

Political reasons for monetary policy choices: Portugal's adoption of the gold standard (1846-1854)

Rita Martins de Sousa 

ABSTRACT: *The present article aims to shed light on the reasons why Portugal changed its monetary regime before any other European country, given that the golden era of the bimetallic regime lasted until the early 1870s. It stresses that the transition to the gold standard in Portugal can be explained by analysing two preparatory steps, one in 1847 and another in 1851. In 1847, changes in the bimetallic ratio led to a fall in the price of silver. In 1851, the decision to keep British gold coins in circulation was taken in response to pressure from groups who had negotiated with these coins and in response to the establishment of a committee to analyse the so-called 'monetary situation'. The then Minister of the Treasury, António José d'Ávila, was not in favour of keeping the British currency in circulation, but political pressure forced his hand. (JEL CODES: N13; N20; E42)*

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Razones políticas de las decisiones de política monetaria: La adopción del patrón oro por Portugal (1846-1854)

Rita Martins de Sousa 

RESUMEN: *Si la época dorada del régimen bimetálico duró hasta principios de la década de 1870, el objetivo de este artículo es comprender por qué Portugal cambió su régimen monetario antes que ningún otro país europeo. Destaca que la transición al patrón oro en Portugal puede explicarse analizando dos etapas preparatorias, una en 1847 y otra en 1851. En 1847, los cambios en la relación bimetálica provocaron una caída del precio de la plata. En 1851, se tomó la decisión de mantener en circulación las monedas de oro británicas en respuesta a la presión de los grupos que habían negociado con estas monedas y en respuesta a la creación de un comité para analizar la llamada «situación monetaria». El entonces ministro de Hacienda, António José d'Ávila, no era partidario de mantener la moneda británica en circulación, pero la presión política le obligó a ello..*

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1. Introduction

This article analyses the early end of bimetallism in Portugal, contrary to what happened in other European countries. International conditions only changed in the 1870s and the markets expected bimetallism to last until 1874 (Flandreau, 1996; Flandreau and Oosterlinck, 2012; Meissner, 2005). However, Portugal adopted the gold standard *de jure* in 1854 and *de facto* in 1847.

After Great Britain, that adopted the gold standard in 1816, Portugal was the second economy to adopt this monetary regime before the rest of Europe (Eichengreen, Flandreau, 1996)¹. If the golden era of the bimetallic regime lasted until the early 1870s, the aim of this article is to understand why Portugal changed its monetary regime before other European countries. The present article aims to shed light on the reasons why Portugal changed its monetary regime before any other European country, given that the golden era of the bimetallic regime lasted until the early 1870s. In this sense, the key questions to understand are: why didn't Portugal solve the practical problems of its bimetallic regime by changing the legal price? What were the reasons for the decisions to raise the price of gold in 1847 and to keep British gold coins in circulation in 1851, after all foreign coins had been withdrawn?

The reasons for the shift from bimetallism to the gold standard were one of the liveliest theoretical discussions in the monetary field at the end of the 19th and beginning of the 20th century (Fisher, 1894, 1911; Walras, 1898). The debate came to the fore again when several studies examined monetary regimes after the end of Bretton Woods and before the start of European Monetary Union (Bordo, 1992; Flandreau, 1995, 2003; Friedman, 1990a, 1990b; Gallarotti, 1993; Kindleberger, 1993; Oppers, 1992; Redish, 1990, 1995, 2000). The debate on the best exchange rate regime, fixed or floating, can be related to the literature discussing the reasons why countries adopt the gold standard.

Two explanations for the observed change can be derived from the network externalities of foreign trade and public debt. Since currency and trade are complementary, trade with gold-holding countries can also explain the shift and the increase in bilateral trade (Flandreau and Jobst, 2009; Flandreau and Murel, 2005; Meissner, 2005). A second explanation is that the gold standard reduced the cost of borrowing in international capital markets (Bordo and Rockoff, 1996; Obstfeld and Taylor, 2003). However, Flandreau and Zummer (2004) demonstrate that the monetary regime is not a significant variable in explaining the behaviour of interest rates. The most important variable is "debt sustainability".

Another potential explanation is technological innovation. Redish (1990, 1995, 2000) argues that the gold standard is a superior monetary regime. If it was not adopted before the 19th century, it was for technological reasons. The introduction of the steam engine made it possible to mint small denominations of silver and gold coins, which had previously been too expensive. This new technology also made it possible to avoid counterfeiting. This is Redish's explanation for the time lag between the adoption of the gold standard in Britain and its subsequent spread across the European continent. Using France as an example, Redish demonstrates that the persistence of bimetallism in that country was due to the inability of the French

mint to strike low-value coins.

The political dimension was another variable emphasised by some studies to explain the move to the gold standard. Nogues-Marco presents an argument against the common belief that England adopted the gold standard because ‘Sir Isaac Newton, Master of the Mint, mistakenly overvalued gold at the Mint in 1717’ (Nogues-Marco, 2013, p. 445). The author argues that the decision by members of the English Parliament not to change the legal standard in 1718 explains England’s move to a *de facto* gold standard. As a result, the shortage of silver persisted because its legal price was too low relative to the price of gold. Schiltz (2012) analyses Japan and shows that ‘imperialist ambition was the decisive variable’ in understanding why that country moved to the gold standard in 1897. More recently, Martínez-Ruiz and Nogues-Marco (2018) explain how groups-controlled power by choosing the institutional design that maximized their rents. In this sense, historically there was a conflict of interest between economic and political groups. Under these conditions, it was more difficult to reach a compromise with gold. In addition to this conflict, the trade-off between internal and external objectives runs through the history of the political economy of exchange rates. Groups involved in international activities favour external objectives, and the opposite for groups more involved in domestic activities (Broz and Frieden, 2006; Gallarotti, 1993). Price stability is the main factor in arguments focusing on the behaviour of groups such as bankers, creditors, entrepreneurs and industrialists. For these groups, external objectives are more important than internal ones, since gold monometallism is a more stable price system².

Another theoretical explanation is the evolution of precious metal prices. This theory posits that the fall in the price of silver due to an increase in supply led to its devaluation, which coincided with the change in the monetary regime in Germany after political unification in 1871 (Kindleberger, 1993).

