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# CENTRAL BANKING IN THE IBERIAN PENINSULA: A COMPARISON

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### **Abstract**

The paper explores the similarities and differences between the origin, behavior and evolution of the central banks of Portugal and Spain. Portugal and Spain are two countries that share the same peninsular space in the west corner of Europe. Though different in size and population, the political, social and economic history of both nations offer more similarities than differences. In the financial sphere, the resemblances are remarkable. Both nations exhibit very low levels of financial intermediation, as measured by the ratio between total bank deposits and GDP. Another common feature of both Iberian nations is the dominance exerted by a sole institution. However, we also find some divergences between the financial structures of the two countries that are worth noting. Three differences merit our particular attention in this paper. The first diversity refers to the distinct composition of the quantity of money. The monetary regime is the second difference between the two countries (Portugal joined the gold standard while Spain remained off the gold standard). Finally, the Bank of Portugal and the Bank of Spain exhibit also significant contrasts in their behavior as central banks.

**Keywords:** central banks, monetary policy, gold standard, Portugal, Spain.

**JEL Classification:** : N13, N23, E58.

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## CENTRAL BANKING IN THE IBERIAN PENINSULA: A COMPARISON

Portugal and Spain are two countries that share the same peninsular space in the west corner of Europe. Though different in size and population (Spain occupies two thirds of the territory of the peninsula and it has at the present moment 40 millions inhabitants, as contrasted with 11 millions of inhabitants of Portugal), the political, social and economic history of both nations offer more similarities than differences. A complicated and convulsed transit from the Ancien Regime to modernity and a slow process of economic change that impeded to raise standards of livings of the majority of the population until de second part of the XX century. In 1913 the two countries were part of the group formed by the less developed areas of Europe: the Spanish GDP was half of the average of the combined GDP of Britain, France and Germany, while the Portuguese GDP was a mere 30 per cent.

In the financial sphere, the one of our most interest in this paper, the resemblances are also remarkable. Both nations exhibits very low levels of financial intermediation, as measured by the ratio between total bank deposits and GDP. Confronted with a European average of 104 in 1900, in Spain this same ratio was in the vicinity of 39 per cent, while in Portugal did no reach a 25 per cent. The Portuguese banking system did not take off until the middle of the XIX century: still in 1850 there existed very few banks and the demand of credit was satisfied by merchants and by small private bankers. In the decades of the sixties and seventies a relatively large number of financial institutions were created, up to 53, that opened their doors in the cities of Lisbon and Porto, the two major commercial and industrial centers of the country. In the Spanish case, the financial system did not either make its start until the mid-1850, when three big credit companies with foreign capital were established and various issue and discount banks were constituted.

Another common feature of both Iberian nations was the dominance exerted by a sole institution. In Portugal the leadership was in the hands of the Banco de Lisboa, born in 1821; and when this latter disappeared in 1846, its near monopolistic position was taken by it successor, the Bank of Portugal. In Spain the preeminence was assumed from its inception by the Bank of Spain (established in 1782 under the name of Banco de San Carlos). Neither of them were "stricto sensu" central banks, although both institutions undertook some of its functions. The two performed as Treasury's banks and also as the sole issuers of domestic currency in their respective territories (after

1874 in the case of the Bank of Spain and after 1891 in the case of the Bank of Portugal)<sup>(1)</sup>.

Notwithstanding these similarities, we also find some divergences between the financial structures of the two countries that are worth noting. Three differences merit our particular attention in this paper. The first diversity refers to the distinct composition of the quantity of money. Though poor, agrarian and underdeveloped, the supply of money in Portugal and Spain shows a marked contrast. While gold coins circulated abundantly in the western part of the peninsula (the Portuguese territory), in the eastern part (the Spanish territory), the yellow metal was extremely scarce and the public used mainly silver coins as means of payments. The monetary regime is the second difference between the two countries. To the surprise of many observers, now and then, Portugal was after Britain leader in adopting the gold standard in the early date of 1854. On the contrary, Spain remained attached officially to bimetallism, although in fact gold convertibility was suspended and the country adopted a "de facto" silver standard regime. Finally, the Bank of Portugal and the Bank of Spain exhibit also significant contrasts in their behavior as central banks that need to be examined

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<sup>1</sup> The Portuguese monetary unit was the real (plural reis). Its value was set in 1854 at 4,500 reis to the pound sterling. There was also a unit of account, the conto, equal to one million reis. The Spanish monetary unit was the peseta, introduced in 1868. Its value was set at 25.22 pesetas to the pound sterling.

