on Accounting*, 8(4), 293-310.
- Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and structuration: studying the links between action and institution. *Organization Studies*, 18(1), 93-117.
- Barrême, B.-F. (1721). *Traité des parties doubles ou méthode aisée pour apprendre à tenir en parties doubles les livres du commerce et des finances; avec un traité de finance*. Paris: Nyon.
- Barreto, J. (1986). *Escritos económicos de Londres (1741-1742)*. Lisboa: Biblioteca Nacional.
- Baxter, J., & Chua, W. F. (2003). Alternative management accounting research - whence and wither. *Accounting, Organizations and Society*, 28(2/3), 97-126.
- Bealing, W. (1994). Actions speak louder than words: an institutional perspective on the Securities and Exchange Commission. *Accounting, Organizations and Society*, 19(7), 555-567.
- Bealing, W., Dirsmith, M., & Fogarty, T. (1996). Early regulatory actions by the SEC: an institutional theory perspective on the dramaturgy of political exchanges. *Accounting, Organizations and Society*, 21(4), 317-338.
- Beckert, J. (1999). Agency, entrepreneurs, and institutional change. The role of strategic choice and institutionalized practices in organizations. *Organization Studies*, 20(5), 777-799.

- Bedford, N. M. (1966). The international flow of accounting thought. *International Journal of Accounting*, 1, 1-7.
- Behrens, C. B. A. (1985). *Society, government and the enlightenment - The experience of eighteenth-century France and Prussia*. Germany: Thames and Hudson.
- Bellotto, H. L. (1986). O estado Português no Brasil: sistema administrativo e fiscal. In J. Serrão, & A. H. O. Marques (Eds.), *Nova história da expansão Portuguesa – O Império Luso-Brasileiro 1750-1822* (pp. 261-300), vol. VI, Lisboa: Editorial Estampa.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality*. New York: Doubleday Anchor.
- Bergevärn, L.-E., Mellemvik, F., & Olson, O. (1995). Institutionalization of municipal accounting – a comparative study between Sweden and Norway. *Scandinavian Journal of Management*, 11(1), 25-41.
- Berry, A., Capps, T., Cooper, D., Ferguson, P., Hopper, T., & Lowe, E. A. (1985). Management control in an area of the NCB: rationales of accounting practices in a public enterprise. *Accounting, Organizations and Society*, 10(1), 3-28.
- Berry, A., & Otley, D. (2004). Case-based research in accounting. In C. Humprey, & B. Lee (Eds.), *The real life guide to accounting research* (pp. 231-255). Amsterdam: Elsevier.
- Bethencourt, F. (1998). A América Portuguesa. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 228-249), vol. III. Lisboa: Círculo de Leitores.
- Bhimani, A. (1993). Indeterminacy and the specificity of accounting change: Renault 1898-1938. *Accounting, Organizations and Society*, 18(1), 1-39.
- Bhimani, A. (1994). Accounting enlightenment in the age of reason. *The European Accounting Review*, 3(3), 399-442.
- Birmingham, D. (1993). *A concise history of Portugal*. Cambridge: Cambridge University Press.
- Bjørnenak, T. (1997). Diffusion and accounting: the case of ABC in Norway. *Management Accounting Research*, 8(2), 3-17.
- Black, J. (1990). *Eighteenth century Europe, 1700-1789*. Hampshire: The Macmillian Press.
- Bluche, F. (1968). *Le despotisme éclairé*. Paris: Fayard.
- Boland, R. J., Jr. (1987). Discussion of “accounting and the construction of the governable person”. *Accounting, Organizations and Society*, 12(3), 267-272.

- Boland, R. J., Jr., & Pondy, L. R. (1983). Accounting for organizations: a union of natural and rational perspectives. *Accounting, Organizations and Society*, 8(2/3), 223-234.
- Bonavie, J. B. (1758). *Mercador exacto nos seus livros de contas*. Lisboa: Oficina de Miguel Manescal da Costa.
- Bosher, J. F. (1970). *French finances, 1770-1795 – from business to bureaucracy*. Cambridge: Cambridge University Press.
- Bougen, P. D., Ogden, S. G., & Outram, Q. (1990). The appearance and disappearance of accounting: wage determination in the UK coal industry. *Accounting, Organizations and Society*, 15(3), 149-170.
- Boxer, C. R. (1969). *The Portuguese seaborne Empire, 1415-1825*. London: Hutchinson.
- Boxer, C. R. (1981). *O Império colonial Português (1415-1825)*. Lisboa: Edições 70.
- Boyns, T., & Edwards, J. R. (2000). Pluralistic approaches to knowing more: a comment on Hoskin and Macve. *Accounting Historians Journal*, 27(1), 151-158.
- Brignall, S., & Modell, S. (2000). An institutional perspective on performance measurement and management in the 'new public sector'. *Management Accounting Research*, 11(3), 281-306.
- Broadbent, J., & Guthrie, J. (1992). Changes in the public sector: a review of recent “alternative” accounting research. *Accounting, Auditing & Accountability Journal*, 5(2), 3-31.
- Broadbent, J., Jacobs, K., & Laughlin, R. (2001). Organisational resistance strategies to unwanted accounting and finance changes: the case of general medical practice in the UK. *Accounting, Auditing & Accountability Journal*, 14(5), 565-586.
- Broadbent, J., Laughlin, R., & Read, S. (1991). Recent financial and administrative changes in the NHS: a critical analysis. *Critical Perspectives on Accounting*, 2(1), 1-29.
- Brown, R. [1905] (2003). *A history of accounting and accountants*. Edinburgh: T.C. and E.C. Jack.
- Bryer, R. A. (1994). Accounting for the social relations of feudalism. *Accounting and Business Research*, 24(5), 209-229.
- Bryer, R. A. (1993). Double-entry bookkeeping and the birth of capitalism: accounting for the commercial revolution in medieval northern Italy. *Critical Perspectives on Accounting*, 4(2), 113-140.
- Bryer, R. A. (2000a). The history of accounting and the transition to capitalism in England. Part one: theory. *Accounting, Organizations and Society*, 25(2), 131-162.
- Bryer, R. A. (2000b). The history of accounting and the transition to capitalism in England. Part two: evidence. *Accounting, Organizations and Society*, 25(4/5), 327-381.

- Bryer, R. A. (2005). A Marxist accounting history of the British industrial revolution: a review of evidence and suggestions for research. *Accounting, Organizations and Society*, 30(1), 25-65.
- Burchell, S., Clubb, C., & Hopwood, A. G. (1985). Accounting in its social context: towards a history of value added in the United Kingdom. *Accounting, organizations and Society*, 10(4), 381-413.
- Burchell, S., Clubb, C., & Hopwood, A. G. (1994). Accounting in its social context: towards a history of value added in the United Kingdom. In R. H. Parker, & B. S. Yamey (Eds.), *Accounting history – some British contributions* (pp. 539-589). Oxford: Clarendon Press.
- Burchell, S., Clubb, C., Hopwood, A., Hughes, J., & Nahaphiet, J. (1980). The roles of accounting in organizations and society. *Accounting, Organizations and Society*, 5(1), 5-27.
- Burns, J. (2000). The dynamics of accounting change: inter-play between new practices, routines, institutions, power and politics. *Accounting, Auditing & Accountability Journal*, 13(5), 566-596.
- Burns, J., & Scapens, R. W. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), 3-25.
- Burrell, G. (1987). No accounting for sexuality. *Accounting, Organizations and Society*, 12(1), 89-101.
- Caeiro, F. G. (1980). Livros e livreiros franceses em Lisboa, nos fins de setecentos e no primeiro quartel do século XIX. *Separata dos Anais da Academia Portuguesa de História*, 26(2), 301-327.
- Capela, J. V. (1993). *Política, administração, economia e finanças públicas Portuguesas (1750-1820)*. Braga: ICS/UM.
- Carmona, S., & Donoso, R. (2004). Cost accounting in early regulated markets: the case of the Royal Soap Factory of Seville (1525-1692). *Journal of Accounting and Public Policy*, 23(2), 129-157.
- Carmona, S., Ezzamel, M. & Gutiérrez, F. (1997). Control and cost accounting practices in the Spanish Royal Tobacco Factory. *Accounting, Organizations and Society*, 22(5), 411-446.
- Carmona, S., Ezzamel, M., & Gutiérrez, F. (1998). Towards an institutional analysis of accounting change in the Royal Tobacco Factory of Seville. *Accounting Historians Journal*, 25(1), 115-147.
- Carmona, S., Ezzamel, M. & Gutiérrez, F. (2002). The relationship between accounting and spatial practices in the factory. *Accounting, Organizations and Society*, 27(3), 239-274.

- Carmona, S., Ezzamel, M., & Gutiérrez, F. (2004). Accounting history research: traditional and new accounting history perspectives. *De Computis – Spanish Journal of Accounting History*, 1(1), 24-53.
- Carmona, S., & Macías, M. (2001). Institutional pressures, monopolistic conditions and the implementation of early cost management practices: the case of the Royal Tobacco Factory of Seville (1820-1887). *Abacus*, 37(2), 139-165.
- Carnegie, G. D. (1997). Pastoral accounting in colonial Australia: a case study of unregulated accounting. New York & London: Garland Publishing, Inc.
- Carnegie, G. D., & Edwards, J. R. (2001). The construction of the professional accountant: the case of the Incorporated Institute of Accountants, Victoria (1886). *Accounting, Organizations and Society*, 26(4/5), 301-325.
- Carnegie, G. D., Foreman, P., & West, B. P. (2006). F.E. Vigars' *Station Book-Keeping*: a specialist Australian text enabling the adaptation and transfer of accounting technology. *Accounting Historians Journal*, 33(2), 103-130.
- Carnegie, G. D., & Napier, C. J. (1996). Critical and interpretive histories: insights into accounting's present and future through its past. *Accounting, Auditing & Accountability Journal*, 9(3), 7-39.
- Carnegie, G. D., & Napier, C. J. (2002). Exploring comparative international accounting history. *Accounting, Auditing & Accountability Journal*, 15(5), 689-718.
- Carnegie, G. D., & Parker, R. H. (1994). The first Australian book on accounting: James Dimelow's *Practical Book-keeping Made Easy*. *Abacus*, 30(1), 78-97.
- Carnegie, G. D., & Parker, R. H. (1996). The transfer of accounting technology to the southern hemisphere: the case of William Butler Yaldwyn. *Accounting, Business & Financial History*, 6(1), 23-49.
- Carnegie, G. D., & Parker, R. H. (1999). Accountants and Empire: the case of comembership of Australian and British accountancy bodies, 1885-1914. *Accounting, Business & Financial History*, 9(1), 77-102.
- Carnegie, G. D., Parker, R. H., & Wigg (2000). The life and career of John Spence Ogilvy (1805-71), the first chartered accountant to emigrate to Australia. *Accounting, Business & Financial History*, 10(3), 371-383.
- Carpenter, B., & Dirsmith, M. (1993). Sampling and the abstraction of knowledge in the auditing profession: an extended institutional theory perspective. *Accounting, Organizations and Society*, 18(1), 41-63.