The proposition that the gold standard was an “historical accident” is defended by Flandreau (1995, 1996). The change to the gold standard was not inevitable, as the bimetal ratio stabilised between 1820 and 1870 (1:15.5). The changes introduced from 1870 onwards – the international spread of the gold standard – are explained by the interaction between network externalities and costs. Flandreau’s approach to the Franco-Prussian conflict is distinctive in that he attributes the decline in the price of silver to French monetary policy, rather than German monetary policy as is commonly assumed. According to his analysis, the reduction in the price of silver was the consequence of the French decision to limit the daily minting of silver immediately after the indemnities arising from the 1871 war were paid to Germany. This provisional and precautionary measure was not perceived by the French authorities as a modification of the bimetallic regime. Nevertheless, it did give rise to expectations among international economic actors, in particular investors and bankers. This is the so-called Crime of 1873 that Friedman also analyses (Flandreau, 1996; Friedman, 1990 b).

When the focus is on Portugal, some studies discuss the reasons why the country joined the gold standard in 1854. Eichengreen (2019) emphasises the variable network externalities by considering the historical importance of Portuguese trade with England³. Other studies have identified the monetary chaos of the late 1840s and the high percentage of gold coins in

circulation at the beginning of the 1850s as the main reasons for the decision to join the gold standard (Duarte and Andrade, 2012; Esteves et al., 2009; Reis, 1996a). Upon consideration of these theses, none of them satisfactorily explains the appreciation of gold in the Portuguese market in 1847, nor the reasons for the decision to continue to circulate British gold sovereigns in 1851.

The shift to the gold standard in Portugal is explained in this article via the analysis of two preparatory steps, one in 1847 and another in 1851. In 1847, changes in the bimetallic ratio resulted in a decrease in the price of silver. In 1851, the decision to continue circulating British gold coins was made in response to pressure from groups that negotiated with these coins and in reaction to the establishment of a committee to analyse the so-called ‘monetary situation’. The then Minister of the Treasury, António José d’Ávila, was not in favour of maintaining the circulation of British currency. But as we shall see, political pressure forced his hand.

Although the gold standard was the first global monetary system, the aim of this article is not to explain the international reasons for Portugal’s adoption of the gold standard, but the domestic reasons that justified the adoption of this monetary regime. In this article, we want to emphasise that money is a political variable and that there are political reasons behind the adoption of the gold standard. Therefore, in order to maintain political stability and avoid economic or social unrest, several interests had to be balanced. Change would have political/electoral consequences without this balance (Broz and Frieden, 2006).

The remainder of the paper is organised as follows: in Section 2, we analyse two different theses concerning the change in the Portuguese monetary regime. These are network externalities and technological innovation. Section 3 explains the monetary context in 1847 and the decision to revalue gold. Section 4 discusses the reasons for the legislation that abolished the legal tender status of foreign gold coins, with the exception of English coins. The last section concludes.

2. A discussion of two theses: network externalities and technological innovation

According to the network externalities explanation, the adoption of the same monetary regime enables international trade and financial transactions, so that a nationally determined monetary regime can become a truly international monetary regime. This is what happened with the gold standard in the 19th century. For the Portuguese case, Eichengreen (2019) highlights the role of network externalities in Portugal’s decision to join the gold standard at an early stage.

Indeed, at the time, Britain had been a major trading partner with Portugal for centuries. Therefore, this section will first examine the evolution of trade relations during the first half of the nineteenth century in order to assess whether Portugal’s adoption of the gold standard

changed the way it managed its trade payments. Table 1 presents the data for the years preceding and following the implementation of the new monetary standard (1854).

TABLE 1. Share of Great Britain in Portuguese Foreign Trade (1826-1866)

Year	Imports (<i>contos</i>)	% of total imports	Exports (<i>contos</i>)	% of total exports
1826	6,870	66	3,189	50
1831	5,101	75	3,508	53
1843	6,531	53	3,801	43
1848	5,464	51	5,999	53
1851	7,682	56	4,430	41
1861	14,419	54	8,394	52
1865	12,259	49	13,545	66
1866	15,392	62	11,963	50

SOURCE: *Balanças Geraes de Commercio e Mappas Geraes do Commercio de Portugal com suas Possessões e Nações Estrangeiras*, several years.

In 1843, there was a significant decline in the proportion of Portuguese exports destined for Great Britain. This decline can be attributed to the impact of commercial bankruptcies that occurred in London and Hamburg, which also had a negative effect on the trading conditions in Oporto and across the wine trade in northern Portugal.

This commercial crisis lasted throughout the first half of the 1840s and required the financial support of the Banco Comercial do Porto, founded in 1835⁴. The share of exports did recover in 1848 but fell back once again in 1851. Imports continued to decline throughout 1848 and oscillated among lower percentages than those recorded in the 1820s and 1830s until as late as 1866. Consequently, the percentages obtained for 1861, when Portugal was on the gold standard, do not show any significant change in Portuguese-British trade.

In summary, the continued importance of Britain as Portugal's most important trading partner did not lead to any discernible changes in the trajectory of Portuguese monetary policy in the early 1850s, culminating in the decision of 1854⁵.

With regard to trade payments, no significant change was observed. From the eighteenth century onwards, Portugal balanced a substantial proportion of its trade payments in gold, and this method did not constitute a novel practice in the wake of adopting the gold standard (Fisher, 1971; Sousa, 2006).

External public debt is the other component of network externalities. In theory, adopting the gold standard makes public finances sounder and gives markets a sign of credibility. As Bordo, Rokoff (1996) point out, the gold standard is a "good housekeeping seal of approval". However, Bordo (2003) demonstrates the choice of gold did not lead to an immediate increase in credibility or to the prevention of exchange rate risk in the medium and long term⁶. Despite the adoption of the gold standard in the second half of the 19th century, the prevailing short-

term interest rates were high in Southern Europe, and the Crédit Lyonnais standards identified Portugal as a high-risk economy during the 1880s (Flandreau, 2003).