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Levels of GDP per capita in several European countries (in international dollars of 1990)

	1870	1913
Belgium	2779	4220
France	2017	3485
Germany	1875	3648
Great Britain	3249	4921
Netherlands	2874	4049
Denmark	1952	3912
Finland	1151	2111
Norway	1603	2501
Sweden	1456	3096
Austria	1638	2599
Italy	1595	2564
SPAIN	1439	2255
Bulgaria	1270	1521
Greece	996	1255
Hungary	888	1574
PORTUGAL	926	1244
Romania	861	1378
Serbia	934	1152

Sources: Lains (2003)

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Distribution of employment by sectors. In percentages

	<u>Portugal</u>		<u>Spain</u>	
-	1851	1900	c. 1860	c. 1900
Agriculture	75,0	66,0	63,5	61,2
Industry	10,0	19,0	17,2	18,6
Services	15,0	15,0	19,3	20,2

Sources: Lains (2003); Prados de la Escosura (2003) y Estadísticas Históricas de España (2005)

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Geographical distribution of Portuguese and Spanish exports(c. 1900). In percentages

	Portugal	Spain
Great Britain	25,6	33,9
Brazil	17,6	-
Spain	6,8	-
Portuguese Africa	15,3	-
France	-	22,9
Cuba	-	7,2
Portugal	-	4,7

Source: Lains (2003); Estadísticas Históricas de España (2005)

### The quantity of money in Portugal and Spain

Fortunately we have long series of the supply of money for the two economies. The Portuguese data have been compiled by Reis (1990) and Sousa (1991), and the Spanish figures were collected by Tortella (1974). Our purpose in this section is to compare, first, the composition of the quantity of money in both countries and, later, to examine its long-run behavior (<sup>2</sup>).

In the case of Portugal the year 1891 marks a watershed. While the country was on the gold standard, currency in the forms of coins, particularly gold coins, was paramount. Portuguese and British gold pieces represented more than 70 per cent of the total quantity of money in hands of the public (<sup>3</sup>). In fact, Portugal was one of the European nations with a largest per capita gold stock, only after France and well above Britain, Germany and Italy. Silver as well as other non-precious metal, such as copper, bronze and nickel came second, although its share in the money supply tended to fall considerably between 1860 and 1890, from 21 to 6 per cent. Banknotes represented a very reduced proportion of the stock of money, despite the existence of numerous issue financial institutions ready to supply the public with the required means of payments. Of all issue institutions, the Bank of Portugal, with head office in Lisbon, the main commercial city of the country, was the oldest and the biggest in terms of resources. Furthermore, the Bank of Portugal's notes were accepted beyond the geographical limits of Lisbon and also used to cancel debts with the government. The rest of the banks of issue were smaller, and the circulation of their notes was restricted to the northern part of the country.

In 1887 the Bank of Portugal was granted the monopoly of issue for forty years, although until 1891 the notes of the small northern banks remained in circulation. In this year, when the gold standard was suspended, banknotes hardly represented a 7 per cent of the total quantity of money in the hands of the public. The share of deposits was also quite small, although its proportion in the money supply increased from 4 to 16 per cent between 1860 and 1890. In the overall period of 1854-1890, the bank's money (notes plus deposits) made a minority part of the Portuguese means of payments. In these years

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<sup>2</sup> For Portugal, Nunes and Valério (2005) have produced various definitions of money supply for the period 1834-1914. Because our study is restricted to the period 1854-1910, we have preferred to use Reis' figures that have the advantage of being homogeneous with the figures offered by Tortella.

<sup>3</sup> British sovereign and half sovereign represented almost 90 per cent of all gold coins circulating in the country.

is obvious that the public showed a clear preference for gold and silver as means of payments.

The 1891 crisis and the end of the gold standard implied a considerable mutation in the composition of the Portuguese money supply. Gold coins, particularly foreign coins, went rapidly out of circulation and were replaced by silver and other (copper, bronze and nickel) metallic pieces, but most of all by Bank of Portugal's notes. In two decades, the change was quite expeditious. In 1910 the share of gold has declined to a 30 per cent of the money supply, other metallic coins represented a 17 per cent and banknotes in circulation had increased to a 44 per cent. On the contrary, the share of deposits remained at a very low level. In fact, the evidence shows that this component of the money stock declined sharply from 16 per cent in 1890 to 9 per cent around 1910. It can be argued that the end of the gold standard led to a general crisis of confidence in the banking system. The public decided not only to reduce its holding of deposits but also to hoard the high value English sovereign and use instead non convertible Bank of Portugal's notes. In a relatively short time period the monetary system of Portugal moved from a strong metallic base to a situation in which the notes of the central bank represented the largest percentage of all means of payments.