- Carpenter, V. L., & Feroz, E. H. (1992). GAAP as a symbol of legitimacy: New York State's decision to adopt generally accepted accounting principles for external financial reporting. *Accounting, Organizations and Society*, 17(7), 613-643.
- Carpenter, V. L., & Feroz, E. H. (2001). Institutional theory and accounting rule choice: an analysis of four US state governments' decisions to adopt generally accepted accounting principles. *Accounting, Organizations and Society*, 26(7/8), 565-596.
- Carrato, J. F. (1977). The enlightenment in Portugal and the educational reforms of the Marquis of Pombal. In T. Beterman (Ed.) *Studies on Voltaire and the Eighteenth Century*. Oxford: The Voltaire Foundation.
- Carruthers, B. G. (1995). Accounting, ambiguity and the new institutionalism. *Accounting, Organizations and Society*, 20(4), 313-328.
- Carruthers, B. G., & Espeland, W. N. (1991). Accounting for rationality: double-entry bookkeeping and the rhetoric of economic rationality. *The American Journal of Sociology*, 97(1), 31-69.
- Carvalho, J. M. de Matos, Rodrigues, L. L., & Craig, R. (2007). Early cost accounting practices and private ownership - The Silk Factory of Portugal, 1745-1747. *The Accounting Historians Journal*, 34(1), Forthcoming.
- Carvalho, R. (1982). O recurso a pessoal estrangeiro no tempo de Pombal. *Revista de História das Ideias – O Marquês de Pombal e o seu tempo, vol. IV*. Coimbra: FLUC.
- Chagas, M. P. [1867]. *História de Portugal, vol. IX*. Lisboa: Escriptorio da Empreza.
- Chalmers, K., & Godfrey, J. M. (2004). Reputation costs: the impetus for voluntary derivative financial instrument reporting. *Accounting, Organizations and Society*, 29(2), 95-125.
- Chambers, R. J. (1991). *Foundations of accounting*. Geelong: Deakin University.
- Chatfield, M. (1977). *A history of accounting thought*. New York: Robert E. Krieger Publishing Company.
- Chatfield, M. (1996a). Credit. In M. Chatfield, & R. Vangermeersch (Eds.), *The History of Accounting, an international encyclopedia* (pp. 184-185). New York & London: Garland Publishing, Inc.
- Chatfield, M. (1996b). Massari commune ledgers. In M. Chatfield, & R. Vangermeersch (Eds.), *The History of Accounting, an international encyclopedia* (p. 400). New York & London: Garland Publishing, Inc.
- Chatfield, M. (1996c). Mercantilism. In M. Chatfield, & R. Vangermeersch (Eds.), *The History of Accounting, an international encyclopedia* (p. 415). New York & London: Garland Publishing, Inc.

- Cheke, M. (1946). *O Ditador de Portugal – Marquês de Pombal*. Portuguese version, translated by António Álvaro Dória. Porto: Livraria Civilização.
- Christensen, M. (2003). Without 'reinventing the Wheel': business accounting applied to the public sector. *Australian Accounting Review*, 13(2), 22-27.
- Chua, W. F. (1986). Radical developments in accounting thought. *The Accounting Review*, 41(4), 601-632.
- Chua, W. F. (1995). Experts, networks and inscriptions in the fabrication of accounting images: a story of the representation of three public hospitals. *Accounting, Organizations and Society*, 20(2/3), 111-145.
- Chua, W. F., & Poullaos, C. (1993). Rethinking the profession-state dynamic: the case of the Victorian charter attempt, 1885-1906. *Accounting, Organizations and Society*, 18(7/8), 691-728.
- Chua, W. F., & Poullaos, C. (1998). The dynamics of "closure" amidst the construction of market, profession, empire and nationhood: an historical analysis of an Australian accounting association, 1886-1903. *Accounting, Organizations and Society*, 23(2), 155-187.
- Chua, W. F., & Poullaos, C. (2002). The empire strikes back? An exploration of centre-periphery interaction between the ICAEW and accounting associations in the self-governing colonies of Australia, Canada, and South Africa, 1880-1907. *Accounting, Organizations and Society*, 27(4/5), 409-445.
- Chua, W. F., & Sinclair, A. (1994). Interests and the profession-state dynamic. *Journal of Business Finance & Accounting*, 21(5), 669-705.
- Chung, L. H., Gibbons, P. T., & Schoch, H. P. (2000). The influence of subsidiary context and head office strategic management style on control of MNCs: the experience in Australia. *Accounting, Auditing & Accountability Journal*, 13(5), 647-666.
- Clarke, P. J., Hill, N. T., & Stevens, K. (1999). Activity-based costing in Ireland: barriers to, and opportunities for change. *Critical Perspectives on Accounting*, 10(4), 443-468.
- Clegg, S. R. (1989). *Frameworks of Power*. London: Sage Publications.
- Coelho, J. P. (1962). French influence of Portuguese literature in the 18th and 19th centuries. Proceedings of the Third Congress of the *International Comparative Literature Association*. Mountain: The Hague.
- Colignon, R., & Covalleski, M. (1991). A Weberian framework in the study of accounting. *Accounting, Organizations and Society*, 16(2), 141-157.

- Collier, P. M. (2001). The power of accounting: a field study of local financial management in a police force. *Management Accounting Research*, 12(4), 465-486.
- Conrad, L. (2005). A structuration analysis of accounting systems and systems of accountability in the privatised gas industry. *Critical Perspectives on Accounting*, 16(1), 1-26.
- Coomber, R. R. (1956). Hugh Oldcastle and John Mellis. In A. C. Littleton, & B. S. Yamey (Eds), *Studies in the history of accounting* (pp. 206-214). London: Sweet & Maxwell.
- Coombs, H. M., & Edwards, J. R. (1992). Capital accounting in municipal corporations 1884-1914: theory and practice. *Financial Accountability & Management*, 8(3), 181-201.
- Coombs, H. M., & Edwards, J. R. (1993). The accountability of municipal corporations. *Abacus*, 29(1), 27-51.
- Coombs, H. M., & Edwards, J. R. (1994). Record keeping in municipal corporations: a triumph for double entry bookkeeping. *Accounting, Business & Financial History*, 4(1), 163-80.
- Coombs, H. M., & Edwards, J. R. (1995). The financial reporting practices of British municipal corporations. *Accounting and Business Research*, 25(98), 93-105.
- Coombs, H. M., Edwards, J. R., & Greener, H. T. (eds.) (1997). *Double-entry bookkeeping in British central government 1822-1856*. New-York: Garland Publishing.
- Cooper, C. & Puxty, A. (1996). On the proliferation of accounting (his)stories. *Critical Perspectives on Accounting*, 7(3), 285-313.
- Cooper, C. & Taylor, P. (2000). From Taylorism to Ms Taylor: the transformation of the accounting craft. *Accounting, Organizations and Society*, 25(6), 555-578.
- Coornaert, E. L. J. (1967). European economic institutions and the new world: the chartered companies. In E. E. Rich, & C. H. Wilson (Eds.), *The Cambridge economic history of Europe: the economy of expanding Europe in the sixteenth and seventeenth centuries* (pp. 220-274). Cambridge: Cambridge University Press.
- Coppieters, B. (1993). *The world of the Enlightenment*. Brussels: Vubpress.
- Correia, M. A. R. (1965). *Sebastião José de Carvalho e Mello na Corte de Viena de Áustria: Elementos para o estudo da sua vida pública (1744-1749)*. Lisboa: Centro de Estudos Históricos.
- Cortesão, J. (1971). *O ultramar Português depois da restauração*. Lisboa: Portugália.
- Covaleski, M. A., & Aiken, M. (1986). Accounting and theories of organizations: some preliminary considerations. *Accounting, Organizations and Society*, 11(4/5), 297-319.

- Covaleski, M. A., & Dirsmith, M. W. (1988a). The use of budgetary symbols in the political arena: a historically informed field study. *Accounting, Organizations and Society*, 13(1), 1-24.
- Covaleski, M. A., & Dirsmith, M. W. (1988b). An institutional perspective on the rise, social transformation, and fall of a university budget category. *Administrative Science Quarterly*, 33(4), 562-587.
- Covaleski, M. A., & Dirsmith, M. W. (1990). Dialectic tension, double reflexivity and the everyday accounting researcher: on using qualitative methods. *Accounting, Organizations and Society*, 15(6), 543-573.
- Covaleski, M. A., & Dirsmith, M. W. (1991). The management of legitimacy and politics in public sector administration. *Journal of Accounting and Public Policy*, 10(2), 135-156.
- Covaleski, M. A., & Dirsmith, M. W. (1995). The preservation and use of public resources: transforming the immoral into the merely factual. *Accounting, Organizations and Society*, 20(2/3), 147-173.
- Covaleski, M. A., Dirsmith, M. W., & Michelman, J. E. (1993). An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organizations. *Accounting, Organizations and Society*, 18(1), 65-80.
- Covaleski, M. A., Dirsmith, M. W., & Rittenberg, L. (2003). Jurisdictional disputes over professional work: the institutionalization of the global knowledge expert. *Accounting, Organizations and Society*, 28(4), 323-355.
- Covaleski, M. A., Dirsmith, M. W., & Samuel, S. (1996). Managerial accounting research: the contribution of organizational and sociological theories. *Journal of Management Accounting Research*, 8, 1-35.
- Cunha, L. (17--). *Testamento Político*. National Library, Códice13032//1.
- Dacin, M. T. (1997). Isomorphism in context: the power and prescription of institutional norms. *Academy of Management Journal*, 40(1), 46-81.
- Davis, S. W., Menon, K., & Morgan, G. (1982). The images that have shaped accounting theory. *Accounting, Organizations and Society*, 7(4), 307-318.
- de Roover, R. (1937). Aux origines d'une technique intellectuelle: la formation et l'expansion de la comptabilité à partie double. *Annales d'Histoire Économique et Sociale*, IX, 171-193.
- de Roover, R. (1956). The development of accounting prior to Luca Pacioli according to the account-books of medieval merchants. In A. C. Littleton & B. S. Yamey (Eds), *Studies in the history of accounting* (pp. 114-174). London: Sweet & Maxwell.
- Denis, H. (1974). *História do pensamento económico* (2nd Ed.). Lisboa: Livros Horizonte.

