

The Effect of the Establishment of the Portuguese Republic on the Revenue of Secular Brotherhoods—the Case of “Bom Jesus de Braga”¹

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Abstract

Following its establishment in 1910, the First Portuguese Republic adopted a markedly anticlerical profile during its early years. Consequently, we hypothesize that the revenue of Portuguese religious institutions should reflect a clear structural break in 1910. However, one of Portugal’s most important historical pilgrimage sites (“Bom Jesus de Braga”) does not seem to have experienced a very significant break. Relying on time series econometrics (consisting primarily of recurring tests for multiple structural breaks), we studied the series of the Bom Jesus revenue between 1863 and 1952 (i.e., between the confiscation of church property by the constitutional monarchy and the stabilization of the Second Republic). It was concluded that 1910 does not represent a significant date for identifying a structural break in this series. However, the last quarter of the nineteenth century cannot be neglected in terms of the structural changes occurring in the Bom Jesus revenue.

Keywords

Portuguese economic history; anticlericalism; Bom Jesus de Braga; structural breaks

Resumo

Após o estabelecimento, em 1910, a Primeira República Portuguesa assumiu um perfil anticlerical durante os seus primeiros anos. Consequentemente, poderíamos supor que as receitas das instituições religiosas portuguesas refletiram quebras estruturais em 1910. No entanto, um dos mais importantes centros históricos de peregrinação de Portugal (o "Bom Jesus de Braga") parece ter passado esses anos sem quebras significativas. Baseando-nos em análises econométricas de séries temporais (principalmente testes sobre quebras estruturais), estudámos com detalhe a série de receitas de Bom Jesus entre 1863 e 1952 (ou seja, entre o confisco da propriedade da igreja pela monarquia constitucional e a estabilização da Segunda República). Concluiu-se que 1910 não é uma data significativa para a identificação

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de uma quebra estrutural na série. No entanto, os anos do último quartel do século XIX não podem ser negligenciados em termos de mudanças estruturais nas receitas do Bom Jesus.

Palavras-chave

História económica portuguesa; anticlericalismo; Bom Jesus de Braga; quebras estruturais

1. Introduction

The establishment of the First Portuguese Republic (on October 5, 1910) transformed a constitutionalist monarchy into a parliamentary republican system. In its first years, this system produced an impressive number of legislative documents. However, the most important of these documents were clearly anticlerical in their tone and nature. This political vendetta against Catholic forces stemmed in part from the Catholic hierarchy’s official opposition to republican forces (since the early 1820s), as well as from the political loyalty of many clergymen and rural residents to the monarchy. The Minho region (whose administrative capital, Braga, is approximately 30 miles to the north of Porto) was among the most conservative areas, opposing many political changes that were more effusively applauded in the largest Portuguese cities (e.g., Lisbon and Porto).

Since the seventeenth century, Bom Jesus de Braga has been one of the most important religious sites in the so-called Portuguese Rome (i.e. the city of Braga), and is managed by a secular brotherhood. In addition to the local and regional prestige that it enjoys by belonging to this brotherhood, Bom Jesus de Braga has been further characterized by its national and international prominence since the eighteenth century. However, after an exhaustive study of the daily balance sheets, we observed considerable oscillations in the revenue reported by the Bom Jesus brotherhood for almost a century, i.e. between 1863 and 1952. These daily sheets cover a long period that was extremely dense in historical, political and economic events, even from a national perspective. Because the Bom Jesus revenue has primarily been derived from donations, alms, stipends and yields from financial investments (among other items, which will be discussed later on), they reflect not only the flows of visitors to the shrine, but also the country’s economic growth and the idiosyncratic changes it has experienced.

Accordingly, this work will analyze the endogenous dynamics of Bom Jesus, which, during the period under study here, evolved from a strictly religious area (centered around Jesus Christ’s *via crucis*) into a tourist area (changes included the improvement of its hotels, the building of a funicular, and the enlargement of its already dense forest). However, the Minho region also developed, and its population increased between 1863 and 1952. Demographic challenges arose, and important moves were made in the political chess game. The Minho area not only adapted to the complex evolution of the Portuguese economy and society, but also retained one of the most notable particularities of the area’s population—its religiosity.

We will empirically test whether the establishment of the First Republic significantly changed the Bom Jesus revenue. Our hypothesis was constructed in the light of the extensive changes that the republican forces intended to make to the population’s Catholicism and the military occupation of Braga’s convents, with the interruption of its processions and the enforced exile of two of its archbishops during the period of the establishment of the Republic, among other episodes that will be discussed later on. Furthermore, in 1910-1911, important changes took place in the purchasing power of the Portuguese population, including a significant reduction in the size of the economically active population (Valério, 2001), which might have significantly changed the propensity of private individuals for making religious donations (such as those that accounted for much of the Bom Jesus revenue).

The structure of this paper is as follows: in section 2, we will discuss the location of Bom Jesus, its religious importance, and its evolution; and, in this same section, we will also describe the changes occurring in the Bom Jesus revenue from 1863 to 1952. In section 3, we will revisit the most important historical moments that occurred in Portugal and the Minho region during the period under study. Our empirical tests for the existence and identification of structural breaks in the time series of the Bom Jesus revenue will be discussed in section 4. Finally, section 5 concludes the paper.

2. The revenue of Bom Jesus de Braga between 1863 and 1952—how the revenue of a secular brotherhood reflected the evolution of the local and national economies

2.1 The importance of Bom Jesus and a justification for selecting the case of the Bom Jesus revenue

According to Pereira (2013a), the Bom Jesus complex remains one of Portugal’s most important and most heavily visited religious pilgrimage sites, receiving more than 900,000 visitors per year. Bom Jesus is currently applying for the status of a World Heritage Site. Interestingly, the Brazilian site of Bom Jesus de Matosinhos (Congonhas, Minas Gerais, Brazil), which was constructed in the eighteenth century with a design based on that of Bom Jesus de Braga, is already a World Heritage Site.³ The architectural influence of Bom Jesus de Braga can be clearly noted at various other Portuguese sites, such as the

³ Information about the Bom Jesus sanctuary in Congonhas is available from UNESCO: <http://whc.unesco.org/en/list/334>

Sanctuary of Our Lady of Remedies (Lamego) and the Sanctuary of Our Lady of Mercy (Sanfins do Douro).

The Bom Jesus site continues to be inspired by its religious roots. However, it also provides non-religious tourist amenities (including its funicular, which was the first to be built in Portugal and Spain,⁴ green leisure areas, a central lake, and a group of four hotels).

This site was originally developed around modest chapels that focused on the Catholic devotion to the Holy Cross, which already existed in the seventeenth century (Peixoto, 2011). On August 29, 1773, Pope Clement XIV signed three religious briefs concerning Bom Jesus, which significantly contributed to the increased number of visitors from then on (Peixoto, 2011). During the eighteenth century and the first years of the nineteenth century, the religious area expanded into its adjacent territory to create a baroque natural sanctuary (a “sacromonte tridentino,” as Bandeira (2006) claims). Prior to 1868, 16 chapels were constructed on the site to represent the stations of Jesus Christ’s *via crucis* (*Ilustração Popular*, 1868, as reported in Peixoto, 2011). During the eighteenth and nineteenth centuries, the site was enriched with a complex system of fountains and biblical statues to improve its scenic attractiveness. During the nineteenth century, several private chalets were built around this natural sanctuary, demonstrating the local importance of this place even to Braga’s bourgeoisie (Bandeira, 2006). The dense inner forest area within the Bom Jesus site was also substantially improved during the second half of the nineteenth century through the planting of trees from the hills of Gerês and Buçaco (Peixoto, 2011).

The last quarter of the nineteenth century witnessed several more improvements, namely to the lakes and fountains. In 1877, a central lake was constructed (Peixoto, 2011). In 1878, in recognition of the public’s affluence, a telegraph post was erected. On May 13, 1880, a contract was signed between Bom Jesus and a private company (*Companhia de Carris e Ascensor*) to distribute water between its various sources and utilities (e.g. the funicular, the lakes, and the hotels). The impressive number of visitors during this period⁵ led to an increased hotel capacity through two main initiatives—the construction of a chalet for benefactors (1877-1880), and the construction of a new storey at the *Hotel do Elevador* (1883-1884) (Peixoto, 2011).

According to Peixoto (2011), during the nineteenth century, Bom Jesus was not only an important site of religious pilgrimage, but also a local setting for the enactment of national political and parliamentary conflicts that were then exported to the most important

⁴ According to Unamuno (1908) and Coutinho (1899), the funicular began to operate on March 25, 1882, thanks to the enterprise of Manuel Joaquim Gomes.

⁵ According to Lopes (2009: 19), during the pilgrimage of 1884, more than 90,000 pilgrims visited Bom Jesus.

brotherhoods of the region (namely the conflicts between the “Regeneradores” and the “Progressistas”). The elections of the last quarter of the nineteenth century revealed these dynamics. During the 1870 elections, several protests were made about the continuing persistence in office of several brothers who had managed the brotherhood for over 15 years. In the elections of 1877 and 1895, two separate lists of candidates claimed victory, with the result of the elections being resolved by the Supreme Administrative Court (Peixoto, 2011).

After the establishment of the First Portuguese Republic (October 5, 1910), the statutes governing the brotherhood of Bom Jesus provided the primary evidence of the deep changes that the anticlerical direction of the new Portuguese government had introduced into the country’s religious life. According to Peixoto (2011), in 1912, new statutes were approved by both civil authorities (on February 27) and religious authorities (on March 25). In 1919, new statutes were passed, which expressly mentioned the Law of Separation of Church and State (Peixoto, 2011).

Although the establishment of the First Portuguese Republic is usually linked to the rise of anticlerical movements, the Bom Jesus resort continued to develop after 1910. In 1903, an artificial cavern was built close to the main hotel, and, in 1912, a belvedere was constructed in that cavern. In 1906, the space was electrified in order to power the public streetlights installed at the resort.

