ARTÍCULOS DOCTRINALES / ARTICLES

ACCOUNTING SYSTEM AND PRACTICES AT JERÓNIMOS MONASTERY (PORTUGAL). AN ANALYSIS OF THE BOOK OF EXPENSES AND RECEIPTS AT THE END OF 1833

Leonor Fernandes Ferreira

Nova School of Business and Economics, Universidade Nova de Lisboa E-mail: leonor.ferreira@novasbe.pt - ORCID iD: https://orcid.org/0000-0002-6544-7511

Cátia Martins

Nova School of Business and Economics, Universidade Nova de Lisboa E-mail: catiamartins87@gmail.com - ORCID iD: https://orcid.org/0009-0005-9886-1056

Received in the journal: July 31, 2022

Accepted for publication: May 23, 2025

Cómo citar este artículo/Citation:

Fernandes Ferreira, L., Martins C. (2025). Accounting System and Practices at Jerónimos Monastery (Portugal). An Analysis of the Book of Expenses and Receipts at the End of 1833. *De Computis - Revista Española de Historia de la Contabilidad*, 22 (1), 57 - 108. ISSN: 1886-1881 - doi: http://dx.doi.org/10.26784/issn.1886-1881.22.1.12069

Abstract: This paper aims to present the accounting system and practices of the Monastery of Santa Maria de Belém, best known as Jerónimos Monastery, in Lisbon, Portugal, during its last reporting period (1833). Primary sources of data for this research were the accounting books deposited at Torre do Tombo Library. A detailed analysis was conducted on one key document, Book 14: Book of Expenses and Receipts of the Monastery (1833), offering valuable insights into monastic accounting practices.

The Monastery accounting system is composed of five books, each corresponding to a distinct area of activity: three books of expenses and receipts, from the Monastery, the Farm and the Sacristy; one book of repairs and house improvements and another book of rents, interest, and land tenure. An additional book was prepared specifically for inspection. Beyond religious functions, the activities of the Monastery included agriculture, property rentals, and land leases. The accounting practices show a concern in keeping track of expenses and receipts from all the activities mentioned.

The accounting cycle of the Monastery lasts one year, from October to September, aligned with its seasonal agricultural activities. Unlike modern accounting, the Monastery did not use the double-entry bookkeeping system, nor the accruals concept. Instead, it adopted the charge and discharge system and cash-based accounting.





Summary accounts were prepared by the scribe and approved by the *In Capite* President (or General Abbot) and the deputies, every three or four months. Book 14 was prepared for inspection and proves the importance of, and attention given to the control of the accounting records. An analysis of Book 14, along with browsing the remaining books, showcases a well-established accounting system and underscores the emphasis placed on financial oversight and accountability.

The findings reveal that Jerónimos Monastery maintained a structured and transparent accounting system, which proved to be useful in capturing its economic operations. These records not only facilitated internal financial control but also offer valuable historical insights into monastic accounting practices of the time.

Keywords: monastic accounting, accounting history, Jerónimos Monastery, charge and discharge system, accounting system, accounting practices, Portugal.

Sistemas y prácticas contables en el Monasterio de los Jerónimos (Portugal). Un análisis del libro de gastos e ingresos a fines de 1833

Resumen: Este artículo tiene como objetivo presentar el sistema de contable y las prácticas contables del Monasterio de Santa María de Belém, Lisboa, Portugal, más conocido como el Monasterio de los Jerónimos, en su último período de reporte (1833). Las fuentes primarias de datos para esta investigación fueron los libros de contabilidad depositados en la Biblioteca Torre do Tombo. Se realizó un análisis detallado de un documento clave, el Libro 14: Gastos y recibos del monasterio (1833), que ofrece información valiosa sobre las prácticas contables monásticas.

El sistema de contabilidad del Monasterio se compone de cinco libros, correspondientes cada uno de ellos a un área de actividad distinta: tres libros de gastos y recibos, del Monasterio, de la Granja y de la Sacristía; un libro de reparaciones y mejoras de la casa y otro libro de alquileres, intereses y foros. Se preparó un libro adicional específicamente para su inspección. Más allá de las funciones religiosas, las actividades del Monasterio incluyen la agricultura, el alquiler de propiedades y el arrendamiento de tierras. Las prácticas contables muestran una preocupación por llevar el control de los gastos e ingresos de todas las actividades mencionadas.

El ciclo contable del Monasterio tiene una duración de un año, de octubre a septiembre, alineándose con sus actividades agrícolas estacionales. A diferencia de la contabilidad moderna, el Monasterio no utilizaba el sistema de contabilidad por partida doble ni el concepto de devengo. En lugar de ello, adoptó el sistema de cargos y descargas y la contabilidad basada en la caja.

El escriba preparaba cuentas resumidas y las aprobaba el presidente in capita (o abad general) y los diputados, cada tres o cuatro meses. El Libro 14 fue preparado para inspección y demuestra la importancia y atención prestada al control de los registros contables. Un análisis del Libro 14, junto con la exploración de los libros restantes, muestra un sistema de contabilidad bien establecido y subraya el énfasis puesto en la supervisión financiera y la rendición de cuentas.

Los hallazgos revelan que el Monasterio de los Jerónimos mantuvo un sistema de contabilidad estructurado y transparente, que resultó útil para capturar sus operaciones económicas. Estos registros no sólo facilitaron el control financiero interno, sino que también ofrecen valiosos conocimientos históricos sobre las prácticas contables monásticas de la época.

Palabras clave: contabilidad monástica, historia contable, Monasterio de los Jerónimos, sistema de carga y descarga, sistema contable, prácticas de contabilidad, Portugal.

Copyright: (c) 2025 Leonor Fernandes Ferreira y Cátia Martins. Este es un artículo de acceso abierto distribuido bajo los términos de la licencia Creative Commons Attribution (CC BY-NC-SA 4.0).



1. Introduction

On 5th August 1833, the Commission of Ecclesiastical Reform (*Comissão de Reforma Eclesiástica*) set up by the Government of Dom Pedro, King of Portugal, published four decrees in which the separation of Church and State became officialized. Not only this, but any benefits or political preference to the clergy were declared null and void. In addition, any clergy considered rebellious or traitorous were subject to severe financial and professional penalties. And furthermore, the initiation of novices and furthering religious orders were prohibited.

It could thus be surmised that the above would be the background to any economic activities undertaken and recorded by religious orders in Portugal. The Monastery of Santa Maria de Belém, or *Jerónimos Monastery*¹ (Lisbon), has a considerable amount of accounting books and well-preserved documents kept at the *Torre do Tombo* Library. It is likely that most of them have never been examined for research purposes.

Historical studies of accounting are far too often neglected (Gomes & Rodrigues, 2017). Yet ecclesiastical institutions have long played an important role in the development of accounting and its practices (Faria, 2008), given that in many European countries the Catholic Church owned a considerable amount of property and accumulated great wealth (Hernández, 2008, p. 121), which needed to be administrated and accounted for. Thus, the accounting of the institutions formed by regular clergy who live in community under the rules of an Order and reside in its monasteries, known as monastic accounting, could well be very relevant to accounting history (Cordery, 2015; Maté, Prieto & Santidrián, 2017).

In Portugal, monastic orders, their inhabitants and assets played a vital role in religious, economic, and social life at the time. The Jerónimos Monastery is one of the most iconic buildings in Portugal² and is a symbol of royal power³. It was built during the reign of King D. Manuel I, in the 16th century, near the maritime port of Lisbon from which Portuguese discoverers, such as Vasco da Gama (to India) and Pedro Álvares Cabral (to Brazil) set sail.

This study describes the accounting system and practices of the Jerónimos Monastery in 1833, the year of the state takeover of the monasteries in Portugal. Its purpose is to understand how the system was designed, who the preparers were and which roles they had in the Monastery. This paper contributes to the discussion of a broader question, namely how the accounting system and the accounting practices could reflect the economic activity of an organization. This was done by identifying the extent to which

³<u>https://unescoportugal.mne.gov.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-</u> <u>criatividade/patrimonio-mundial-em-portugal/jeronimos-e-torre-de-belem</u>. accessed on 1st October 2024.



¹ Throughout this paper the Monastery of Santa Maria de Belém or *Mosteiro dos Jerónimos* (Portuguese designations) will appear as 'Jerónimos Monastery'.

² The Jerónimos Monastery is a very good example of Manueline architecture and is the most visited historical site in Portugal. On 13th December 2007, the European Treaty of Lisbon was signed there, laying down the basis for the reform of the European Union.



the accounting records of the Jerónimos Monastery reflect the economic activity of the Monastery, its organizational structure and financial accountability.

The research proceeds as follows: Section 2 reviews previous research on monastic accounting, with a special focus on Portuguese research. Section 3 presents a brief history of the Monastery to provide the context. Section 4 outlines the methodological issues. Section 5 discusses the accounting system and practices of the Jerónimos Monastery, and finally, Section 6 presents the main conclusions of the research, contributions, limitations, and possible future research.

2. Literature Review

At the turn of the last century, there was little interest in accounting history research (Booth, 1993; Carmona, 2004; Carmona & Ezzamel, 2006; Cinquini, Marelli & Tenucci, 2008; Faria, 2008; Hernández-Esteve, 2000, 2008; Carmona, Ezzamel & Gutiérrez, 2004) stressed the lack of academic interest in the study of accounting in religious institutions. According to Hernández-Esteve (2008), the study of monastic accounting continued to receive little attention, despite the wealth of information it could provide on the progress of the economy.

Early research on accounting history focused on the evolution of accounting techniques. However, a view of accounting history as business history emerged, and the effect of accounting in subjects such as organization, management, information, and control of companies started to be studied, linking accounting to economic history (Hernandéz-Esteve, 2000). Carmona, Ezzamel & Gutiérrez (2009) reviewed the literature on accounting's relationship with religion, exploring its influence at both organizational (micro) and societal (macro) levels, the former perspective focusing on accounting within religious institutions.⁴

Rappazzo, Marisca, and Sargiacomo (2024) use a bibliometric approach to analyze 1,044 papers from 2000 to 2023, offering insights into trends in accounting history research. Their study identified eight thematic clusters in the field, one being accounting and religion. Research in this area covers historical analyses across diverse faiths and regions, shedding light on how religious institutions' internal dynamics have impacted broader accounting principles.

Maté et al. (2017) wrote the most comprehensive literature review of monastic accounting in the Christian world, to the best of our knowledge. Their study analyses over fifty monastic institutions located in several European countries, and covers the Middle,

⁴ Published research to date about accounting history and religion have concerned Christian-Judeo, Buddhism and Islam. In Europe, apart from the Iberian Peninsula, several studies on research on monastic accounting were done, in Italy (Barnabè and Ruggiero, 2004; Montrone and Chirieleison, 2009; Leardini and Rossi, 2013; Sibilio and Vannini, 2020) and in England (Dobie, 2008a; 2008b; 2011; 2015) and in other countries. Centorrino, Naciti, and Schifilliti (2024) presented a comparative analysis of archival records of two monasteries, in Spain and Italy, studying how their accounting and managerial practices were influenced by institutional logics and discussing the interplay between spiritual devotion and organizational structure within the two Benedictine institutions





Modern and Contemporary ages. The study highlights the economic, cultural and social importance of accounting in monastic institutions in Europe, from its origins until the expropriations of their property in the 19th century. For each monastic institution, Maté et al. (2017) identify its geographical-temporal context and the Order to which it belongs, as well as the gender of its members, whether nuns or monks. This analysis reveals a diversity in accounting purposes, the role of accounting in the governing norms of the several monastic orders, and how accounting has been a key element for the survival of these institutions over time. There are several papers related to accounting systems and accounting practices of several monastic orders.

In the past two decades, there has been significant development in accounting history research in the Iberian Peninsula. Between 1998 and 2018, there were 721 contributions came from this region on the topic of accounting history, with 73 specifically focusing on ecclesiastical accounting (Prieto & Gutiérrez, 2018). This concentration on ecclesiastical accounting highlights a growing academic interest in the financial and administrative practices of religious institutions, reflecting their historical significance within the broader development of accounting.

In Spain, a majority of papers focus on Benedictine institutions, such as the Monastery of Santo Domingo de Silos (Maté, Prieto & Tua, 2004; Maté et al., 2008; Prieto, Maté & Tua 2006; Maté, Prieto & Santidrián, 2021), and several refer to Cistercian institutions like Santa Maria de Oseira (Rivero, Gallego & Ramos, 2005; Rivero, Gallego, Ramos & Tua, 2005, 2023; Gallego, Rivero & Ramos, 2007). Yet, papers on accounting topics of monasteries belonging to other religious orders are scarce, with very few studies on Jesuits, Franciscans, Templars, Dominicans, Canonicus of Saint Augustin, and Hieronymus.

As regards the Hieronymite Order, the study of the Monastery of Guadalupe by Llopis, Fidalgo and Mendez (2002) deserves to be highlighted in the Iberic Peninsula, which is the region where this monastic order had more influence. Llopis et al. (2002) analyzed the evolution of the accounting system of the Hieronymite monastery as well as the economic and financial activities, accounting regulation and procedures, and bookkeeping systems between 1597 and 1784. The study found that top management functions, with decision-making power, and specific financial tasks such as accounting records, activity center analysis, and control mechanisms were performed under clearly separate structures. Particularly, they focused on the shift from a cash approach to a "livestock sheets approach". The new accounting system was designed with the specific purpose of analyzing the profit by type of livestock (activity), and inventory data, and amount of income and expenses of each stock were recorded. Moreover, when analyzing the accounting records, the monks understood the concept of opportunity costs and the importance of transfer prices to the decision-making process.

As for Portugal at the turn of the last century, research on accounting history was scarce (Faria, 2008). The first doctoral thesis, as opposed to masters', theses on general



De Computis

accounting history were submitted in 2007 and the second one in 2014⁵. However, neither of them focused on monastic accounting.

In recent years, there has been an increasing focus on monastic accounting history by various authors, both in master's dissertations and doctoral theses as well as journal papers. The existing studies on Portuguese monastic accounting predominantly focus on the 18th and 19th centuries, a period with information easily available. The literature on Portuguese monastic accounting primarily encompasses studies of Cistercian and Benedictine monasteries, as is the case in Spain. Appendix 1 provides a summary of the research on the accounting history of Portuguese monastic institutions, acknowledging the existing literature including master and Ph.D. theses, books and book chapters, and journal articles as well.