- Dias, J. S. S. (1952). Portugal e a cultura europeia (sécs. XVI a XVIII). *Biblios*, 18, 203-541.
- Dias, J. S. S. (1972). O ecletismo em Portugal no século XVIII. Génese e destino de uma atitude filosófica. *Revista Portuguesa de Pedagogia*, IV, 3-24.
- Dias, J. S. S. (1984). *Pombalismo e projecto político*. Lisboa: U.N.L.
- Dillard, J. F., Rigsby, J. T., & Goodman, C. (2004). The making and remaking of organizational context – duality and the institutionalization process. *Accounting, Auditing & Accountability Journal*, 17(4), 506-542.
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations* (pp. 3-21). Cambridge: Ballinger.
- DiMaggio, P. J. (1991). Constructing an organizational field as a professional project: US art museums, 1920-1940. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 267-292). Chicago, IL: University of Chicago Press.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Journal of Sociology*, 48, 147-160.
- DiMaggio, P. J., & Powell, W. W. (1991). Introduction. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 1-33). Chicago, IL: University of Chicago Press.
- Dirsmith, M. W. (1986). Discussion of “social environments and organization accounting”. *Accounting, Organizations and Society*, 11(4/5), 357-367.
- Dirsmith, M. W., Heian, J. B., & Covaleski, M. A. (1997). Structure and agency in an institutionalized setting: the application and social transformation of control in the Big Six. *Accounting, Organizations and Society*, 22(1), 1-27.
- Donoso Anes, A. (1997). Estudio histórico de un intento de reforma en la contabilidad pública: la aplicación del método de la partida doble en las cajas reales de indias (1784-1787). *Revista Española de Financiación y Contabilidad*, XXVI(93), 1045-1089.
- Donoso Anes, R. (1994). The double-entry bookkeeping method applied in Spain to account for transactions related to the minting process of gold and silver in the sixteenth century. *Accounting Historians Journal*, 21(1), 97-116.
- Donoso Anes, R. (1996). *Una Contribución a la Historia de la Contabilidad – Análisis de las Prácticas Contables desarrolladas por la Tesorería de la Casa de la Contratación de las Indias de Sevilla (1503-1717)*. Sevilla: Ed. Universidad de Sevilla.
- Donoso Anes, R. (2002). Accounting for the estates of deceased travellers: an example of early Spanish double entry bookkeeping. *Accounting History*, 7(1), 79-99.

- Eden, L., Dacin, M. T., & Wan, W. P. (2001). Standards across borders: crossborder diffusion of the arm's length standard in North America. *Accounting, Organizations and Society*, 26(1), 1-23.
- Edwards, J. R. (1989). *A history of financial accounting*. London: Routledge.
- Edwards, J. R., Coombs, H. M., & Greener, H. T. (2002). British central government and 'the mercantile system of double entry' bookkeeping: a study of ideological conflict. *Accounting, Organizations and Society*, 27(7), 637-658.
- Edwards, J. R., & Greener, H. T. (2003). Introducing 'mercantile' bookkeeping into British central government, 1828-1844. *Accounting and Business Research*, 33(1), 51-64.
- Falcon, F. J. C. (1982). *A época pombalina*. São Paulo: Editora Ática.
- Faria, M. S. (1624). *Advertências sobre a confusão que há na receita e despesa da fazenda real de Portugal, e como se poderá atalhar*. National Library, Cód. 917, pp. 115-118.
- Fennell, M. L. (1980). The effects of environmental characteristics on the structure of hospital clusters. *Administrative Science Quarterly*, 25(3), 484-510.
- Fernández Aguado, J. (1997). Orígenes de las escuelas de comercio, com especial referencia a la de Madrid. *Técnica Económica*, No. 158, pp. 56-61.
- Filios, V. (1983). The cameralist method of accounting: a historical note. *Journal of Business Finance & Accounting*, 10(3), 443-450.
- Fisher, H. E. S. (1984). *De Methuen a Pombal, o comércio Anglo-Português de 1700 a 1770*. Portuguese translation of *The Portugal Trade / A Study of Anglo-Portuguese Commerce 1700-1770* (1971). Lisboa: Gradiva.
- Fleischman, R. K., Kalbers, L. P., & Parker, L. D. (1996a). Expanding the dialogue: industrial revolution costing historiography. *Critical Perspectives on Accounting*, 7(3), 315-337.
- Fleischman, R. K., Mills, P. A., & Tyson, T. N. (1996b). A theoretical primer for evaluating and conducting historical research in accounting. *Accounting History*, 1(1), 55-75.
- Fleischman, R. K., & Radcliffe, V. S. (2003). Divergent streams of accounting history: a review and call for confluence. In R. K. Fleischman, V. S. Radcliffe, & P. A. Shoemaker (Eds.), *Doing accounting history: contributions to the development of accounting thought* (pp. 1-29). Amsterdam: Elsevier Science.
- Fleischman, R. K., & Radcliffe, V. S. (2005). The roaring nineties: accounting history comes of age. *Accounting Historians Journal*, 32(1), 61-100.

- Fleischman, R. K., & Tyson, T. N. (1997). Archival researchers: an endangered species?. *The Accounting Historians Journal*, 24(2), 91-109.
- Fleischman, R. K., & Tyson, T. N. (2003). Archival research methodology. In R. K. Fleischman, V. S. Radcliffe, & P. A. Shoemaker (Eds.), *Doing accounting history: contributions to the development of accounting thought* (pp. 31-47). Amsterdam: Elsevier Science.
- Fogarty, T. J. (1996). The imagery and reality of peer review in the U.S.: insights from institutional theory. *Accounting, Organizations and Society*, 21(2/3), 243-267.
- Fogarty, T. J., & Rogers, R. K. (2005). Financial analysts' reports: an extended institutional theory evaluation. *Accounting, Organizations and Society*, 30(4), 331-356.
- Fogarty, T. J., Zucca, L. J., Meonske, N., & Kirch, D. (1997). Proactive practice review: a critical case study of accounting regulation that never was. *Critical Perspectives on Accounting*, 8(3), 167-187.
- Fonseca, M. T. (2000). *Absolutismo e municipalismo – Évora (1750-1820)*. Ph D Thesis. Universidade Nova de Lisboa/Faculdade de Ciências Sociais e Humanas.
- Forbonnais, V. (1758). *Recherches et considérations sur les finances de France*. Basle: Cramer.
- Foreman, P. (2001). The transfer of accounting technology: a study of the Commonwealth of Australia government factories, 1910-1916. *Accounting History*, 6(1), 31-59.
- Foreman-Peck, J. (1990). Accounting in the industrialization of Western Europe. In P. Walton (Ed.), *European financial reporting – a history* (pp. 11-28), Academic Press.
- Forrester, D. A. R. (1990). Rational administration, finance and control accounting: the experience of cameralism. *Critical Perspectives on Accounting*, 1(4), 285-317.
- Francis, A. D. (1966). *The Methuens and Portugal: 1691-1708*. Cambridge: University Press.
- Francis, A. D. (1985). *Portugal, 1715-1808: Joanine, Pombaline, and Rococo Portugal as seen by British diplomats and traders*. London: Tamesis Books.
- Franklin, J. (1972). *Jean Bodin and the rise of absolutist theory*. Cambridge: University Press.
- Frumkin, P., & Galaskiewicz, J. (2004). Institutional isomorphism and public sector organizations. *Journal of Public Administration Research and Theory*, 14(3), 283-307.
- Funnel, W. (1996). Preserving history in accounting: seeking common ground between "new" and "old" accounting history. *Accounting, Auditing & Accountability Journal*, 9(4), 38-64.
- Funnel, W. (1998). The narrative and its place in the new accounting history: the rise of the counternarrative. *Accounting, Auditing & Accountability Journal*, 11(2), 142-162.

- Funnel, W. (2001). Distortions of history, accounting and the paradox of Werner Sombart. *Abacus*, 37(1), 55-78.
- Galaskiewicz, J. (1991). Making corporate actors accountable: institution-building in Minneapolis-St. Paul. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 293-310). Chicago, IL: University of Chicago Press.
- Galaskiewicz, J., & Wasserman, S. (1989). Mimetic processes within an interorganizational field: an empirical test. *Administrative Science Quarterly*, 34(3), 454-479.
- Gallhofer, S., & Haslam, J. (1991). The aura of accounting in the context of a crisis: Germany and the First World War. *Accounting, Organizations and Society*, 16(5/6), 487-520.
- Gay, P. (1969). *The Enlightenment. An interpretation: the science of freedom*. New York: W. W. Norton & Company.
- Geiger, D. R., & Ittner, C. D. (1996). The influence of funding source and legislative requirements on government cost accounting practices. *Accounting, Organizations and Society*, 21(6), 549-567.
- Goddard, A. (2002). Development of the accounting profession and practices in the public sector – a hegemonic analysis. *Accounting, Auditing & Accountability Journal*, 15(5), 655-688.
- Godinho, V. M. (1962). *A economia dos descobrimentos henriquinos*. Lisboa: Sá da Costa Ed.
- Godinho, V. M. (1981). *Os descobrimentos e a economia mundial* (2nd Ed.). Lisboa: Ed. Presença.
- Goldberg, L. (1974). The future of the past in accounting. *Accountant's Magazine*, October, pp. 405-410.
- Gorani (1945). *Portugal: a Côrte e o país nos anos de 1765 a 1767*. Translation and introduction by Castelo Branco Neves. Portugal: Ática.
- Gramoza, J. P. F. (1882). *Sucessos de Portugal (1742-1804)*. Lisboa: Typ. Diário da Manhã.
- Grande Enciclopédia Portuguesa e Brasileira* (1981). “Mercantilismo”, vol. VII. Lisboa/Rio de Janeiro: Ed. Enciclopédia, Lda., pp. 974-976.
- Granlund, M., & Lukka, K. (1998). It's a small world of management accounting practices. *Journal of Management Accounting Research*, 10, 153-179.
- Greener, H. T. (1999). *A longitudinal study of financial record keeping in British central government*. Unpublished M.Phil. Thesis, University of Wales (Cardiff).
- Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: bringing together the Old and New Institutionalism. *Academy of Management Review*, 21(4), 1022-1054.

- Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing change: the role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45(1), 58-80.
- Gregoriou, G. N., & Gaber, M. (Eds.) (2006). International accounting: standards, regulations, financial reporting. Butterworth-Heinemann Ltd.
- Gupta, P. P., Dirsmith, M. W., & Fogarty, T. J. (1994). Coordination and control in a governmental agency: contingency and institutional theory perspectives on GAO audits. *Administrative Science Quarterly*, 39(2), 264-284.
- Hall, P. A., & Taylor, R. C. R. (1996). Political science and the three new institutionalisms. *Political Studies*, XIV, 936-957.
- Hartung, F. (1957). *Enlightened despotism*. London: Routledge & Keagan Paul.
- Hatfield, H.R. [1924] (1977). An historical defense of bookkeeping. *The Journal of Accountancy*, 37(4), 241-253. Reprinted in Baxter, W.T. and Davidson, S. (1977). *Studies in Accounting* (pp. 1-10) (3rd Ed.). London: Sweet & Maxwell.
- Hegel, G. F. W. (1975). *Logic*. Oxford: Clarendon Press.
- Hernández Esteve, E. (1983). Trás las huellas de Bartolomé Salvador de Sólorzano, autor del primer tratado español de contabilidad por partida doble (Madrid, 1590). Paper presented at the *IV Semana de Historia del Ferecho Español*. Madrid.
- Hernández Esteve, E. (1984). Las cuentas de Ernán López del Campo, primer factor general de Filipe II para los reinos de España (1556-1560). *Revista Hacienda Pública Española*, n.º 87.
- Hernández Esteve, E. (1985a). Legislación castellana de la Baja Edad Media y comienzos del Renacimiento sobre la contabilidad y libros de cuentas de mercaderos. *Revista Hacienda Pública Española*, n.º 95.
- Hernández Esteve, E. (1985b). Pedro Luis de Torregrosa primer contador del Libro de Caxa de Filipe II. Introducción a la contabilidad por partida doble en la Real Hacienda de Castilla (1592). *Revista de Historia Económica*, n.º 2.
- Hernández Esteve, E. (1985c). A Spanish treatise of 1706 on double-entry bookkeeping: "Norte mercantil y crisol de cuentas" by Gabriel de Souza Brito. *Accounting and Business Research*, 15(60), 291-296.
- Hernández Esteve, E. (1986). *Establecimiento de la partida doble en las cuentas centrales de la Real Hacienda de Castilla (1592)*. Madrid: Banco de España.