Portugal's external debt was usually denominated in pounds sterling and was normally paid at predefined exchange rates. The exception was the loan of 40 million francs at 5% interest contracted by the absolutist government in 1832 and later renounced by the government of Queen Maria II at the end of the Portuguese Civil War (Mata, 1993). Therefore, the adoption of the gold standard did not provide additional guarantees for the investors (Esteves, 2005). However, the Portuguese government was burdened by a significant public debt and in the 1850s, gold was a particularly inflationary metal due to the discovery of new deposits (Table 2). This may have made it advantageous to use gold as a means of servicing the debt.

TABLE 2. Legal price of gold (1845-1860)

Year	Legal price of gold (réis/kg)
1845	570,451
1846	570,451
1847	608,643
1848	608,643
1849	608,643
1850	608,643
1851	608,643
1852	608,643
1853	608,643
1854	615,063
1855	615,063
1856	615,063
1857	615,063
1858	615,063
1859	615,063
1860	615,063

SOURCE: Valério, 2001.

NOTE: 1 kg = 35,2746129 oz

Technological innovations had never been discussed as a potential reason for Portugal adopting the gold standard. From the 1830s, however, technological changes took place at the Lisbon Mint. In 1835, the Lisbon Mint installed a 16-horsepower steam engine imported from the factory of Boulton Watt & Co. in Birmingham, as steam-powered coin presses had been introduced at the Soho Mint in the 1770s (Challis, 1992). The fact that the Lisbon Mint introduced this innovation some years before the adoption of the gold standard may indicate, as Redish argues, that the shift to this monetary regime only became possible after changes in

the coinage of metallic money. However, the reports produced by the Lisbon Mint described a multitude of technical problems that occurred following the introduction of the new machine. In particular, interruptions in the minting process and the production of coins occurred because the inappropriate weights or purities⁷. It can be concluded that the Portuguese Mint only acquired a new set of machinery with a 30-horsepower capacity between 1866 and 1869. This comprised three rolling mills and three minting presses (Bastien, 1991). Therefore, it can be argued that 15 years after the adoption of the gold standard, the Portuguese Mint had the necessary technology to improve the quality of the coins it produced, particularly those of smaller dimensions. Furthermore, the Lisbon Mint's request to obtain from Britain "some objects that are indispensable for the minting machinery" in order to "perform promptly and regularly all the works needed for the reminting of the different coins" was not discussed by parliament until May 1854 (Correspondência Expedida, May 1854, Lisbon Mint Archive). Two years later, the issues with the minting of coins persisted. At the beginning of 1856, the Mint Director informed the Minister of the Treasury of the "irregular service" of the minting machine, which made it "impracticable to be able to satisfy the important works that will yet be needed" after the adoption of the gold standard. Furthermore, he highlighted the problem of the "rolls existing in the machine (...) not completely fulfilling the works of rolling the low-value gold coins." (Correspondência Expedida, January to March 1856, Lisbon Mint Archive).

Consequently, the technological developments that occurred prior to the change in the monetary regime were insufficient to justify it. This is evidenced by the fact that after 1854, the Director of the Lisbon Mint expressed concern about the mintage of low-value coins⁸.

3. The monetary context in 1847

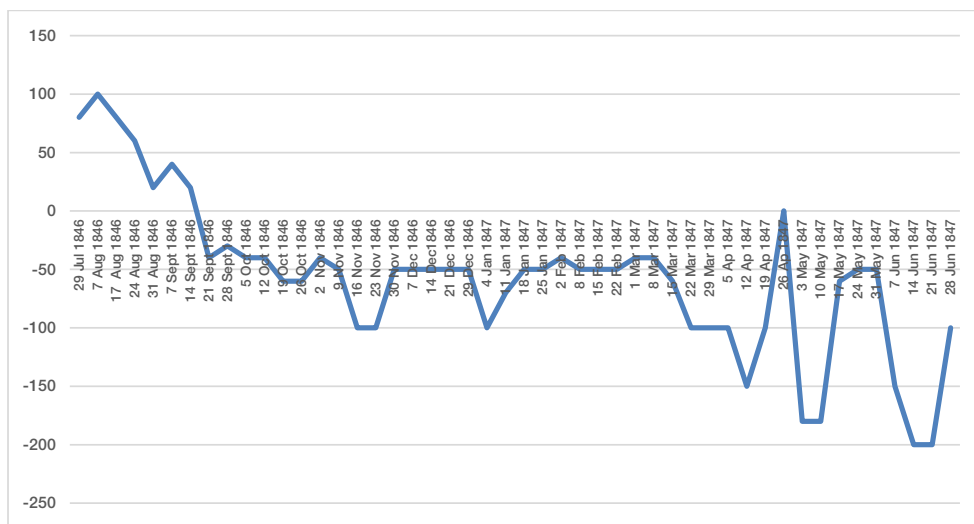
The changes in the monetary regime can also have a political dimension, which we consider to be a key variable in the Portuguese case. The political context was characterised by great instability before 1851. In April of that year, the Regeneration movement took power, creating more stability up to the last decade of the century. It was in 1854, during the Regeneration government, that Portugal adopted the gold standard. Nevertheless, the decisions taken in 1847 and January 1851 served to explain the change in the monetary regime in July 1854.

The difficulties in minting metals were a constant concern for the political powers during the first half of the nineteenth century (Sousa, 2012). The scarcity of silver in the 1830s and 1840s justified interventions in the bullion market in order to obtain silver for the Lisbon Mint House. During this period, the market price functioned as the minimum purchase price for the metal.

Between 1831 and 1835, the Mint paid a commission to anyone who delivered silver to it. The percentages of this commission oscillated between 10% and 19%, before reaching 24% in 1835.⁹ Other monetary facts include interventions in the bullion market by the Bank of Lisbon, the first Portuguese bank; the purchase of metals by the Lisbon Mint at prices above the

legal ratio and, on occasion, above the market ratio; the suspension of the rights of seigniorage (1846); and the increase in customs duties (1851) in order to prevent the outflow of metals. These state decisions demonstrate that the official institutions did not confine themselves to merely establishing the legal ratio (Flandreau, 1995). Furthermore, such interventions in the bullion market call into question the viability of bimetallism, just on the basis of arbitrage. A comparison of the mintage figures for the first half of the nineteenth century with those for the eighteenth century reveals a scarcity of monetary emissions at the Lisbon Mint House. While the annual average of total issues was 600 *contos* in the first half of the nineteenth century, between 1688 and 1797 the annual average had reached 2,963 *contos*¹⁰. The first represents an issue of 162 *réis* per capita, while the latter represents an issue of 1,288 *réis* per capita in the previous century¹¹.