Gold coins, both foreign and national, were also dominant in the composition of the quantity of money in mid-XIX century Spain. And also as in Portugal, the share of the notes of the three banks of issue and the volume of deposits were a small percentage of the money supply: a 12 per cent around 1870. But the fact that Spain did not adopt the gold standard and the unreasonable policy of keeping the official bimetallic ratio unchanged despite the rapid depreciation of silver in international market, led to the gradual disappearance of gold from circulation. Later, the suspension of the convertibility of the Bank of Spain's notes into gold accelerated the trend. Gold coins were either exported or hoarded by the public to the extent that by 1900 there was no gold in circulation in the country. To compensate the reduction in the gold stock and to cover the necessities of trade, the government increased the minting of silver coins and introduced new copper and nickel pieces. Altogether, these fiduciary coins made almost a third of the quantity of money in the hands of the public by the end of the century. Banknotes in circulation also increased rapidly thanks to the continuous opening of Bank of Spain's branches in all major cities. By 1910, paper money represented almost a 50 per cent of the Spanish money supply. The development of the financial system also contributed to the use of deposits as a mean of payments. The creation of new

commercial and mixed banks at the turn of the century explains that the share of deposits in the stock of money increased from 10 per cent in the nineteen eighties to 30 per cent in early twenty century.

The comparison between the Portuguese and the Spanish data renders some interesting conclusions. In the Portuguese economy the weight of the metallic base was greater than in the Spanish case, particularly with respect to gold. At the end of our period, gold coins in Portugal made still a 30 per cent of the stock of money, while in Spain gold coins had disappeared entirely from circulation. We can also identify some other differences between the two countries with regard to the use of silver and banknotes in the XIX century. However, it is true that by 1910 the shares of these two components of the money supply were similar in both countries. The most remarkable contrast appears when we consider the use of bank's deposits in the two peninsular nations. In Portugal this form of money was hardly employed, while in Spain it made almost a 25 per cent of the stock of money. Possible explanations for the weak demand for deposits in Portugal compared to Spain is the relative underdevelopment of its financial system as well as its lower level of urbanization and its lower level of per capita income.

If we now move to analyze the long run behavior of the money supply and the contribution made to it by each of its proximate determinants, we also find some interesting results. According to the classical method proposed by Cagan-Friedman the quantity of money is the result of the combined influence of the monetary base, or high powered money, the currency ratio and the reserve ratio (<sup>4</sup>). As can be seen below, changes in the base money (H) in the two countries completely dominated the variations in M. This means that M followed closely the movements in H. In fact a 88 per cent of the rate of growth of the money supply was caused by the growth of high powered money. This suggests that the monetary multiplier (m), which summarized the influence of both the currency and the reserve ratios, had a minimum impact. In the Portuguese economy as well as in the Spanish economy the contribution of the monetary multiplier did not exceeded 11 per cent. Therefore, despite the fact that Portugal and Spain had a

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<sup>4</sup> The currency ratio is the quotient between total deposits and currency (coins and banknotes) in the hands of the public. The reserve ratio, or cash ratio, is the quotient between total deposits and vault cash or cash retained by the banks against its liabilities. Although the figures to estimate these two ratios for the two countries are not entirely homogeneous, they serve nonetheless to make some comparisons and to detect some significant differences that confirm many of the arguments developed so far.

different composition of its respective stock of money, the proximate determinants of this variable were similar in the two economies.

In Portugal the currency ratio fluctuated within very narrow limits. From a 0.1 estimated for the two first decades it rose to 0.2 in 1891. Thereafter, when the gold standard was abandoned, the ratio fell again. The very low value for this coefficient reflects that money in the form of deposits was not much in demand. As it has been suggested, this can be due to the relative underdevelopment of the financial structure of the country or rather to a matter of public preference, since from the 1860s there was a rapidly growing banking sector that was ready to provide such a monetary instrument. With regard to the reserve ratio we can point out to two salient features. In the first place, its high value, possibly the result of an excessive prudence of banks administrators. And second, its volatility, before and after 1891. From the year of the adoption of the gold standard in 1854 the ratio rose from 1.78 to 2.87 in 1875. The financial crisis of the following year moved the public to convert deposits into coins and banknotes. Hence, the ratio fell notably. Conversely, as the calm returned to the market, the reserve ratio resumed its upward trend, although fell again to a minimum of 1.04 as a consequence of the financial turmoil associated with the suspension of convertibility. Once the worst of the crisis had passed and confidence had been restored, the ratio recovered and by 1910 it had regained the mark recorded at the beginning of the period in 1854.