In 1916, the architect Raul Lino designed a casino for the resort (which is currently a conference hall), and, in 1926, the same architect put his name to the “Casa das Estampas” project, a building designed to sell religious articles that was located close to the main church of Bom Jesus (Bandeira, 2006). In 1925, the Bom Jesus private historical library was created.

According to Pereira (2013a), from 1890 to 1930, Bom Jesus was a cultural space with an intense program. There were philharmonic performances, popular/secular festivities (usually at Pentecost, 50 days after Easter), cultural conferences hosted at the hotels,⁶ and sports tournaments (especially fencing). Because of its many sights and magnificent views, Bom Jesus was also visited by many photographers. It was further improved in 1944 with the addition of a telescope, which is now considered to be one of its major attractions (Peixoto, 2011).

⁶ At a historical conference on May 27, 1926, Dr. Cunha Leal gave a speech. This conference precipitated the military coup that started in Braga the following morning, resulting in the establishment of the Second Portuguese Republic (1926-1974).

2.2 The revenue of Bom Jesus between 1863 and 1952

The Bom Jesus brotherhood maintains a private historical library containing a large collection of books that describe the history of the area and the institution. We will therefore begin by studying the library’s daily balance sheets, which span nearly a century, i.e. from 1863 to 1952.⁷ This private library includes an extensive list of documents relating to official administrative staff meetings (“Mesa”), accounting ledgers relating to the brotherhood’s various financial operations (not only its day-to-day activities, but also its investments), and documents providing details of particular brotherhood activities, such as the provision of social welfare or the modernization and expansion of its buildings.

These activities generated expenses that were primarily covered by the brotherhood’s revenue. To observe the Bom Jesus revenue, we consulted the brotherhood’s official accounting ledgers for 1863-1952. Accordingly, we consulted the Bom Jesus daily balance sheets (*Diário da Despesa e Receita*). This collection is composed of seven handwritten and well-preserved ledgers⁸ whose reference codes (in the Bom Jesus book inventory) are 811, 812, 813, 814, 815, 816, and 817.⁹ These ledgers provided us with our observations of the group’s revenue.

The main items of revenue observed from 1863 to 1952 can be divided into current revenue and capital revenue. Current revenue includes donations, religious bequests, alms, Mass stipends, sales of religious items (such as pictures of saints, medals, candles, and books), dues paid by members/brothers, and new enrolment fees for members. Capital revenue primarily relates to the receipt of interest from bank accounts, dividends, and rents (the brotherhood owns land and hotels, which are rented by third parties).

During the period under study, current revenue accounted for an average of 72% of total revenue, and thus the yearly cycle of revenue primarily depended on the cycle of current revenue. There were two peaks in the months of June and July (which are usually

⁷ The Bom Jesus historical library also contains other books that describe the details of its accounting operations and/or financial flows for the period before 1863. However, because this information is scattered among various books, with different accounting methods being used by different bookkeepers and treasurers, we opted to cover the most extensive series of yearly observations, which was constructed using the same methodological and accounting procedures. Therefore, we focused only on the years between 1863 and 1952. More recent years (i.e. after 1952) were not covered in this paper because the relevant books have not yet been deposited in the historical library. The study of daily balance sheets after 1952 merits additional attention in future research studies.

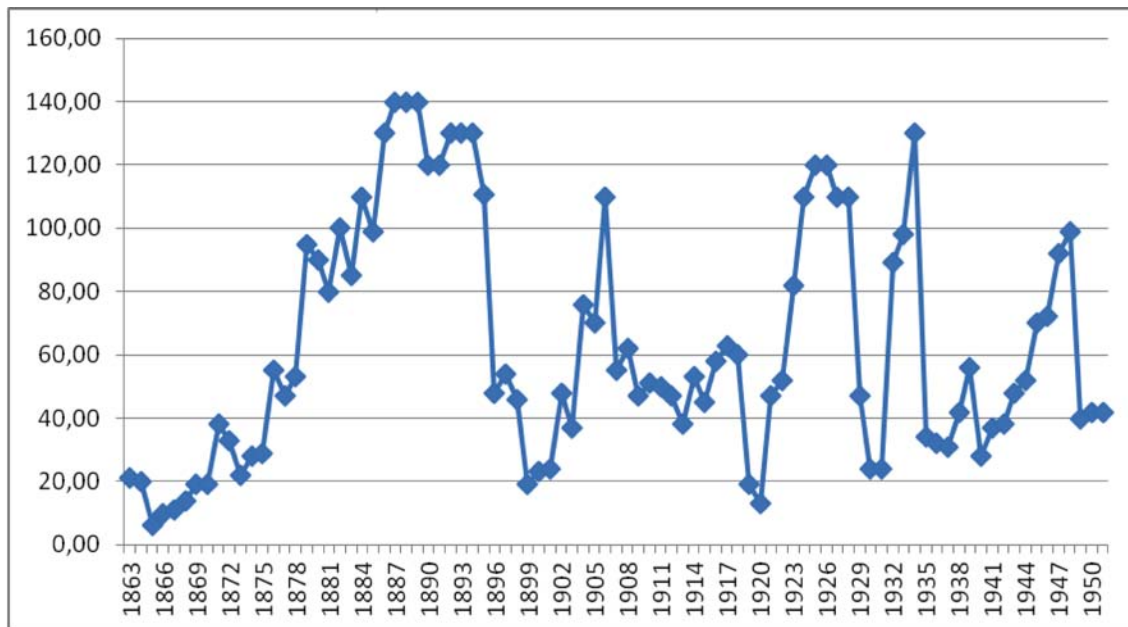
⁸ A full description of these books is available upon request.

⁹ Book 811 covered the period from July 4, 1863, to July 10, 1877. Book 812 covered the period from July 18, 1877, to June 30, 1896. Book 813 covered the period from June 30, 1897, to June 30, 1921. Book 814 gave the details for book 813. Book 815 covered the period from June 30, 1921, to December 31, 1952. Books 816 and 817 gave the details for book 815.

close to the main religious festival for Bom Jesus—Pentecost—according to Peixoto (2011)). The minimum monthly values tended to occur in August. Full details are available upon request.

To avoid serious problems with inflated values (due to the Portuguese inflation rate), we will observe this revenue at constant prices. To properly deflate the Bom Jesus revenue, we will use the price indexes available in Valério’s *Estatísticas Históricas Portuguesas* (2001) and Vasconcelos (1999). Figure 1 shows the values of the Bom Jesus revenue at constant prices¹⁰ between 1863 and 1952.

Figure 1—The total revenue of Bom Jesus, 1863-1952 (vertical axis: 1,000,000 escudos at 1999 prices)



If we analyze Figure 1, we will notice an upward trend in revenue between 1865 and 1890. At the end of the 1880s, revenue reached its maximum value of approximately 140,000,000 escudos (at 1999 prices). The 1890s were characterized by sharply diminishing values (1899 revenue only reached slightly over 20,000,000 escudos). Between 1900 and 1920, revenue reached its maximum value (approximately 110,000,000 escudos in 1906), exhibiting an inverted-U shape over these two decades. Between 1920 and 1950, there were three revenue cycles during each decade, with peaks in 1925, 1935 and 1948.

¹⁰ The base year is 1999 for two reasons: firstly, the euro was introduced in 1999 as the official Portuguese currency, secondly, using amounts calculated at 1999 prices improves clarity for readers, given that these are relatively recent (Wynne and Rodriguez-Palenzuela, 2004).

This series exhibits different patterns of oscillation, indicating the absence of a unique trend. To explain this movement in terms of revenue, we could formulate hypotheses that focused on the history of Bom Jesus. In this case, several authors (Otáhal, 2012; Almodovar and Teixeira, 2008; Bértola, 2013) warn that we would be overlooking the importance of Bom Jesus beyond its religious practices. As various authors have claimed (Bandeira, 2006; Peixoto, 2011), Bom Jesus has always been an important source of revenue, not only at a local level, but also at the national and international levels. Therefore, the revenue of Bom Jesus is necessarily dependent on major regional and national socioeconomic changes. In order to search for additional explanations, in the next section, we will describe the main political, economic and religious changes observed in Portugal and in the Braga area during the period under study.

3. Explaining the oscillation of the revenue of Bom Jesus—brotherhood dynamics and local and national causes between 1863 and 1952

The study of business cycles in the field of economics has received special attention from very different authors, including Ibn Khaldun, Adam Smith, Karl Marx, and Alfred Marshall. As Parpola (2009) argues, even nomadic tribes studied the cycles of their travels, paying special attention to seasonal variations, lunar phases, and tides. Similarly, the study of the causes of such cycles has emerged as a “natural” field of research (Moore, 1914; Temin, 1998). According to several authors (Moore, 1914; Otáhal, 2012; Bértola, 2013), if we wish to analyze the cycle of a particular socioeconomic phenomenon, we must also identify the most important external dimensions that might influence the phenomenon beyond its own dynamics. If the phenomenon is regionally concentrated (for instance, the volume of trade recorded by a fair over several years), we must study the economic history of the region in addition to the fair’s own commercial flows.

In the case of Bom Jesus, we are analyzing a religiously inspired place whose sphere of influence not only includes its surrounding region (northern Portugal), but also touches upon Portugal as a whole (Peixoto, 2011; Pereira, 2013b). Therefore, if we intend to explain the oscillations observed in the Bom Jesus revenue, we must analyze the Bom Jesus dynamics more closely, as well as the major economic events in historical terms in Portugal in general, and in its northern region in particular.

3.1 The complex relationship between Portuguese political forces and Catholic institutions from 1863 to 1910

The period under observation (1863-1952) is full of events related to the rise of the Portuguese republican movement, ranging from the complex management of the institutional and social relationships between the Catholic Church, the Monarchy and the Parliament to the social convulsions affecting the country.