The following Benedictine monasteries have been studied in Portugal: the Convent of Arouca (Oliveira, 2005; Brandão & Oliveira, 2012), the Monastery of Santa Ana in Viana do Castelo (Araújo, 2010; Araújo & Gomes, 2014; Gomes, Maran & Araújo, 2022), and the Monastery of Alcobaça (Gonçalves da Silva, 1982, 1985; Miranda, 2023).⁶

Gonçalves da Silva (1985) briefly analysed the accounting system and organizational structure of the Monastery of Alcobaça from its creation in the seventeenth century until its extinction in 1834. Oliveira (2005) and Brandão and Oliveira (2012) focus on another Cistercian monastery, Arouca, detailing its accounting system from 1786 to 1825. The research presents a thorough overview of the monastery's economic structure, its accounting books, and administrative and accounting procedures used there.

Araújo (2010), Araújo and Gomes (2014) and Gomes et al. (2022) cover the Monastery of Santa Ana, in Viana do Castelo, in the period 1701 to 1895, emphasizing accountability and the role of accounting as a mechanism to establish power relations in a Benedictine institution. Araújo and Gomes (2014) conclude that accounting practices reinforce the hierarchical control between the abbess and the monastic community and between the abbess and the archbishopric of Braga, her hierarchical superior. Internal control over the community was exercised periodically every month, annually and triennially. The exercise of control was linked to a system of reward and punishments, already found in other Benedictine monasteries. Furthermore, Gomes et al. (2022) highlighted the role of religious women in accounting education.

Gomes (2011) examined the accounting records of the Monastery of San Jorge de Coimbra, from 1257 to 1259, a period that has received relatively little scholarly attention. His study explores various types of income generated by the monastery's properties and

⁶ Additionally, while not focused on monasteries, Carvalho (2019) has researched accounting practices within the Diocese of Santarém, which is relevant to the area covered by the Monastery of Alcobaça.



⁵ Gomes (2007) refers to accounting change in central government: the institutionalization of double entry bookkeeping at the Portuguese Royal Treasury (1761-1777). See <u>https://hdl.handle.net/1822/6754</u>. Oliveira (2014) refers to the case of the Companhia Geral da Agricultura of the Alto Douro vineyards (1756-1826). See <u>The Companhia Geral da Agricultura das Vinhas do Alto Douro (hereafter CGAVAD) was incorporated in 1756 (up.pt)</u>.

activities, as well as the contracts associated with them. Gomes (2011) emphasizes the significance of accounting records in the exercise of authority within the Augustinian Order, ensuring a clear delineation between the property rights of the monastic community and those reserved for the prelate. The monks of São Jorge were canonical regulars of Saint Augustine, whose rule is also followed by the Hieronymite monasteries, including the Jerónimos Monastery, which is within the scope of this paper.

There is a vast amount of existing research on the Jerónimos Monastery. However, existing research is mostly about the history of Portugal, the monastery architecture and art.⁷ As far as is known, no study on accounting system and accounting practices had been conducted about the Monastery until the master thesis of Martins (2010), the starting point for this research. This paper expands on Martins's research, which added the Jerónimos Monastery to the existing literature on monastic accounting history, by providing a more detailed description, analysis and interpretation of the accounting system and practices of the Jerónimos Monastery in its final years.

3. Brief History of the Monastery and the Hieronymite Order

The Hieronymite Order is a monastic institution with a contemplative intention, which in silence, solitude, prayer, and penitence brings monks closer to God. The Hieronymite Order was founded in the fourteenth century, following the footsteps of Saint Hieronymus who was known as a pedagogue, teaching and setting up schools and colleges. Many educators of renown in former times had come from the Hieronymite Order (e.g. Fathers Heitor Pinto and Miguel Soares).

The abbot Castro e Sousa (1837, pp. 7-8) refers to a hermitage dedicated to Saint Mary of Belém having been built in the current location of the Jerónimos Monastery, on the outskirts of Lisbon, by order of Prince Henry, first Duke of Viseu and Grandmaster of the Order of Christ. The hermitage and its surrounding territory (land and orchards) were thus granted to monks belonging to the Order of Christ.

In 1496, King Manuel I requested permission from the Holy See to establish a large monastery on the site of the old hermitage. Authorized by Pope Alexander VI through the *Eximiae devotionis* bull⁸, the king granted the site to the Hieronymite monks in 1498 to build a monastery with space for 100 monks and to continue the Order's services for sailors previously provided by the Order of Christ. Funded by the Crown, in part through the pepper tax, a levy on profits from the spice trade with Goa (Portuguese India), actual construction began in 1502 and lasted almost one century.⁹ With Vasco da Gama's successful voyage to India, the King decided that the Monastery would commemorate this feat and serve as a place of spiritual support for sailors. In 1518, King Manuel I

⁹ Idem.



⁷ For example, see Silva, Boytaca and Castilho (1925), a monograph on the Jerónimos Monastery with detailed descriptions and hidden secrets within its architecture.

⁸ <u>https://digitarq.arquivos.pt/details?id=4381009</u>, accessed on 9th September 2024.

De Computis

decided to privilege the Monastery with a lavish construction and opulence in line with the principles of royal propaganda and the glorification of a kingdom that was intimately associated with his person (Pereira, 2011).

The main residence of this order in Portugal was the Jerónimos Monastery, given that in 1517, by decree of Pope Leo X, the Monastery became the headquarters of the Order of Saint Jerome (hence the name *Monastery of Jerónimos*). The Hieronymites lived there for almost four centuries up to the year of 1833, at which point there were fourteen resident monks. There were, moreover, several Hieronymite convents established in Portugal, such as the convents in Penha Longa (Sintra) and Alenquer (Silva *et al.*, 1925, p. 8).

In the case of the organizational structure of the Monastery, in 1519 the Holy Pope named the Monastery as the seat of the *Provincial* of the Congregation in Portugal. Every two years a new *provincial* priest was to be elected. The election being made by four monks appointed by the Board members of Jerónimos Monastery, with the monks' only task being to elect the *provincial*. The Board was formed by the *provincial* and deputies (Jacinto de S. Miguel, 1901).

The monks followed the Rule of Saint Augustine: they were dedicated to prayer, meditation, and community service. According to the official website of the Hieronymite Order,¹⁰ the monks' daily life is structured around both work and contemplation to sustain their needs and maintain inner balance. The monks' main activity was to pray for the soul of the King and the whole royal family (Jacinto de S. Miguel, 1901). Mornings are dedicated to practical tasks, while afternoons were reserved to contemplation, prayer, reading, and study, with the Liturgy of the Hours punctuating the day.

Additionally, the Jerónimos Monastery had its own economic activities, agriculture and trade being its main activities. According to the description given by the monk Sousa (1837), the Monastery was surrounded by a large fence, where there was a great dovecote, lime kilns and the living quarters of the person responsible for everything enclosed within the fenced area. Sousa also notes that beyond the fence lay an area of wild trees and a woodland.¹¹ Another monk, Jacinto de S. Miguel (1901) writes that inside the fence there was more than one orchard where a wide variety of fruits was collected, as well as several water resources, a farm and workshops to support the agricultural activities. There were a great number of olive trees outside the fence, besides the wood previously mentioned. According to Jacinto de S. Miguel, these agricultural activities were the economic basis of the entire community (Jacinto de S. Miguel, 1901). Silva et al. (1925) mention that some parts of the Monastery were conceived to shelter pilgrims and wayfarers, but over time these facilities came to be used as warehouses, generating income (rents) for the Monastery.

¹¹ The wood was called 'Cunhoso' and it was known as the King's hunting grounds.



¹⁰ See <u>https://monjesjeronimos.es/</u>

Moreover, the Monastery served as a place for charity, offering food and shelter to the poor. The monks were also responsible for aiding sailors and navigators embarking from Lisbon (Belém). The Monastery was also used as a hospital for the English troops during the French invasions, between 1807 and 1811.

The connection between Portugal and the Hieronymite Monastery of Guadalupe held considerable religious and political significance, symbolizing the unity and shared devotional practices between the Iberian crowns (Mendes, 1994). Established by King Afonso V^{12} and strengthened by other monarchs, this link granted Guadalupe special privileges, such as customs exemptions (Mendes, 1994). The relationship peaked during the reign of Manuel I, solidifying Guadalupe's role as a religious epicenter for both crowns (Mendes, 1994, pp. 73-95). However, as Portugal's focus shifted toward domestic Marian shrines, the central role of transnational pilgrimage sites like Guadalupe was diminished.

The religious orders were undergoing governmental attacks by the second half of the 18th century. And later, in the nineteenth century admittance to the religious orders was not possible anymore and the extinction of masculine orders followed (Serrão, 1996). By the mid-19th century, the Hieronymites had largely declined as an influential religious order, with most of their properties absorbed into the secular economy. The Hieronymite Order was suppressed in Portugal in 1834 and in the whole Iberian Peninsula in 1835, along with all the other monastic orders. All the Monastery's properties and other assets were expropriated. This was the reason why the remaining fourteen monks were sent to other places.¹³ Cash flow problems, the French invasions, civil war, ecclesiastical reforms and the dissolution of religious orders in 1834 caused iconic buildings, such as the Jerónimos Monastery, to being neglected and/ or destructed (Rodrigues, 2017).

The year 1833 was special in the life of the Monastery and its economy. In 1834, the Law for the Dissolution of Religious Orders was enacted, formally initiating the expulsion from the Monastery and all male orders, convents, and monasteries, and the nationalisation of their assets. Although formally a political decision, within the context of Portugal's liberal consolidation, the dissolution was influenced by other factors, such as economic and social transformations and the longstanding conflict between Liberalism and the Catholic Church. However, it also stemmed from economic and social transformations, and a shift towards secularism that marked a profound transition in Portuguese history.

¹³ Joaquim António de Aguiar, who enacted the law of extinction and expropriation started to be known by the nickname of "monk killer" (in Portuguese, *matafrades*).



¹² King Afonso V of Portugal reigned from 1438 until his death in 1481. He travelled to Guadalupe with devotional intentions and his reign marked the first sustained link between the Portuguese Crown and the Monastery of Guadalupe. He granted the Monastery exemptions from customs duties on all fish, salt, and other products sent from Portugal for the Monastery's daily consumption (Mendes, 1994).

Since then, the Monastery has served as part of a charity institution that is dedicated to the care and education of orphans and the rehabilitation of the poor and disadvantaged (Royal Casa Pia Institution).

The Jerónimos Monastery was recognized as a "World Heritage Site" by UNESCO in 1983.¹⁴ As already mentioned, it is currently one of the most visited landmarks in Portugal, attracting hundreds of thousands of visitors each year from around the world to admire its architectural beauty and learn about its history.

4. Methodology

4.1. Research Questions

The aim of this study is to describe and discuss the accounting system and practices of the Jerónimos Monastery in 1833, a period marked by significant socio-political changes and close to the expulsion of the monastic order dwelling therein.

To analyse the accounting system and accounting practices of the Jerónimos Monastery, this study first outlines key accounting principles relevant to historical recordkeeping, focusing on bookkeeping techniques, accountability, and financial reporting. Understanding the accounting systems of religious institutions during this era offers valuable insights into historical accounting practices and their role in governance and control.

There are several perspectives on accounting systems that highlight different aspects of what accounting can represent or achieve. This paper adopts a traditional view, which focuses on record-keeping and accountability. Accounting is viewed as a system for record-keeping and stewardship, concerned with accurately recording and reporting past financial transactions. This perspective emphasizes accountability and control, with the monks providing regular reports. The components of an accounting system are (i) a list of all accounts used to classify financial transactions; (ii) the journal entries and ledgers, as systems for recording and summarizing transactions; (iii) internal control procedures, like audit, segregation of duties, and approval processes. (iv) the output of the accounting system, such as a balance sheet and income statement.

Accounting systems involve specifying what type of information goes through the bookkeeping process, when exactly these records are created and how they relate to a certain period in the past (accounting period); who prepares those records, who approves and verifies the matching of records to reality (accountability process) and who uses such information to make decisions.

Regarding periodicity, two different concepts matter: the accounting period and the accounting cycle. The former is related to the period for which an operating statement is normally prepared. (e.g.: a month, a quarter, or a semester). The accounting cycle relates

¹⁴ See <u>http://whc.unesco.org/en/list/263/multiple=1&unique_number=1630</u> accessed on 10th January 2025.



Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International



to the process and duration of transaction recording and, at the end of the accounting period, when balances are made and financial statements are prepared, made available and disseminated to users.

Typically, organizations recorded transactions in specific formats, as happens with accounting nowadays. Currently bookkeeping follows the double-entry system, where debit entries and credit entries must balance. However, it has not always been like this. An alternative format used was the charge-and-discharge system, in which expenses and receipts were recorded. The English Exchequer system was the first known medieval charge-and-discharge system (Jones, 2009, p. 259). In England, this accounting system remained in use until the nineteenth century (Jones, 2009). This accounting system was widely used for centuries, particularly in public administration and religious institutions (Librer & Villaluenga, 2023). Libber & Villaluenga (2023) authored a paper analyzing charge-and-discharge accounting from the Roman Empire to the nineteenth century. Their study extends across various institutions, including government, aristocracy, the church, and businesses, as well as multiple countries. Bookkeeping can be done on a cash basis or accrual-based accounting. The economic effect of transactions can be recognized when the events occur independently of when the payment occurs (accrual basis of accounting) or the economic effect of transactions are recognized when the money is collected, or the payment is done (cash basis).

This research analyzes the accounting system and accounting practices of the Jerónimos Monastery. Given its components, which frame this study, as described above, three research questions were set with emphasis on data collection to conduct an in-depth analysis of key aspects: (i) the design of the Monastery's accounting system, (ii) its accountability mechanisms, and (iii) the usefulness of the accounting records for financial analysis:

RQ 1: What accountability mechanisms were in place in the Jerónimos Monastery?

RQ 2: How was the accounting system designed for in the Monastery?

RQ 3: Could this accounting system support financial analysis?

To explore these questions, the study is structured into several levels of analysis, examined as follows:

Accountability mechanisms of the Monastery's accounting system

- Organizational structure, roles, and responsibilities;
- Accounting and control procedures;
- Opening and closing inscriptions from the Book of Expenses and Receipts.