In Spain the value and behavior of the currency ratio did not differ much from the Portuguese one. It mirrors as well the underdeveloped nature of its economy and the low level of integration of its financial system. The coefficient exhibits a remarkable stability with a gradual rising trend to reach an average of 0.36 for the 1900-1910 decade (slightly above the Portuguese average of 0.13). With respect to the reserve ratio, we observe the same degree of volatility, although in the Spanish case the fluctuations are less violent than in Portugal. A feature that calls our attention is the decline of the ratio until the beginning of the nineteenth and thereafter the strong upward trend. In very few years the ratio jumped from 1.3 in 1900 to the 2.6 in 1910.

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The composition of the quantity of money in Portugal. In percentages

	Gold	Silver and other metallic coins	Banknotes	Deposits
1860	70.4	20.9	4.4	4.6
1870	73.4	14.3	4.1	8.2
1880	73.8	7.7	6.7	11.8
1890	71.7	6.0	6.7	15.6
1900	34.8	17.6	40.6	7.0
1910	29.8	17.1	44.1	9.0

Sources: Reis (1990)

The composition of the quantity of money in Spain. In percentages

	Gold	Silver and other metallic coins	Banknotes	Deposits
1860	63.6	19.7	10.1	6.6
1870	67.8	19.8	5.6	6.8
1880	40.1	27.5	12.9	19.5
1890	14.6	30.7	32.1	22.6
1900	-	20.8	49.4	29.8
1910	-	15.8	58.6	25.6

Sources: Tortella (1974)

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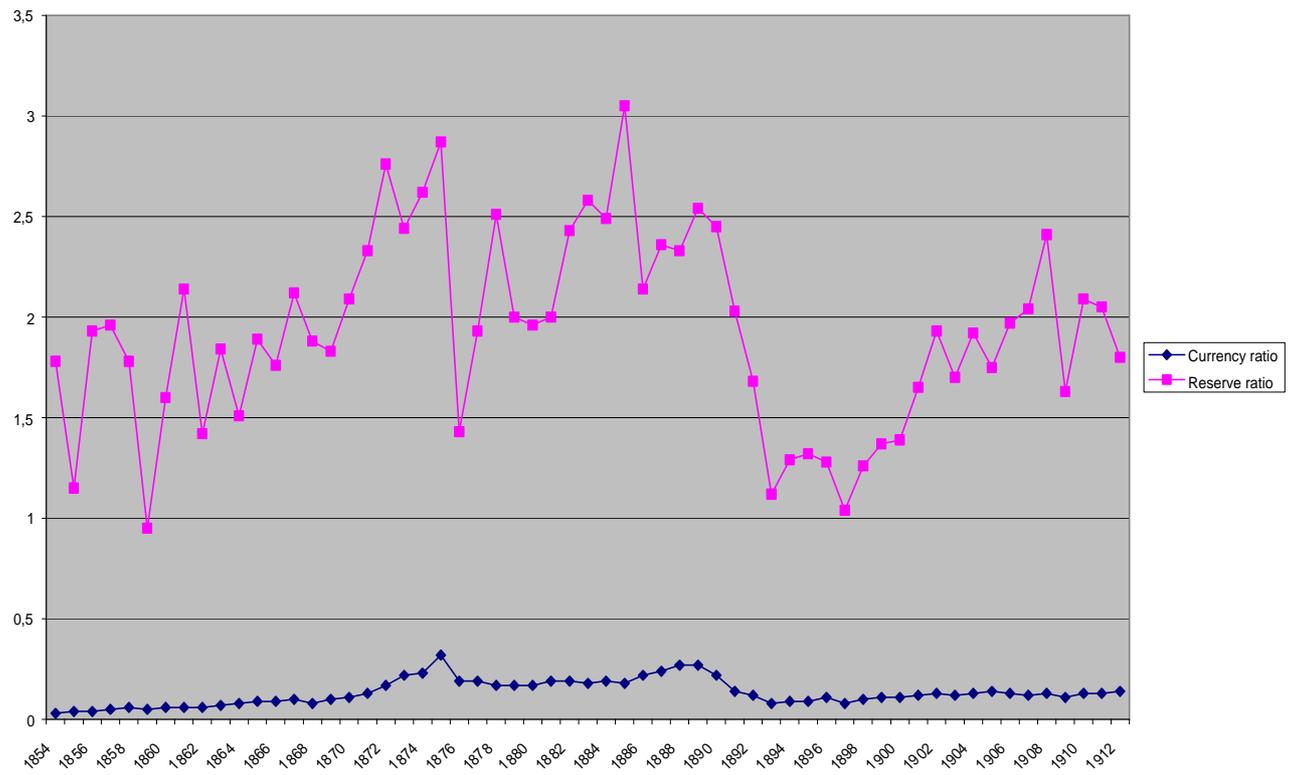
Sources of growth of the money stock. (percentages)