FIGURE 1. Discount of the banknotes of the Bank of Lisbon (July 1846 to July 1847) (in *réis*)



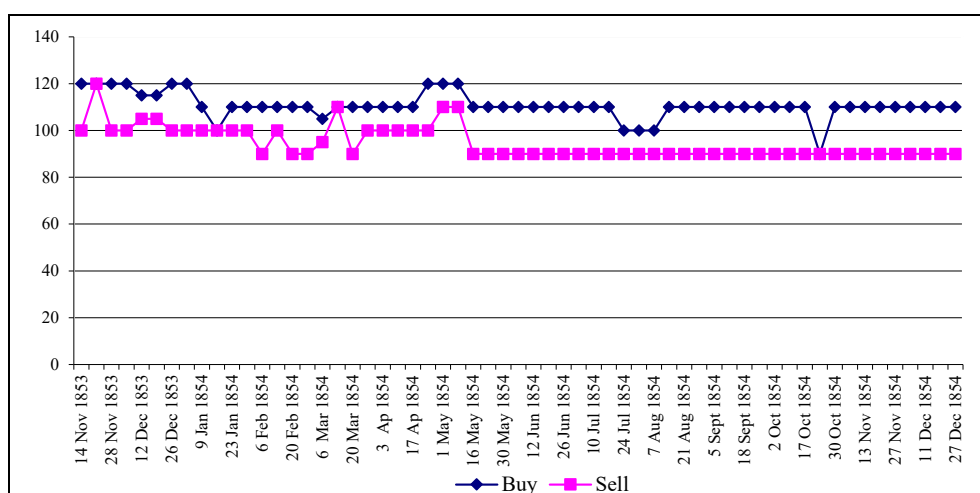
SOURCE: *Diário do Governo*.

The year 1846 saw a number of developments in the Portuguese monetary context. First, it marked the end of the Bank of Lisbon and the creation of the Bank of Portugal. Article 20 of the decree establishing the Bank stipulated that between 30 June 1847 and 31 December 1848, the Bank of Lisbon's notes were to be used exclusively for two-thirds of government payments and for half of those made after that date, until they were redeemed by the Bank of Portugal.¹² As not all economic agents were aware of the Bank of Lisbon's notes, the discount on the notes was considerable. Figure 1 shows the weekly discounts (the difference between buy and sell) between 1846 (July) and 1847 (June).

The discount on the Bank of Lisbon's banknotes continued in the following years, and at

the end of 1854 these banknotes were still accepted in circulation at a discount, despite the fall recorded between 1853 (November) and 1854 (December) (Figure 2)

FIGURE 2. Discount of the banknotes of the Bank of Lisbon (November 1853 to December 1854) (in réis)



SOURCE: *Diário do Governo*.

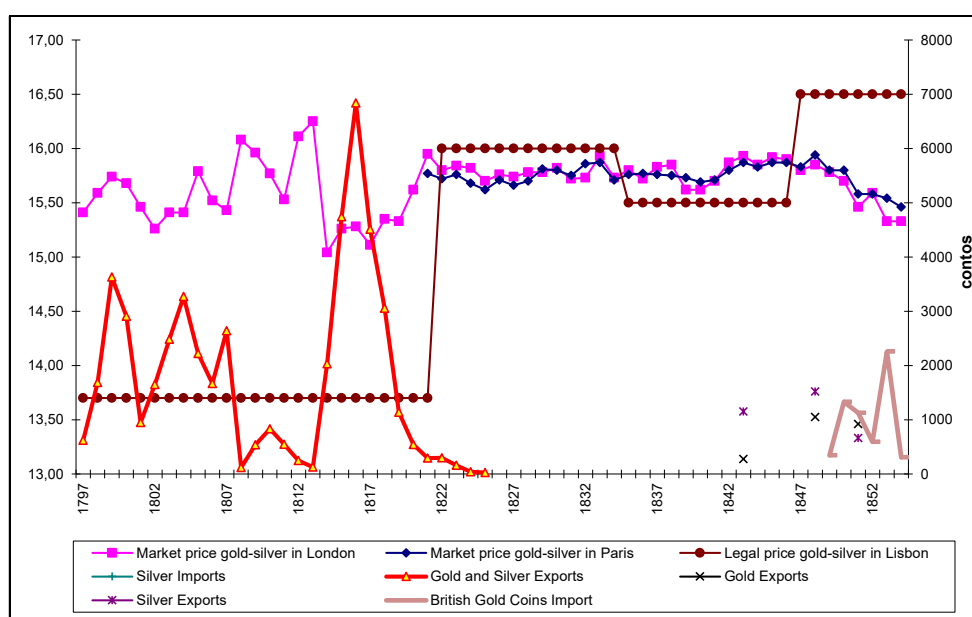
The other legislative measure that was introduced with significant monetary consequences was the Decree of the 3 March in 1847¹³. The legal ratio was increased to 1:16.5, which resulted in an increase in the gold price. This legal change was decided by the Minister of Finance (João Gualberto de Oliveira, 1st Count of Tojal), who was a man with British networks, in particular, with the Baring Brothers House (Martins, 1979, p. 202).