Design of the Monastery's accounting system

- Index of the Book of Expenses and Receipts: account titles and contents;
- Accounting cycle and accounting period;
- Bookkeeping technique: the charge and discharge system.

Use of the Monastery's accounting records for economic and financial analysis



De Computis

- Summary of the Monastery activities;
- Analysis of expenses;
- Analysis of receipts;
- Analysis of cash flow.

Carnegie and Napier (1996) argue that accounting history requires a robust archival base to maintain direction. However, they emphasize that the definition and interpretation of archives should remain flexible.

Given the debate between Traditional Accounting History (TAH) and New Accounting History (NAH) as possible research methods in accounting history (Donoso, 2005; Carmona et al., 2004; Gomes & Rodrigues, 2017), this study is better fitted to the traditional approach, because it is mainly a descriptive case study. Moreover, the background of this research does not deal with a specific organizational theory or social science, which is typical of NAH. The TAH and NAH can be briefly defined as narrative and interpretative perspectives, respectively. The narrative perspective tries to identify the facts objectively and without an analytic view, whereas the interpretative perspective uses secondary sources and seeks to identify and classify all the information systematically, looking at possible explanations and interpretations of the object in study, like in a social science (Donoso, 2005).

Despite the differences between the types of research, Hernández-Esteve (2008) states that one complements the other, and so a description of the facts is not sufficient without the corresponding interpretation. According to him, "accounting historians should not be satisfied with limiting themselves to the study of formal and technical aspects of account books, such as recording techniques and procedures. (...) Accounting historians have to go far beyond this: they have to describe, analyze and interpret the operations recorded in the accounting documents, placing their studies in a relevant context" (Hernández-Esteve, 2008, p. 132).

4.2. Data Collection

Data collection started with the collation of the accounting books and documents from the Jerónimos Monastery deposited in the *Arquivo Nacional da Torre do Tombo* (ANTT).¹⁵ Appendix 2 discloses the full list of the books that are in the *Arquivo Nacional da Torre do Tombo* (ANTT) in Lisbon.



¹⁵ This research was done under restrictive conditions. It is worth noting that consulting and reading these records had to follow specific rules due to the age of the books, and their rarity. Specific procedures had to be followed at *Torre do Tombo Library*, such as having a reader card, limited consultation, on site only and under a restricted time schedule. Sometimes even the use of gloves in specific areas of the library, depending on the state of conservation of the books requested. Understandably the books cannot be taken out of Torre de Tombo premises.

The documents available cover the period from 1509 to 1833, which is the year of the proscription of the Jerónimos Monastery and provide the raw data available for research. The available books and the seven batches of various documents were grouped according to the type of information disclosed and their location. They are not only accounting books, but also documents related to non-accounting information, such as judicial orders and official letters of the Monastery and one packet of documents related to the extinction of the Monastery (the latter belongs to the Archive of the Financial Ministry).

Despite being originally thought there were approximately 90 books on the Jerónimos Monastery, including seven *maços* (the latter are in part not catalogued), after collation it was found that only 38 books were accounting books exclusively related to the Monastery. By the time we started this research, of the remaining books, and *maços* included, a few were related to other Hieronymite monasteries in Portugal, while others were simply not or wrongly catalogued, as they had no relation to the Hieronymite order in any way.

The accounting books of the Jerónimos Monastery deposited in the *Torre do Tombo* Library can be grouped in five categories as shown in Table 1.

Type of Books	Number of Books	Period Covered
Expenses and Receipts - Monastery	25	1783-1834
Expenses and Receipts - Farm	5	1783-1833
Expenses and Receipts - Sacristy	1	1813-1833
Repairs and Improvements - Houses	1	1797-1833
Rents, Interest and Land Leasing (foros)	6	1549-1833
TOTAL	38	

Table 1. Accounting Books of the Jerónimos Monastery

Accounting books from the mid-sixteenth century to the early eighteenth were excluded from the analysis because they are illegible due to bleached ink. Several researchers (e.g., Rivero et al. ,2005; Maté et al., 2004; Llopis et al., 2002) have analyzed data from the late eighteenth and early nineteenth centuries. In order to allow comparison with the findings of previous studies, and although records from the last decade of the Monastery's existence were looked at, this paper municiously analyses the year 1833, the last period of reporting of the Jerónimos Monastery. Monastic orders were proscribed in Portugal in 1834, but the process had started in 1833.

All the books are in manuscript and written in archaic Portuguese. Besides, the rules to protect such documents mean the imposition of short consultation periods, very few hours for books to be borrowed from the Torre do Tombo files, and a maximum of two books can be referenced per day. Therefore, only one of the books was transcripted and analyzed, the book from the year 1833 titled *Livro da Despeza e Receita do Mosteiro* (Book of Expense and Receipt of the Monastery. This book can be found in the *Fundo* do *Mosteiro de Santa Maria de Belém*, numbered Book 14).



4.3. The Accounting Books of the Monastery

The accounting system of the Jerónimos Monastery was organised in five books, each corresponding to a distinct area of activity: three books of expenses and receipts, from the Monastery, the Farm and the Sacristy; one book of Repairs and House Improvements (Convenant's House) and another book of Rents, Interest, and Land Tenure. An additional book was prepared specifically for inspection. Beyond religious functions, the activities of the Monastery include agriculture, property rentals, and land leases. The accounting practices show a concern in keeping track of expenses and receipts from all the activities mentioned.

The Book of Expenses and Receipts of the Monastery contains information on the daily life of the Monastery, with the information on the expenses more detailed than receipts and taking up most of the book.

The Book of Expenses and Receipts of the Farm records events and transactions related to farm administration, such as the number of seeds bought, or the number of fruits sold. Records in this type of book disclose the receipts in a more detailed manner than the Book of Expenses and Receipts of the Monastery book.

The Book of Expenses and Receipts of the Sacristy includes expenses and receipts related to the administration of the Chapel of Santa Maria de Belém. While disclosures of receipts are scarce, details concerning expenses are shown (e.g., the amount of wax bought, and the amounts paid to the priest), but the source of receipts is not disclosed.

The Book of Repairs and Improvements gives information on payments, items fixed or improved and the building to which the expense was assigned. Works in progress are also specified.

Finally, the Book of Rent, Interest and Land Tenure¹⁶ contains data about rents received from permits, land, houses, or custom letters, as well as the amount to be received, debtor identification and the time when the payment is due. Similar information is given on land tenures and interest due or gained.

The five books were copied into another book which was specifically prepared for the inspection team on the date of inspection (discussed later in this report), every four years.

5. Case Narrative

This section provides an analysis based on comparison between the findings in the Jerónimos Monastery and those in previous research reviewed in section 2, namely the studies on the Monastery of Arouca (Oliveira, 2005; Brandão & Oliveira, 2012) and the

¹⁶ *Foro*, which is the term used in the original book of accounts, is the actual lifelong amount to be paid by the tenant annually, either in money or in kind annually under the land tenure agreement (*aforamento*, *enfiteuse* ou *emprazameto*). The *foro* amount was defined in terms of a fraction of the total produce of the land. (Alves Caetano, 2020, p.24).





Monastery of Guadalupe (Llopis et al., 2002). These two studies were chosen due to the sharing of characteristics between the Jerónimos and Arouca, both being Portuguese and between Jerónimo's and Guadalupe, both belonging to the Hieronymites Order.

5.1. Accountability Mechanisms at the Monastery

Organizational structure, roles, and responsibilities

The accounting records of the Jerónimos Monastery from 1833 reflect a hierarchy organizational structure with a clear and division of labour.

Through an accountability lens, Llibrer and Villaluenga (2023) analyze charge-anddischarge accounting system and suggest that the charge-and-discharge system is a "multivariable and multicausal accountability mechanism" (Llibrer & Villaluenga, 2023, p. 21), particularly relevant in delegated management. According to these authors "the charge-and-discharge system is affected by the non-mercantile mentality of the entities that used it. Hierarchical structures are a paradigm of the master-servant (principal-agent) relationship where justice between the parties materialised in accountability, which prevented conflicts." (Llibrer & Villaluenga, 2023, p. 21). The absence of conflicts preserved social order, ensured institutional sustainability, and reinforced organizational culture by fostering economic management skills among individuals.

The accounting records of the Monastery of Guadalupe were organized into activity centres (Llopis et al., 2002), whereas those of the Monastery of Arouca were organized into responsibility centres (Oliveira, 2005; Brandão & Oliveira, 2012). In the case of the Jerónimos Monastery, the records frequently mention individuals (e.g., priests and workers) responsible for various accounts and expenses, suggesting an emphasis on accountability. Specific monks managed religious services, agricultural tasks, property maintenance, and financial matters, with their responsibilities and expenditures meticulously recorded.

The Provincial ensured that the rules of the Order were followed and could appoint or transfer priors of individual monasteries. The Provincial was responsible for spiritual leadership, discipline of monasteries, and the administration of the Order's affairs within the province.

The term *in Capite* denotes the role of a superior responsible person within a religious community, meaning that the Monastery was autonomous in governance and directly under the authority of the Superior General of the Order or even under the Pope, rather than being under a Provincial. Specifically, in the context of the Jerónimos Monastery or the Order of Saint Jerome, who held ultimate authority over the monks, both in terms of administrative and spiritual guidance.¹⁷

¹⁷ In 1833, the President in Capite of the Jerónimos Monastery was Frei Joaquim José Pereira dos Santos.



De Computis

The Prior was the priest responsible for the financial administration of the Monastery, with the Scribe assisting in record-keeping.¹⁸ His financial oversight extended to receipts from donations, rents, and sales, as well as expenditures on goods and services. According to the hierarchical chain of responsibility, the monks reported to the Prior, who, in turn, was accountable to higher authorities.

Within the Catholic Church, inspections could be conducted by representatives of the order or local ecclesiastical authorities. Religious orders often required Priors to submit regular financial reports to higher-ranking officials, such as the Provincial. Financial records were kept in specific books, which were to be preserved, particularly for audits or disputes.

There is no evidence that the Jerónimos Monastery was accountable to Spain, Instead, it was subordinated to the Order of Saint Jerome and under the protection of the Portuguese Crown. On one hand, the Monastery was subordinated to the Order of Saint Jerome, which had its own hierarchical structure. The Prior was responsible for internal administration, but he was also accountable to the higher authority of the order, which in the case was the General Chapter of the order. The Prior of the Jerónimos Monastery attends the General Chapters to discuss the monastic policies. On the other hand, the Monastery was under the protection of the Portuguese Crown. The Portuguese King often provided financial support to the Monastery, given that it was a symbol of the empire's power and wealth and served as a place of prayer for sailors.¹⁹

Accounting and control procedures

The accounting process at the Jerónimos Monastery was structured in three primary phases: preparation of accounting records, approval of accounts, and control of accounts. Figure 1 illustrates this process, detailing the roles of people involved and its frequency, as recorded in Book 14: Book of Expenses and Receipts of the Monastery.

¹⁹ The *Provedor* was a lay administrator, not a religious superior, responsible for managing the monastery's finances, particularly after secularization. Following the secularization of the Jerónimos Monastery, the *Provedor* took charge of its finances and charitable functions, while its religious hierarchy was dissolved.



¹⁸ At the time, the Prior of the Jerónimos Monastery was Frei Francisco de Jesus Mario and the Scribe was Frei Manoel do Bom Jesus Costa.



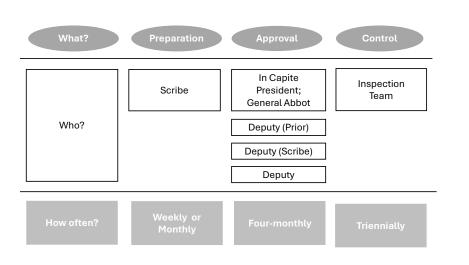


Figure 1. Accounting and Control Procedures in the Jerónimos Monastery

The Scribe (*escrivão*) played a central role in record-keeping. He was primarily responsible for record-keeping, in contrast to the Guadalupe Monastery, where the Steward and Treasurer managed accounts (Llopis et al., 2002), and the Arouca Monastery, where this duty fell to the Steward (Oliveira, 2005; Brandão & Oliveira, 2012). At the time, a monk named Costa served as the Scribe, whose role included recording, certifying each book with his signature, taking an oath to verify accuracy as per orders, and signing each page.

The Monastery's accounts were approved every four months by a panel including the *In Capite* President, the Abbot, deputies (usually three, one of whom was the Prior and another was the Scribe), as recorded in the analyzed books²⁰. The approval team rotated every three to four years.²¹ For instance, Book 14: Book of Expenses and Receipts of the Monastery indicates that accounts from September to December 1833 were reviewed and approved by December of that year.

Controlling expenditures was possible as expenditures were recorded in detail, particularly those related to Monastery maintenance, such as provisions like food, repairs, materials purchases, and salaries. Expenses related to charity, such as the Monastery's obligations to aid the poor and pilgrims, were also recorded along with religious worship,

²¹ The candidates were usually nominated by the monks attending the Chapter. It is told that the monks used beans to vote, ensuring the secrecy of the process. Hence, the popular expression "*favas contadas*", which currently means a foregone conclusion, often because the result is obvious from the start.



²⁰ In the case of Book 14, the inspection team was composed of: the President *in Capite*, Frei Joaquim José Pereira dos Santos and three deputies: Deputy (Prior) Frei Francisco de Jesus Marii, Deputy (Scribe) Frei Manoel do Bom Jesus Costa, and Deputy Frei Fillipe Nery da Conceição.

De Computis

including the purchase of liturgical items, church maintenance, and expenses associated with religious celebrations.

The presence of an inspection book suggests that the records were reviewed by a superior authority, although there is no evidence of the rules on practice. It is likely that the accounting records were analysed by an inspection team, which would be different from the approval team. In the case of the date of inspection, Book 14 makes it clear when the book was written, but not when the inspection took place. This accounting book notes the beginning of record preparation on September 3, 1833, yet does not specify inspection dates. In contrast, the Arouca Monastery enforced strict disclosure rules, and the accounting records were reviewed by the Congregation of Alcobaça. External visits were programmed as well (Oliveira (2005); Brandão & Oliveira, 2012).