For instance, as Mourão (2012a) notes, the 1860s imposed a series of unpopular taxes, marked by the “Maria Bernarda” and “Maria da Fonte” revolts in the Braga and Minho areas, respectively. In April 1861, several laws were enforced by the Portuguese courts in favor of the dissolution (“desamortização”) of the property of nuns and churches, which were financed by interests on public debt (Neto, 1998). 1861 also signaled the suppression of the rights relating to religious bequests (“vínculos e capelas”). In 1862, new legislation prohibited the functioning of religious congregations. In 1866, the movement to confiscate religious properties was extended to include parishes, brotherhoods, and charitable institutions (“Misericórdias”); in 1869, it was extended to religious primary schools. For a more detailed discussion of anticlericalism in Portuguese law during the 1860s, see Fernandes (2007).

However, the 1870s brought changes to these anticlerical laws. According to Silva (1996), the “Associação Católica”¹¹ was created in 1870, and in 1871 there were some attempts to re-legalize the activities of religious orders (although the Benedictines only returned in 1888). In 1871, anticlerical conferences were prohibited at the Casino Lisbonense (Mónica, 2001). In 1872, the Catholic newspaper “A Palavra” was founded. The 1878 Administrative Reform clarified the functions that could be performed by local religious authorities (namely priests) and by the presidents of “juntas,” the local parish councils that managed many public issues, including the maintenance and reconstruction of religious sites (Gomes, 2012).

The years 1880 (marking the three hundredth anniversary of Camões’ death) and 1882 (marking the centenary of the Marquis of Pombal’s death) reinforced the influence of the anticlerical movement (Cunha, 2011). In 1895, a congress of anticlerical forces was organized by socialists, and in that same year Afonso Costa published *A Igreja e a Questão Social*. Furthermore, Portugal signed a treaty with the United Kingdom (on August 20, 1890), which permitted religious freedom in the African territories under their

¹¹ See Gonçalves (2004) or Catroga (1988) on the “Associação Católica.”

administration. In 1900, the socialist force “Círios Civis” organized another anticlerical congress, and João Bonança published *O Século e o Clero*. In 1901, Minister Hintze Ribeiro attempted to pass legislation recognizing the public activities of religious orders through the Decree-Law of April 18, 1901 (Villares, 1995), which was followed by popular protests in several cities (even in cities in northern Portugal, such as Vila Real and Chaves).¹²

Catholic movements defended themselves in the press. In 1893, the influential Catholic newspaper *Correio Nacional* appeared. In 1901, ten years after the *Rerum Novarum* (of Leo XIII) at Coimbra, Catholic forces acquired a more powerful political voice with the creation of the “Centro Académico de Democracia Cristã.”¹³ In October 1904, legislation appeared to facilitate the loan contracts of Catholic trade unions. In December 1904, Father Pinheiro Marques published *O Socialismo e a Igreja* (Ferreira, 2007). On August 30, 1907, the 2nd Congress of the Popular Catholic Associations took place in Porto. Silva (1996) discusses the Catholic movements over these final years of the constitutional monarchy.

The rise of Catholic social organizations was accompanied by the appearance of important anticlerical movements, such as the “Junta Liberal,” a para-Masonic organization (led by Miguel Bombarda, António Aurélio da Costa Ferreira, Egas Moniz and Cândido dos Reis), which attracted more than 100,000 people to a public meeting on December 22, 1909 (Catroga, 1988).

3.2 The First Republic and changes in the relationship between the Portuguese State and the Catholic Church

The First Portuguese Republic was established on October 5, 1910. The incumbent forces immediately set about the task of profoundly restructuring the relationship between the Portuguese State and the Catholic Church (Fernandes, 2009).

On October 8, 1910, the Jesuits were expelled, as were other religious congregations, and many convents were closed. Several religious institutions lost their religious heads (some were arrested, others fled) and were consequently maintained by secular Christians in the months that followed (Araújo, 2001). Ten days later, on October 18, 1910, the teaching of Christian doctrine at public schools was abolished. Afonso (2013) argues that the republicans’ most effective anticlerical legislation was the one governing

¹² See Ribeiro Aires (2010).

¹³ For an extensive discussion on the origins and the importance of the “Centro Académico de Democracia Cristã,” see Hipólito (2004).

educational reform, and on October 20, 1910, the Apostolic Nuncio left Lisbon, while many priests and nuns were imprisoned.

On November 3, 1910, the Divorce Law was promulgated (according to Ferreira (1993), this law represents one of the major victories of republican ideas), and on December 29, the theological and canonical law faculties were closed. On January 21, 1911, a Decree-Law was passed prohibiting religious worship at the chapel of the University of Coimbra (at the time, the most important in the country). On February 20, 1911, parochial institutions lost their monopoly over the control of demographic censuses (namely the registration of births, deaths, and marriages), and these duties were assumed by the “Registo Civil” (Civil Registry Office), a secular administrative office created in each municipality.

The first public reaction from Portuguese bishops occurred on February 23, 1911, with the signing of a public letter of protest about the evolution of the newly-established republic. The Minister of Justice, Afonso Costa,¹⁴ prohibited the reading of the letter, and several arrests and imprisonments were reported when religious people disobeyed the ban. On January 14, 1912, the bishops of Viseu and Porto were exiled.¹⁵

On April 20, 1911, the Law of Separation of Church and State was passed. This law led to the severance of institutional relations with the Vatican (which was further encouraged by Portugal’s nationalization of Church property).

However, after three years during which there was an intense implementation of anticlerical measures by the ruling forces (discussed in Fernandes (2009)), the First Republic and the Portuguese Church began to enjoy a more stable relationship. In 1913, the Catholic movement known as “União Católica” (Pinto, 2011) was officially registered. On February 7, 1915, the consecration of the first Bishop since the establishment of the Republic—Dom Antonio Pereira Ribeiro, Bishop of Funchal—took place, and on August 8, 1915, the Catholic nationalist movement “Centro Católico Português”¹⁶ was created at a meeting in Braga.

In 1917, the reported apparitions of the Virgin Mary at Fátima increased Portugal’s Catholic religiosity, which evolved from a popular phenomenon into the international pilgrimage that currently characterizes Fátima. The relations between the Portuguese

¹⁴ There are several books that reflect on the difficult relationship between the Catholic Church and the early First Republic. Afonso Costa’s *Catolicismo, Socialismo e Sindicalismo* (1913) and Moreira d’Almeida’s *A Separação do Estado e das Igrejas* (1911) deserve special attention.

¹⁵ On February 22, 1914, the Bishop of Porto received an amnesty.

¹⁶ According to Catroga (2010) and Rocha (2012), this important movement denounced the religious intolerance of the First Republic.

parliaments and governments and Fátima, and even the relationship of the Catholic hierarchy towards Fátima, were always complex affairs (Azevedo, 1995). This complexity was evident during the First Republic (Fernandes, 2012) and was only overcome after the establishment of the Second Republic (in 1926), a political period during which Fátima clearly assumed its international prominence.

In 1918, the dictatorship led by Sidónio Pais¹⁷ issued a Decree-Law (on February 23), revising the Law of Separation of Church and State, in order to restore some powers to the Catholic Church and other religious organizations. On July 10, 1918, diplomatic relations with the Vatican were resumed after Monsignor Ragonesi was received by Sidónio Pais. On January 23, 1919, Nuno Álvares Pereira (a fourteenth-century Portuguese statesman) was beatified, signaling the creation of Catholic movements such as the “Cruzada Nun’Álvares,” which were concerned with stimulating religious worship and devotion. For an extended discussion of the role played by the dictatorship of Sidónio Pais in the re-establishment of relations with the Holy See, see Silva (1996). On July 26, 1923, the Cardinal Patriarch of Lisbon, Dom António Mendes Belo, was accepted as a corresponding member of the Academy of Sciences.

3.3 The tenuous stability of the relationship between Portuguese political institutions and the Catholic Church, 1926-1952

On May 28, 1926, a military revolt began in Braga and ended in Lisbon some days later with the establishment of the Second Portuguese Republic (greatly influenced by Oliveira Salazar, Finance Minister from 1928 onward and Head of Government from 1932 to 1968). This was a period of relatively stable relations between the Portuguese political authorities (namely the parliament, the government and the president) and the Holy See.

On October 13, 1926, the Minister for the Colonies, João Belo, signed Decree-Law No. 12485, which granted the Catholic Church the exclusive right to evangelize in the Portuguese colonies. Furthermore, in 1926, several conservative Catholic periodicals appeared—most notably, the *Ordem Nova*, in which the future Chief of Government, Marcello Caetano, participated.

On June 29, 1928, Order No. 6269 nullified most of the First Republic’s anticlerical legislation, namely that which applied to public demonstrations of religious faith. On August 5, 1928, Cardinal Manuel Gonçalves Cerejeira replaced Dom António Mendes Belo

¹⁷ This dictatorship was initiated on December 8, 1917, by a military coup led by Sidónio Pais; it ended when Sidónio Pais was assassinated (December 14, 1918).

as the Patriarch of Lisbon. Cerejeira was a former colleague of Oliveira Salazar, a former leading member of Catholic organizations such as “Centro Académico de Democracia Cristão” and “Acção Católica,” and a former history professor at the University of Coimbra. The close relationship between Salazar and Cerejeira contributed not only to the approval of Salazar’s successive governments by the Catholic hierarchy, but also to the recovery and stabilization of the Church’s social and pastoral activities in Portugal (Reis, 2000).

On November 10, 1933, Pope Pius XI created the “Acção Apostólica Portuguesa,” a religious institution for pastoral action in society. In the institution’s opening message, it clarified that the Holy See recognized and supported the ideological and legitimate plans of the (new) Portuguese Republic because the activities of Portuguese Catholic forces were subordinate to the State in the political sphere. The Portuguese State in turn recognized the Church’s moral tutelage. This institutional relationship was further developed through the implementation of the Concordat and the Missionary Agreement on May 7, 1940. A few weeks later (on May 25, 1940), Salazar clarified these points in his speech “Problemas politico-religiosos da Nação Portuguesa e do seu Império.” On July 25, 1940, Decree-Law No. 30615 provided for the return to the Church of the property that religious institutions had previously managed (which had been nationalized by the First Republic).