- Hernández Esteve, E. (1992). Propuestas de contabilidad por partida doble para llevar las cuentas centrales de la Real Hacienda Castellana (Hacia 1574). *Técnica Contable*, XLIV, 535-554, 649-664.
- Hernández Esteve, E. (1994). *Estudo introdutorio, introducción y traducción del Título Noveno, Tratado XI, de las Cuentas y las Escrituras de la Summa de Arithmetica, Geometria, Proportioni et Proportionalita de Luca Pacioli*. Madrid: Ed. AECA.
- Hernández Esteve, E. (1996). Problemática general de una historia de la contabilidad en España – revisión genérica de las modernas corrientes epistemológicas y metodológicas, y cuestiones específicas. *En torno a la elaboración de una historia de la contabilidad en España* (pp. 46-114). Madrid: AECA.
- Hernández Esteve, E. (1997). Historia de la contabilidad; pasado rumbo al futuro. Paper presented at the 7^{as} *Jornadas de Contabilidade e Fiscalidade da APOTEC*, Figueira da Foz/Portugal.
- Hernández Esteve, E. (1998a). Las contadurías de libros de la contaduría mayor de hacienda y la contabilidad de cargo y data en la gestión del imperio Español (Siglos XV al XVII). Paper presented at the *II Encuentro de trabajo sobre la historia de la contabilidad en España: dos formas de entender la historia de la contabilidad*, Seville/Spain.
- Hernández Esteve, E. (1998b). Intervención, contabilidad y control en la Real Hacienda Castellana (1474-1700). Paper presented at the *I Jornadas de História da Contabilidade da APOTEC*, Coimbra/Portugal, pp. 1-157.
- Hespanha, A. M. (1993). A fazenda. In J. Mattoso (Dir.), *História de Portugal - o antigo regime (1620-1807)* (pp. 203-239), vol. 4. Lisboa: Circulo de Leitores.
- Hespanha, A. M., & Santos, M. C. (1993). Os poderes num Império oceânico. In J. Mattoso, (Ed.), *História de Portugal* (pp. 395-413), vol. IV, Lisboa: Círculo de Leitores.
- Hines, T. (1988). Financial accounting: in communicating reality we construct reality. *Accounting, Organizations and Society*, 13(3), 251-261.
- Hines, T., McBride, K., Fearnley, S., & Brandt, R. (2001). We're of to see tthe wizard: an evaluation of directors' and auditors' experiences with the Financial Reporting Review Panel. *Accounting, Auditing & Accountability Journal*, 14(1), 53-84.
- Hof, U. (1995). *A Europa no século das luzes*. Portuguese version of *Das Europa Der Aufklärung*. Lisboa: Editorial Presença.
- Hooper, K., & Kearins, K. (1997). “The excited and dangerous state of the natives of Hawkes Bay”: a particular study of nineteenth century financial management. *Accounting, Organizations and Society*, 22(3/4), 269-292.

- Hopper, T., & Powell, A. (1985). Making sense of research into the organizational and social aspects of management accounting: a review of its underlying assumptions. *Journal of Management Studies*, 22(5), 429-465.
- Hopwood, A. G. (1974). *Accounting and human behaviour*. New Jersey: Prentice-Hall.
- Hopwood, A. G. (1977). Editorial. *Accounting, Organizations and Society*, 2(4), 277-278.
- Hopwood, A. G. (1981). Commentary on 'the study of accounting history'. In M. Bromwich, & A. G. Hopwood (Eds.), *Essays in British accounting research* (pp. 294-296). London: Pitman.
- Hopwood, A. G. (1983). On trying to study accounting in the contexts in which it operates. *Accounting, Organizations and Society*, 8(2/3), 287-305.
- Hopwood, A. G. (1985). The tale of a committee that never reported: disagreements on intertwining accounting with the social. *Accounting, Organizations and Society*, 10(3), 361-377.
- Hopwood, A. G. (1987). The archaeology of accounting systems. *Accounting, Organizations and Society*, 12(3), 207-234.
- Hopwood, A. G. (1990). Accounting and organisation change. *Accounting, Auditing & Accountability Journal*, 3(1), 7-17.
- Hopwood, A. G. (2000). Understanding financial accounting practice. *Accounting Organizations and Society*, 25(8), 763-766.
- Hopwood, A. G. (2005). After 30 years. *Accounting, Organizations and Society*, 30(7/8), 585-586.
- Hopwood, A. G., Burchell, S., & Clubb, C. (1994). Value-added accounting and national economic policy. In A. G. Hopwood, & P. Miller (Eds.), *Accounting as social and institutional practice* (pp. 211-236). Cambridge: University Press.
- Hopwood, A. G., & Miller, P. (Eds.) (1994). *Accounting as social and institutional practice*. Cambridge: University Press.
- Hoque, Z. (2006). Introduction. In Z. Hoque (Ed.), *Methodological issues in accounting research: theories and methods* (pp. 1-5). London: Spiramus.
- Hoskin, K. W., & Macve, R. H. (1986). Accounting and the examination: a genealogy of disciplinary power. *Accounting, Organizations and Society*, 11(2), 105-136.
- Hoskin, K. W., & Macve, R. H. (1988). The genesis of accountability: the West Point connections. *Accounting, Organizations and Society*, 13(1), 37-74.

- Hussain, M. M., & Hoque, Z. (2002). Understanding non-financial performance measurement practices in Japanese banks: a new institutional sociology perspective. *Accounting, Auditing & Accountability Journal*, 15(2), 162-183.
- Irson, C. (1678). *Méthode pour bien dresser toutes sortes de comptes a parties doubles... composée de l'ordre de Monseigneur Colbert*. Paris: Cusson.
- Irwin, D. A. (1991). Mercantilism as strategic trade policy: the Anglo-Dutch rivalry for the East India Trade. *The Journal of Political Economy*, 99(6), 1296-1314.
- Israel, J. (2001). *Radical enlightenment: philosophy and the making of modernity, 1650-1750*. Oxford: University Press.
- Jack, L. (2005). Stocks of knowledge, simplification and unintended consequences: the persistence of post-war accounting practices in UK agriculture. *Management Accounting Research*, 16(1), 59-79.
- Jackson, A., & Lapsley, I. (2003). The diffusion of accounting practices in the new "managerial" public sector. *International Journal of Public Sector Management*, 16(5), 359-372.
- Jeacle, I., & Walsh, E. J. (2002). From moral evaluation to rationalization: accounting and the shifting technologies of credit. *Accounting, Organizations and Society*, 27(8), 737-761.
- Jeacle, I. (2003). Accounting and the construction of the standard body. *Accounting, Organizations and Society*, 28(4), 357-377.
- Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalization. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 143-163). Chicago, IL: University of Chicago Press.
- Jepperson, R. L., & Meyer, J. W. (1991). The public order and the construction of formal organizations. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 204-231). Chicago, IL: University of Chicago Press.
- Jeremy, D. J. (Ed.) (1991). *International technology transfer, Europe, Japan and the USA, 1700-1914*. Aldershot: Edward Elgar.
- Johnson, H. T. (1975). The role of accounting history in the study of modern business enterprise. *Accounting Review*, 50(3), 444-450.
- Johnson, H. T. (1986). The organizational awakening in management accounting history. In M. Bromwich, & A. G. Hopwood (Eds.), *Essays in British accounting research* (pp. 67-77). London: Pitman.
- Jones, R. H. (1992). On local government accounting history: the case of the central establishment charges. *Financial Accountability & Management*, 5(2), 59-71.

- Jones, R. H. (1994). Accounting in English local government from the middle ages to c. 1835. In R. H. Parker, & B. S. Yamey (Eds.), *Accounting history, some British contributions* (pp. 377-403). Oxford: Clarendon Press.
- Jones, T. C., & Dugdale, D. (2002). The ABC bandwagon and the juggernaut of modernity. *Accounting, Organizations and Society*, 22(2), 121-163.
- Jönsson, S. (1991). Role making for accounting while the state is watching. *Accounting, Organizations and Society*, 16(5/6), 521-546.
- Jurado-Sánchez, J. (2002). Mechanisms for controlling expenditure in the Spanish Royal Household, c.1561-c.1808. *Accounting, Business & Financial History*, 12(2), 157-185.
- Kaplan, R. S. (1984). The evolution of management accounting. *The Accounting Review*, 59(3), 390-418.
- Kaplan, R. S. (1986). The role for empirical research in management accounting. *Accounting, Organizations and Society*, 11(4/5), 429-452.
- Kato, J. (1996). Review article: institutions and rationality in politics – three varieties of neo-institutionalists. *British Journal of Political Science*, 26(4), 553-582.
- Kayslering, M. (1971). *História dos judeus em Portugal*. Portuguese version of *Geschichte der Juden in Portugal*. São Paulo: Livraria Pioneira Editora.
- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social enquiry - scientific inference in qualitative research*. New Jersey: Princeton University Press.
- Kirkham, L. M. (1992). Integrating *herstory* and *history* in accountancy. *Accounting, Organizations and Society*, 17(3/4), 287-297.
- Kirkham, L. M., & Loft, A. (1993). Gender and the construction of the professional accountant. *Accounting, Organizations and Society*, 18(6), 507-558.
- Lapsley, I., & Pallot, J. (2000). Accounting, management and organizational change: a comparative study of local government. *Management Accounting Research*, 11(2), 213-229.
- Lapsley, I., & Wright, E. (2004). The diffusion of management accounting innovations in the public sector: a research agenda. *Management Accounting Research*, 15(3), 355-374.
- Larsson, B. (2005). Auditor regulation and economic crime policy in Sweden, 1965-2000. *Accounting, Organizations and Society*, 30(2), 127-144.
- Laughlin, R. (1991). Environmental disturbances and organisational transitions and transformations: some alternative models. *Organisational Studies*, 12(2), 209-232.