	Average rate contributed by				Relative contribution	
	M1	H	CR	RR	H	m
Portugal (1854-1890)	3.04	2.69	0.34	0.26	88	11
Spain (1874-1900)	2.60	2.30		0.3	88	11

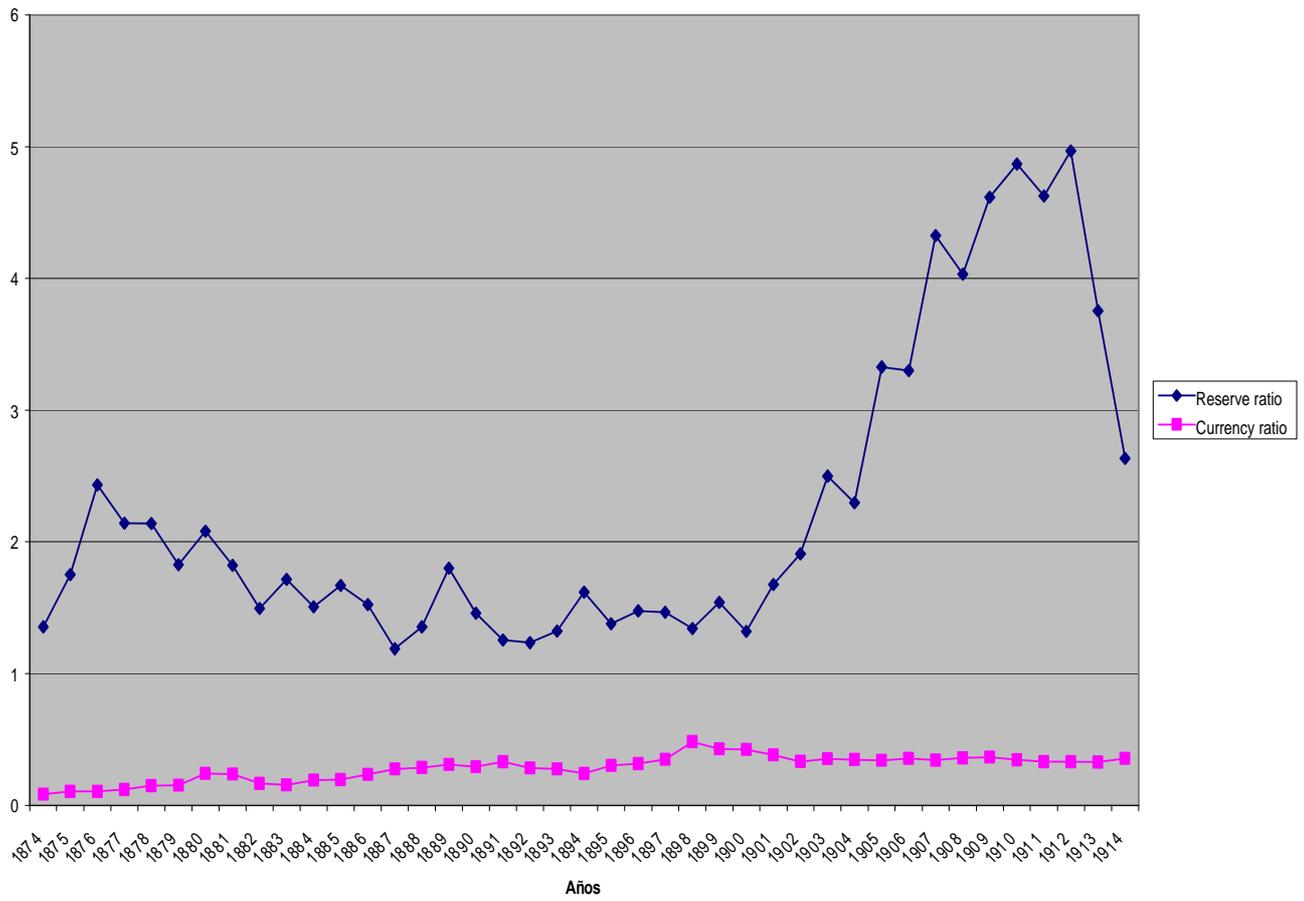
Sources: Reis (2000); Tortella (1874)

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Portugal: currency and reserve ratios



Spain: currency and reserve ratios



### The Bank of Portugal and the Bank of Spain

The history of the central banks of Portugal and Spain exhibits remarkable similarities as well as noted differences. Unfortunately we do not have complete historical accounts of either of them. Hence, our knowledge of both institutions rest on books and articles that cover only limited periods or specific issues. For the origin and first decades in the life of the Bank of Portugal we can rely on an old volume written by Peres (1921), two papers prepared by Caeiro da Mata (1932, 1933) and the most thoughtful and recent book produced by Reis (1996). The second part of the XIX century and the early XX century are studied in two brief articles: one by Valério and Mata (1982) and another by Reis (1999). A good and recent summary can be found in Nunes and Valério (2005). For the Spanish institutions modern studies have been published by Tortella (1970), Anes (1974) and Tedde (1982). Furthermore we also have the recent volume prepared by the Bank of Spain (2006), which includes four chapters that cover the period 1856-2006.