Reflecting the proximity between their respective points of view, on December 2, 1940, a “Te Deum” Mass was celebrated in Lisbon, presided over by Cardinal Cerejeira, to conclude celebrations of the eight hundredth anniversary of the Portuguese nation and the importance of religious activities in Portugal.

As previously noted, the religious phenomenon of Fátima took on even greater importance during the Second Republic. For example, Cardinal Masella, a Legate of Pius XII to Cova da Iria (Fátima), visited the sanctuary for a celebration during which a statue of Our Lady of Fátima was crowned (on May 13, 1946) after the end of the Second World War.

Although the relationship between the Catholic hierarchy and the Portuguese political institutions had stabilized, there was less evident agreement from some clergymen (or secular movements) about the country’s political direction. For instance, *O Trabalhador*, a newspaper edited by Father Abel Varzim, a former supporter of the Second Republic, was banned on July 10, 1948, for adopting a pro-Marxist perspective. Because of this episode, Father Varzim, who had received a PhD (in political and social science) from Louvain University, was transferred from Lisbon (where he had also directed several

Catholic social initiatives) to the parish of his birthplace (Cristelo, Barcelos) in the north of the country. Another important case involved the exile of Dom António Ferreira Gomes (1959-1969), the Bishop of Porto, whose opposition to the corporatist inclinations of the Second Republic is discussed by Linda (1999).

The work of Braga da Cruz (1999) details the Catholic opposition to Salazar's government. Santos (2006) shows that, as Oliveira Salazar persisted in power, traditionally supportive movements began to withdraw their backing. For instance, articles published in the review *Brotéria*, founded by Jesuits in 1902 as a counterbalance to anticlerical and atheist opinions, shifted from a laudatory position (from 1926 through the 1930s) to a very critical stance (after 1950).

Therefore, in keeping with Linda (1999) and Reis (2000), we can recognize that after 1926 Portugal's political authorities abandoned the anticlerical view that had been adopted by the Portuguese government during the early years of the First Republic. This new profile created a scenario of stability that religious institutions or brotherhoods (such as the Bom Jesus de Braga brotherhood) might have used to expand their activities and to increase their revenue.

3.4 Socioeconomic movements in the city of Braga and its developing region, 1863-1952

In searching for explanations for the oscillations in the Bom Jesus brotherhood's revenue, we must also consider the social and economic changes taking place in its surrounding region, i.e. in northern Portugal, especially in the Braga and Minho areas, during the period under study (1863-1952).

Although the most important political events occurred in Porto, after the middle of the nineteenth century, the remainder of Portugal's northern region gradually began to participate in the evolving political and religious discussion, because it also witnessed the country's economic transformation, namely the industrialization process promoted by the Fontes Pereira de Melo government (1868-1889).

This industrialization provided various cities and towns in northern Portugal with the opportunity to display their own economic development at industrial exhibitions and trade fairs beginning in 1860. For instance, in 1861, the Portuguese Industrial Exhibition was held in Porto. Two years later, Braga organized the Agricultural and Industrial Exhibition. In 1865, the remarkable Porto International Exhibition took place at the Palácio de Cristal in this major northern city, a site deeply marked by the romanticism of

the time. In 1869, the Porto Commercial Athenaeum (“Ateneu Comercial do Porto”) was created, being linked to the appearance of a regional bourgeoisie whose wealth was based on Porto’s wine production and trade, textile industry and local banks. In 1875, the city of Braga opened a train station (Capela and Nunes, 2011).

However, Northern Portugal also experienced a rise in the number of proletarian movements, including the organization in Porto, on May 24, 1892, of the “Congresso das Associações de Classe” (Congress of Class Associations). In 1902, the 2nd Galician-Portuguese Congress was organized in the Minho city of Viana do Castelo; the following year, Braga hosted the 3rd Congress, which was marked by a common debate that included socialist speakers and trade unionists from both regions (Minho, Portugal and Galicia, Spain).

The second half of the nineteenth century featured very significant developments in the Braga area that explained the dynamics set in motion by the industrial exhibitions and the proletarian meetings. As Oliveira (2011) argues, this dynamism was also supported by the presence of a new bourgeoisie in Minho, composed of barons and viscounts (who, at the time, were afforded political recognition with the provision of a significant public fund by the State) and the so-called “brasileiros,” returned emigrants who had lived and worked in Brazil. Additional proof of this industrialization (which reinforced Braga’s centrality) is provided by the concentration of many organizations created during the period in response to the challenges of the rising numbers of indigent people and poor families.¹⁸ On the one hand, we must agree with Juncal (2004), who shows a growing number of people living in the Minho region after 1864. On the other hand, we must also recognize that a rising population was not synonymous with a significant reduction in the area’s poverty. Guimarães (2005) identifies twenty organizations (primarily religious organizations) created in Braga after 1860 to help needy people. Some examples include the “Asilo da Infância Desvalida de Dom Pedro V” (1863), the “Oficina de São José” (1889) for children, the “Colégio de Regeneração” (1869), the “Regulamento das Toleradas” (1871) for female prostitutes, the “Montepio de São José” (1861) and the “Associação Comercial de Beneficência de Braga” (1874) for the impoverished families of local merchants. Some of the supporting religious organizations included the Franciscan Hospitaller Sisters of the Immaculate Conception, the Dominican Sisters, and the Sisters of Saint Joseph of Cluny.

¹⁸ Although the city of Braga was increasingly central, some events taking place in the second half of the nineteenth century limited its growth. Examples include the epidemics of smallpox and typhoid during the 1870s, according to Barbosa (2001), and increasing emigration after 1860, according to Barbosa (2002).

Republicanism once more enjoyed greater prominence in northern Portugal during this period (after the massacre of January 31, 1891). Porto was chosen to host the Congress of the Republican Party on April 29-30, 1909. On April 27, 1912, after the actual implantation of the republic itself, another Congress of the Republican Party was hosted in the north, this time in Braga.

Social forces from the Minho region that were more closely connected with the Portuguese Catholic monarchist and conservative movements began to organize similar public events (Rocha, 2012).¹⁹ For instance, on July 3, 1903, Viana do Castelo hosted the Congress of the Nationalist Party (a Catholic political movement).

The effects of October 5, 1910 also spread from Lisbon to other Portuguese regions, namely to the country’s traditionalist northern region.

On February 23, 1911, members of two Catholic political groups (the “Círculo Católico” and the “Associação Católica”) publicly debated (and even fought) in the streets of Porto. The topic discussed was the role of the Portuguese Catholic Church in the light of the changed political regime. That year, on April 26, Afonso Costa spoke at Braga about his government’s intention to destroy Catholicism in Portugal within two generations (Araújo, 2001: 58). 1911 was a very tense year in Braga. Ferreira (2011) and Cordeiro (2011) describe street fights that occurred when anticlerical forces interrupted a Sacred Heart procession. Cordeiro (2011) also notes that the headquarters of the “Associação Católica” in Braga were burned down on October 1, 1911.

Coelho (2010) examines Braga newspapers in the weeks after October 5, 1910. Apparently, the local press did not emphasize the regime change during that period. Even republican publications devoted few lines to describing or commenting on the facts. However, as Coelho (2011) recognizes, this type of message (or, more properly, this type of silent message) reveals a strategy of the local press given the magnitude of the changes that were envisaged. Therefore, Braga’s press (mostly in the hands of monarchists and clericalists) presented confusing messages, opinions and perspectives about the situation created by the regime change. According to Sarmento (2012), this apparent silence was followed by the closures of various religious institutions in Braga: “various Theology Schools [were] closed down,²⁰ heritage was vandalized, and many musical activities, such as

¹⁹ According to Lopes (2009: 56) and Aguiã (1996: 125), devotion to the Virgin Mary increased in Portugal after 1876, particularly following the completion of the building of the Basilica of Sameiro in Braga (in a neighboring parish to the Bom Jesus parish). In 1904, 500,000 pilgrims celebrated the 50th anniversary of the proclamation of the dogma of the Immaculate Conception at the Basilica of Sameiro (Aguiã, 1996: 126)

²⁰ There were various military occupations of Braga’s Theology Schools between 1910 and 1911 (Sarmento, 2012; Araújo, 2001).

the study of religious music, were affected (i.e. at Braga’s Montariol College). Indeed, it was in a difficult social and political context that the liturgical congresses of Vila Real (1926) and Braga (1928) took place” (Sarmiento, 2012). Finally, Catholic opinion in Braga became more critical of the political path followed by the First Republic after the exile of two of its Archbishops (Dom Manoel Cunha in 1912 and Dom Manuel Vieira Matos in 1917).

The First Republic (1910-1926) was characterized by significant social turmoil, especially in northern Portugal, which was invaded three times by the monarchist troops of Paiva Couceiro (the “Traulitânia”) in 1911, 1912, and 1919. Although the monarchist troops were defeated by coalitions of popular militias supported by the republican army, several places exhibited particular support for the “Traulitânia” (or the “Monarquia do Norte”). Some of these places were located in the Minho region.²¹

On May 28, 1926, General Gomes da Costa departed from Braga, leading military divisions and spontaneously forming groups of people, including industrial workers, supported by several leading figures in the Catholic conservative movement (who were in Braga for a Marian Congress). They marched to Lisbon to reform the Republic’s political institutions, which were permanently involved in abrupt changes of government and dissolutions of parliament. This military coup ended the First Republic and gave rise to the Second Republic (1926-1974), as described in section 3.2.

On May 28, 1933, the “Camisas Azuis” (the Blue Shirts), a nationalist and socialist movement led by Rolão Preto, appeared in Braga (where this nationalist movement had recruited several members from among its most traditionalist residents) and engaged in streets fights against the police.