In the 19th century, these practices reflect the monasteries' economic and spiritual role at the time, with detailed records, control of income and expenses, and reporting to superiors. However, the 1834 decree dissolving religious orders brought significant changes, such as the confiscation of assets and modifications to accounting rules. After 1834, financial records were no longer maintained under the religious order's internal norms but instead adapted to the State's administrative recording system.

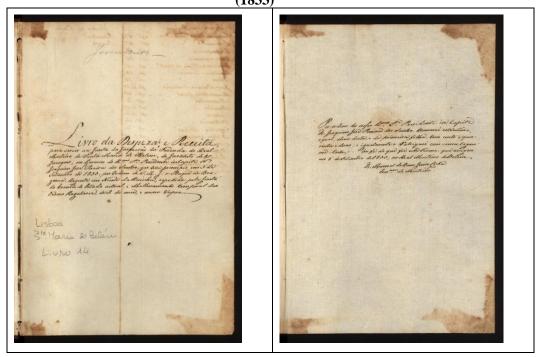
Opening and closing inscriptions from Book of Expenses and Receipts of 1833

All the books include both opening and closing explanatory notes. The opening and closing inscriptions of this Book of expenses and receipts of the Monastery in the year 1833 are shown in Figure 2 and copied below.





Figure 2. Opening and Closing Inscriptions of Book 14: Inspection Book of Expenses and Receipts of the Jerónimos Monastery (1833)



Source: ANTT, Livro de Receitas e Despesas, PT/TT/MSMB/L14, ANTT (1833).

These inscriptions identify the subject of the book, which was meant for a specific inspection process regarding the financial affairs of the Jerónimos Monastery (the "*Royal Monastery of Santa Maria de Belém*").

The opening inscription of Book 14: Book of Expenses and Receipts says:²²

"Book of Expenses and Receipts, to serve in the Financial Inspectorate of the Royal Monastery of Santa Maria de Belem, of the Institute of Saint Jeronymo, during the Administration of the Most Reverend Father President in Capite. Joaquim Joze Pereira dos Santos, which was commenced on 3rd September 1833, by the Order of S.M. J. the Duke of Bragança, on behalf of the Queen, by the Auditory Council of the (then) current regime, and to materially improve the Monastic Orders, on the 2nd of the month and year above mentioned." (ANTT, Book 14, Mosteiro dos Jerónimos, 1833)

²² The original text in Portuguese was translated into English. It is as follows: "*"Livro da Despeza e Receita, para servir na Junta da Inspecção da Fazenda do Real Mosteiro de Santa Maria de Belem, do Instituto de S. Jeronymo, no Governo do Rmo. Pe. Presidente incapite Fr. Joaquim Joze Pereira dos Santos, que teve principio em 3 de Setembro de 1833, por Ordem de S.M. J. o Duque de Bragança, regente em Nome da Rainha, expeditam pela Junta do Exame do Estado actual, e Melhoramento temporal das Ordens Regulares, de 2 do mez, e anno Supra" (ANTT, Book 14, Mosteiro dos Jerónimos, 1833).*



De Computis

The opening sentence is a declaration that officially marks the purpose and authority of the document. It refers to the monastery whose finances are being audited (*Royal Monastery of Santa Maria de Belem*) and specifies that it is part of a broader religious institute (*the Institute of Saint Jeronymo*, the monastic Order). It also states that the inspection took place during the governance of *Father Joaquim Joze Pereira dos Santos* who held the title of President *in Capite* and oversees the Monastery.

Furthermore, this sentence points out that the inspection was ordered by *His Majesty the Duke of Braganza*, thus indicating royal authority over the Monastery's affairs and tying the Monastery's financial audit directly to the state. In fact, in early 19th century, religious orders in Europe were under increasing scrutiny by both church authorities and secular governments, and the presence of royal orders like this reflects the trend of reforming monastic institutions, where government sought to regulate or suppress monastic orders in the wake of political changes such as those brought about by the Napoleonic Wars and the subsequent liberal revolutions in Spain and Portugal.

The closing inscription of Book 14: Book of Expenses and Receipts is the following: 23

"By the order of our very Reverend Father President in Capite Fr. Joaquim Joze Pereira dos Santos, I have numbered this book which, apart from this, and first page, has one hundred and forty-two pages, and which I have also signed using my surname Costa. As faithful proof of what I have done, I signed on the 6th of September of 1833 in the Royal Monastery of Belem, Father XXX. Monastery Scribe." (ANTT, Book 14, Mosteiro dos Jerónimos, 1833)

The closing sentence reinforces that the inspection process was carried out under the authority of the President *in Capite* of the Monastery, whose orders were pivotal to both the start and the conclusion of this audit.

Both the opening and closing sentences refer to the President *in Capite* of the Monastery, whose authority frames the entire inspection process, from the book's initiation to its conclusion. This reflects a structured and hierarchical organization with the specific individuals entrusted with the governance of the Monastery's financial affairs, the monks who ordered the book (the President *in Capite*) and whomsoever posted the transactions being duly identified. Moreover, in both cases the formal procedures followed during this inspection are emphasised and a balance is shown between external authority and internal governance. While the opening sentence refers to the inspection being conducted by royal order (by the Duke of Braganza), suggesting state oversight, the closing sentence focuses on monastic validation, where the scribe ensures the integrity of the document by numbering the pages and signing it. The dates (starting on *September*)

²³ The original text in Portuguese was translated into English. It is as follows: "Por ordens do nosso Rmo. Pe. Presidente in Capite Fr. Joaquim Joze Pereira dos Santos, mumerei este Livro, o qual, alem desta, e da primeira folha, tem cento e quarenta e duas; e igualmente o rubriquei com o meu cognome = Costa=. Em fé do que fis este Termo, que assigno aos 6 de Setembro de 1833, no Real Mosteiro de Belem. Fr. Manoel do Bom Jesus Costa. Escr.am do Mosteiro." (ANTT, Book 14, Mosteiro dos Jerónimos, 1833).



Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International



3, 1833, and ending on *September 6*, 1833) might reflect the urgency of the inspection or the efficiency of the auditing procedures.

The fact that the book has been numbered by the scribe, containing 142 pages, excluding the first and the last page is an important detail for ensuring the integrity and completeness of the records, preventing pages from being added or removed after the audit. Adding his surname as a signature, the scribe *Fr. Manoel do Bom Jesus Costa*, serves as an additional measure of accountability, ensuring that the document is finalized and properly signed by the monk in charge.

5.2. Accounting System of the Monastery

Index of the book of expenses and receipts

Table 2 introduces the Index of the Book of Expenses and Receipts of the Monastery. This book contains information on the daily life of the Monastery spreading over 142 pages. It reflects the administrative complexity of monastic life, and the extensive records kept.

Index of Expenses		Index of Receipts	
Weeks; Written Debts	affl. 1. 2.	Palm Farm	affl. 22.
Deliveries	affl. 6.	Orchards	affl. ia.
Infirmary	affl. 11.		
Extraordinary	affl. 14.		
Expenses with "Priest Outside the Monastery"	affl. 16.		
Refectory and Kitchen	affl. 17.		
Works and Repairs	affl. 18.		
Interest, Tithes, Instalments	affl. ia. V°		
General Procurator's Office	affl. 19.		
Lawsuits	affl. ia.		
Claims	affl. ia. V°		
Salaries	affl. ia. ia.		
Vestments	affl. 20.		
Chapels and Masses	affl. ia.		
Overdue Debts	affl. ia. V°		
Servants' Rations	affl. ia. ia.		
Lodging	affl. 21.		
Debates	affl. ia.		
Orchards; Passive Debts	affl. ia.		
Balance of Accounts	affl. 23.		

Table 2. Index of Book of Expenses and Receipts of the Jerónimos Monastery (September to December 1833)

Source: Livro de Receitas e Despesas, PT/TT/MSMB/L14, ANTT (1833).

There is a wider variety in terms of expenses than in terms of income types. The expenses cover a broad range of operational costs, from food and clothing to more





complex matters like lawsuits. The income sections show that the Monastery operations often relied on their own land and agricultural production, like orchards, to support themselves financially.

Expenses (*Despezas*) are itemized under distinct categories, which helps in understanding the nature of the expenditures. The records include detailed entries for various expenses, salaries, and debts. The source of receipts (*Receitas*) of the Monastery were the orchards (*Pomares*) and the Palm grove or the farm (*Palmeira*).

Table 3 provides a brief description of each expense account (*Despeza*) of the Monastery. It is a window into the operations of the Jerónimos Monastery in a time where the influence of the Church and its monastic orders were being drastically reduced.





Title of Account	Content of Account
Weeks (Semanas)	• Expenses tracked on a weekly basis, and recorded debts, possibly obligations that the Monastery had to fulfil.
Deliveries (Provisoes)	• Purchases or allocations of provisions needed for the monks' daily life, (v.g., food and materials for the upkeep of the Monastery).
Infirmary (Enfermaria)	• Expenses related to medical care and other health services for monks residents or guests at the Monastery (e.g., chicken, a food typically given to patients in Portugal).
Extraordinary (Extraordinario)	• Non-regular expenses, such as cleaning a warehouse or gifts to graduated monks, lawyers and magistrates, expenses of the President and the cost of Book 14.
Priests Outside the Monastery (Padres Fora do Mosteiro)	• Expenses related to priests associated with the Monastery, monks currently residing within the Monastery and those who have moved.
Refectory and Kitchen (Refeitorio e Cozinha)	• Expenses with feeding the monastic community, such as the acquisition of food supplies, kitchen maintenance, and staffing.
Works and Repairs (Obras)	• Expenses with ongoing maintenance or repair of the Monastery's building (v.g, House of the Moneychanger (<i>Caza do Cambista</i>).
Interests, Tithes and Instalments (Juros, Décimas e Prestações)	• Financial obligations to the state, church, or other external authorities such as tithes ²⁴ , interest paid to the crown on loans owed to the Monastery, and principal reimbursements.
General Attorney's Office (Procudaria Geral)	• Expense related to the management of the Monastery's business, representation of the Monastery and or ongoing legal challenges.
Lawsuits (Demandas)	• Expenses related to disputes or claims the Monastery addresses connected to judgement and litigation with priests.
Claims (Partidas)	• Expenses with legal experts (v.g., lawyers) related to ongoing legal work or representation provided by the individuals to the Monastery.
Chapels and Masses (Capelas e Missas)	• Expenses with the chapels' maintenance and celebration of masses (v.g., stipend for priests, liturgical materials, and chapels repairing).
Vestments (Vestiarias)	• Expenses related to clothing and religious garments for the monks both everyday wear and ceremonial vestments.
Rations to the Servants (Rações aos Criados)	• Expenses with food provision to servants who assisted the monks in daily activities.
Lodging (Hospedaria)	• Expenses incurred in providing hospitality to guests, travellers, or visiting clergy, shelters of pilgrims and visitors.
Orchards (Pomares)	• Expenses related to management and maintenance of the Monastery's orchards, which were a source of income and sustenance for the community.
Overdue Debts (Dívidas Atrazadas)	• Expense to be paid, mainly salaries of the priests and other professional of the Monastery.

Table 3. Titles and Content of the Jerónimos Monastery Expense Accounts

The use of terms such as debts (Dividas) and expenses (Despeza) suggest a

²⁴ Tithes (*Décimas*) were a common form of tax or contribution imposed on the Monastery, representing a tenth of income or agricultural produce.



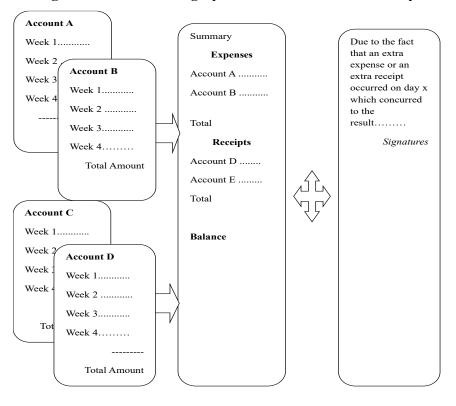


standardized approach to financial terminology. This consistency would facilitate clear communication and understanding among those monks involved in the accounting processes.

Accounting cycle and accounting period

Evidence regarding the accounting period does not explicitly come from Book 14, but from other extant accounting books from the Jerónimos Monastery in the Torre do Tombo Library. Book 14 only refers to the last quarter of 1833.

The accounting cycle of the Monastery lasts for approximately one year, seemingly beginning in mid-October, helping the monastery to align its financial reporting with the cycle of its main economic activity, agriculture. Once the harvest is complete, October becomes an appropriate time to close the books on the year's activities, making it easier to assess revenue and expenses related to agriculture, and its operating cycle. One may surmise that the accounting reporting of the Portuguese Jerónimos Monastery and the Monastery of Arouca followed the operating cycle of the farming calendar, given that agriculture was their main operating activity at the time. The religious calendar followed might also influence the timing of the accounting cycle. Autumn might coincide with traditional religious periods of reflection and planning in the monastic community.







In terms of periodicity, the accounting practices in these books combined monthly reporting for some operational expenses with cumulative or long-term reporting for debts and legal expenses. Recording in a journal and posting to ledgers were usually made on a weekly basis, while Salaries and some other expenses were documented monthly or quarterly. The records primarily show monthly financial activity in various areas, such as Infirmary and Lodging expenses, particularly from September to December 1833. However, sections like Expenses to do with Priests and the General Attorney's Office show bimonthly reporting periods or cumulative records that cover longer spans of time, suggesting that financial management accommodates both immediate and ongoing financial obligations.

The accounting books are organized into three parts: (i) a weekly journal during three or four months for the several accounts; (ii) a balance between expenses and receipts presented in summary accounts; (iii) financial records approved, including a short explanation of surplus or deficit- a summary statement shows the balance between income and expenses at the end of each period.

Book 14, the Book of Expenses and Receipts of the Monastery covered by this research, was prepared for inspection and covers the last four months of the year 1833. It confirms the periodicity of inspections. According to Brandão and Oliveira (2012), in the Arouca Monastery the summary accounts were presented to the Congregation of Alcobaça (the Principal House of the Cister Order in Portugal) every four months and full detailed accounts every three years. In the case of monks from the Monastery of Guadalupe, the financial records were presented annually. However, its accounting period coincides with the civil year (Llopis et al., 2002).