The Bank of Portugal was formed from the merger of two institutions, the Banco de Lisboa (established in 1821 as the first commercial bank in Portugal) and the Companhia Confiança Nacional (or National Surety Company, a finance firm set up in 1844 to make loans to the government). From its inception the Banco de Lisboa, which enjoyed a note issuing monopoly, had been involved in financing the government. Increasing funding demands, especially during the 1840's, resulted in the Treasury becoming unable to meet its obligations to the Bank, leading to a suspension of convertibility of its notes. For similar reasons the Companhia Confiança Nacional had to suspend its payments, prompting the government to merge and replace these two institutions in 1846 with the Bank de Portugal. To certain extent it can be argued that lato sensu the Bank of Portugal is the successor of the old Banco de Lisboa.

The foundation of the Bank of Spain goes further back in history: its creation can be traced to the year of 1782. In order to sustain the market value of the public debt (vales reales) issued to finance the wars against Britain and France, the government of the epoch proposed the formation of a credit institution with the name of Banco de San Carlos. The San Carlos operated quite successfully until the beginning of the XIX century when due to the complications of the Napoleonic invasion of the country and the war of independence fell into a long phase of decadence. In 1829 the government introduced some drastic reforms to avoid its failure and changed its name to Banco de

San Fernando. Later in 1856 as a result of a new financial law the San Fernando was renamed Bank of Spain.

Although the two banks were born by public initiative, they were established as private joint-stock companies. They were administered by independent boards of directors elected by the shareholders. However, in both cases the states retained powers over the banks that largely exceeded their position as a minority shareholder. These were the consequences both of the states' legislative capacity frequently used to change the banks' statutes and operational framework, and of their power to nominate the most influential members of the banks' governing body, among them the governors (statutorily the heads of the institutions). As regulated companies, the Treasury had also the legal power to fix norms for many of the operations of the banks. In the case of the Bank of Portugal many of its operations were subject to rules laid out in its founding charter, although its objectives and functions were vague. No formal reserve requirement was stipulated, but the Bank was forbidden from extending long-term credit or making mortgage loans. Furthermore, the discount rate could not be altered except by government decree. The Bank of Spain was also subjected to certain rules imposed by the Treasury that was empowered to set the upper bound to the notes in circulation and the reserve requirements. Nevertheless, it is also true that both banks enjoyed quite substantial autonomy and independence from the government in its daily operations at least until 1914.

At the beginning the privilege of the Bank of Portugal to issue notes was restricted to the city of Lisbon, although most of its notes circulated and were accepted in many other cities of the country. The issue of banknotes was also allowed to other financial institutions such the Banco Comercial do Oporto, founded in 1835, and to other seven banks established between 1856 and 1873 (<sup>5</sup>). A 1887 law authorized the Bank of Portugal to open branches in the main cities of each of the territorial districts in which the country was divided. Thanks to this facility, the Bank extended its operations and its notes penetrated the commercial interstice of the nation. The same law declared the Bank of Portugal's notes legal tender. As compensation for such privilege, the Bank was required to maintain a given volume of gold reserves in order to assure

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<sup>5</sup> Banco Mercantil Portuense (1856), Banco Uniao do Porto (1861), Nova Companhia de Utilidade Pública (1861), Banco Aliança (1863), Banco do Minho (1864), Banco Comercial de Braga (1873) and Banco de Gumaraes (1873), all of them with headquarters in the city of Porto.

convertibility. The Board of the Bank also accepted the obligation to help the government financially and the institution assumed the role of a Treasury's bank.

The position of the Bank changed radically after 1891, when the Portuguese monetary authorities abandoned the gold standard regime and suspended the convertibility of banknotes. The government decreed the "curso forzoso" and raised the legal limit of notes in circulation to compensate the drainage of gold coins, particularly foreign British pieces. The change in the monetary regime brought also some other significant news. The Bank of Portugal was eventually given the monopoly of issue in the entire country, the continental territory and the islands of Madeira and Azores. Another consequence was that government interference in the internal affairs of the Bank increased. This was visible because loans to the government grew rapidly to levels not seen during the gold standard period. However, the Bank expanded its presence in the economy and by 1914 had been able to open as much as 21 branches; the volume of banknotes in circulation multiplied tenfold; and there was a significant increase in its commercial operations with the private non financial sector.