One of the Second Republic’s strategies was to use propaganda to send out strong messages that stabilization had been achieved (Rosas, 2012). Some such displays took place in the Minho region. Cardinal Cerejeira presided over the religious celebrations of the 150th anniversary of the laying of the first stone for the main church at Bom Jesus (Peixoto, 2011). On May 1, 1935, Guimarães hosted the “Festa do Trabalho,” which included impressive parades. On May 28, 1936, Oliveira Salazar and the President of the Republic, Oscar Carmona, went to Braga to commemorate the 10th anniversary of the 1926 coup d’état; several civic and military parades demonstrated the public acceptance of the ruling forces.

²¹ Places such as Ponte da Barca, Ponte de Lima, Arcos de Valdevez, Melgaço, Vila Nova de Cerveira, Caminha, Guimarães, Barcelos, Vieira do Minho, Fafe, Póvoa de Lanhoso, Cabeceiras de Basto, and Esposende.

On June 2, 1940, Guimarães (the first capital of the Kingdom of Portugal) hosted the celebrations for the 8th centenary of the foundation of Portugal; Salazar made his emblematic speech, “800 anos de Independência.”

During the first decades of the twentieth century, the regions closest to Bom Jesus (especially in the Braga and Minho areas) did not lose their pro-Catholic characteristics. Pereira (2013a) shows how Braga’s social practices maintained the city’s close ties to religious organizations even after the establishment of the First Republic. In 1930, 140 of the 193 designated “places of sociability”—i.e., places where organized meetings, conferences and congresses could take place—were managed by religious institutions.

During the period in which we are studying the Bom Jesus revenue (1863-1952), Braga (and its surrounding region) exhibited three main characteristics: population growth since the middle of the nineteenth century (Juncal, 2004), instability around the time of the implantation of the First Republic (1910), and the maintenance of a conservative Catholic influence during those years (Rocha, 2012).

3.5 The 1910 hypothesis—how economic and political crises changed the revenue of religious institutions

Based on the previous sections of this paper, 1910, the year of the birth of the First Republic, represents a hypothesized change in the pattern of the series of the Bom Jesus revenue. In this year, we observed simultaneous and important changes not only in the dynamics of Bom Jesus itself, but also in the dynamics of Portugal in general and the northern areas in particular. Let us recall these changes.

The statutes of the Bom Jesus brotherhood were revised several times after 1910. Peixoto (2011) notes that new statutes were required to be passed in 1912 and 1919, reflecting the anticlerical legislation produced after the establishment of the First Republic.

From a national perspective, the regime change led to hard times within the hierarchy of the Portuguese Catholic Church and other Catholic institutions. According to Fernandes (2009) and Rocha (2012), priests were arrested, bishops exiled, and convents closed, and the temporal authority of the Church was eroded by more than 30 anticlerical laws passed during the first year after October 5, 1910. Because of these national changes, we expected to note significant differences in the Bom Jesus revenue due to the political changes motivated by the appearance of the First Republic. We will test these expectations in Section 4.

Additionally, we observed that northern Portugal, including the Braga region, was not immune to the social and political transformations taking place in Lisbon and beginning in 1910. This permeability might have generated significant differences in northerners’ attitudes toward religious practices, according to authors such as Araújo (2001), Ferreira (2011) and Sarmiento (2012). Ferreira (2011) also describes the turmoil arising from the celebrations of the Sacred Heart of Jesus (in Braga in May 1911). Because the laws of the First Republic prohibited public displays of religious faith, a procession for the celebration of the Sacred Heart was interrupted by anticlerical individuals, leading to street fights. Ferreira (2011) also notes that there were “clear signs of a break in the exteriorization of religious feeling” (sic) with the suspension of the religious tradition of Easter festivities in many parishes. This change in perspective should also have led to changes in the revenue received by the religious orders and secular brotherhoods in the northern part of the country.

A body of economic literature argues that periods of political and/or economic crisis are prime candidates for the display of structural breaks in time series related to business flows. In this case, we are drawing, for instance, on the works of Peacock and Wiseman (1961) and Hamilton (1994). Synthesizing this economic literature, there are three main reasons why a crisis can explain a breakpoint: revenue effects, price shocks, and the instability that occurs in moments of crisis. Usually, inflation shocks generate not only a decrease in consumer purchasing power, but also a significant break in net household revenue (Jinnai, 2013; Fountas, 2010). Several historical episodes providing such evidence are discussed by Hayes (2011) and Moiseev (2005). An increased “fear of the future” leads to delays in investment (Schulmeister, 2014), to changes in the composition of the consumption bundle (Sato, 1997) and to a restructuring of the set of preferences and priorities related to families’ objectives (Grosjean et al. 2013). This was the economic scenario in post-1910 Portugal: Lains (2003) shows the divergence of real per capita GDP in Portugal from that of a group of nine industrialized countries between 1910 and 1915.

Therefore, assuming that the Bom Jesus visitors, contributors and customers were so affected, we can expect 1910 to have been a year that generated a significant breakpoint in the reported revenue. This is Ferreira’s (2011) thesis: the events of 1910 changed the public expression of religiosity, even in the traditionally most conservative Portuguese regions.

However, Mourão (2012b) observes that during periods of economic hardship, believers increase the number of graces/blessings published in Catholic bulletins.

According to this evidence, during periods of economic difficulty, believers may also have a higher propensity to increase their demand for religious goods and services, all else remaining constant. However, even in this case, the 1910 hypothesis is also favored by the evidence of a statistically significant breakpoint in the Bom Jesus revenue for 1910 (meaning that this revenue should have consistently increased since 1910).

What interpretation can we offer if the 1910 hypothesis is not supported? In this case, we can argue that the establishment of the First Portuguese Republic did not change the structural forces affecting the business cycle of this religious resort, supporting Carreira’s (1996) explanation that the people of Minho (most of whom are deeply religious) have tended to interpret the various regime changes as political matters unlikely to transform their idiosyncrasies or their faith (Carreira, 1996). In this case, we could also conclude that the establishment of the First Republic did not give rise to any significant alterations either in the religious beliefs of the Bom Jesus public or in their habits in terms of local visits and pilgrimages.

Now, we will test the hypothesis that 1910 (when the political regime changed from a monarchy to a republic) represented a break in the series of the Bom Jesus revenue (as illustrated by Figure 1). To test this hypothesis, we will use the appropriate time series techniques to identify the breaks in the next section.

4. Empirical section—a study of structural breaks in the revenue of the Bom Jesus brotherhood

At this point, we recall that this paper’s primary motivation is to identify the presence of structural changes in the revenue series observed between 1863 and 1952, as reported in the official accounts of the brotherhood of Bom Jesus de Tenões (Braga), referred to in this paper as simply Bom Jesus. First, we will test the 1910 hypothesis.

Econometricians have already developed appropriate methods for identifying single or multiple breaks in time series (Hamilton, 1991), with further significant developments having been made since 1970.

Given the focus of this study, we intend to briefly introduce the analysis of structural breaks. We refer those interested in more exhaustive explanations to Hamilton (1991), Andrews and Zivot (1992), Clemente, Montañés and Reyes (1998), and Baum,

Barkoulas and Caglayan (1999). Here, b_t represents the series of yearly revenue collected by Bom Jesus at constant prices.²²

$$b_t = \alpha + \rho_1 b_{t-1} + \dots + \rho_n b_{t-n} + e_t \quad (1)$$

$$E(e_t^2) = \sigma^2$$

That is, in keeping with Hansen (2001), we first model b_t as an autoregressive [AR(n)] process with an n lag, as in equation (1). We will test for structural breaks in this series by considering two alternative assumptions. First, we will test for aprioristically known/suspected dates (Chow tests), and secondly, we will test for unknown dates (Andrews and Zivot, 1992; Clemente, Montañés and Reyes, 1998; Baum, Barkoulas and Caglayan, 1999).

Let us first test the year 1910 as a probable candidate for a break in b_t . Accordingly, we will use a Chow test (Baum, 2005). In keeping with Baum’s explanation, we must split the sample into two sub-periods (the period before and including 1910 and the period after 1910). Then we estimate the parameters of equation 1 for each sub-period. Finally, we test whether the two sets of parameters are equally recurring, using a classic F -statistic. Table 1 presents the main values associated with the Chow test.

Table 1—Chow test of the Bom Jesus revenue with a break in 1910 (implantation of the Portuguese Republic)

Series	Break date	F-statistic (AR-n)
Budget revenue (logged)	1910	10.19*** (AR-1)
Budget revenue (growth rate)	1910	21.86*** (AR-1)

Note: Significance level: 1%, ***, 5%, *, 10%, *.

In reviewing Table 1, we cannot reject the null hypothesis that the year 1910 (marking the implantation of the Portuguese Republic) changed the structure of the Bom Jesus revenue. We cannot reject this hypothesis either for the budget revenue series or for the respective yearly changes. However, according to several authors (Andrew and Zivot,

²² In order to test for robustness, we will also examine the respective yearly growth rates of the revenue of Bom Jesus.

1991; Baum, 2005), the Chow test raises several issues. For instance, what happens in 1911 or in 1900?²³ Are these dates characterized by more (or less) significant F-statistics?

To address these limitations, we must use tests of unknown dates that analyze all possible breaks. According to Baum (2005), in this set of tests we first use Andrews and Zivot’s (1992) procedure for a single break. This test is based on a Dickey-Fuller unit root test. We can test for a trend break or for trend and intercept breaks generated by the break year. The next table (Table 2) presents the values obtained by Andrews and Zivot’s procedure for our data.

Table 2—Andrews and Zivot’s (1992) test of the Bom Jesus revenue

Series	Break assumption	Break date (with minimum t-stat)	t-statistic (AR-n)
Budget revenue (logged)	Intercept and trend	1896	-5.902*** (AR-3)
	Intercept	1877	-4.264** (AR-0)
Budget revenue (growth rates)	Intercept and trend	1902	-7.198*** (AR-3)
	Intercept	1922	-7.145*** (AR-3)

Note: Significance level: 1%, ***; 5%, **, 10%, *.