Bookkeeping technique: the charge and discharge system

The Jerónimos Monastery used the charge and discharge system of accounting, as did both Guadalupe (Llopis et al., 2002) and Arouca (Oliveira, 2005; Brandão & Oliveira, 2012) monasteries. This system was widely used by religious institutions and differed from the double entry bookkeeping method, which began to be taught at *Aula do Comércio*, in Lisbon, the first public governmental school of accounting in the world (Rodrigues, Gomes & Craig, 2004), to prepare people in accounting and business.

Double-entry bookkeeping was considered a modern accounting method and had become compulsory for trading companies from the mid-eighteenth century, during the Marquis the Pombal government (1755-1777). However, the Catholic Church and other religious institutions were exempted from these rules (Oliveira, 2005; Brandão & Oliveira, 2012). It is clear Portuguese monasteries were accountable to the Crown as well as their Order. Despite the Crown's efforts to apply the double-entry accounting system





around the mid-eighteenth century, monasteries and religious orders maintained the charge and discharge system until the beginning of the nineteenth century.²⁵

Cillanueva (2009) *apud* Llibrer and Villaluenga (2023) noted that the charge-anddischarge system did not use negative entries. Instead, it employed contrary entries – negative entries were treated as discharges. For instance, uncollectibles were not deducted from the charge, they were discharged, which helped distinguish accrued funds from charges. (Llibrer and Villaluenga, 2023, p.9).

As part of a charge-discharge accounting system, the columns "P." and "M." can be interpreted within the framework of charges (resources or obligations incurred) and discharges (resources used or obligations fulfilled). Each of these columns "P." (Charge) and "M." (Discharge) relate to different financial aspects. The subtotals in "P." reflect the total obligations or charges (resources expected or allocated), that is, amounts to be accounted for as obligations, debts, or receivables (what should come in). Should the charge side ("P.") be blank, it indicates that only cash inflows were tracked for these transactions. The subtotals in "M." represent the total discharges, that is resources received, spent or liquidated, i.e. the outflow of resources, such as actual cash received, payments made, or obligations settled. It represents what has been liquidated or discharged from the initial charges.

According to Hernández-Esteve (1984) *apud* Llibrer and Villaluenga (2023) the system effectively records both assets and liabilities, as the charges represented accounts receivable for the principal and liabilities for the agent, whereas discharges were accounts receivable for the agent and liabilities for the principal. Taken as an illustration of the charge and discharge bookkeeping system, Table 4 shows sheet number 1 of Book 14: Book of Expenses and Receipts of the Monastery in the year 1833, which is part of the 'Weeks Account' postings.

The two columns 'P." and "M." together capture the inflows and outflows of resources, showing the balance for a particular category, and thus, facilitating a clear view of financial activity. A separation between cash inflows and cash outflows is shown, with the cash amount that should result from the transaction being recorded in the "coin" ("M") side and the parts not received and not paid being recorded in the "paper" ("P") side, as shown in Table 4.

²⁵ Jones (2018) highlights the role of the Domesday Book (1086) as a historical record of the evolution of charge-and-discharge accounting and government financial administration. It is shown to be a "device for royal consolidation, a political expression of royal power and a vehicle to raise taxes" (Jones, 2018, p. 275), lays the foundation for the English Exchequer and formalizes a written system of government accounting.





Weeks	Р.	М.		
2nd September 1833 - 1st Week				1.
219 arreteis of Beefat 85	*	18,615		Costa
520 breads	*	11,690		
Fish	»	3,850		
Mail	*	0,285	34,4400	
9th September - 2nd Week				
224 arreteis of Beefat 85	*	19,040		
420 breads	*	9,450		
Fish	*	3,280		
Mail	*	0,180	31,9500	
16th September - 3rd Week				
112 arreteis of Beefat 85	*	9,520		
64 arreteis of Vealat 80	*	5,120		
428 breads	*	9,630		
Fish	»	1,440	25,7100	
23rd September - 4th Week				
165 arre teis of Beefat 85	»	14,025		
400 breads	*	9,000		
Sardines	*	0,800	23,8250	
30 th September - 5th Week				
174 arreteis of Beefat 90	<i>»</i>	15,660		
36 arreteis of Lambat 60	<i>»</i>	2,160		
428 breads	<i>»</i>	9,630		
6 arreteis of Pasta	<i>»</i>	0,480		
1 arretal of Cheese	<i>»</i>	0,280		
3 arreteis of Butter	<i>»</i>	0,560		
6 arreteis of Sugar	<i>»</i>	0,720		
3 douzens of Eggs	<i>»</i>	0,600		
Milk	*	0,210		
Brandy	<i>»</i>	0,160		
1 alqueire of Potatos	<i>»</i>	0,340	30,8000	
6th Octber1833 - 1st Week				
188 arreteis of Beefat 85	<i>»</i>	17,860		
400 breads	<i>»</i>	9,000		
Mail	<i>»</i>	0,120	26,9800	
13th Octiber - 2nd Week				
185 arreteis of Beefat 95	*	15,725		
370 breads	*	8,325		
150 sardines	<i>»</i>	0,260		
Fish	*	2,600	26,910	
21st October - 3rd Week				
193 arreteis of Beefat 75	*	14,475		
<i>350 breads</i>	*	7,875		
Fish	»	2,300		
Mail	*	0,200	24,850	225,465
		5,200	,	,

Table 4. Excerpt from the 'Weeks Account' of the Jerónimos Monastery(September and October 1833)

Source: Livro de Receitas e Despesas, PT/TT/MSMB/L14, ANTT (1833); P and M columns expressed in the currency in course (*Réis*).



Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International

Based on the information shown in Table 4, several conclusions could be drawn about the accounting and reporting practices of the time, as well as the daily live in the Monastery. Monastery transactions included mainly expenses and receipts on a cash basis. However, the system also kept track of transactions that did not result in a cash flow, such as the amounts due and payable, as reported in a balance sheet.

The charge and discharge system used a double-column layout that provided a dual perspective, as it distinguished between expected and realized values, a fundamental distinction in accounting systems. The subtotals and overall totals provided in the records facilitate quick insights into the financial position at a specific point in time. The breakdown into subtotals helped to ensure accuracy by grouping transactions under specific categories and verifying totals.

In the accounting records, symbols such as ["] were used to repeat amounts or currency, what helps identify the transactions in monetary units. These notation practices reflect the accounting conventions of the time and further reinforced the accuracy of the accounting system and contribute to standardization and clarity in reporting.

The Monastery used a well-defined monetary system and currency notation, consistently recording amounts in *réis* (\$), a practice which was also used in the monastery of Arouca (Brandão & Oliveira, 2012).²⁶ Additionally, financial records were disclosed in quantities (weight or capacity).

Accounting prioritizes categorization considerations. By detailing transactions and their purposes (e.g., purchases of goods like rice, olive oil, etc.), the records reflect an organizational commitment to transparency. Each transaction is itemized with specific amounts, allowing for easy tracking of Monastery activities. The records include transactions involving the purchase of goods like beef, sardines, eggs, bread and other provisions, suggesting interactions with local merchants who provided essential goods and services to the Monastery.

In conclusion, the accounting book analysed demonstrates a well-organized, accountable, and transparent system of accounting within the Monastery. It provides valuable historical insights into monastic accounting practices of the time.

5.3. Use of the Monastery's Accounting Records for Financial Analysis

Summary of expenses and receipts from the Monastery

The analyzed book of expenses and receipts serves as a useful resource in capturing the economic and financial activity of the Jerónimos Monastery. The Summary Account offers a detailed breakdown of expenses (*Despeza*) and receipts (*Receitas*) in the Monastery highlighting the effectiveness of the charge and discharge bookkeeping system

²⁶ Arrateis, alqueire, almudes, centos, arroba, molho were the most common measures that can be converted into kilos or liters (See <u>https://www.ipq.pt/museu-metrologia/pesos-e-medidas-em-portugal/os-primeiros-pesos-e-medidas/as-primeiras-tentativas-de-uniformizacao/</u>



Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International



during the period under research. Table 5 shows the transcript of the Summary account of expenses and receipts from the Monastery in 1833 (*Saldo das Contas*).²⁷ The analysis of this account, along with other financial records, enabled the Monastery's administration (*Prior*), to identify primary expenses and income sources of the Monastery as well as determine cash inflows and cash outflows.

²⁷ Appendix 3 presents a photography of the original page of Book 14: Book of Expenses and Receipts with the Summary Account.





Table 5. Transcript of Summary Account Balances of the Book of Expenses and Receipts
of Jerónimos Monastery (September to December 1833)

of Jeronimos Monast	cry (be	premoe			033)	
						19
Accounts Balance		<i>P</i> .	М			Costa
Weeks			523,100			
Deliveries		23,000	231,875			
Infirmary			28,160			
Extraordinary Expenses			167,160			
Expenses with Priests outside the Monastery			152,600			
Refectory and Kitchen		2,400	6,100			
Works and Repairs			5,760			
Interest, Tithes, and Instalments		60,400	61,700			
General Attorney's Office			3,480			
Lawsuits			19,200			
Claims			18,000			
Debts Overdue			23,200			
Rations to Servants			58,500			
Lodging			10,470			
Debates			142,321			
Orchards			71,000		1522,626	
		85,800				
	Recibo					
Palm Farm			240,000			
Orchards		570,000	640,635		880,635	
Handed over Fr. Provider		484,200			-880,635	
At the Real Mosteiro de Belém, in the Financ	। e Inspecti	on Board n	neeting on I	December	22, 1833,	
approvals and adjustments were made.						
President in Capite	Joaquim	José Perei	ra dos Sant	OS .		
Deputy	Frei Fra	ncisco de J	esus Mario			
Deputy	Frei Mar	niel do Bom	ı Jesus Cost	а		
Deputy	Frei Fill _l	pe Nery da	Conceição			

Source: *Livro de Receitas e Despesas*, PT/TT/MSMB/L14, ANTT (1833). *P* and *M* columns expressed in the curency in course (*Réis*).





The charge and discharge system, along with detailed bookkeeping techniques, facilitated internal financial control and provided a clear picture of the Monastery's economic activities in the year 1833. This system would also have allowed to determine whether the Monastery faced a cash surplus or a cash deficit.

The subtotals for receipts and expenses further illustrate the usefulness of the charge and discharge bookkeeping system. While the records provide more detail on expenses than receipts, they still offer insight into how the Jerónimos Monastery generated income. They reveal diverse income sources, including rent or land leasing (*foros*), property revenue (from *Quinta da Palmeira*), and agricultural activities (orchards rent and vegetable sales).

Debt was also a significant component of the accounting system of the Monastery. The monks carefully identified the Monastery' both lenders and borrowers, with the latter often linked to rents and interest payment and principal repayment. This aligns with the description provided by the Hieronymite monk Jacinto de São Miguel (1901). Liabilities (*Dividas Passivas*) refers to the financial obligations the Monastery towards various priests for their services and needs.

Analysis of expenses

Monastery expenses are shown in Table 6, where data is organized according to the account breakdown provided in the Summary Account of the Book of Expenses and Receipts of the Monastery.

	01.1	
Expense category	Réis	%
Weeks	523,100	34.36%
Deliveries	231,875	15.23%
Extraordinary	157,150	10.32%
Expenses with the Priests outside	162,600	10.68%
Debates	142,321	9.35%
Orchards	71,000	4.66%
Interest, Tithes, Instalments	61,700	4.05%
Rations to the Servants	58,500	3.84%
Infirmary	28,160	1.85%
Overdue Debts	23,200	1.52%
Lawsuits	19,200	1.26%
Claims	18,000	1.18%
Lodging	10,470	0.69%
Refectory and Kitchen	6,100	0.40%
Works and Repairs	5,760	0.38%
General Attorney's Office	3,480	0.23%
	1,522,616	100.00%

Table 6. Expenses of J	erónimo Monaster	v by Category	(September to]	December 1833)
Tuble of Expenses of 0	ci ommo monuscer,	, by Cuttegory	(September to	December 1000)

Source: *Livro de Receitas e Despesas*, PT/TT/MSMB/L14, ANTT (1833); *Réis* refers to the currency in course



De Computis

In the analyzed period, total expenses of the Monastery amounted to 1,522,616 *réis*. Given that fourteen monks were residing at the Monastery in 1833, the monthly average expense per monk was 108,738 *réis* in the analysed period.

The most significant expenses were food-related expenses, posted in the accounts Weeks (*Semanas*) and Deliveries (*Provimentos*), as shown in Table 5. Deliveries account includes numerous purchases, like rice, oil, and other goods, indicating outflows for operational needs. This is similar to the Arouca Monastery (Oliveira, 2005; Brandão & Oliveira, 2012), where expenses related to daily maintenance of the residents were also the most significant ones (Oliveira, 2005; Brandão & Oliveira, 2012).

An analysis of total expenses after regrouping them into five categories, ordinary, worship, food, external works and exceptional expenses, is shown in Table 7 and provides a view of the Monastery's activity. Figure 4 shows the breakdown of the Jerónimos Monastery expenses according to the five categories mentioned above.

An analysis of the information in Table 6 requires the following explanation:

- Substantial general ongoing ordinary expenses: food-related expenses (Weeks together Deliveries expenses) account for nearly 50 per cent, reflecting the operational needs of the Monastery;
- Worship-related spending highlights the importance of spiritual activities in the Monastery, with circa 30 per cent of the expenses related to religious services and obligations;
- Low exceptional and external works costs: these also take up a smaller 10 per cent share, indicating careful control although also a limited focus on external engagements.

However, no entries were posted in Vestments, Chapels and Masses, and Salary Accounts from September to December 1833. These expenses to be paid to the monks who reside in the Monastery were shown in the Debt Account (Liabilities). Also amounts due to three medical professionals who support the Monastery (the physician, the surgeon and the apothecary) and the salary of the responsible for the Lodging activity were also presented as debt, that is expense to be paid. Each priest contributes equally to the expense structure of the Monastery, reflecting a standard compensation rate for their roles (ten priests have a salary of 24,000 *réis* per month).