The rationale behind this legal change is as follows. During the 1830s and 1840s, a considerable quantity of British currency entered Portugal. The legal tender granted in the provinces to notes issued by the Bank of London and the poor quality of the coinage in circulation justified these exports (Challis, 1992, p. 484). In 1847, the gold Portuguese coins, denominated as *peças*, were valued at 8,000 réis, which equates to the mint price of 128,000 réis. The réis/mark (equivalent to 120,000 réis/mark in bullion) was applied to gold, whereas silver maintained the mint price of 7,750 réis/mark (equivalent to 7,280 réis/mark in bullion). The motivation behind this change in the law was to prevent Portuguese gold coins from being withdrawn from circulation. However, when Portuguese and British coins are compared these were overvalued. The reasons for this difference are unclear. Both Portuguese and English coins had a fineness of 22 carats, but if each *sovereign* weighed 2 *oitavas* (eighths of an ounce) and 16 *grãos* (80 grams) and was worth 4,500 réis, then each *peça* weighed 4 *oitavas* and was worth 7,500 réis. Consequently, considering their intrinsic value, the *sovereign* was not worth 128,000 réis/

mark, but 129,600 réis/mark. Therefore, *sovereigns* were overvalued which indicates that the legal change was not enough to prevent economic agents from hoarding Portuguese coins and circulating British gold coins.

When international prices are considered, the price of gold was higher in Portugal. A comparison of the Portuguese legal ratio with the market price in London and Paris reveals that it was relatively higher than the market price in those financial centres (Figure 3).

FIGURE 3. Prices of precious metals and trade



SOURCES: Market prices in London and Paris – calculations of the author from Boyer-Xambeu, Deleplace and Gillard, “Régimes monétaires, points d’or et «serpent bimétallique» de 1770 à 1870”, *Revue Économique*, 5, 1994. Silver imports and exports, gold and silver exports and gold exports - *Mappas Geraes do Commercio de Portugal com suas Possessões e Nações Estrangeiras*, several years. British gold coins imports – House of Commons PP.

Conversely, while silver was more highly valued in London and Paris than in Lisbon, foreign currencies were also accepted in transactions. Accordingly, economic agents avoided transporting bullion to the Mint House in order to avoid paying the 6% seigniorage on silver. Despite this change in the legal ratio, the Mint House continued to lack metals (silver and gold). The institutional solution was to approve a set of decrees that granted the status of legal tender to foreign gold and silver coins¹⁴.

Regarding monetary circulation, neither silver nor gold Portuguese coins were in circulation. The *sovereigns* were overvalued and continued to circulate, accepted by tale, i.e., accepted for their extrinsic value (Aragão, 1877, pp. 226-230). Greshman’s law can explain this situa-

tion. The circulation of overvalued British gold coins can be seen as a further increase in the price of gold in the Portuguese economy.

Internationally, precious metal prices moved in the opposite direction. The supply of gold increased as a result of the discovery of mines in Siberia and California. On the other hand, the supply of silver had fallen as a result of conflict in one of the major producing countries (Mexico) and demand had risen to pay the troops of the large armies in Prussia, Austria and Russia. The result was an outflow of silver to Europe, particularly to the London market.

In this domestic and international context, the Portuguese political authorities focused their monetary policy decisions on the appreciation of gold over silver. This was because, in comparison to international prices, gold appreciated more in Portugal. Indeed, 1847 is the first stage in understanding why Portugal joined the gold standard a few years later. But the question still remains: why were only British gold coins in circulation in 1851?

4. The political discussion in 1851

In 1851, the Law of 30 January abolished the legal tender status of foreign gold coins. However, English *sovereigns* (4\$500) and *half sovereigns* (2\$250) were excluded from this prohibition and continued to circulate with the same value. Furthermore, the Law of 15 February introduced new gold coins into circulation in accordance with the definition of the *real*, which was established in 1847 (1 real = 1.643 mg of fine gold). This law also stated that the total value of gold coins minted could not exceed the value of gold coins withdrawn from circulation. The objective was to avoid the general circulation of gold coins at a time when the international price of gold was falling.

The other government's aim was to impede the export of silver, which it achieved by increasing the duties on the export of this metal from 100 to 1000 reis/mark on wrought silver, ingots, pieces and broken objects¹⁵. The protectionist legislation in question did not prevent the export of silver from the country, despite a decline in legal exports (Figure 3). Furthermore, it did not result in a surge in the attraction of this metal to the Mint. In 1853, the Director of the Mint stated that between 1848 and 1850, approximately 62 *contos* of silver had been minted, whereas in the two years from 1851 to 1852, this figure rose only to 79 *contos* (an increase of 27 per cent)¹⁶. This means that the measures taken did not seem to have much of an effect on minting. Silver was simply being drawn to the external markets where prices were higher.

In 1851, the circulation of British gold coins and the almost complete absence of silver characterised the monetary situation. In this context, the then Minister of the Treasury, António José d'Ávila, formally set up a committee to study the so-called 'monetary question'¹⁷. The decree justified the creation of this committee as due to the prices of precious metals, and its purpose was "to make the changes required by the current monetary system, and to be better advised in order to harmonise the relative price of gold and silver"¹⁸. The initial target was to change the bimetallic ratio (to increase the price of silver) and to withdraw *sovereigns* from

circulation. The committee was to meet at the Lisbon Mint to obtain details related of the movements of precious metals and more information on the market situation. The increase in the number of requests sent to the Mint reflected the concern of several governments in assessing the prevailing monetary situation and deciding how to increase the amount of Portuguese metallic money in circulation¹⁹.

Nevertheless, the creation of this committee caused economic and social turbulence in the Lisbon market and became a matter of concern for Parliament. The government was forced by the opposition not to interfere with the interests of those who held foreign gold currency, i.e., those who held *sovereigns*. Consequently, the public interest was identified as the interests of British currency holders in the Lisbon market.

The appointment of this committee was published in the *Diário do Governo*²⁰, with its setting up identified by Parliament as the cause of the panic that spread across the Lisbon money market. According to members of parliament, this panic led to the refusal to accept *sovereigns* for payments and the rush to obtain banknotes from the Bank of Portugal. Even members of the opposition expressed suspicions, suggesting that Ávila may have been attempting to harm the Bank's interests. Recent conflicts between the two institutions and the fact that the Treasurer did not invite representatives of the Bank of Portugal to the committee contributed to this mistrust²¹. The relationship between the government and the Bank was characterised by a lack of mutual confidence, and the shareholders were reluctant to extend loans to the state during this period (January 1851) (Reis, 1996b). The Bank was a creditor of the government and, as a result, exerted considerable political pressure. According to Ávila's opponents in parliament, the bank's actions would damage its credibility if it were to exchange banknotes for gold, as private individuals would not accept the devalued metal.