After reviewing the values provided in Table 2, we reject the hypothesis that 1910 (or a year close to this) brought significant changes in the *Bom Jesus* revenue. Depending on the assumptions used in each test specification (either intercept and trend changing because of the break or only intercept changing), we obtained four different dates. Two of those dates (1896 and 1902) coincided with the previously discussed pre-1910 downtrend. This downtrend was recorded for the period when socialist and republican ideas spread across the country, even into northern regions and rural areas. A third possible break was 1877; observing Figure 1, this date coincides with the beginning of the period during which the Bom Jesus revenue significantly increased for nearly ten years. The fourth date (1922) occurs at the beginning of the period during which we observed another uptrend in the Bom Jesus revenue, coinciding with the recovery of the privileged relationship of the Catholic Church with the Portuguese government (Reis, 2000).

Therefore, the results of the Andrews and Zivot (1992) test do not allow us to pinpoint the official date of the implantation of the Portuguese Republic (1910) as marking a structural change in the revenue of secular brotherhoods such as the Bom Jesus one. Alternatively, these values suggest that the period of political transition (from a monarchy

²³ For the series of budget revenue in 1911, the F-statistic is 10.18 (significance level below 1%). For the same series in 1900, the F-statistic is 12.23 (significance level below 1%). For the series of growth rates in 1911, the F-statistic is 21.89 (significance level below 1%); in 1900, the F-statistic is 25.03 (significance level below 1%).

to a republic) did not significantly change the relevant budgets, placing special emphasis on the moments characterized by the diffusion of republican and socialist ideas or by the recovery of privileges by religious institutions.

However, tests similar to the one developed by Andrews and Zivot (1992) are not suited to identifying multiple breaks (for instance, in a W-shaped series), which typically occur when time series span several decades. This may be the case for the Bom Jesus revenue series and its respective annual growth rates—which we observed for 1863-1952. In these cases, several researchers opt for tests such as those developed by Clemente, Montañés and Reyes (1998). The critical values are then those provided by Perron and Vogelsang (1992). These tests allow for the detection of sudden breaks because of particular moments (*additive outliers*) or gradual shifts in the mean of the series (*innovational outliers*).

Considering the previous specification using the notation of Baum (2005) and detailing the additive outliers’ case, we first estimate the following system of equations.

$$b_t = \alpha + \delta_1 DU_{1t} + \delta_2 DU_{2t} + e_t \quad (2)$$

$$e_t = \sum_{i=1}^k w_{1i} DT_{b1,t-i} + \sum_{i=1}^k w_{2i} DT_{b2,t-i} + \rho e_{t-i} + \sum_{i=1}^k \theta_i \Delta e_{t-i} + z_t$$

DU_{1t} is equal to 1 for the periods t after the first break, and $DU_{1t} = 0$ otherwise. Equivalently, $DU_{2t} = 1$ for the periods t after the second break, and $DU_{2t} = 0$ otherwise. T_{b1} and T_{b2} are the breakpoints to be located by grid search (i.e. by identifying the minimal t -ratio for the hypothesis $\rho = 1$). According to Baum (2005), we use $DT_{bm,t} = 1$ for $t = T_{bm} + 1$ and 0 otherwise for $m = 1, 2$.

The innovational outlier case estimates the following model.

$$b_t = \alpha + \delta_1 DU_{1t} + \delta_2 DU_{2t} + w_1 DT_{b1,t} + w_2 DT_{b2,t} + \alpha b_{t-i} + \sum_{i=1}^k \theta_i \Delta b_{t-i} + z_t$$

We again test for the hypothesis $\rho = 1$ (i.e. that the error term follows an AR(1) process).

The next table shows the values obtained using the tests developed by Clemente, Montañés and Reyes (1998). We obtained these values and Figures 2, 3, 4, and 5, using the Stata commands *clemao2* and *clemio2*. From Figures 2, 3, and 4, we can easily note that the significance level dropped considerably in the analysis of growth rates. This is a common

pattern in series that are stationary at their own growth rates (meaning that the successive growth rates are close to their means), but that are not stationary at their original levels.

Table 3—Clemente, Montañés and Reyes (1998) test of the Bom Jesus revenue

Series	Break assumption	Optimal breakpoints	t-statistic (AR-n)
Budget revenue (logged)	Additive outliers	1878	8.820***(AR-2)
		1897	-5.058***(AR-2)
Budget revenue (growth rates)	Additive outliers	1875	3.236*** (AR-11)
		1894	-3.690*** (AR-11)
Budget revenue (growth rates)	Innovational outliers	1918	0.092 (AR-4)
		1929	-0.320 (AR-4)
Budget revenue (growth rates)	Innovational outliers	1930	1.942*(AR-3)
		1935	-1.826*(AR-2)

Note: Significance level: 1%, ***, 5%, **, 10%, *. The optimum number of lags included in the AR process following information criteria are shown in parentheses.

Table 3 again shows that the year 1910 is not a good candidate for a breakpoint in the Bom Jesus revenue. Adopting a different perspective, we identify four years (1875, 1878, 1894, and 1897) as the most probable optimal breakpoints for the logged series. The respective t-statistics relate to significant values (significance level below 1%). Figures 2 and 3 display these results in the form of a graph.

Figure 2—Graph of the Double Additive Outlier Test of the Bom Jesus Revenue

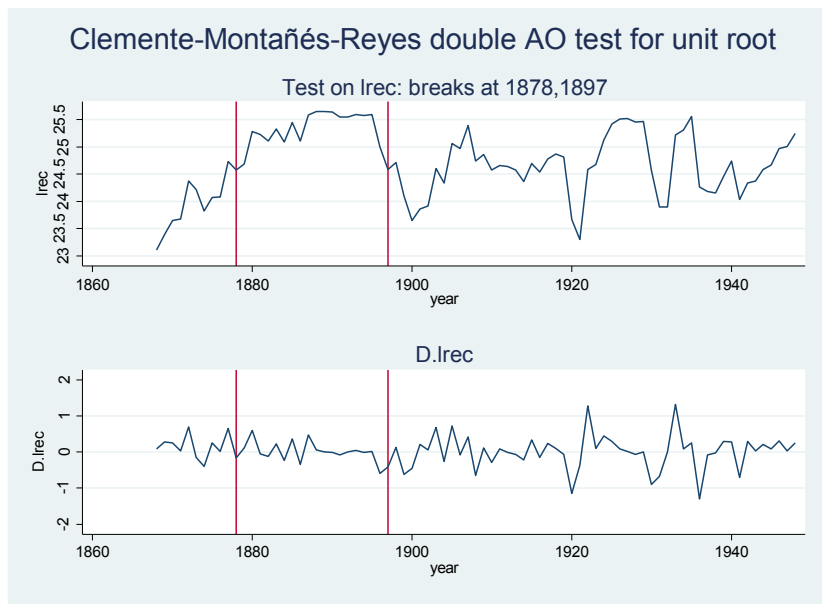


Figure 3—Graph of the Double Innovational Outlier Test of the Bom Jesus Revenue

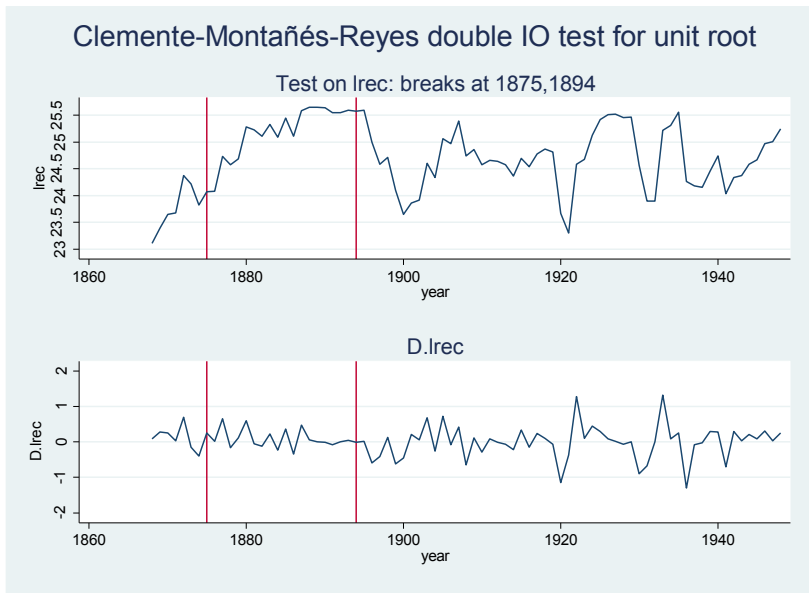


Figure 4—Graph of the Double Additive Outlier Test of the Bom Jesus Revenue Growth Rates