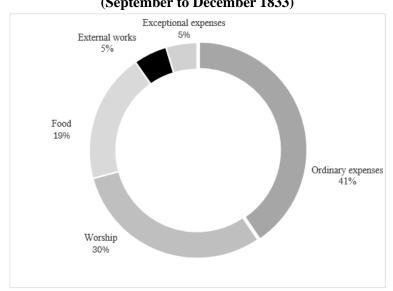
	Réis *
Ordinary Expenses: General ongoing operational costs.	
Weeks (523,100 réis, 34.36%)	523,100
Interest, Tithes, Instalments (61,700 réis, 4.05%)	61,700
Infirmary (28,160 réis, 1.85%)	28,160
General Attorneyr's Office (3,480 réis, 0.23%)	3,480
	616,440
Worship: Includes expenses directly tied to religious practices and priestly acti	vities.
Expenses with the Priests outside the Monastery (162,600 réis, 10.68%)	162,600
Extraordinary (157,150 réis, 10.32%)	157,150
Debates (142,321 réis, 9.35%)	142,321
	462,071
Food: Includes all expenses related to meals and provisions.	
Deliveries (231,875 réis, 15.23%)	231,875
Rations to the Servants (58,500 réis, 3.84%)	58,500
Refectory and Kitchen (6,100 réis, 0.40%)	6,100
	296,475
External Works: Includes maintenance, construction, or physical projects.	
Orchards (71,000 réis, 4.66%)	71,0000
Works and Repairs (5,760 réis, 0.38%)	5,7600
	76,7600
Exceptional Expenses: Non-recurring or unique costs.	
Overdue Debts (23,200 réis, 1.52%)	23,200
Lawsuits (19,200 réis, 1.26%)	19,200
Claims (18,000 réis, 1.18%)	18,000
Lodging (10,470 réis, 0.69%)	10,470
	70,870
Total Expenses of the period	1,522,616

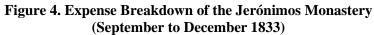
Table 7. Expenses of the Jerónimos Monastery (September to December 1833)

* *réis* refers to the currency in course.









Ordinary expenses:

Table 8 presents the breackdown of Week Expenses from September to December 1833, which includes expenses incurred with the acquisition of meat, mainly beef, followed by cereals and vegetables, fish and dairy products, such as cheese, butter and pasta.

	Réis	%
Meat	297,675	56,91%
Cereals and vegetable	169,935	32,49%
Fish	49,290	9,42%
Dairy products	2,730	0,52%
Sundry	3,470	0,66%
	523,100	100,00%

Table 8. Breakdown of Expenses in 'Weeks Account' of the Jerónimos Monastery
(September and October 1833)

Food items have different unit prices, and some of them faced price volatility at the time. Table 9 shows the average unit prices of some food items at the time.





Item	Quantity*	Unit price**
Beef	3240	0,090
Veal	64	0,080
Lamb	36	0,060
Bread	7428	0,023
	* arratel	** réis
Item	Quantity	Unit price**
	Quantity	enii priec
Pasta	<u>Qualitity</u> 6	0,080
	-	<u>^</u>
Pasta	6	0,080
Pasta Cheese	6 1	0,080 0,280
Pasta Cheese Butter	6 1 3	0,080 0,280 0,187
Pasta Cheese Butter Sugar	6 1 3 6	0,080 0,280 0,187 0,120

Table 9. Average Price of Food Items in 'Weeks Account' (September to October 1833)

It is worth noting the financial obligations to the Crown, the Church, or other external authorities such as tithes, interest, and instalments payments. The accounts balance also show payments related to interest on loans owed to the Monastery and regular payments, as part of principal reimbursements.

Other ordinary expenses were medical expenses and general attorney's expenses. The infirmary expenses reflect a commitment to care for both the community and the clergy. The general attorney's office category of expense includes expenses with financial management and legal responsibilities of the Monastery. For example, in this account, it was found that Book 14: Book of Expenses and Receipts of the Monastery under analyses in this paper costed 2,400 *réis*.

Worship expenses:

The residents in the Jeronimos Monastery (such as Pe. Ignacio, Pe. Fr. Pedro, Pe. Fr. Antonio, Pe. Fr. José, Pe. Fr. Luiz) have expenses related to their vestments (*vestiarias*), masses (*missas*), and other religious duties, suggesting a focus on their clerical responsibilities and the religious services.

Food and other deliveries:

Over the four months (September to December 1833), the monastery spent a total of 58,500 *réis* on Rations to Servants, with varying amounts allocated each month. Moreover, transactions related to inventory, such as purchase of meat, fish, cereals, and vegetables, and agricultural transactions of rice, oil, and beans, and others from agriculture are inventories accountable products. Information about the quantity bought or sold and the respective unit price is presented before the total, as it is in Weeks account.





External works:

According to the rule of the Hieronymite Order, the monks did not have much free time to dedicate to activities other than prayers and religious services (*Liturgy of Hours*), thus employees were hired for kitchen and laundry duties, as well as for agricultural services (orchards or farms).

Exceptional expenses:

An example of exceptional expense is the sum shown in Lawsuits account, which is the cost of Hiring of a *Letrado* (a lawyer), 18,000 *réis* for six months, related to ongoing legal work or representation provided by this individual to the Monastery. The hiring of a *Letrado* (lawyer) might be related to actual conflict and legal issues and can be seen as the recognition of the need for expertise in legal matters, suggesting a level of professionalism in managing the Monastery's affairs.

In fact, the Monastery has a liability of 16,800 *réis* related to legal judgment involving Irish priests, indicating a court decision that requires the monastery to pay or settle. The additional 2,400 *réis* noted for ongoing litigation expenses suggests that the legal matters involving the Irish priests may have included costs beyond the judgment, such as court fees or additional legal representation.

Overdue Debs (*Dívidas Atrazadas*) is another example of exceptional expense. The balance of Overdue Debts account amounted to 23,200 *réis*. This refers to debts the Monastery has to various individuals, whose professions are identified, as follows:

- The *azeiteiro* (likely an oil merchant or supplier whose role combined agricultural work with religious service, was responsible for producing, preserving, and distributing the oil used in the monastery, carrying out both practical and liturgical duties) is owed a total of 13,600 *réis* from multiple entries, indicating regular purchases and debts to be need settling;
- The *sineiro* (bell ringer or caretaker of church bells; he communicated with the community, marking the rhythm of daily and religious life with meaning) also has an outstanding balance owed to him;
- Miguel, identified as a *creado* (servant or worker) in the Sacristy, is owed the remainder of this account, signifying ongoing financial transactions related to staffing and maintenance of religious functions.

Lodging and associated expenses (*Hospedeira Mór*) are also exceptional expenses, such as expenses with maintaining cleanliness (*lavagem*) of the Monastery, indicating responsibility for the limited guest accommodation in the Monastery during the four last months of the year 1833.

Analysis of receipts

In general, the income sources of monasteries included property rents, such as revenue from their agricultural lands, orchards, and other properties, tithes, i.e. payments from





tenants in money or goods. Also, donations, and other irregular or one-time income sources may happen.

Table 10 shows the activity of the period which resulted in receipts from September to December 1833 which amount to 885,635 *réis*. It illustrates the charge and discharge bookkeeping system and demonstrates how it can be useful for economic and financial analysis.

Table 10. Receipts Account of the Jerónimos Monastery(September to December 1833)

· -			
Receipts in the Period	<i>P</i> .	М.	22 Costa
Palmeira			
Received from Palmeira Farm	"	100\$000	
Plus, from 5 thousand foros, to be collected in 1834, sold to Abraão	"	140\$000	
		240\$000	
			240\$000
Orchards			
Rented the vegetable garden from April until 24th December	"	70\$635	
Sold the orchard for 1:1,400\$000 réis, and received	285\$000	285\$000	
Received the 2nd payment	285\$000	285\$000	
	570\$000	640\$635	640\$635
			570\$000

Source: Livro de Receitas e Despesas, PT/TT/MSMB/L14, ANTT (1833).

In the account Palmeira Farm (*Quinta da Palmeira*), the subtotal of 240,000 *réis* under "M." reflects the total discharged (actual cash received) for this category, that is 100,000 *réis* of receipt from Palmeira Farm (*Quinta da Palmeira*) and 140,000 *réis* from the sale of five *milheiros de foros*, expected to be collected in 1834.²⁸ In this case, the charge side ("P.") is blank, indicating that only cash inflows were recorded for these transactions.

The account Orchards (*Pomares*) shows a subtotal of 570,000 *réis* under "P.", being the total charge applied to this account, consisting of 70,635 *réis* from the revenue (vegetable sales), and two entries of 285,000 *réis* each from the instalment sale of the orchard. The subtotal of 640,635 *réis* under column "M." reflects the total discharged in this category, i.e. 70,635 *réis* received from rent plus two instalments of 285,000 *réis* each for the orchard sale. It shows the total cash or resources received (liquidated) under Orchards.

In summary, the sources of income in the analyzed period were the following:

- Palmeira Farm (*Quinta da Palmeira*): Total receipts relate to income received from *foros*: 240,000 *réis*, out of which 100,000 *réis* received in the period and additional 140,000 *réis* expected in 1834).
- Orchards (*Pomares*): Total receipts amount to 640,635 *réis*, as follows:
 Revenue from vegetable sales....70,635 *réis*;

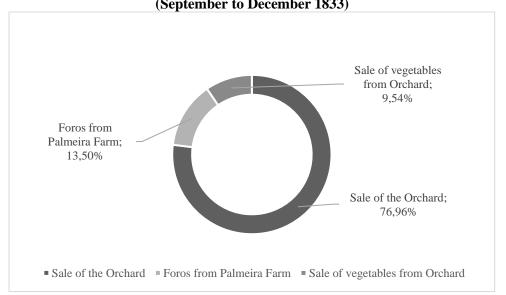
²⁸ Foros refers to land rents, tributes paid by tenants to landowners or religious institutions in medieval and early modern Portugal. *Milheiro* means a group of a thousand.

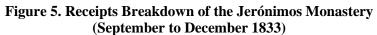




- Sale of the orchard...... 570,\$000 réis (in two equal instalments).

Figure 5 shows the breakdown of receipts of the Jerónimos Monastery in the analysed period.





Comparatively, Hieronymite monks in Guadalupe (Llopis et al., 2002) also had rents and agriculture as sources of income, but additionally they had returns on livestock. The importance of livestock in Guadalupe Monastery justifies differences in the reported records. Specific sheets (Livestock sheets) were drawn up to control the number of animals. Not for the period under analysis in this research, but in earlier centuries, there is information indicating that the Monastery of Guadalupe requested permission from Portugal to graze 15,000 sheep in the Serra da Estrela, a region in Portugal not far from the Extremadura area where the Gaudalupe Monastery is in Spain.

It should be highlighted the relative importance of receipts from disinvestment activity (sale of the orchard), compared to operating activity, something that can be understood in the political and social context, and the announced ecclesiastical reform in August 1833.

Analysis of cash flow

From September to December 1833, the Summary Account of the Monastery's activities recorded a negative balance of 556,180 *réis*, as shown in Table 11.

The Summary Account further indicates that a portion of these expenses, recorded on the Coin Side ("M"), remained as outstanding debt on the Paper Side ("P"). During this period, expenses exceeded receipts, leading to a cash deficit of 496,981 *réis*.



Expenses	Réis	Receipts	Réis
+ Total expenses	1,522,616	+ Total receipts	1 450,636
- To be paid	85,800	- To be received	570,000
= Cash outflow	1,436,816	= Cash inflow	880,636
Cash flow of the pe	-556,180		

T 11 11 C	ет. I	D	G (1 (D I 61022
Table 11. Summary of	of Expenses and	Receipts from	September to	December of 1833

Charges	Réis	Discharges	Réis
+ To be received	570,000	+ Total expense	1,522,616
- To be paid	85,800	- Cash inflow	880,636
= Difference	484,200	= Difference	641,980

Key insights from Table 11 can be drawn regarding the financial analysis of the Monastery from September to December 1833. The detailed entries for receipts and expenses suggest that the Monastery was facing difficulties in managing its cash flow.²⁹

Despite salary payments to the priests residing in the Monastery were postponed and posted as debts overdue, the cash flow was negative, as expenses exceeded receipts. Receipt from agriculture, rents, donations, tithes or charitable contributions and other sources of income did not generate cash enough to cover expenditures. The sale of an orchard suggests that the Monastery sold resources (land) to raise funds.

Regarding cash flows from financing activities, that is, cash related to borrowing or repaying principal and interests, it is worth noting that the interest rate was at four, five and nine per cent, as can be seen from the description of account 'Interests'. Support from higher religious authorities or community funds could also be considered a financing activity and enhance cash inflow if received. However, further details would be needed for a comprehensive analysis of financing activities.

Given that the Monastery generated a negative cash flow of 556\$180 *réis* based on the inflows and outflows recorded in the last four months of 1833, it is understandable that the priest responsible for the financial administration of the Monastery (known as the *Procurador*) made a significant monetary contribution to the Monastery, which amounted to 484\$200 *réis*, possibly to cover this gap shown in the Summary of Expenses and Receipts.

²⁹ The difference between the actual cash flow during the period (556,180 *réis*) and the variation in charges (484,200 *réis*) results in a negative balance of 71,980 *réis*. This amount corresponds to the net result for the year and may also be derived by subtracting total expenditures (1,522,616 *réis*) from total revenues (1,450,636 réis). The charge-and-discharge system of bookkeeping captures the difference between *cash basis* and *accruals basis* approaches.





The year 1833 was special in the life of the Monastery and its economy, as already stated. The Monastery foresaw there were problems of continuity together with the political decision to close. The Hieronymite monks, who had occupied the Monastery since the 16th century, were ultimately expelled in 1834, marking a significant transition in Portuguese history.

6. Conclusion

This study described the accounting system and practices of the Jerónimos Monastery in 1833, close to the eviction of the monks from the Monastery. The research was based on primary sources, particularly accounting books archived at *Torre do Tombo* Library, with a detailed analysis of Book 14: Book of Expenses and Receipts of the Monastery from that year.

Despite being limited to a single book and time-period, this study provides extensive insights into the Monastery's accounting system and practices, including its design, control mechanisms, and use for economic and financial analysis. By documenting and analyzing the last year of the monastery's activity, this study captures a crucial historical moment, offering valuable descriptive data.

The accounting system of the Monastery is composed of five books plus an extra one that is prepared for inspection. These records covered the various operating areas: three groups of Books on Expenses and Receipts, from the Monastery, the Farm and the Sacristy; one book focused on repairs and maintenance; and another book of rents, interest, and land tenures. The accounting cycle adopted a one-year period, from October to September, aligning with seasonal agricultural activities. The accounting system was based on a *cash approach* and employed the *charge and discharge method*.