In the parliamentary debates, the primary concern was the committee's authority to withdraw foreign gold coins from circulation, particularly British gold coins. On 21 January 1851, the then-member of parliament Fontes Pereira de Melo, who later became the Minister of the Treasury during the Regeneration period, delivered a compelling speech on the interests that required protection during the session. Firstly, Fontes Pereira de Melo elucidated the prevailing concerns, stating, "Mr. President, the panic is a fact. And it does so justifiably. If I were a very rich man and had a great deal of foreign gold, I would be even more frightened today than I was yesterday." (Debates Parlamentares, session of 21 January 1851). To calm the market, he also proposed that Parliament approve a binding resolution requiring the committee to respect sovereign debt holders. Furthermore, he asserted that the interests of gold owners are inextricably linked to the broader interests of the country. This assertion implies that Fontes Pereira de Melo advocated for the interests of exporters, suggesting that the benefits of this group align with those of the nation. This stance can be understood as a defense of property rights and the political support of Fontes (Broz and Frieden, 2006).

The government, through the voice of the President of the Council of Ministers, committed itself to protecting the interests of holders of foreign gold currency. In order to dispel any remaining doubts, he reiterated that "whatever measures the government may submit to Parliament, the sovereigns will not cease to have the legal value which they now have, and the

holders of foreign gold currency will suffer no loss.” (Debates Parlamentares, session of 21 January 1851).

The pressure on the government became so intense that at this same Parliamentary session, António José d’Ávila presented a bill and the members of parliament elected a special committee to analyse it²². The composition of this committee differed from that of the previous one, with the addition of José Lourenço da Luz, a Director of the Bank of Portugal from 1848 to 1857 and a supporter of the political movement Regeneração (Reis, 2011). If there was no lobby between Fontes and the shareholders of the Bank (Stasavage, 2002, p. 164), in January 1851 he was defending the owners of the sovereigns and probably the position of the Bank of Portugal. A few months later, the relationship between Fontes and the Bank was not so friendly (Reis, 1996b).

Three years later, Ávila clarified that he had not intended to keep sovereigns in circulation in 1851 in the ensuing debate on the gold standard. Ávila stated, “In 1851, I was of the opinion that the sovereigns should not be kept in circulation.” (...) If Parliament had given the necessary support on the question of gold, I would have withdrawn the sovereigns from circulation (Debates Parlamentares, session of 2 May 1854).

However, the Decree of 30 January 1851 ended the legal tender status of foreign gold coins, with the exception of sovereigns. What were the potential benefits of keeping British currency in circulation? Which groups were engaged in trading silver and gold? While these groups may have been similar, the businesses involved may have been distinct.

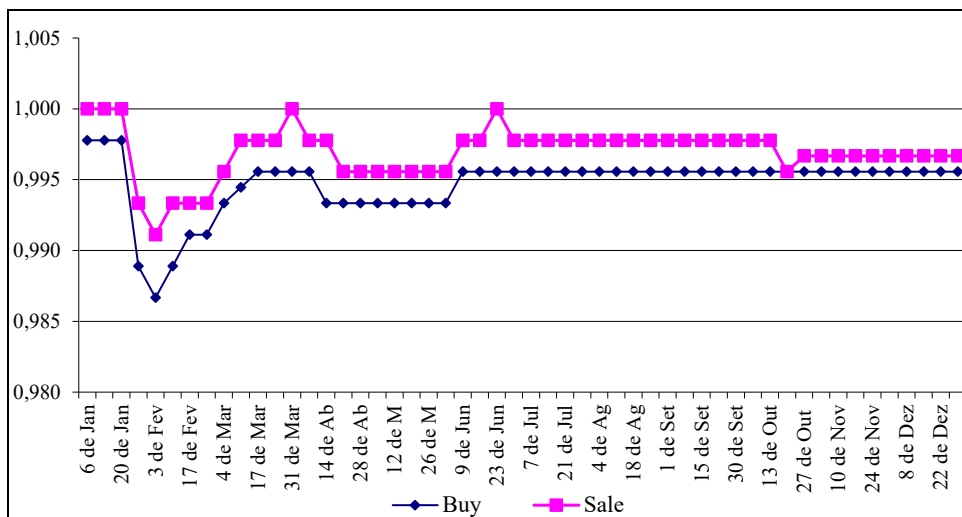
Silver coins, the *cruzados novos*, were melted into bars and exported to Great Britain. In parliament, two Lisbon workshops were mentioned as places where silver coins were melted²³. Although the location of one of the workshops remained unknown, its denunciation was not contested. Meanwhile, the price of precious metals in bullion ceased to be published in the *Diário do Governo* on 20 January 1851, which was the date of the parliamentary debate. This information was missing until 1854 (the year in which Portugal joined the gold standard). It is unclear whether this was a coincidence or whether there were other reasons for this. The bullion market continued to operate, but the lack of transparency and competitiveness was evident. The social groups that operated in the silver market were further protected as they were able to negotiate prices in accordance with their respective market power.

With regard to the gold market, it is notable that gold imports arrived primarily through Southampton, which was the port through which Portuguese products, including wine, oranges, corn, sheep, and cattle, entered Great Britain. Additionally, the same port handled the products, such as cotton, wool, and linen, and “crates with money,” which were destined for Portugal²⁴. The route taken by these ships can be traced back to Gibraltar, which was referred to by José da Silva Carvalho in a letter sent to the Duke of Palmela in 1833 as the “great store of products from Asia”²⁵. This situation remained in effect throughout the 1850s. In 1861, Carlos Morato Roma highlighted the impact of the trade with Asia, which was largely dominated by Britain, on European silver production (Roma, 1861, p. 69). The trade circuit was operational, with gold coins entering Europe and silver bullion and foreign silver coins leaving the continent, as evidenced by the years for which there are statistics on foreign trade²⁶.

The port of Southampton was the dominant player in this metal trading circuit, with the port of London a close second. The demonetisation of silver in Britain in 1816 meant that the price of this metal was relatively free to fluctuate. The par value of silver was not significantly different from that of gold, which likely contributed to the market absorbing a considerable amount of silver during the first half of the nineteenth century.