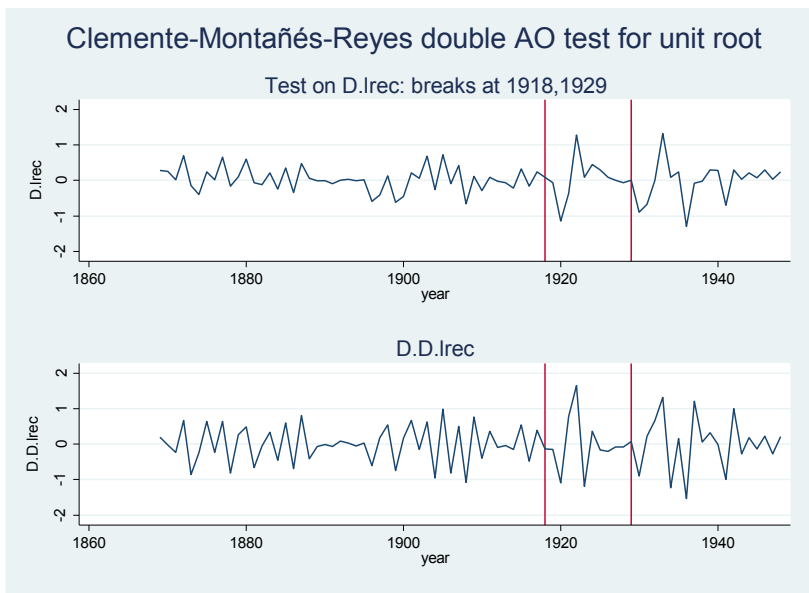
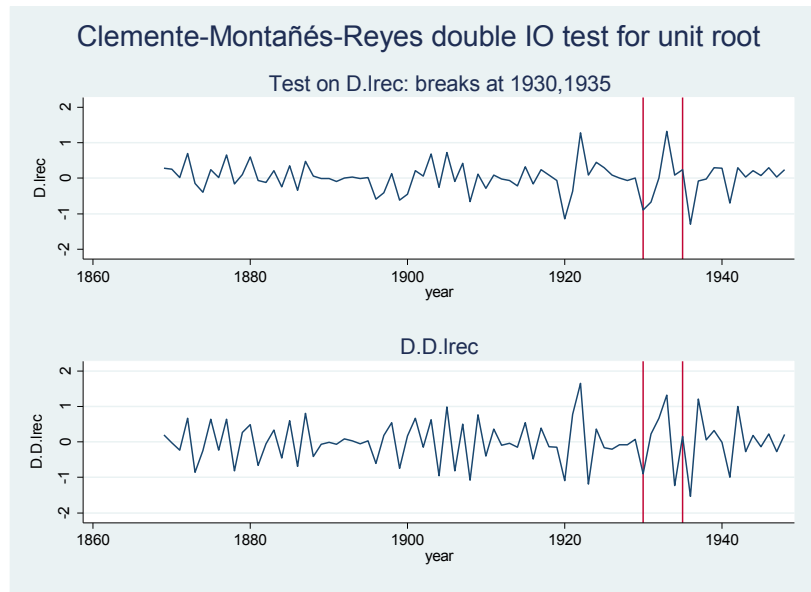


Figure 5—Graph of the Double Innovational Outlier Test of the Bom Jesus Revenue Growth Rates



4.1 Discussing the empirical evidence—why was Bom Jesus relatively unaffected in 1910?

From Tables 1, 2, and 3, we can argue that the last quarter of the nineteenth century (i.e. from 1875 to 1900) was more important than the years on either side of the implantation of the Portuguese Republic (circa 1910) for the financial structure of a Portuguese secular brotherhood (i.e. the Bom Jesus brotherhood). Therefore, we were not able to support the explanations of authors such as Ferreira (2011) for the behavior of the Bom Jesus revenue series in approximately 1910. Instead, the explanations of Carreira (1999) were more appropriate for describing the slight oscillations in the Bom Jesus revenue observed during this period.

The Bom Jesus revenue rose for almost a decade beginning in 1875. Revisiting the main historical moments identified in sections 2 and 3, this period saw an increase in the population of Braga and its surrounding area (because of industrialization and abundant natural resources—see Juncal (2005)). This was also a time during which the population growth in the Minho region led to an increasing number of visitors to the Bom Jesus complex, many of whom were probably attracted by its structural improvements, namely the completion of the chapels (1868), the improvements to the central lake (1877), and the opening of the funicular (1882). The combination of these two positive effects—the novelty effect (Peixoto, 2011) and the welfare effect (Oliveira, 2011)—has proved a valid

explanation for the empirical results, indicating that the decade after 1875 produced statistically significant changes in our series of the Bom Jesus revenue.

After 1890, the Bom Jesus revenue decreased consistently until 1900. The period between 1880 and 1890 produced several anticlerical and anti-Jesuit public protests (after the centenary of the Marquis de Pombal’s death in 1882 and Afonso Costa’s 1895 publication *A Igreja e a Questão Social* (The Church and the Social Question)). As Mónica (2001) and Gomes (2012) have commented, this was also a period of loud public demonstrations by republican and socialist movements in the largest Portuguese cities (in Lisbon, Porto, and Coimbra in 1882; similarly, in 1891, the Congress of the Republican Party was also a protest against the so-called “English Ultimatum” of January 11, 1890).²⁴ This combination of factors promoted a critical situation in which, even though religious practices continued to be performed in the traditionalist and monarchist areas such as Braga, the secular brotherhoods reported significantly lower revenue.

Alternative breakpoints were especially identified for the growth rates (presuming innovational outliers) in 1930 and 1935. As observed in section 3, and according to several authors (Catroga, 2010; Rocha, 2012; Fernandes, 2012), this period coincides with the first years of the Second Republic, which restored the institutionally privileged relationship of the Portuguese State and the Holy See. This restoration created a context in which religious institutions (even secular brotherhoods) stabilized their activities. In the case of Bom Jesus, this led to an increasing trend (or a persistence of positive growth) in revenue between 1930 and 1950.

5. Conclusions and Future Research

In this work, we tested for the presence of structural breaks in the Bom Jesus revenue series, at constant prices, collected by the Bom Jesus de Braga brotherhood, which we observed for the 1863-1952 period. Bom Jesus de Braga has been a well-known pilgrimage site in Portugal since the seventeenth century, as well as serving as a starting point for pilgrims and hosting visitors from many countries since the nineteenth century.

Given the radical changes ushered in by the establishment of the First Portuguese Republic, we first tested for the presence of a structural break in the studied series around the year 1910. The results of Chow tests conducted in order to evaluate the 1910

²⁴ According to Capela and Nunes (2010), there were several protests in Braga due to the English Ultimatum; these protests were organized by members of a trade association, the “Associação Comercial de Braga,” as well as by local students.

hypothesis indicate that the establishment of the First Republic changed the path of the Bom Jesus revenue. However, additional tests suggest that other periods introduced far more relevant changes into the series. Using Andrews-Zivot (1992) procedures, confirmed by the tests suggested by Clemente, Montañés and Reyes (1998), we found that the 1870s revealed a significant upward trend, and that the years 1890-1900 recorded a very important downtrend in revenue.

We interpreted these results in the light of a review of the dynamics of Bom Jesus itself, the socioeconomic history of the Minho region, and the socioeconomic history of Portugal as a whole. This review led us to conclude that the Bom Jesus revenue was particularly influenced by the positive stimulus of the combination of events that occurred during the 1870s. On the one hand, a novelty effect was introduced by the completion of the set of sixteen chapels (1868), the enlargement of the central lake (1877), the opening of the funicular (1882), and the modernization of the hotels. On the other hand, there was a wealth effect caused by rising activity in the regional industrial sector, remittances from Brazilian emigrants, and the acts of a bourgeoisie with more time available for leisure activities.

The national dimension was especially influential for the series of yearly growth rates, and 1930 and 1935 were identified as particularly relevant years. During these years, the Second Republic (1926-1974) replaced the government's previous anticlericalism with a close institutional relationship between religious institutions and Portuguese political institutions. These ties helped to change volatile growth rates into continuous positive growth rates for the series observed.

We identify four main opportunities for future research. Because the years after 1952 were not covered, we suggest an extension of this analysis to this more recent period. A second opportunity relates to the possibility of studying the different series that compose revenue. Accordingly, we suggest that the breakpoints in the series relating to current revenue and those relating to capital inflows be studied separately. Thirdly, the cycles (namely seasonality using monthly data) of revenue and growth rates could be analyzed using appropriate techniques, such as periodograms and spectral analysis. Finally, studying the correlation/causality of various variables on the evolution of the Bom Jesus revenue would be important. Such variables include population change, internal/external financial flows and exogenous asymmetric shocks (such as those related to the World Wars), which could be analyzed by estimating vector autoregression or vector error correction models.

References

- Afonso, J. (2013). “A escola pública laica em Portugal: a República e os republicanos—um inquérito aos programas dos partidos republicanos (1910-1926).” *Educação e Filosofia*, 27, 21-62.
- Aguiã, S. (1996). “A Imaculada Conceição—Padroeira e Rainha de Portugal” in *vv.aa.*, (eds.). *A Virgem Maria—Padroeira e Rainha de Portugal*. Civilização Editora, Porto.
- Almodovar, A. and P. Teixeira (2008). “The Ascent and Decline of Catholic Economic Thought, 1830-1950s,” *History of Political Economy*, Duke University Press, vol. 40(5), 62-87, Supplement.
- Andrews, D. and E. Zivot (1992). “Further evidence on the Great Crash, the oil price shock, and the unit-root hypothesis.” *Journal of Business and Economic Statistics*, 10, 251–270.
- Araújo, A. (2001). *Memórias da Paróquia de S. Pedro de Vila Real 1528-2000*. APPACDM. Braga.
- Azevedo, C. (1995). “Historiografia religiosa portuguesa contemporânea (séc. XIX-XX).” *Anuario de Historia de la Iglesia*, Pamplona, 4, 271-305.
- Bandeira, M. (2006). “Três mitos visuais de Braga—um ensaio em geografia cultural.” In Martins, M. (ed.), *Caminhos nas Ciências Sociais—Memória, Mudança Social e Razão*. Grácio Editor, Coimbra.
- Barbosa, M. (2001). *Crises de Mortalidade em Portugal desde meados do século XVI até ao início do século XX*. Núcleo de Estudos de População e Sociedade, Instituto de Ciências Sociais, Universidade do Minho. Braga.
- Barbosa, M. (2002). “Contextos da emigração numa comunidade do concelho de Braga: Esporões, 1869-1935.” Proceedings of the XIII Congresso Internacional—AHILA, Universidade dos Açores, 3 a 8 de Setembro de 2002.
- Baum, C. (2005). “Stata: The language of choice for time-series analysis?” *The Stata Journal*, 5 (1), 46-63.
- Baum, C., Barkoulas, J. and M. Caglayan. (1999). “Long memory or structural breaks: Can either explain nonstationary exchange rates under the current float?” *Journal of International Financial Markets, Institutions, and Money*, 9, 359–376.
- Bértola, L. (2013). “Another brick in the wall? A comment on Francesco Boldizzoni's The Poverty of Clío,” *Investigaciones de Historia Económica (IHE)*, *Journal of the Spanish Economic History Association*, Asociación Española de Historia Económica, vol. 9, 1, 7-10.
- Braga da Cruz, M. (1999). *O Estado Novo e a Igreja Católica*. Bizâncio, Lisbon.
- Capela, J. and H. Nunes (eds.) (2011). *Braga—Roteiros Republicanos*. Quid Novi, Matosinhos.
- Carreira, A. (1996). *Martiño de Dumio: a creación dun reino*. Vigo: Edicións do Cumio.
- Catroga, F. (1988). “O laicismo e a questão religiosa em Portugal (1865-1911).” *Análise Social*, XXIV, 100, 211-273.
- Clemente, J., Montañés, A. and M. Reyes. (1998). “Testing for a unit root in variables with a double change in the mean.” *Economics Letters*, 59, 175–182.
- Coelho, Z. (2011). “O 5 de Outubro de 1910 na Imprensa da cidade de Braga”. In Capela, J. and H. Nunes (eds.). *Braga—Roteiros Republicanos*. Quid Novi, Matosinhos.
- Cordeiro, J. (2011). “As matérias fracturantes. A resistência.” In Capela, J. and H. Nunes (eds.). *Braga—Roteiros Republicanos*. Quid Novi, Matosinhos.
- Coutinho, A. (1899). *Bom Jesus do Monte (Esboço histórico e descritivo)*. Livraria Central, Braga.
- Cunha, C. (2011). *III Centenário da morte de Camões (1880)*. In Aguiar e Silva, V., (ed.), *Dicionário de Luís de Camões*. Editorial Caminho. Alfragide.
- Fernandes, A. (2007). *Igreja e sociedade na Monarquia Constitucional e na Primeira República*. Estratégias Criativas, Porto.