Summary accounts were prepared by the scribe and approved by the *In Capite* President (or General Abbot) and the deputies, which include the Prior and the Scribe of the Monastery, demonstrating attention given to control of the accounting records and a structured approach to financial control. A detailed analysis of Book 14: Book of Expenses and Receipts of the Monastery (inspection book) and browsing the remaining books proved the usefulness of the accounting system as a reflection of the economic activity of the Monastery. This book also highlights the emphasis placed on accountability and oversight. These records not only facilitated internal financial control but also offer valuable historical insights into monastic accounting practices of the time.

Beyond its contribution to understanding historical accounting practices, this study contributes to the discussion of a broader question, namely how the accounting system and practices could reflect the economic activity of an organization. This historical perspective on accounting practices can provide valuable insights into the evolution of accounting as a discipline as well as its importance in organizational management.³⁰

³⁰ An externality and a singular contribution of this paper was to discover and advise Torre do Tombo Library that a document which had been ascribed to the Jerónimos Monastery did, in fact, belong to another



The Jerónimos Monastery is a key historical site in Portugal, representing the wealth and influence of the Order of St. Jerome particularly during the Age of the Discoveries. The economic, social and cultural relevance of the monasteries throughout history justifies the search for new evidence, both descriptive and interpretative.

In addition to Book 14: Book of Expenses and Receipts of the Monastery, several other accounting records from the Jerónimos Monastery exist, originally written in archaic Portuguese and still awaiting transcription into modern Portuguese. These books cover various aspects of the Monastery's operations, including records related to the farm, sacristy, land tenures and rents, Monastery administration, and covenant houses. Analysing these records presents new opportunities for research, especially into the economic and operational structure of the Monastery.

Key questions remain unanswered. It is unclear whether the Monastery reported operated autonomously or under the oversight of Spanish authorities. Notably, historical documents suggest a possible connection between the Portuguese Jerónimos Monastery and the Monastery of Guadalupe in Spain, hinting at possible ties between the two institutions.³¹ Exploring these ties could provide deeper insights into the administrative and financial networks of the Hieronymite order.³²A possible avenue for future research would be to examine the Hieronymite Order's Rule in greater depth, as applied to monastic life, particularly when comparing declared and actual accounting systems and practices. This analysis could provide valuable insights into the alignment between prescribed guidelines and real-world application. Further studies could explore the administrative aspects of the Order's standard, particularly its role in internal control, financial oversight and accountability. Such research would contribute to a deeper understanding of the historical evolution of financial accountability and regulatory frameworks in monastic settings. The question of whether accounting practices were influenced more by trade interactions than by religious orders also remains unanswered. To investigate this question, it would be useful to compare the monastery's accounting records with contemporary business accounting methods in Lisbon and examine whether similar practices were documented in other monastic institutions of the time.

³² These documents are part of *maço* 5, that can be found at Torre do Tombo. They are as follows: (i) The permit for the Monastery of Santa Maria de Guadalupe to be able to bring 15,000 sheep to Serra da Estrela to graze there - Torre do Tombo national archive - digitq (arquivos.pt) <u>alvará para o mosteiro de santa maria de guadalupe poder trazer à serra da estrela 15 000 ovelhas para aí pastarem - arquivo nacional da torre do tombo - digitarq (arquivos.pt) (ii) 'Vive vocis oraculo' by Cardinal Raynuncio to the prior and friars of the Monastery of Santa Maria de Guadalupe on how to take orders - National Archive of Torre do Tombo - DigitArq (arquivos.pt) (ii) 'Vive vocis oraculo' do cardeal Raynuncio ao prior e frades do Mosteiro de Santa Maria de Guadalupe sobre o modo de tomarem ordens - Arquivo Nacional da Torre do Tombo - DigitArq (arquivos.pt)</u>



Monastery. This finding may well have contributed to the proper cataloguing of monastic records and historical preservation efforts.

³¹ See https://www.centrodehistoria-flul.com/uploads/7/1/7/0/7170743/o_mosteiro_de_guadalupe.pdf



Furthermore, future research could expand beyond this study's scope by analyzing records from different time periods, as well as non-accounting documentation and records from other monasteries and colleges of the Hieronymite order in Portugal, for a broader institutional perspective or comparing accounting practices across other monasteries and religious orders. By extending the analysis to other institutions within the Hieronymite order, or even to other monastic traditions, scholars could gain a more comprehensive understanding of the religious financial management, governance, and economic influence across various institutions and eras.

Manuscript Primary Sources

ANTT, Código de referência: PT/TT/MSMB/L14 (See Appendix 2)

Main source: Livro de Receita e Despesa, Ordem de São Jerónimo, Mosteiro de Santa Maria de Belém, liv. 14 Arquivo Nacional da Torre do Tombo, Lisboa. [Book 14: Book of Expenses and Receipts of the Monastery in 1833]. https://digitarq.arquivos.pt/details?id=4617498

References

Alves.Caetano, A. (2020). Perfídia - Conde do Farrobo. Edição do autor. Lisboa.

- Araújo, D. (2010). A Contabilidade no Mosteiro de Santa Ana de Viana do Castelo nos Séculos XVIII e XIX. *Dissertação de Mestrado*. Universidade do Minho. https://repositorium.sdum.uminho.pt/handle/1822/16518.
- Araújo, D. & Gomes, D. (2014). Contabilidade e Religião: O caso do Mosteiro de Santa Ana de Viana do Castelo (séc. XVIII e XIX) VII Encontro de História da Contabilidade da Ordem dos Técnicos Oficiais de Contas. https://www.occ.pt/fotos/editor2/delfinagomesehc2014.pdf
- Barnabè, F. & Ruggiero, P. (2004). Contabilità e Controllo in un Ente Monastico: Monte Oliveto Maggiore nel XIX Secolo. *Contabilità e Cultura Aziendale*, 4(2): 211–214. <u>https://hdl.handle.net/11365/11763</u>.
- Booth, P. (1993), Accounting in Churches: A Research Framework and Agenda. *Accounting, Auditing & Accountability Journal, 6*(4):37-67. <u>https://doi.org/10.1108/09513579310045684</u>.
- Brandão, M. & Oliveira, J. (2012). Account Books and the Use of Accounting in the Monastery of Arouca, 1786-1825. In *The Economics of Providence: Management, Finances and Patrimony of Religious Orders and Congregations in Europe, 1773-CA. 1930*, Leuven, Belgium: Leuven University Press, 267-293.



- 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. <u>https://doi.org/10.26784/issn.1886-1881.v1i1.239</u>.
- Carmona, S. & Ezzamel, M. (2006). Accounting and Religion: A Historical Perspective. *Accounting History*, *11*(2): 117–127. <u>https://doi.org/10.1177/1032373206063109.</u>
- Carmona S & Ezzamel M (2009). Religion. In: Edwards J and Walker S (eds.) *The Routledge Companion to Accounting History*. New York: Routledge, 503–523.
- Carnegie, G. & Napier, C. (1996). Critical and Interpretive Histories: Insights into Accounting's Present and Future through its Past. *Accounting, Auditing & Accountability* Journal, 9(3): 7–39. <u>https://doi.org/10.1108/09513579610121956</u>.
- Carvalho, C. (2019). A influência das Práticas Contabilísticas no Processo de Criação da Diocese de Santarém. *Dissertação de Mestrado*. Escola Superior de Gestão e Tecnologia, Santarém. <u>http://hdl.handle.net/10400.15/2705</u>
- Centorrino, G.; Naciti, V. & Schifilliti, V. (2024), One Faith for Different Realities: Accounting and Management Practices of Benedictine Monasteries. *Journal of Management History*, ahead-of-print. <u>https://doi.org/10.1108/JMH-04-2024-0049</u>
- Cillanueva, M. A. (2009). Cobros y Pagos para la Edificación de una Catedral: Segovia 1524-1699." *De Computis: Revista Española de Historia de la Contabilidad 6* (10): 157–182. <u>https://doi.org/10.26784/issn.1886-1881.v6i10.140</u>
- Cinquini, L.; Marelli, A. & Tenucci, A. (2008). An Analysis of Publishing Patterns in Accounting History Research in Italy, 1990-2004. *The Accounting Historians Journal*, 35(1):1-48. <u>https://www.jstor.org/stable/40698366</u>
- Cordery, C. J. (2015). Accounting History and Religion: A Review of Studies and a Research Agenda. *Accounting History*, 20(4), 430-463. https://doi.org/10.1177/10323732156105.
- Dobie, A. (2008a). An Analysis of the Bursars' Accounts at Durham Cathedral Priory, 1278-1398. *Accounting Historians Journal*, 35(2): 181-208. https://www.jstor.org/stable/pdf/40698395.pdf.
- Dobie, A. (2008b). The development of financial measurement and control in monastic houses and estates in England c. 1200–1540. Accounting, Business & Financial History, 18(2): 141–159. <u>https://doi.org/10.1080/09585200802058677</u>.
- Dobie, A. (2011). A Review of the Granators' Accounts of Durham Cathedral Priory 1294–1433: An Early Example of Process Accounting?. *Accounting History Review*, 21(1): 7-35 <u>https://doi.org/10.1080/21552851.2011.548178</u>.



- Dobie, A. (2015). The Role of the General and Provincial Chapters in Improving and Enforcing Accounting, Financial and Management Controls in Benedictine Monasteries in England 1215–1444. *The British Accounting Review*, 47(2): 142–158. https://doi.org/10.1016/j.bar.2014.09.003
- Donoso Anes, R. (2005). Estado Actual de la Investigación en Historia de la Contabilidad: Perspectives on Present Accounting History Research. *Revista de Contabilidad Spanish Accounting Review*, 8(15): 19–44.
- Faria, A. (2008). An Analysis of Accounting History Research in Portugal: 1990—2004. AccountingHistory,382. https://doi.org/10.1177/1032373208091532
- Fernandes, M. (1992). O Mosteiro de Santa Clara do Porto em Meados do Século XVIII (1730- 80). Porto, Arquivo Histórico, Câmara Municipal do Porto. Available at <u>Repositório Aberto da Universidade do Porto: O Mosteiro de Santa Clara do Porto</u> <u>em meados do séc. XVIII: (1730-80)</u>
- Gallego, E.; Rivero, D. & Ramos, A. (2007). Los Flujos de Efectivo en una Economía Monástica. Estudio del Arca de la Comunidad del Monasterio de Santa María la Real de Oseira (1614-1698). De Computis - Revista Española de Historia de la Contabilidad. 4(6):3-31. <u>http://dx.doi.org/10.26784/issn.1886-1881.v4i6.181</u>.
- Gomes, D. & Rodrigues, L. L. (2017). Investigação em História da Contabilidade, in M.
 J. Major e R. Vieira (org.). *Contabilidade e Controlo de Gestão. Teoria, Metodologia e Prática*, 2nd Ed. (pp. 211-239). Lisboa, Escolar Editora.
- Gomes, D., Maran, L. & Araújo, D. (2022). Accounting in the Organisation and Life of a Religious Institution: The Monastery of Santa Ana in the eighteenth century. *Accounting History*, 27(4): 607-638. <u>https://doi.org/10.1177/10323732221095628</u>.
- Gomes, S. (2011). Um registo de Contabilidade Medieval do Mosteiro de S. Jorge de Coimbra (1257-1259). *Medievalista, 10.* URL: http://journals.openedition.org/medievalista/118; <u>https://doi.org/10.4000/medievalista.118</u>
- Gonçalves da Silva, F. (1982) A Contabilidade do Mosteiro de Alcobaça Curiosidades e Velharias. *Revista de Contabilidade e Comércio*, 181(2): 219–223.
- Gonçalves da Silva, F. (1985). A Contabilidade do Mosteiro de Alcobaça. In: *Curiosidades, Velharias e Miudezas Contabilisticas*, 2nd edition, Lisboa, Editorial Império.
- Hernández-Esteve, E. (1984). Las cuentas de Fernán López del Campo, primer Factor General de Felipe II para los reinos de España (1556-1560) Contribución al estudio





de la contabilidad y de la Hacienda Pública en la España del siglo XVI. *Hacienda Pública Española 87*: 85–105.

- Hernández-Esteve, E. (2000). Presentation. In Accounting and History A Selection of papers presented at the 8th World Congress of Accounting Historians, 5-17, Madrid: Caja Madrid.
- Hernández-Esteve, E. (2008). Some Reflections on the Orientations and Volume of Accounting History Research in the 21st Century. *De Computis Spanish Journal of Accounting History*, 9: 97-135.
- Jacinto de S. Miguel, F. (1901). *Mosteiro de Belém Relação da Insigne e Real Casa de Santa Maria de Belém*. Lisbon, Typographia da Academia Real das Sciencias, Exemplar 117/1000.
- Jones, M. J. (2009). Origins of medieval Exchequer accounting. *Accounting, Business & Financial History*, 19(3): 259–285. <u>https://doi.org/10.1080/09585200802667147</u>.
- Jones, M. J. (2018). Domesday book: An early fiscal, accounting narrative?, *The British* Accounting Review, 50(3): 275-290.DOI: 10.1016/j.bar.2017.10.002
- Leardini, C. & Rossi, G. (2013). Accounting and Power in Religious Institutions: Verona's Santa Maria della Scala Monastery in the Middle Ages. Accounting History, 18(3): 415–427. <u>https://doi.org/10.1177/1032373213487336</u>
- Llibrer Escrig, I., & Villaluenga de Gracia, S. (2023). Learning from history. Deconstructing the charge-and-discharge system within an accountability context. *Accounting History Review*, *33*(1): 1–27. https://doi.org/10.1080/21552851.2023.2207609
- Llopis, E., Fidalgo, E. & Mendez, T. (2002). The "Hojas de Ganado" of the Monastery of Guadalupe, 1597-1784: an Accounting Instrument for Fundamental Economic Decisions. *Accounting, Business & Financial History*, 12(2): 203-229. https://doi.org/10.1080/09585200210134929.
- Malheiro, M. (2018). A Contabilidade Praticada no Mosteiro de São Salvador de Palme durante o Século XVIII. *Dissertação de Mestrado*. Universidade do Minho. http://repositorium.sdum.uminho.pt/handle/1822/59441.
- Malheiro M. (2024). A contabilidade da Congregação de São Bento de Portugal no século XVIII. *Dissertação de Mestrado*. Universidade do Minho. <u>https://repositorium.sdum.uminho.pt/handle/1822/88284</u>.
- Martins, C., (2010). The Accounting System of the Hieronymite Monastery of Santa Maria de Belém circa 1833. *Dissertação de Mestrado*. Nova School of Business and Economics. <u>http://hdl.handle.net/10362/</u>