Valério and Mata argue that the Bank of Portugal was an excellent and profitable business, at least until 1914. The shareholders received high and increasing dividends throughout the time, that in the eve of the First World War represented near 10 per cent of paid-up capital. The State reaped good benefits as well, since it participated in the yearly benefits distributed by the Bank. Besides, since the foundation of the Bank in 1846 the government had at its disposal a financial institution ready to assist the Treasury in case of financial difficulties.

The Bank of Spain shared the privilege of issue with a dozen provincial credit companies until 1874, when it obtained the exclusive right to issue banknotes. From that moment on, the Bank extended its operations by opening branches throughout the country. Convertibility of notes into gold and silver was maintained until 1882; afterward notes were only changed for silver. However, as the latter metal depreciated in international markets it can be said that Spain adopted a "de facto" fiduciary monetary system. As we have already indicated, there existed a statutory limit to the volume of notes in circulation fixed by the government. Despite being out the gold standard, the government also established the legal ratio between short-term liabilities (including banknotes) and metallic reserves. When required, the upper bound to the volume of banknotes and the aforementioned ratio were changed in order to meet the financial needs of the Treasury.

After 1874 the Bank increased its relations with the Treasury. By 1900 loans and government debt represented a very large proportion in the balance sheet of the Bank. Simultaneously, during this same period the Bank reduced its links with the private sector. Contrary to what we know about the Bank of Portugal, the Spanish institution never had among its goals the maintenance of convertibility of its notes into gold. Furthermore, the lender of last resort function was accepted by the Bank with delay and under the pressure of the monetary authorities. The Bank of Spain hardly had any relationship with other central banks and to a very limited extent with other foreign financial institutions.

The Bank of Spain was as profitable or more than the Bank of Portugal. Benefits over paid-up capital were always over 15 per cent and in some years the level rose to a high of 35 per cent. The stock market price of the Bank's share increased firmly and continuously (between 1874 and 1914 they multiply by three) and the shareholders received dividends that were always superior to the national average. As in the Portuguese case, the State also benefited from its privileged relation with the Bank. It not only obtained loans and advances from the Bank but it also placed a significant volume of public debt to finance its budget deficit.

The main difference between the central banks of Portugal and Spain was in the realm of monetary policy. From the time of its foundation in 1846 maintaining the convertibility of its notes was one of the overriding objectives of the Bank of Portugal. For almost forty years, this goal was achieved with complete success –except for a few days in 1876. Perhaps as a consequence of its responsibility as guardian of convertibility, the Bank of Portugal also performed the function of lender of last resort. Reis argued that in 1876, it provided assistance to a large number of commercial banks throughout the country, for the first time in its history, in the aftermath of a strong bout of speculation (<sup>6</sup>). The funds from this came from London and from the Portuguese Treasury and the system recovered successfully, though at the cost of some mortality. According to Reis, several aspects of this episode are worth noting here: ‘First of all, the fact that the Bank of Portugal could hardly have been more precocious in taking on the role of lender of last resort since a banking system with a plurality of institutions was only coming into existence in the late 1860s and could hardly had experienced a crisis sooner. Besides, the perception of the Bank's directors had of the event is also a question of interest. On the one hand, the board was firm in its acceptance that the

privileges which the institution enjoyed, its dominant market position and its long history were together sufficient to justify the expectation that the Bank would be the supreme and reliable resource which all can rely upon in moments of hardship, during a crisis, to vanquish their difficulties and ward off the dangers of an imminent storm. On the other hand, besides a sense of obligation to the community, there was a clearly also a selfish reason: to prevent the downfall of any significant bank from becoming contagious and obliging the Bank of Portugal to take even more costly defensive action''.

After the 1891 crisis in spite of the suspension of the gold standard, Reis also argues that the lender of last resort function, in both the systemic and the individual versions, seems to have become more important. As this author has written: 'Both the government and the Bank showed a greater keenness for intervention when they saw trouble, although the Bank's competition with the other banks, if anything, increased relative to the pre-1891 period. According to this same author, there were reasons for this accrued protagonism. The first was the increase public pressure on the central bank to fulfil its public duty in view on the fact that, as a result of being able to increase the note issue substantially without the extra cost of larger reserves, it was now in receipt of larger profits than ever. The second was that owing to the weakening of the joint stock bank sector after the 1891 crisis, the position of the Bank of Portugal had become even more dominant and therefore its interest in keeping the credit market stable was commensurably greater. On the other hand, since it no longer controlled the market's behavior through the discount rate, it is likely that some banks may have overextended themselves more than before and consequently found themselves in trouble more often. In the politically and socially more unstable situation of these years, the public implications of the cyclical downturn in the economy were amplified. The need to ward off criticism for its lack of intervention may have become stranger and it became prudent for the Bank of Portugal to do more than assist large enterprises and even whole sectors in trouble''.