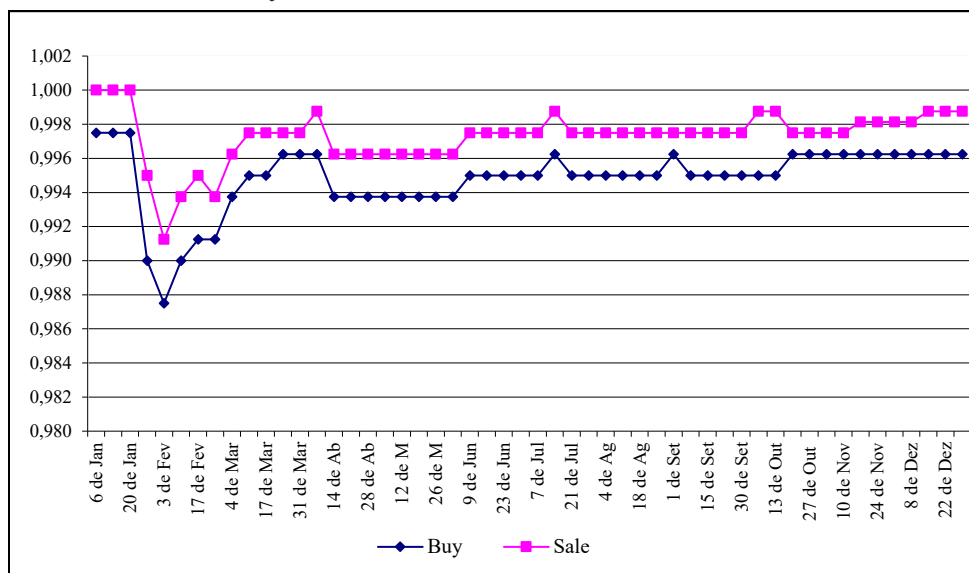
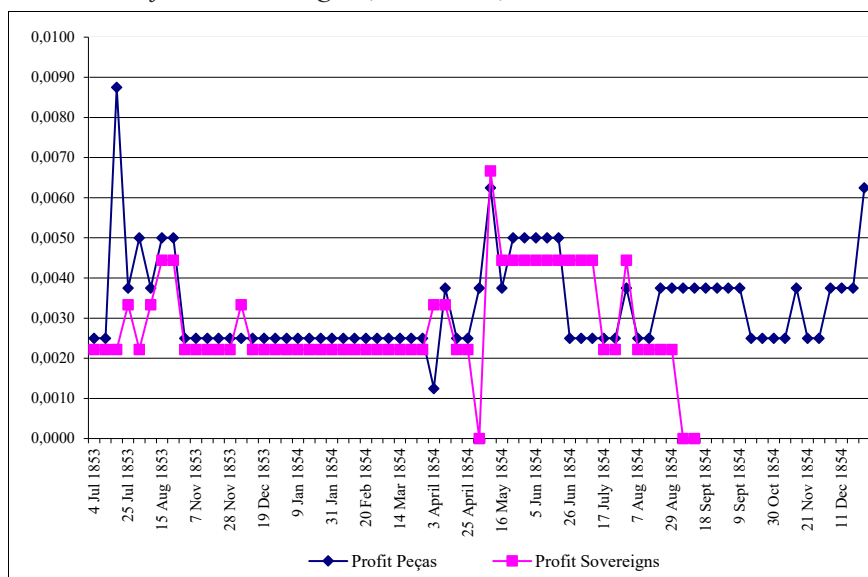
A similar approach can be applied to the Portuguese metals market, where an analysis of the price of gold and silver coinage can also be used to support the same conclusions.

FIGURE 4. Discount of *Sovereigns* (1851) (in % of face value)



SOURCE: *Diário do Governo*.

By analysing the Lisbon market discount on the price of coins, which reflects their intrinsic value, it is possible to see how a discount was applied to both *sovereigns* and *peças* in 1851 (Figures 4 and 5). As the figures show, these gold coins were always traded below their face value. The difference between the buying and selling premiums was higher for British coins in 1851 and lower in 1853 and 1854 (Figures 4 and 6), on the eve of the adoption of the gold standard.

FIGURE 5. Discount of *Peças* (1851) (in % of face value)SOURCE: *Diário do Governo*.FIGURE 6. Profit *Peças* and *Sovereigns* (1853-1854)SOURCE: *Diário do Governo*.

NOTE: There are no data for sovereigns from September 1854, when the gold standard was already in force.

In summary, the monetary situation in 1851 was influenced by two key factors. Firstly, sovereigns were not withdrawn from circulation because they were making a profit on the Lisbon market. A comparison of the market values of gold coins showed that the British currency made a higher profit than the Portuguese coins. Secondly, the importance of silver in the London market explains the absence of any change in the bimetallic ratio. The intention of the Minister of the Treasury, António José d'Ávila, was to change the price between the two metals and thereby increase the value of silver, as he admitted in the parliamentary debate of 1854 (Sousa, 2004). Nevertheless, he was unable to achieve this because the import of sovereigns and the export of silver bullion represented a profitable monetary business for the Lisbon market. The problem of silver exports was frequently discussed in Parliament and the solution was not to increase the price of the metal but to increase the duties, albeit with limited success. In examining the two relationships, it is necessary to determine which interests were most protected. Was it the group holding assets in sovereigns or the group trading in silver? It is likely that these groups were not very different, and Fontes Pereira de Melo was aware of this. However, Ávila had weaker links with these lobby groups (Sardica, 2005, p. 643) and only political pressure in Parliament influenced his decision. By this time, the Regeneration was about to take power, and Fontes would serve as Minister of Finance for several years.

5. Conclusions

There are many theories to explain the adoption and spread of the gold standard in the 19th century. As Portugal was the second country in the world to adopt this monetary system, the reasons for its adoption have often been linked to Anglo-British relations. But Britain, given its hegemonic power, had trade and financial relations with many other economies. Why didn't these economies join the gold standard in the first half of the 19th century? Domestic and international reasons explain the adoption of this monetary regime, but for Portugal the internal reasons remain unexplained. In particular, the question of why the British currency remained legal tender in 1851, when all foreign currencies had lost it, has never been answered.