- Laughlin, R. (1995). Empirical research in accounting: alternative approaches and a case for 'middle range' thinking. *Accounting, Auditing & Accountability Journal*, 8(1), 63-87.
- Laughlin, R. (1999). Critical accounting: nature progress and prognosis. *Accounting, Auditing & Accountability Journal*, 12(1), 73-78.
- Lawrence, T. B., Winn, M., & Jennings, P. D. (2001). The temporal dynamics of institutionalization. *Academy of Management Review*, 26(4), 624-644.
- Leautey, E. (1886). *L'enseignement commercial et les écoles de commerce en France et dans le monde entier*. Paris: Librairie comptable et administrative.
- Lee, G. A. [1973] (1984). The Florentine Bank Ledger fragments of 1211: some new insights. *Journal of Accounting Research*, Spring, pp. 47-61. Reprinted in C. Nobes (Ed.), *The development of double entry bookkeeping, selected essays* (pp. 9-23). New York & London: Garland Publishing, Inc.
- Lee, G. A. [1977] (1984). The coming age of double entry: the Giovanni Farolfi Ledger of 1299-1300. *The Accounting Historians Journal*, Fall, pp. 79-95. Reprinted in C. Nobes (Ed.), *The development of double entry bookkeeping, selected essays* (pp. 45-95). New York & London: Garland Publishing, Inc.
- Lee, G. A. (1989). Manuscript additions to the Edinburgh University copy of Luca Pacioli's *Summa de Arithmetica*. *Abacus*, 25(2), 125-134.
- Lee, G. A. (1994). The oldest European account book: a Florentine bank ledger of 1211. In R. H. Parker & B. S. Yamey (Eds.), *Accounting history, some British contributions* (pp. 160-196). Oxford: Clarendon Press.
- Lee, T. A. (1997). The influence of Scottish Accountants in the United States: the early case of the Society of Accountants in Edinburgh. *The Accounting Historians Journal*, 24(1), 117-141.
- Leite, A. (1982). A ideologia pombalina – despotismo esclarecido e regalismo. *Revista Brotéria*, 114, 487-514.
- Lemarchand, Y. (1994). Double entry versus charge and discharge accounting in eighteenth-century France. *Accounting, Business & Financial History*, 4(1), 119-145.
- Lemarchand, Y. (1998). À la conquête de la science des comptes, variations autour de quelques manuels Français de tenue des livres. *Revista de Contabilidade e Comércio*, LV(219), 509-558.
- Lemarchand, Y. (1999). Introducing double-entry bookkeeping in public finance: a French experiment at the beginning of the eighteenth century. *Accounting, Business & Financial History*, 9(2), 225-254.

- Littleton, A. C. (1933). *Accounting evolution to 1900*. New York: American Institute Publishing Co., Inc..
- Littleton, A. C. (1966). *Accounting evolution to 1900* (2nd Ed.). New York: Russell & Russell.
- Livermore, H. V. (1976). *A new history of Portugal*. Cambridge: Cambridge University Press.
- Livock, D. M. (1965). The accounts of the Corporation of Bristol: 1532 to 1835. *Journal of Accounting Research*, III, 86-102.
- Lodh, S. C., & Gaffikin, J. R. (1997). Critical studies in accounting research, rationality and Habermas: a methodological reflection. *Critical Perspectives on Accounting*, 8(5), 433-474.
- Loft, A. (1986). Towards a critical understanding of accounting: the case of cost accounting in the UK, 1914-1925. *Accounting, Organizations and Society*, 11(2), 137-169.
- Lopez, R. S. (1980). *A revolução comercial da Idade Média 950-1350*. Lisboa: Ed. Presença.
- Luft, J. L. (1997). Long-term change in management accounting research: perspectives from historical research. *Journal of Management Accounting Research*, 9, 163-197.
- Lukka, K., & Kasanen, E. (1995). The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal*, 8(5), 71-90.
- Macedo, J. B. (1951). *A situação económica no tempo de Pombal: alguns aspectos*. Porto: Livraria Portugália.
- Macedo, J. B. (1971a). “Absolutismo”. In J. Serrão (Ed.), *Dicionário de História de Portugal* (pp. 8-14), vol. IV. Porto: Livraria Figueirinhas.
- Macedo, J. B. (1971b). “Despotismo”. In J. Serrão (Ed.), *Dicionário de História de Portugal* (pp. 290-292), vol. IV. Porto: Livraria Figueirinhas.
- Macedo, J. B. (1971c). “Mercantilismo”. In J. Serrão (Ed.), *Dicionário de História de Portugal* (pp. 271-275), vol. IV. Porto: Livraria Figueirinhas.
- Macedo, J. B. (1982). *Problemas de história da indústria Portuguesa no século XVIII* (2nd Ed.). Lisboa: Editorial Quercó.
- Magalhães, J. C. (1967). *História do pensamento económico em Portugal: da idade média ao mercantilismo*. Coimbra: s.n..
- Magalhães, J. R. (1998a). As novas fronteiras do Brasil. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 10-42), vol. III. Lisboa: Círculo de Leitores.

- Magalhães, J. R. (1998b). As tentativas de recuperação asiática. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 43-59), vol. III. Lisboa: Círculo de Leitores.
- Magalhães, J. R. (1998c). Os territórios africanos. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 60-83), vol. III. Lisboa: Círculo de Leitores.
- Major, M., & Hopper, T. (2004). Extending New Institutional Theory: regulation and activity-based costing in Portuguese Telecommunications. *Forth Asia Pacific Interdisciplinary Research in Accounting Conference*, 4-6 July, Singapore.
- Malmi, T. (1999). Activity-based costing diffusion across organisations: an exploratory empirical analysis of Finish firms. *Accounting, Organizations and Society*, 24(8), 649-672.
- Maltby, J. (1997). Accounting and the soul of the middle class: Gustav Freytag's *Soll und Haben*. *Accounting, Organizations and Society*, 22(1), 69-87.
- Mann, M. (1995). *The sources of social power: a history of power from the beginning to a.D. 1760*. Cambridge: Cambridge University Press.
- March, J. G., & Olsen, J. P. (1976). *Ambiguity and choice in organizations*. Bergen: Universitetsforlaget.
- March, J. G., & Olsen, J. P. (1984). The new institutionalism: organizational factors in political life. *The American Political Science Review*, 78(3), 734-749.
- March, J. G., & Olsen, J. P. (1989). *Rediscovering institutions: the organizational basis of politics*. New York: The Free Press.
- March, J. G., & Olsen, J. P. (2005). Elaborating the “new institutionalism”. Center for European Studies, University of Oslo, Working paper N° 11, URL: <http://www.arena.uio.no>.
- Marion, M. (1914). *Histoire financière de l'histoire de la France depuis 1715*, vol. I. Paris: Rousseau.
- Marques, A. H. O. (1973). *Histórial de Portugal*, vol. I (5th Ed.). Lisboa: Edições Agora.
- Marques, A. H. O. (1984). *História de Portugal*, vol. II (10th Ed.). Lisboa: Palas Editores.
- Marques, A. H. O. (1998). A expansão no Atlântico. In J. Serrão, & A. H. Oliveira Marques (Eds.), *Nova história da expansão Portuguesa – A expansão quatrocentista* (pp. 9-233), vol. II. Lisboa: Editorial Estampa.
- Martin Lamouroux, F. (1994). La influencia de Pacioli durante el siglo XVI. *Revista de Contabilidade e Comércio*, LI(203), 297-320.

- Martinelli, A. (1983). The ledger of Cristianus Lomellinus and Dominicus de Garibaldo, stewards of the City of Genoa (1340-41). *Abacus*, 19(2), 83-118.
- Martínez Ruiz, J. I. (1988). La reforma de la Contaduría Municipal de Sevilla y la introducción del Libro de Caja (1567). *Revista Española de Financiación y Contabilidad*, XVII(56), 335-349.
- Martins, O. (1972). *História de Portugal*. Lisboa: Guimaráes Editores.
- Mauro, F. (1970). *Etudes économiques sur l'expansion Portugaise 1500-1800*. Paris: Publications du Centre Culturel Portugais.
- Mauro, F. (Coord.) (1991). *O Império Luso-Brasileiro 1620-1750, vol. VII*. In J. Serrão, & A. H. O. Marques (Eds.), *Nova história da expansão Portuguesa*. Lisboa: Editorial Estampa.
- Maxwell, K. (1995). *Pombal: paradox of the enlightenment*. Cambridge: Cambridge University Press.
- Maxwell, K., Silva, M. B. N. (1986). A Política. In J. Serrão, & A. H. Oliveira Marques (Eds.), *Nova história da expansão Portuguesa – O Império Luso-Brasileiro 1750-1822* (pp. 333-442), vol. VIII. Lisboa: Editorial Estampa.
- McKinstry, S. (1997). Status building: some reflections on the architectural history of Chartered Accountants' Hall, London, 1889-1893. *Accounting, Organizations and Society*, 22(8), 779-798.
- Melis, F. (1950). *Storia della Ragioneria*. Bolonha: Dott. Cesare Zuffi.
- Mendonça, J. J. M. (1758). *História universal dos Terremotos....* Lisboa: Off. de António Vicente da Silva.
- Mephram, M. J. (1988a). The Scottish Enlightenment and the development of accounting. *The Accounting Historians Journal*, 15(2), 151-176.
- Mephram, M. J. (1988b). *Accounting in eighteenth century Scotland*. New York: Garland Publishing.
- Merino, B. D., & Mayper, A. G. (1993). Accounting history and empirical research. *The Accounting Historians Journal*, 20(2), 237-267.
- Merrill, R. S. (1968). Technology. In *International encyclopedia of the social sciences*, vol. 15, p. 576.
- Meyer, J. W. (1980). The world polity and the authority of the nation-state. In A. J. Bergesen (Ed.), *Studies of the modern world-system* (pp. 109-137). New York: Academic Press.

- Meyer, J. W. (1983a). Institutionalization and the rationality of formal organizational structure. In J. W. Meyer, & W. R. Scott (Eds.), *Organizational environments* (pp. 261-282). California: Sage.
- Meyer, J. W. (1983b). On the celebration of rationality: some comments on Boland and Pondy. *Accounting, Organizations and Society*, 8(2/3), 235-240.
- Meyer, J. W. (1986). Social environments and organizational accounting. *Accounting, Organizations and Society*, 11(4/5), 345-356.
- Meyer, J. W., & Rowan, B. [1977] (1991). Institutionalised organisations: formal structures as myth and ceremony. *American Journal of Sociology*, 83(2), 310-363. Reprinted in W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 41-62). Chicago, IL: University of Chicago Press.
- Meyer, J. W., Boli, J., Thomas, G. M., & Ramirez, F. O. (1997). World society and the nation state. *American Journal of Sociology*, 103(1), 144-181.
- Mezias, S. J. (1990). An institutional model of organizational practice: financial reporting at the Fortune 200. *Administrative Science Quarterly*, 35(3), 431-457.
- Mezias, S. J., & Scarselletta, M. (1994). Resolving financial reporting problems: an institutional analysis of the process. *Administrative Science Quarterly*, 39(4), 654-678.
- Miller, P. (1986). Accounting for progress – national accounting and planning in France: a review essay. *Accounting, Organizations and Society*, 11(1), 83-104.
- Miller, P. (1990). On the interrelations between accounting and the state. *Accounting, Organizations and Society*, 15(4), 315-338.
- Miller, P. (1991). Accounting innovation beyond the enterprise: problematizing investment decisions and programming economic growth. *Accounting, Organizations and Society*, 16(8), 733-762.
- Miller, P. (1994). Accounting as a social and institutional practice: an introduction. In A. G. Hopwood, & P. Miller (Eds.), *Accounting as social and institutional practice* (pp. 1-39). Cambridge: University Press.
- Miller, P., Hopper, T., & Laughlin, R. (1991). The new accounting history: an introduction. *Accounting, Organizations and Society*, 16(5/6), 395-403.
- Miller, P., & Napier, C. (1993). Genealogies of calculation. *Accounting, Organizations and Society*, 18(7/8), 631-647.
- Miller, P., & O'Leary, T. (1987). Accounting and the construction of the governable person. *Accounting, Organizations and Society*, 12(3), 235-265.