- Fernandes, A. (2009). *Afrontamento Político-Religioso na Primeira República—enredos de um conflito. Estratégias Criativas*, Lisbon.
- Fernandes, A. (2012). *Fátima e Poder Político na I República*. Estratégias Criativas, Porto.
- Ferreira, A. (2007). *Um católico militante diante da crise nacional—Manuel Isaías Abúndio da Silva (1874-1914)*. Centro de Estudos de História Religiosa/Fac. Teologia. Universidade Católica, Lisbon.
- Ferreira, M. (1993). *O casamento civil e o divórcio 1865-1910*. M.Sc. Dissertation on History of Populations. Universidade do Minho, Braga.
- Ferreira, M. (2011). “A Igreja Bracarense na I República. Do projeto à implementação do programa laicizador: o anúncio da ‘Questão Religiosa.’” In Capela, J. and H. Nunes (eds.). *Braga—Roteiros Republicanos*. Quid Novi, Matosinhos.
- Fountas, S. (2010). “Inflation, inflation uncertainty and growth: Are they related?” *Economic Modelling*, Elsevier, 27, 5, 896-899, September.
- Gomes, E. (2012). *A Administração local na Monarquia Constitucional. O papel da freguesia e do pároco (1834-1910)*. M.Sc. Thesis on History. Universidade do Minho, Braga.
- Gonçalves, E. (2004). “O conde de Samodães e o discurso conciliador entre catolicismo e liberalismo político.” *Lusitania Sacra*. 2ª série, 16, 87-109.
- Grosjean, P., Ricka, F. and C. Senik (2013). “Learning, political attitudes and crises: Lessons from transition countries”. *Journal of Comparative Economics*, Elsevier, 41, 2, 490-505.
- Guimarães, A. (2005). *A assistência em Braga: iniciativas da segunda metade do século XIX*. Proceedings of the I Congresso Internacional de História, Braga, 5-7 Dezembro 2005.
- Hamilton, J. (1991). “A quasi-Bayesian approach to estimating parameters for mixtures of normal distributions.” *Journal of Business and Economic Statistics*, 9, 27-39.
- Hamilton, J. (1994). *Time Series Analysis*. Princeton University Press, Princeton.
- Hansen, B. (2001). “The New Econometrics of Structural Change: Dating Breaks in U.S. Labor Productivity”. *Journal of Economic Perspectives*, 15, 4, 117-128.
- Hayes, M. (2011). “The Social History of Quantifying Inflation: A Sociological Critique.” *Journal of Economic Issues*, M.E. Sharpe, Inc., 45, 1, 97-112, March.
- Hipólito, I. (2004). “Nas origens do C.A.D.C. Estudos.” *Revista do Centro Académico de Democracia Cristã*. 3, II, 739-766.
- Jinnai, R. (2013). “News shocks and inflation,” *Economics Letters*, Elsevier, 119, 2, 176-179.
- Juncal, C. (2004). *Vidas através das gerações : comportamentos demográficos de uma comunidade rural do Baixo Minho: Santiago de Antas 1581-1910*. M.Sc. Thesis on History of Populations. Universidade do Minho, Braga.
- Lains, P. (2003). “Catching up to the European core: Portuguese economic growth, 1910-1990.” *Explorations in Economic History*. 40, 4, 369-386.
- Linda, M. (1999). *Andragogia Política em D. António Ferreira Gomes*. Fundação Spes., Porto.
- Lopes, M. (2009). *Crónicas bracarense de Rafael Bordalo Pinheiro*. Fundação Bracara Augusta, Braga.
- Moiseev, S. (2005). “The History of One ‘Free Lunch.’” *Voprosy Ekonomiki*, vol. 10.
- Mónica, M. (2001). “O senhor Ávila e os conferencistas do Casino.” *Análise Social*. 35, 157, 1013-1030.
- Moore, H. (1914). *Economic cycles: their law and cause*. The Macmillan Company, New York.
- Mourão, P. (2012a). “Review of ‘A Questão Financeira Resolvida’ by José Barbosa Leão,” *Journal of Economic Literature*; 50, 4, 1127-1130.
- Mourão, P. (2012b). “Does the economic cycle change our prayers? A discussion based on Catholic Bulletins.” *Kyklos*, 65, 4, 563-580.
- Neto, V. (1998). *O Estado, a Igreja e a Sociedade em Portugal (1832-1911)*. Instituto Nacional Casa da Moeda. Lisbon.

- Oliveira, E. (2011). “A arte em Braga antes e durante a I República.” In Capela, J. and H. Nunes (eds.) (2011). *Braga—Roteiros Republicanos*. Quid Novi, Matosinhos.
- Otahal, T. (2012). “Economic History: What Are the Contributions of Historical Example to Understanding of Economic Phenomena?” *Politická ekonomie*, University of Economics, Prague, vol. 2012, 5, 679-693.
- Parpola, A. (ed.) (2009). *Migration, trade and peoples—Part 3: Aryans and nomads*. The British Academy, London.
- Peacock, A. and J. Wiseman (1961). *The Growth of Public Expenditure in the United Kingdom*. Princeton University Press, Princeton.
- Peixoto, J. (2011). *Bom Jesus do Monte*. Edição da Confraria do Bom Jesus. Braga.
- Pereira, N. (2013a). *Teatro, cinema, excursões... Usos do tempo de lazer em Braga, 1890-1930*. M.Sc. Thesis on History. Universidade do Minho, Braga.
- Pereira, V. (2013b). “A importância do turismo religioso para o desenvolvimento regional.” Proceedings of the 19th Conference of the Associação Portuguesa para o Desenvolvimento Regional. Braga.
- Perron, P. and T. Vogelsang (1992). “Nonstationarity and level shifts with an application to purchasing power parity.” *Journal of Business and Economic Statistics*, 10, 301–320.
- Pinto, S. (2011). “Legislação republicana em matéria religiosa e separação.” In vv.aa., *Centenário da República*. Agência Ecclesia / Universidade Católica, Lisbon. pp. 26-31.
- Reis, B. (2000). “A concordata de Salazar? Uma análise a partir das notas preparatórias de Março de 1937” *Lusitania Sacra*, 2ª série, 12, 185-220.
- Ribeiro Aires, J. (2010). *A República no distrito de Vila Real (1873-1933)*. Maronesa, Vila Real.
- Rocha, A. (2012). *Católicos e política a partir da imprensa conservadora bracarense: o Centro Católico Português (1915-1926)*. M.Sc. Thesis on History. Universidade do Minho, Braga.
- Rosas, F. (2012). *Salazar e o Poder—a Arte de saber durar*. Tinta-da-China, Lisbon.
- Santos, A. (2006). *A Brotéria e a justiça social no Estado Novo*. M.Sc. Thesis on Philosophy. Universidade do Minho, Braga.
- Sarmento, J. (2012). “Space, culture, and music: how provincial were the provincial Portuguese towns at the turn of the nineteenth century?” Proceedings of the XIII Coloquio Ibérico de Geografia. Santiago de Compostela.
- Sato, H. (1997). “What is Japan's Economic Crisis?” *Japanese Economy*, M.E. Sharpe, Inc., vol. 25(2), pp. 3-20, March.
- Schulmeister, S. (2014). “Learning from Roosevelt: His ‘New Deal’ and the Present Crisis of Europe.” *WIFO Working Papers*, WIFO 473, WIFO.
- Silva, A. (1996). “Os católicos e a ‘República Nova’ (1917-1918)—Da questão religiosa à mitologia nacional.” *Lusitania Sacra*. 2ª série, 8/9, 385-499.
- Temin, P. (1998). “The causes of American business cycles—an essay in economic historiography.” *NBER Working Paper* No. 6692.
- Unamuno, M. (1908). *Escritos de Unamuno sobre Portugal*, ed. 1985. Paris.
- Valério, N., (ed.) (2001). *Portuguese Historical Statistics*. Instituto Nacional de Estatística, Lisbon.
- Vasconcelos, P. (1999). *O real valor do dinheiro—850 anos de história de inflação em Portugal*. Districultural, Sacavém.
- Villares, A. (1995). “As ordens religiosas em Portugal nos princípios do século XX.” *Revista de História*, 13, 195-223.
- Wynne, M. and D. Rodriguez-Palenzuela (2004). “Measurement Bias in the HICP: What do we know and What do we need to know?” *Journal of Economic Surveys*, Wiley Blackwell, 18, 1, 79-112, 02.

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