- Maté L., Prieto B. & Tua Pereda J. (2004). Financial Activity of the Silos Monastery in the Light of its Account Books. *De Computis Spanish Journal of Accounting History*, 1(1): 97–141. DOI:10.26784/issn.1886-1881.v1i1.242
- Maté, L., Prieto, B. & Tua Pereda, J. (2008). Contabilidad, Información y Control en un Contexto de Actividades Económicas Diversificadas en la Edad Moderna: El Monasterio de Silos y su Sofisticado Sistema Contable. *De Computis - Spanish Journal of Accounting History*, 9(9): 136–229. <u>https://doi.org/10.26784/.1886-1881.v5i9.151</u>.
- Maté, L., Prieto, B., & Santidrián, A. (2017). El Papel de la Contabilidad Monástica a lo Largo de la Historia en el Orbe Cristiano. Una Revisión. *Revista de Contabilidad* Spanish Accounting Review, 20(2), 143–156. https://doi.org/10.1016/j.rcsar.2016.10.003
- Maté, L. M., Prieto, B., & Santidrián, A. (2021). The Transfer of Accounting Technologies within a Religious Order: the case of the Monastery of Silos (Spain) in the Nineteenth Century. Spanish Journal of Finance and Accounting / Revista Española de Financiación y Contabilidad, 51(1), 102–131. https://doi.org/10.1080/02102412.2021.1894804
- Mendes, I. M. R. (1994). *O Mosteiro de Guadalupe e Portugal: Séculos XIV-XVIII. Contribuição para o Estudo da Religiosidade Peninsular*. Lisboa: JNICT; Centro de História da Universidade de Lisboa, 509 pp.
- Miranda, N. (2023). A Contabilidade no Mosteiro de Santa Maria de Alcobaça nos Finais do Século XVIII. *Dissertação de Mestrado*. Escola Superior de Gestão e Tecnologia, Santarém. Disponível em https://repositorio.ipsantarem.pt/handle/10400.15/4446.
- Montrone, A. & Chirieleison, C. (2009). Traces of Double Entry in a Monastic Community: The Accounting of the Abbey of San Pietro in Perugia 1461-1464. *De Computis Spanish Journal of Accounting History*, 10, 239-263.
- Oliveira, A. (1974). A Abadia de Tibães e o seu Domínio (1630-1680): Estudo Social e *Económico*. Porto, Publicações da Faculdade de Letras do Porto.
- Oliveira, A. (1979). Contabilidades Monásticas e Produção Agrícola durante o Antigo Regime: Os Dízimos do Mosteiro de S. Tirso 1626-1821. Porto, Publicações da Faculdade de Letras do Porto.
- Oliveira, J. (2005). The Accounting System of the Monastery of Arouca: 1786-1825: The Case Study of the Economic and Administrative Governance of a Feminine Cistercian Monastery. Arouca: RIRSMA.





- Pereira, P. (2011). Arte Portuguesa: História Essencial. Lisboa: Círculo de Leitores; Temas e Debates, 434-444.
- Prieto, B, Maté, L & Tua Pereda, J. (2006). The Accounting Records of Monastery of Silos throughout the Eighteenth Century: The Accumulation and Management of its Patrimony in the Light of its Accounts Books. *Accounting History*, 11(2): 221–256. <u>https://doi.org/10.1177/1032373206063115</u>.
- Prieto B. & Gutiérrez, F. (2018). Tendencias en la Producción Científica en Historia de la Contabilidad. *De Computis - Spanish Journal of Accounting History 15*(2). doi: <u>http://dx.doi.org/10.26784/issn.1886-1881.v15i2.331</u>.
- Rappazzo, N.; Marisca, C. & Sargiacomo, S. (2024). Tracing the Evolution of Accounting History Research in the New Millennium: A Bibliometric Analysis of Publication Patterns in Specialist Journals, *Accounting Historians Journal*, 1–27. Available at <u>https://ricerca.unich.it/retrieve/8e17cc7c-42db-4046-bd4dae9267d28075/aahj-2023-037.pdf</u>
- Ribeiro, V. (2015). A Contabilidade no Convento de Nossa Senhora dos Remédios em Braga nos Séculos XVIII e XIX. *Dissertação de Mestrado*. Universidade do Minho. <u>https://hdl.handle.net/1822/34961</u>.
- Rivero D.; Gallego E. & Ramos A. (2005) Accounts Rendering at the Cistercian Order in Castile: the 'Book of Statements' of the Monastery of Oseira (1614–1832). *De Computis - Spanish Journal of Accounting History*, 2(2): 81–198.
- Rivero, D., Gallego, E. & Ramos, A. (2023). La Rendición de Cuentas en la Orden del Cister de Castilla: el Libro de Estados del Monasterio de Oseira (1614-1832). De Computis - Revista Española de Historia de la Contabilidad, 2(2). 81-198. <u>https://doi.org/10.26784/issn.1886-1881.v2i2.232</u>
- Rivero, D.; Gallego, E.; Ramos, A. & Tua, J. (2005): *Economía y Contabilidad Monásticas en la Transición del Antiguo al Nuevo Régimen. El Monasterio de Santa María la Real de Oseira*. Ourense: Ed. Diputación Provincial de Ourense.
- Rodrigues, L. L., Gomes, D., & Craig, R. (2004). The Portuguese School of Commerce, 1759-1844: a reflection of the "Enlightenment." *Accounting History*, *9*(3), 53-71. https://doi.org/10.1177/103237320400900304.
- Rodrigues, R. (2017). *Tempos de Mudança, Tempos de Perda: o Património Conventual Português no Século XIX. Testemunhos de Vandalismo.* Universidade de Lisboa. <u>http://hdl.handle.net/10451/38065</u>.
- Ryan, B., Scapens, R. & Theobald, M. (2007). *Research Method & Methodology in Finance & Accounting*. London: Thomson, Dexter Haven Associates Ltd.



- Santos, C. (1980). *Os Jerónimos em Portugal: das Origens aos Fins do Século XVII*, Instituto Nacional de Investigação Científica: Centro de História da Universidade do Porto.
- Serrão, J. (1996). *História de Portugal. O Despotismo Iluminado (1750–1807).* VI. Lisboa: Editorial Verbo.
- Silva, C. da; Boytaca, D., & Castilho, J. (1925). *Mosteiro dos Jerónimos (História e Descrição)*. 3rd edition. Lisbon: Henrique Torres Editor.
- Silva, M. (2010). A contabilidade do Mosteiro de S. Martinho de Tibães nos Séculos XVIII e XIX. *Dissertação de Mestrado*, Universidade do Minho, Braga. <u>http://repositorium.sdum.uminho.pt/handle/1822/16818</u>.
- Sibilio, B., & Vannini, I. E. (2020). Development of the Administrative-Accounting System of the Conservatorio S. M. degli Angiolini in Florence from 1785 to 1859: Institutional Changes and Isomorphic Pressures. *Accounting History*, 25(2), 261-280. <u>https://doi.org/10.1177/1032373219882436</u>
- Sousa, A. (1837). Descripção do Real Mosteiro de Belém com a Notícia da sua Fundação pelo Abbade A.D. Castro e Sousa. Lisbon: Typographia de A.I.S. de Bulhões.



De Computis

Appendices

Appendix 1. Literature on Portuguese Monastic Accounting History

Author (Year)		Monastic Institution	Religious Order	Period of Analysis	Obetctive
Oliveira (1974)	Book	São Martinho de Tibães (Braga)	Benedictine	17th century	Land and management
Oliveira (1979)	Book	São Bento (Santo Tirso)	Benedictine	17th century	Agricultural production and tithes
Gonçalves da Silva (1985)	Book chapter	Santa Maria (Alcobaça)	Cister	17th century	Organization of the accounting books and roles
Fernandes (1992)	Book	Santa Clara (Porto)	Clarisse	18th century	Evolution of financial position and human ressources
Oliveira (2005)	Master Thesis	Santa Maria (Arouca)	Cister	18th-19th centuries	Organization and hierarchical structure; sources of income and expenses; decision making; internal control
Martins (2010)	Master Thesis	Santa Maria de Belém (Lisboa)	Hyeromomyte	19th century	Accounting practices and control
Silva (2010)	Master Thesis	São Martinho de Tibães (Braga)	Benedictine	18th-19th centuries	Analysis of accounting books and internal control
Araújo (2010)	Master Thesis	Santa Anna (Viana do Castelo)	Benedictine	18th-19th centuries	Accounting system
Gomes (2011)	Master Thesis	São Jorge (Coimbra)	Agoustinian	13rd century	Revenues and land
Brandão & Oliveira (2012)	Book chapter	Santa Maria (Arouca)	Cister	18th-19th centuries	Accounting books and their use
Ribeiro (2015)	Master Thesis	Nossa Senhora dos Remédios (Braga)	Franciscan	18th-19th centuries	Accounting books and accounting control
Malheiro (2018)	Master Thesis	São Salvador (Palme)	Benedictine	18th century	How accounting books are organised
Gomes, Maran & Araújo (2022)	Article	Santa Anna (Viana do Castelo)	Benedictine	18th century	Link between governance and accounting
Miranda (2023)	Master Thesis	Santa Maria (Alcobaça)	Cister	18th century	Accounting practices
Malheiro (2024)	Master Thesis	Congregation - Rule of Saint Benedict (Braga)	Benedictine	18th century	Accounting and control





Appendix 2. Accounting books and other documents from the Monastery

The accounting books and other documents from Jerónimos Monastery were grouped into relevant categories, based on themes such as financial, agricultural, legal, ecclesiastical, and property-related matters, as shown below. These categories provide a comprehensive view of the scope of available records, as well as they reflect the responsibilities and activities that the monastery was involved in during this period.

List of Books - Jerónimos Monastery - Santa Maria de Belém

#	Type of Books
32	Financial and Expense Records
13	Agriculture and Property Management
3	Legal Documents and Contracts
3	Ecclesiastical and Monastic Records
8	Property and Land Management
4	Miscellaneous*
17	Monastery Library
80	
	*Administrative and Organizational Documents

List of books - Jerónimos Monastery - Santa Maria de Belém

1. Financial and Expense Records

Books concerning the monastery's financial operations, including income, expenses, and financial management across various years.

# Book	s look Code		
14	L01-L14	•	Book of expense and revenue (1800-1833).
1	L15	•	Book of expense and revenue of the sacristy (1813-1833).
1	L49	•	Book of expense and revenue (1802-1804).
9	L31–L39	•	Book of expense and revenue (several periods).
5	L50–L54	•	Book of royal interest, rents and revenue (juros reais/rendas/foros) collected (1576-1833).
1	L61	•	Book with notes on debts (liabilities and assets) (1797-1806).
1	L40	•	Book of expenses incurred in arranging the graves (1797-1833).
32			

2. Agriculture and Property Management

	Books con	cernir	g the administration and productivity of the monastery specific properties, such as agricultural estates, farms and other a
# Book	s look Code		
6	2, L16–L	•	Book related to the management of Quinta da Palmeira (1800-1833).
5	L21–L25	•	Orchard and vegetable garden expense books (1783-1822).
1	L55		Book of notices regarding land grants, rents, and royal interests (1743).
1	L56		Property boundary records (Livro de tombos) for the farms Atalaia, Palmeira, and Fernão Ferro (1549-1600).
13			





3. Legal Documents and Contracts

# Books	look Code		
1	L30	•	Legal documentation regarding confirmation laws (1765).
1	L46	•	Legal case involving the Hieronymus' monks against the prior D. Miguel de Castro.
1	L64		Legal process concerning the quindénio, a tribute paid to Santa Sé every 15 years.*

4. Ecclesiastical and Monastic Records

	Books which cover the internal operations, professions of monks, customs, and religious ceremonies.							
# Book	s look Code							
2	L45, L82		Book of monastic professions (1509-1805).					
1	L83		Monastic customs of the Real Mosteiro de Belém (1745).					
3								

5. Property and Land Management:

	Books concerning records of properties under the monastery's ownership and rental contracts.							
# Bool	ks look Code							
3	L41–L43	•	Book of the cartorial index and land management of the Mosteiro de Santa Maria de Belém (1755).					
1	L44	•	Book of leased estates and land tenure (casais foreiros) (1741).					
4	L57-L60	•	Book of land registration (Livro de tombo) (1745).					
8								

6. Miscellaneous Administrative and Organizational Documents:

Documents concerning the broader administrative operations of the monastery.

# Books	look Code	
1	L62	Book of certificates confirming the fulfillment of pious obligations of the chapel of João Teixeira (1786-1833).
1	L63	Commune Sanctorum (1780).
1	L38	Resolutions concerning monastic finances (Mesa da Fazenda).
1	L47	Index of burials in the cloisters of the monastery.
4	_	

7. Monastery Library

# Books look Code			
1	L65		Book of Hous of D. Duarte.
1	L66		Liber Sententiarum by Pedro Lombardo (1494).
7	L67-L73		Jerónimos Bible.
5	L74-L78		Crónicas de vários Reis.
2	L79-L80		Comentarii et postillas Fratris Nicolay de Lyra super Bibliam Sacram , vol. 1 1415.
1	L81		Decretais de Gregório IX.
17			

Source: https://digitarq.arquivos.pt/details?id=4381009





Appendix 3. Transcript of Summary Accounts Balance in the Book of Expenses and Receipts of the Jerónimos Monastery – September to December 1833

23. Saldo das Conta a. de. Conto Sumanas 523/100 hovimmetor 23 1 231 187. dumaria anin an # Ou dentro Den a eloranha 214 Beennas, Prutacois 60 Alas neurasonial ger madas Partidos Dividas atrazadas ous andreader . 42/321 Bea 71800 522 4 610 85#800 Auibo 240 100 Palameira 8808633 570 Horo 6 hoy 633 1841200 641198) en Junto se ne unda de 22 40 se 1 1833 C. Fr Francisco de Alstade Lo B.

Source: Livro de Receitas e Despesas, PT/TT/MSMB/L14, ANTT (1833).