The first contribution of this article is that the maintenance of bimetallism as a monetary regime seems to have been a concern of the government, reflected in the interventions that took place in the money market. However, private economic agents showed no interest in using the mint to produce coins. Even the suspension of seigniorage rights in 1846 did not change this behaviour. The advantages of trading in bullion were the main reason for the absence of metals in the Lisbon Mint. The change in the legal ratio in 1847 led to a fall in the price of silver, an increase in the price of gold and an overvaluation of sovereigns on the Portuguese market. As a result, Portuguese coins were almost completely withdrawn from circulation. Economic agents turned to the bullion market to buy silver, while arbitrageurs profited whenever they traded British gold coins.

A second contribution of this article is to show that when the dominant medium of ex-

change in the Lisbon market was the gold coin, the then Minister of the Treasury, Ávila, took measures that caused panic in the market. This was due to the fact that those who held such coins feared that they would be devalued. It was against this background that the 1851 parliamentary decision was taken, in the face of difficulties in minting Portuguese coins, while the overvalued British gold coins remained in circulation. The government was obliged by the opposition not to harm the interests of private agents holding British gold coins, and the opposition was between a finance minister with weaker links to these lobby groups and the opposite member of parliament who would be finance minister when Portugal joined the gold standard. The public interest was identified as the interest of British holders in the Lisbon market.

Finally, we argue that a political decision can explain the adoption of the gold standard, and that the shift to this monetary regime was decided in two moments: 1847 and 1851. These political decisions influenced the choice made three years later when bimetallism was officially abandoned in 1854. This episode took place in a southern European country, demonstrating the importance of political considerations in monetary decision-making.

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Notes

1. As Gallarotti stresses, global studies about the regime change have their own limitations. This author even presents Portugal as one of the case studies that does not fit the general model - “These observations, however, are not free of anomalies. Portugal, a relatively underdeveloped nation with traditional political structures, preempted other Western European nations onto a *de jure* gold standard” (GALLAROTTI, 1993, p. 47).
2. For the explanation of this trade-off in the monetary history of the nineteenth and twentieth centuries, see EICHENGREEN, 2019.
3. We discuss this argument in section 2.
4. *Relatórios do Banco Comercial do Porto*, 1836-1855.
5. The importance of trade in explaining Japan’s adoption of the gold standard is the main argument of the MITCHENER *et. al.*, 2010, but SCHILTZ, 2012, argues against this explanation. See also, REIS, 2007, about possible banking externalities.
6. About the discount rates in Portugal compared with the U.K., see BORDO, 2003. See also REIS, 2007, about the evolution of discount rates. Concerning credit ratings, see FLANDREAU, 2003, pp. 43-5. SUSSMAN and YAFEH, 2000, consider the “credit rating” a very important variable in explaining Japan’s adoption of the gold standard. However, SCHILTZ, 2012, argues against this explanation.
7. At the time, the Director of the Lisbon Mint House produced a considerable number of documents containing a variety of information, including data on productivity, costs, and other useful data. For further insight into the quality of coins produced at the Lisbon Mint House during the eighteenth and nineteenth centuries see SOUSA (2015).
8. *Livros do Registo Geral*, Lisbon Mint Archive.
9. The period between 1828 and 1834 saw a rise in political instability and a scarcity of precious metals, which can be attributed to the civil war. The importance of silver as a means of paying troops can be seen to explain these interventions in the bullion market.
10. For the nineteenth century see *Estatística das moedas de ouro, prata, cobre e bronze, que se cunharam na Casa da Moeda de Lisboa desde o 1.º de Janeiro de 1752 até 31 de Dezembro de 1871*, Lisbon Mint House. For the period between 1688 and 1797 see SOUSA, 2006.
11. The plural form of the word “*real*” is “*réis*.” The *real* was the Portuguese unit of account between 1435 and 1911.
12. In several decrees, the Bank of Lisbon’s notes were designated as legal tender. The first of these dates from 23 May 1846, and the notes were made legal tender for a three-month period. However, this period was subsequently extended.
13. This decree was published after some inspections at the Lisbon Mint. However, there was no parliamentary discussion of this matter as, in 1846, due to the Maria da Fonte revolution parliament was only in session between 2 January and 23 May. Parliament only reopened in 1848 with its first ordinary session sitting on 2 January of that year.
14. Cf. Decrees of 24 February, 10 March, 21 April, 20 May and 24 May 1847.

15. It was only on 5 August 1854 (already under the regime of the gold standard) that the duty levied on silver exports returned once again to the level of 100 réis/mark.
16. *Livro do Registo Geral*, Lisbon Mint Archive.
17. The committee had seven members: Rodrigo da Fonseca Magalhães and Francisco Simões Margiochi, both Peers of the Realm; Agostinho Albano da Silveira Pinto and José Isidoro Guedes, both Members of Parliament; Joaquim Larcher and Filipe Folque, both Counsellors; and Júlio Máximo de Oliveira Pimentel, a Professor at the Escola Politécnica de Lisboa.
18. Decree of 15 January 1851, published in *Diário do Governo* on 17 January.
19. Livro de Registo Geral, Livros da Correspondência Recebida and Livros da Correspondência Expedida, *Lisbon Mint Archive*.
20. Idem footnote 17.
21. On the conflicts between the government, in particular Minister Ávila, and the Bank of Portugal, see REIS, 1996b, pp. 354-362.
22. This bill was published in the *Diário do Governo* on 22 of January of 1851 with the explanation that the Committee approved the government's proposal.
23. This situation was denounced by a Member of Parliament Correia Leal in the session of 20 January 1851 (*Debates Parlamentares*).
24. *Mappas do Commercio ... e Folha Commercial de Lisboa, 1849-1854*.
25. Livro de Registo da Correspondência com a Câmara dos Deputados, *Instituto dos Arquivos Nacionais / Torre do Tombo*, MFF, livro 3649.
26. The years that allow us to achieve these conclusions are: 1843, 1848, and 1851.