- Miller, P., & O'Leary, T. (1989). Hierarchies and American ideals, 1900-1940. *Academy of Management Review*, 14(2), 250-265.
- Miller, P., & O'Leary, T. (1990). Making accounting practical. *Accounting, Organizations and Society*, 15(5), 479-498.
- Miller, P., & O'Leary, T. (1993). Accounting expertise and the politics of the product: economic citizenship and modes of corporate governance. *Accounting, Organizations and Society*, 18(2/3), 187-206.
- Miller, P., & O'Leary, T. (1994). Accounting "economic citizenship" and the spatial reordering of manufacture. *Accounting, Organizations and Society*, 19(1), 15-44.
- Mills, G. T. (1994). Early accounting in Northern Italy: the role of commercial development and the printing press in the expansion of double-entry from Genoa, Florence and Venice. *The Accounting Historians Journal*, 21(1), 81-98.
- Mills, P. A., & Young, J. J. (1999). From contract to speech: the courts and CPA licensing laws 1921-1996. *Accounting, Organizations and Society*, 24(3), 243-262.
- Mintzberg, H. (1983). *Power in and around organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: a study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653-683.
- Modell, S. (2003). Goals versus institutions: the development of performance measurement in the Swedish university sector. *Management Accounting Research*, 14(4), 333-359.
- Moll, J., Burns, J., & Major, M. (2006). Institutional Theory. In Z. Hoque (Ed.), *Methodological issues in accounting research: theories and methods* (pp. 183-205). London: Spiramus.
- Monteiro, M. N. (1979). *Pequena história da Contabilidade*. Lisboa: APOTEC.
- Moore, D. C. (1991). Accounting on trial: the Critical Legal Studies movement and its lessons for radical accounting. *Accounting, Organizations and Society*, 16(8), 763-791.
- Moreira, A. (1977). *Inventário do fundo geral do Erário Régio*. Lisboa: Tribunal de Contas.
- Moreira, A., & Pedrosa, A. (2004). *As grandes datas da história de Portugal*. Lisboa: Editorial Notícias.
- Morgan, G., & Willmott, H. (1993). The 'new' accounting research: on making accounting more visible. *Accounting, Auditing & Accountability Journal*, 6(1), 3-36.
- Napier, C. (1989). Research directions in accounting history. *British Accounting Review*, 21(3), 237-254.

- Napier, C. (2001). Accounting history and accounting progress. *Accounting History*, 6(2), 7-31.
- Napier, C. (2006). Accounts of change: 30 years of historical accounting research. *Accounting, Organizations and Society*, 31(4/5), 445-507.
- Neimark, M. K. & Tinker, T. (1986). The social construction of management control systems. *Accounting, Organizations and Society*, 11(4/5), 369-395.
- Neu, D. (2000). "Presents" for the "Indians": land, colonialism and accounting in Canada. *Accounting, Organizations and Society*, 25(2), 162-184.
- Nikitin, M. (2001). The birth of a modern public sector accounting system in France and Britain and the influence of Count Mollien. *Accounting History*, 6(1), 75-101.
- Nobes, C., & Parker, R. (2006). *Comparative International Accounting* (9th Ed.). New York: FT/Prentice Hall.
- Nogueira, A. F. V. (2001). *Judaísmo e capitalismo – contribuição judaica para a formação do ethos capitalista*. Ph D Thesis. Universidade de Aveiro/Portugal.
- North, D. C. (1981). *Structure and change in economic history*. New York: Norton.
- Núñez, M. (1999). *El papel de los individuos en la institucionalización de prácticas contables: el caso de la renta de la Pólvora en Nueva España (1757-1787)*. Ph D Thesis. University of Seville/Spain.
- Núñez, M. (2002). Organizational change and accounting: the gunpowder monopoly in New Spain, 1757-1787. *Accounting, Business & Financial History*, 12(6), 275-315.
- O'Brien, P. (2000). Mercantilism and imperialism in the rise and decline of the Dutch and British Economies 1585-1815. *De Economist*, 148(4), 469-501.
- Oakes, L. S., & Covaleski, M. A. (1994). A historical examination of the use of accounting-based incentive plans in the structuring of labor-management relations. *Accounting, Organizations and Society*, 19(7), 579-599.
- Oldroyd, D. (1999). Historiography, causality, and positioning: an unsystematic view of accounting history. *Accounting Historians Journal*, 26(1), 83-102.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145-179.
- Oliver, C. (1992). The antecedents of deinstitutionalization. *Organization Studies*, 13(4), 563-588.
- Oliver, C. (1997). Sustainable competitive advantage: combining institutional and resource-based views. *Strategic Management Journal*, 18(9), 697-713.

- Orrù, M., Biggart, N. W., & Hamilton, G. G. (1991). Organizational isomorphism in East Asia. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 361-389). Chicago, IL: University of Chicago Press.
- Paixão, J. C. (1998). Métodos de escrituração enviados aos domínios ultramarines durante o século XVIII. Paper presented at the *I Jornadas de História da Contabilidade da APOTEC*, Coimbra/Portugal.
- Paixão, J. C., & Lourenço, M. A. (1999). Tomar em linha de conta. *Jornal de Contabilidade*, 264/265/266/267/268/269, 76-78, 114-115, 155-157, 191-193, 231-234, 263-272.
- Palmer, D. A., Jennings, P. D., & Zou, X. (1993). Late adoption of the multidivisional form by large US corporations: institutional, political, and economic accounts. *Administrative Science Quarterly*, 38(1), 100-131.
- Parker, L. D. (1999). Historiography for the new millennium: adventures in accounting and management. *Accounting History*, 4(2), 11-42.
- Parker, R. H. [1981] (1984). The study of accounting history. In A. Hopwood, & M. Bromwich (Eds.), *Essays in British accounting research* (pp. 279-303). London: Pitman. Reprinted in Parker, R. H. (Ed.), *Papers on accounting history* (pp. 3-17), New York & London: Garland Publishing, Inc.
- Parker, R. H. [1989] (1994). Importing and exporting accounting: the British experience. In A. G. Hopwood (Ed.), *International pressures for accounting change*. Hemel Hempstead: Prentice-Hall International. Reprinted in R. H. Parker, & B. S. Yamey (Eds.), *Accounting history, some British contributions* (pp. 590-613). Oxford: Clarendon Press.
- Parry, J. H. (1967). Transport and trade routes. In E. E. Rich, & C. H. Wilson (Eds.), *The Cambridge economic history of Europe: the economy of expanding Europe in the sixteenth and seventeenth centuries* (pp. 155-219). Cambridge: Cambridge University Press.
- Pedreira, J. (1995). *Os homens de negócio da praça de Lisboa de Pombal ao Vintismo (1755-1822)*. Ph D Thesis. Universidade Nova de Lisboa.
- Pedreira, J. (2005). A indústria. In P. Lains, & A. F. Silva (Eds.), *História Económica de Portugal 1700-2000* (pp. 177-208), vol. 1. Lisboa: Instituto de Ciências Sociais.
- Peragallo, E. (1956). Origin of the trial balance. In A. C. Littleton, & B. S. Yamey (Eds.), *Studies in the history of accounting* (pp. 215-222). London: Sweet & Maxwell
- Pereira, A. S. (2007). The opportunity of a disaster: the economic impact of the 1755 Lisbon earthquake. *CHERRY discussion paper series*, Cherry DP 03/06, Centre for Economics and

- Related Research at York, pp. 1-37. In B. Batiz-Lazo (2007), *New Economics Papers Business, Economic and Financial History*, URL: <http://d.repec.org/n?u=RePEc:yor:cherry:06/03&r=his>.
- Perera, S., McKinnon, J. L., & Harrison, G. L. (2003). Diffusion of transfer pricing innovation in the context of commercialisation: a longitudinal case study of Government Trading Enterprise. *Management Accounting Research*, 14(2), 140-164.
- Peres, D. (1959). *A história dos descobrimentos Portugueses*. Porto: Vertente.
- Perrow, C. (1986). *Complex organizations: a critical essay* (3rd Ed.). New York: Random House.
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: a resource dependence perspective*. New York: Harper & Row.
- Pihlanto, P. (2003). The role of the individual actor in different accounting research perspectives. The holistic individual image as a tool for analysis. *Scandinavian Journal of Management*, 19(2), 153-172.
- Pombal, Marquês de (1741). *Relação dos gravames que ao comercio....* National Library, Coleção Pombalina, Códice 635.
- Pombal, Marquês de (1742). *Carta ao Cardeal da Mota em 19 de Fevereiro de 1742*. National Library, Coleção Pombalina, Códice 657.
- Pombal, Marquês de (1775). Observações secretíssimas do Marquês de Pombal, Sebastião José de Carvalho e Melo, na ocasião da inauguração da Estátua Equestre no dia 6 de Junho de 1775, e entregues por ele mesmo oito dias depois ao senhor rei D. José I. In F. L. Castro (Ed.), *Memórias Secretíssimas do Marquês de Pombal* (pp. 245-252). Lisboa: Publicações Europa América.
- Pombal, Marquês de (1777). *Apologias. Catalogos de todos os papeis....*, National Library, Coleção Pombalina, Códice 695.
- Post, J. E., & Andrews, P. N. (1982). Case research in corporation and society studies. In L. E. Preston (Ed.), *Research in corporate social performance and policy* (pp. 1-33), vol. 4. London: JAI Press.
- Potter, B. N. (2005). Accounting as a social and institutional practice: perspectives to enrich our understanding of accounting change. *Abacus*, 41(3), 265-289.
- Poullaos, C. (1998). Telling stories about accounting history. *Critical Perspectives on Accounting*, 9(6), 701-710.
- Powell, W. W. (1988). Institutional effects on organizational structure and performance. In L. G. Zucker (Ed.), *Institutional patterns and organizations: culture and environment* (pp. 115-136). Cambridge: Ballinger.

- Powell, W. W. (1991). Expanding the scope of institutional analysis. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 183-203). Chicago, IL: University of Chicago Press.
- Powell, W. W., & DiMaggio, P. J. (Eds.) (1991). *The new institutionalism in organizational analysis*. Chicago, IL: University of Chicago Press.
- Power, M. K. (1992). From common sense to expertise: reflections on the prehistory of audit sampling. *Accounting, Organizations and Society*, 17(1), 37-62.
- Power, M., & Laughlin, R. (1996). Habermas, law and accounting. *Accounting, Organizations and Society*, 21(5), 441-465.
- Preston, A. M., Cooper, D. J., Scarbrough, D. P., & Chilton, R. C. (1995). Changes in the code of ethics of the US accounting profession, 1917 and 1988: the continual quest for legitimation. *Accounting, Organizations and Society*, 20(6), 507-546.
- Previts, G. J., & Bricker, R. (1994). Fact and theory in accounting history: presentmindedness and capital market research. *Contemporary Accounting Research*, 10(2), 625-641.
- Previts, G. J., Parker, L. D., & Cofman, E. N. (1990a). Accounting history: definition and relevance. *Abacus*, 26(1), 1-16.
- Previts, G. J., Parker, L. D., & Cofman, E. N. (1990b). Accounting historiography: subject matter and methodology. *Abacus*, 26(2), 136-158.
- Quattrone, P. (2004). Accounting for God: accounting and accountability practices in the Society of Jesus (Italy, XVI – XVII centuries). *Accounting, Organizations and Society*, 29(7), 647-683.
- Radcliffe, V. S. (1998). Efficiency audit: an assembly of rationalities and programmes. *Accounting, Organizations and Society*, 23(4), 377-410.
- Radebaugh, L. H., Gray, S. J., & Black, E. L. (2006). *International accounting and multinational enterprises* (6th Ed.). New York: John Wiley & Sons, Inc.
- Rahaman, A. S., Lawrence, S., & Roper, J. (2004). Social and environmental reporting at the VRA: institutionalised legitimacy or legitimation crisis?. *Critical Perspectives on Accounting*, 15(1), 35-56.
- Ramsey, P. (1956). Some Tudor merchants' accounts. In A. C. Littleton, & B. S. Yamey (Eds.), *Studies in the history of accounting* (pp. 185-201). London: Sweet and Maxwell Limited.
- Ratton, J. (1813). *Recordações de Jacome Ratton sobre ocorrências do seu tempo em Portugal de Maio de 1747 Setembro de 1810*. London: H. Bryer.

- Ratton, J. (1920). *Recordações de Jacome Ratton sobre ocorrências do seu tempo de Maio de 1747 a Setembro de 1810* (2nd Ed.) (Introduction by J.M. Teixeira de Carvalho). Coimbra: Imprensa da Universidade.
- Rau, V. (1951). *A Casa dos Contos*. Coimbra, F.L.U.C/I.E.H.D.A.V.
- Rau, V. (1971). Bartolomeo di Iacopo di ser Vanni mercador-banqueiro Florentino «estante» em Lisboa nos meados do século XV. *Do Tempo e da História, IV*, 97-117.
- Rau, V. (1984a). Um mercador Luso-Brasileiro do séc. XVIII. In J. M. Garcia (Ed.), *Estudos sobre história económica e social do Antigo Regime* (pp. 17-25). Lisboa: Presença.
- Rau, V. (1984b). Fortunas ultramarinas e a nobreza Portuguesa no séc. XVII. In J. M. Garcia (Ed.), *Estudos sobre História económica e social do Antigo Regime* (pp. 27-46). Lisboa: Presença.
- Rau, V. (1984c). Privilégios e Legislação Portuguesa referentes a mercadores estrangeiros (séculos XV e XVI). In J. M. Garcia (Ed.), *Estudos sobre história económica e social do Antigo Regime* (pp. 201-225). Lisboa: Presença.
- Rego, A. S. (1967). *O ultramar Português no século XVIII*. Lisboa: Agência-Geral do Ultramar.
- Riahi-Belkaoui, A. (2000). *Accounting theory* (4th Ed.). London: Business Press.
- Ribeiro, A. (1934). José I e Pombal: governo de força. In D. Peres, *História de Portugal* (pp. 211-228), vol. VI. Barcelos: Portucalense Editora.
- Ribeiro, J. A., & Scapens, R. W. (2006). Institutional theories in management accounting change - contributions, issues and paths for development. *Qualitative Research in Accounting & Management*, 3(2), 94-111.
- Richardson, A. J. (1989). Corporatism and intraprofessional hegemony: a case study of regulation and internal social order. *Accounting, Organizations and Society*, 14(5/6), 415-431.
- Roberts, J., & Scapens, R. (1985). Accounting systems and systems of accountability – understanding accounting practices in their organisational contexts. *Accounting, Organizations and Society*, 10(4), 443-456.
- Roberts, C. B., Weetman, P., & Gordon, P. (2005). *International financial reporting: a comparative approach* (3rd Ed.). Harlow: FT/Prentice Hall.
- Robson, K. (1991). On the arenas of accounting change: the process of translation. *Accounting, Organizations and Society*, 16(5/6), 547-570.
- Robson, K. (1994). Inflation accounting and action at a distance: the Sandilands episode. *Accounting, Organizations and Society*, 19(1), 45-82.

- Rodrigues, L. L., & Craig, R. (2004). English mercantilist influences on the foundation of the Portuguese School of Commerce in 1759. *Atlantic Economic Journal*, 32(4), 329-345.
- Rodrigues, L. L., & Craig, R. (2006). Assessing international accounting harmonization using Hegelian dialectic, isomorphism and Foucault. *Critical Perspectives on Accounting*, Forthcoming.
- Rodrigues, L. L., Craig, R., & Gomes, D. (2007). State intervention in commercial education: the case of the Portuguese School of Commerce, 1759. *Accounting History*, 12(1), 55-85.
- Rodrigues, L. L., Gomes, D., & Craig, R. (2003). Corporatism, liberalism and the accounting profession in Portugal since 1755. *The Accounting Historians Journal*, 30(1), 95-128.
- Rodrigues, L. L., Gomes, D., & Craig, R. (2004). The Portuguese School of Commerce, 1759-1844: a reflection of the 'enlightenment'. *Accounting History*, 9(3), 53-72.
- Rodrigues, M. B. (1995). A Contabilidade Pública. *Jornal de Contabilidade*, n.º 215, pp. 51-53.
- Rodrigues, M. B. (1996). A Carta de Lei de 22 de Dezembro de 1761 sobre a extinção dos Contos e a criação do Real Erário. *Jornal de Contabilidade*, n.ºs 232/233/235/236/237, pp. 185-188, 222-223, 277-279, 309-311, 345-346.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th Ed.). New York: The Free Press.
- Rollins, T. P., & Bremser, W. G. (1997). The SEC's enforcement actions against auditors: an auditor reputation and institutional theory perspective. *Critical Perspectives on Accounting*, 8(3), 191-206.
- Russell-Wood, A. J. R. (1998). Governantes e agentes. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 169-192), vol. III. Lisboa: Círculo de Leitores.
- Sá, A. L. (1953). As origens da partida dobrada. *Revista de Contabilidade e Comércio*, nº 31, 462-468.
- Sá, A. L. (1994). *Teoria da contabilidade superior – história e filosofia da contabilidade*. Belo Horizonte: UNA.
- Sá, A. L. (1998). *História geral e das doutrinas da contabilidade*. Lisboa: Ed. Vislis.
- Sánchez-Matamoros, J. B., Gutiérrez Hidalgo, F., Álvarez-Dardet Espejo, C., & Carrasco Fenech, F. (2005). Govern(mentality) and accounting: the influence of different enlightenment discourses in two Spanish cases (1761-1777)". *Abacus*, 41(2), 181-210.
- Sandin, A. (1991). *Statlig Redovisning i förändring – från Gustaf Vasa till nutid*. Göteborg: Vasastadens Bokbinderi AB.

- Santareno, A. (1998). Crónica da contabilidade pública Portuguesa – das partidas dobradas de 1761 ao plano oficial de contabilidade pública de 1997. Paper presented at the *I Jornada de História de Contabilidade da APOTEC*, Coimbra/Portugal.
- Scapens, R. W. (2004). Doing case study research. In C. Humprey, & B. Lee (Eds.), *The real life guide to accounting research* (pp. 257-279). Amsterdam: Elsevier.
- Scapens, R. W. (2006). Understanding management accounting practices: a personal journey. *British Accounting Review*, 38(1), 1-30.
- Schaub, J.-F. (2001). *Portugal na Monarquia Hispânica*. Lisboa: Livros Horizonte.
- Schneider, S. (1980). *O Marquês de Pombal e o vinho do Porto: dependência e subdesenvolvimento em Portugal no século XVIII*. Lisboa: A Regra do Jogo.
- Schumpeter, J. (1934). *Theorie der wirtschaftlichen Entwicklung*. Berlin.
- Schwartz, S. (1998a). De ouro a algodão: a economia Brasileira no século XVIII. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 86-103), vol. III. Lisboa: Círculo de Leitores.
- Schwartz, S. (1998b). Escravatura e comércio de escravos no Brasil do século XVIII. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 104-120), vol. III. Lisboa: Círculo de Leitores.
- Schwartz, S. (1998c). O Brasil no sistema colonial. In F. Bethencourt, & K. Chaudhuri (Eds), *História da expansão Portuguesa – O Brasil na balança do Império (1697-1808)* (pp. 138-155), vol. III. Lisboa: Círculo de Leitores.
- Scorgie, M. E., & Capitano, C. (1997). Transportation of double-entry bookkeeping to early New South Wales. *Accounting History*, 2(2), 105-111.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493-511.
- Scott, W. R. (1991). Unpacking institutional arguments. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 164-182). Chicago, IL: University of Chicago Press.
- Scott, W. R. (1992). The organization of societal sectors. In J. W. Meyer & W. R. Scott (Eds.), *Organizational environments: ritual and rationality* (pp. 155-175) (Updated Ed.). California: Sage Publications.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage Publications.

- Scott, W. R. (1998). *Organizations: rational, natural, and open systems* (4th Ed.). London: Prentice Hall International.
- Scott, W. R. (2001). *Institutions and organizations* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Scott, W. R., & Meyer, J. W. (1991). The organization of societal sectors: propositions and early evidence. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 108-140). Chicago, IL: University of Chicago Press.
- Scott, W. R., & Meyer, J. W. (1992). The organization of societal sectors. In J. W. Meyer & W. R. Scott (Eds.), *Organizational environments: ritual and rationality* (pp. 129-153) (Updated Ed.). California: Sage Publications.
- Seal, W. (1999). Accounting and competitive tendering in UK local government: an institutionalist interpretation of the New Public Management. *Financial Accountability & Management*, 15(3/4), 309-327.
- Selznick, P. (1957). *Leadership in Administration*. New York: Harper and Row.
- Serrão, J. V. (1980). *História de Portugal – a formação do estado moderno (1415-1495)* (3rd Ed.), vol. II. Lisboa: Editorial Verbo.
- Serrão, J. V. (1982). *O Marquês de Pombal. O homem, o diplomata e o estadista*. Lisboa: Câmaras Municipais de Lisboa, Oeiras e Pombal.
- Serrão, J. V. (1990). *História de Portugal – governo dos Reis Espanhóis (1580-1640)* (2nd Ed.), IV. Lisboa: Editorial Verbo.
- Serrão, J. V. (1994). *O tempo dos Filipes em Portugal e no Brasil, 1580-1668: estudos históricos*. Lisboa: Edições Colibri.
- Serrão, J. V. (1996a). *História de Portugal – a restauração e a monarquia absoluta (1640-1750)* (2nd Ed.), vol. V. Lisboa: Editorial Verbo.
- Serrão, J. V. (1996b). *História de Portugal – o despotismo iluminado (1750-1807)* (5th Ed.), vol. VI. Lisboa: Editorial Verbo.
- Sideri, S. (1978). *Comércio e poder – colonialismo informal nas relações Anglo-Portuguesas*. Lisboa: Edições Cosmos.
- Siegel, P. H., & Rigsby, J. T. (1998). Institutionalization and structuring of certified public accountants. *Journal of Management History*, 4(2), 81-93.

- Sikka, P., & Willmott, H. (1995). The power of "independence": defending and extending the jurisdiction of accounting in the United Kingdom. *Accounting, Organizations and Society*, 20(6), 547-581.
- Silva, A. F. (2005). Finanças Públicas. In P. Lains, & A. F. Silva (Eds.), *História Económica de Portugal 1700-2000* (pp. 237-261), vol. 1. Lisboa: Instituto de Ciências Sociais.
- Simmons, C., & Neu, D. (1997). Re-presenting the external: editorials and the Canadian Case (1936-1950). *Accounting, Organizations and Society*, 22(8), 799-824.
- Smith, J. (1843). *Memoirs of the Marquis of Pombal*, vol. 1. London: Longman, Brown, Green, and Longmans.
- Snyder, L.L. (1955). *The age of reason*. New York, NY: Van Nostrand.
- Soin, K., Seal, W., & Cullen, J. (2002). ABC and organizational change: an institutional perspective. *Management Accounting Research*, 13(2), 249-271.
- Sousa, M. J. B. R. (1995). *Real Fábrica das Sedas e fábricas anexas – Inventário*. Lisboa: Arquivos Nacionais/Torre do Tombo.
- Stevelinck, E. (1970). *La Comptabilité à travers les âges*. Brussels: Bibliothèque Royale.
- Stevin, S. (1608). *Livre de compte de Prince à la manière d'Italie*. Leyde: Jan Paedts Jacobsz.
- Stewart, R. E. (1992). Pluralizing our past: Foucault in accounting history. *Accounting, Auditing & Accountability Journal*, 5(2), 57-73.
- Stinchcombe, A. L. (1968). *Constructing social theories*. New York: Harcourt Brace.
- Subtil, J. (1993). Governo e administração. In J. Mattoso (Dir.), *História de Portugal - o antigo regime (1620-1807)* (pp. 157-193), vol. 4. Lisboa: Circulo e Leitores.
- Suchman, M. C. (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610.
- Suzuki, T. (2003). The epistemology of macroeconomic reality: the Keynesian Revolution from an accounting point of view. *Accounting, Organizations and Society*, 28(5), 471-517.
- Swetz, F. J. (1987). *Capitalism and arithmetic: the new math of the 15th century*. La Salle, Ill.: Open Court.
- Takatera, S., & Sawabe, N. (2000). Time and space in income accounting. *Accounting, Organizations and Society*, 25(8), 787-798.
- Tavares, M. J. F. (1995). *Os Judeus na época dos descobrimentos*. Lisboa: Elo.

- ten Have, O. (1956). Simon Stevin of Bruges. In A. C. Littleton, & B. S. Yamey (Eds.), *Studies in the history of accounting* (pp. 236-246). London: Sweet and Maxwell Limited.
- ter Bogt, H. J., & van Helden, G. J. (2000). Accounting change in Dutch government: exploring the gap between expectations and realizations. *Management Accounting Research*, 11(2), 263-279.
- Thomas, G. M., Meyer, J. W., Ramirez, F. O., & Boli, J. (1987). *Institutional structure: constituting state, society, and the individual*. Beverly Hills, Calif.: Sage.
- Tinker, A. M. (1980). Towards a political economy of accounting: an empirical illustration of the Cambridge controversies. *Accounting, Organizations and Society*, 5(1), 147-160.
- Tinker, T. (2004). The enlightenment and its discontents, antinomies of Christianity, Islam and the calculative sciences. *Accounting, Auditing & Accountability Journal*, 17(3), 442-475.
- Tinker, T., & Neimark, M. (1987). The role of annual reports in gender and class contradictions at General Motors: 1917-1976. *Accounting, Organizations and Society*, 12(1), 71-88.
- Tolbert, P. S. (1985). Institutional environments and resources dependence: sources of administrative structure in institutions of higher education. *Administrative Science Quarterly*, 30(1), 1-13.
- Tolbert, P. S., & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, 28(1), 22-39.
- Tolbert, P. S., & Zucker, L. G. (2003). The institutionalization of institutional theory. In S. R. Clegg, C. Hardy & W. R. Nord (Eds.), *Handbook of organizations studies* (pp. 175-190) (3rd Ed.). London: Sage Publications.
- Tomaz, F. (1988). As finanças do estado pombalino 1762-1776. *Estudos e ensaios em homenagem a V. M. Godinho* (pp. 355-388). Lisboa: Sá da Costa Ed.
- Tomkins, C., & Groves, R. (1983). The everyday accountant and researching his reality. *Accounting, Organizations and Society*, 8(4), 361-374.
- Toms, J. S. (2002). The rise of modern accounting and the fall of the public company: the Lancashire cotton mills, 1870-1914. *Accounting, Organizations and Society*, 27(1/2), 61-84.
- Tosh, J. (1991). *The pursuit of history: aims, methods and new directions in the study of modern history* (2nd Ed.). New York: Longman.
- Touron, P. (2004). The adoption of US GAAP by French firms before the creation of the International Accounting Standard Committee: an institutional explanation. *Critical Perspectives on Accounting*, 16(6), 851-873.

- Tsamenyi, M., Cullen, J., & González, J. M. (2006). Changes in accounting and financial information system in a Spanish electricity company: a new institutional theory analysis. *Management Accounting Research*, 17(4), 409-432.
- Tua Pereda, J. (1988). Evolución del concepto de Contabilidad a través de sus definiciones. *Contaduría Universidad de Antioquía*, nº 13, 9-74.
- Uddin, S., & Hopper, T. (2001). A Bangladesh soap opera: privatisation, accounting, and regimes of control in a less developed country. *Accounting, Organizations and Society*, 26(7/8), 643-672.
- Vanes, J. (1984). The ledger of John Smythe, merchant of Bristol. In C. Nobes (Ed.), *The development of double entry bookkeeping, selected essays* (pp. 109-113). New York & London: Garland Publishing, Inc.
- Vent, G., & Milne, R. A. (1997). Cost accounting practices at precious metal mines: a comparative study, 1869-1905. *Accounting History*, 2(2), 77-105.
- Vlaemminck, J. (1961). *Historia y doctrinas de la contabilidad*. Spanish version of *Histoire et doctrines de la comptabilité* (Revised and enlarged by José M.^a Gonzalez Ferrando). Madrid: Ed. EJES.
- Volmer, F. (1996). Stevin, Simon (1548-1620). In M. Chatfield, & R. Vangermeersch (Eds.), *The history of accounting, an international encyclopedia* (pp. 565-566). New York & London: Garland Publishing, Inc.
- Wahyudi, Imam (2004). *Symbolism, rationality and myth in organizational control systems*, Ph D Thesis, University of Wollongong: Australia.
- Walker, S. P. (1995). The genesis of professional organization in Scotland: a contextual analysis. *Accounting, Organizations and Society*, 20(4), 285-310.
- Walker, S. P. (1998). How to secure your husband's esteem. Accounting and private patriarchy in the British middle class household during the nineteenth century. *Accounting, Organizations and Society*, 23(5/6), 485-514.
- Walker, S. P. (2004a). The genesis of professional organization in English accountancy. *Accounting, Organizations and Society*, 29(2), 127-156.
- Walker, S. P. (2004b). The search for clues in accounting history. In C. Humphrey, & B. Lee (Eds.), *The real life guide to accounting research* (pp. 5-21). Amsterdam: Elsevier.
- Walton, P. (Ed.) (1995). *European financial reporting – a history*. London: Academic Press.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Englewood Cliffs: Prentice-Hall.

- Webster, F. E. (1971). Communication and diffusion processes in industrial markets. *European Journal of Marketing*, 5(4), 178-188.
- Williamson, O. E. (1981). The economics of organization: the transaction cost approach. *American Journal of Sociology*, 87(3), 548-577.
- Wilson, C. H. (1967). Trade, Society and the State. In E.E. Rich, & C. H. Wilson (Eds.), *The Cambridge economic history of Europe: the economy of expanding Europe in the sixteenth and seventeenth centuries* (pp. 487-575). Cambridge: Cambridge University Press.
- Woloch, I. (1982). *Eighteenth century Europe – tradition and progress, 1715-1789*. New York and London: W.W. Norton & Company.
- Yamey, B. S. (1940). The functional development of double-entry bookkeeping. *The Accountant*, November 2, 333-342.
- Yamey, B. S. (1977). Some topics in the history of financial accounting in England 1500-1900. In W. T. Baxter & S. Davidson (Eds.), *Studies in Accounting* (pp 11-34). London: Institute of Chartered Accountants in England and Wales.
- Yamey, B. S. (1980). Early views on the origins and development of book-keeping and accounting. *Accounting and Business Research*, 10(37A), 81-92.
- Yamey, B. S. (1981). Some reflections on the writing of a general history of accounting. *Accounting and Business Research*, 2(42), 127-135.
- Yamey, B. S. (1984). The functional development of double entry bookkeeping. In C. Nobes (ed.), *The development of double entry bookkeeping, selected essays* (pp. 133-142). New York & London: Garland Publishing, Inc.
- Yamey, B. S. (1996). Historia de la Contabilidad: un inventario. *En torno a la elaboración de una historia de la contabilidad en españa* (pp. 13-30). Madrid: AECA.
- Yin, R. K. (2003). *Case study research: design and methods* (3rd Ed.). Thousand Oaks: Sage Publications.
- Zambon, S. (2000). Setting the context for the modern accounting profession: audit, accountability and the College of Rasonati in the Venetian Republic (XIII-XVI century). *Accounting and history: a selection of papers presented at the 8th World Congress of Accounting Historians* (pp. 351-384). Madrid: AECA.
- Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, 13, 443-464.
- Zucker, L. G. (Ed.) (1988). *Institutional patterns and organizations: culture and environment*. Cambridge, MA: Ballinger.

- Zucker, L. G. (1991). The role of institutionalization in cultural persistence. In W. W. Powell, & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 83-107). Chicago, IL: University of Chicago Press.
- Zurdo, J. M. C. (1996). *Ensayo histórico sobre contabilidad*. Facsimile of the original version published in Málaga in 1933, with introduction study by Daniel Carrasco Díaz e Francisco González Gomila. Madrid: AECA.

This document was created with Win2PDF available at <http://www.daneprairie.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.