Contrary to the Portuguese institution, the Bank of Spain with no responsibility with regard to the convertibility of its notes into gold or with respect to the stability of the exchange rate, assumed its role as lender of last resort with considerable retard. Nevertheless, there was no absence of financial difficulties. On the contrary, the country

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<sup>6</sup>In what follows I replicate Reis (2000) text on this issue.

suffered repeated crisis that from time to time wiped out a large number of banks and credit companies (<sup>7</sup>).

As Tortella has recently written "The year 1866 in particular was one of the hardest in Spanish banking history. The panic began in Barcelona with a crash on its stock market. The crisis quickly spread to other cities, leading to the closures of the stock exchanges in Madrid, Bilbao and throughout Andalusia and Castile. A liquidity crisis followed. The circulation of notes fell sharply and the volume of deposits declined, dragging down the total assets of the banking sector. In just a few years, 25 institutions suspended payment, were dissolved or went bankrupt. Of the 37 institutions founded since the reforms of 1856, only 22 survived, some of them by the narrowest of margins. The blow was so bad that confidence in the financial system took more than 25 years – a generation – to recover".

This same author has explained that "as a result of the 1866 crisis, by 1874 there were only fifteen banks in the country (plus the Bank of Spain). The financial world seemed to pick up in the following five-year period, and new institutions were set up in anticipation of better times. The upturn, however, did not endure. "Gold fever" sparked in Barcelona at the end of the 1880s in the form of an uncontrollable stock market bubble, quickly spread to other cities and was followed by the inevitable – and spectacular – crash. The crisis that ensued lasted six years and again deeply scarred the banking sector. Many banks hit by the fall in their market capitalisation were in serious difficulties, public lack of confidence triggered runs on the banks and the contraction in liquidity again produced a sharp fall in lending. A wave of bank collapses followed. In 1890 came more bad news, this time from abroad: Barings Bank in London had had to be rescued, threatening the City and the main European financial centres. The far from prosperous Spanish banks immediately felt the pinch. Securities, public and private, domestic and foreign all fell. Banks lost customers and credit dried up. Many institutions, which had invested in illiquid assets – public works, land and untraded securities – were unable to withstand the pressures. Six large banks in Barcelona and Madrid collapsed".

In none of these instances the Bank of Spain intervened. The board of directors believed the difficulties and failures were due to bad management and risky or extravagant investments. They saw no reason to help its competitors or to instrument a

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<sup>7</sup> The two paragraphs that follow are taken from the recent article of Tortella included in the volume Banco de España (2006).

rescue operation to avoid the collapse of the financial system. They did not believe in the idea that being a banker's banks was one of its functions as the only issue bank of the country. We have to wait until the years 1913-1914 to see an intervention of the Bank of Spain as a lender of last resort. It was as a consequence of the crisis of one of the major Spanish institutions of the time: the Banco Hispano Americano.

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To end this section we examine the evolution of the official discount rate of both the Bank of Portugal and the Bank of Spain and ask a number of questions. For instance, which of the two institutions changed its discount rate more often? Or, which of the two discount rates was set at a higher level. To answer these questions we look at the evidence for period 1870-1890, for which we have comparable data for both institutions.

Considering the fact that the Portuguese authorities chose to adopt the gold standard since 1854, it would be quite reasonable to expect an active discount rate policy. The Bank of Portugal should have raised its official interest rate in order to protect reserves in time of distress and should have lowered it in times of calm. Despite the fact that the directors of the Bank understood perfectly well how important was to manipulate the discount rate, and although Portugal was exposed as any to external shocks associated with international trade and capital movements, by comparison with most countries, this instrument was rarely used. One possible explanation for this inactivity is that the Bank could only alter its rate by means of governmental decree and, out of motives of both political and financial expediency, government made this difficult to obtain. The Bank of Portugal changed its discount rate in 28 instances in this twenty years, which renders a yearly average number of 1.3, quite far from the frequent movements of the Bank's of England rate, but close to the average observed in the case of the Bank of France. After the adoption of the gold standard in 1854, the discount rate of the Bank of Portugal was kept around 5 per cent. It was raised to 6 per cent in 1864 and it hovered around this level until 1891. In the inconvertibility period the rate was altered three times: in 1896, down to 5.5 per cent; in January 1908, when it was raised up to 6 per cent, and down again to 5.5 in June 1913.

Between 1874 and 1890, the Bank of Spain changed its discount rate only eight times: an yearly average of a mere 0.4, below that of any other country for which we

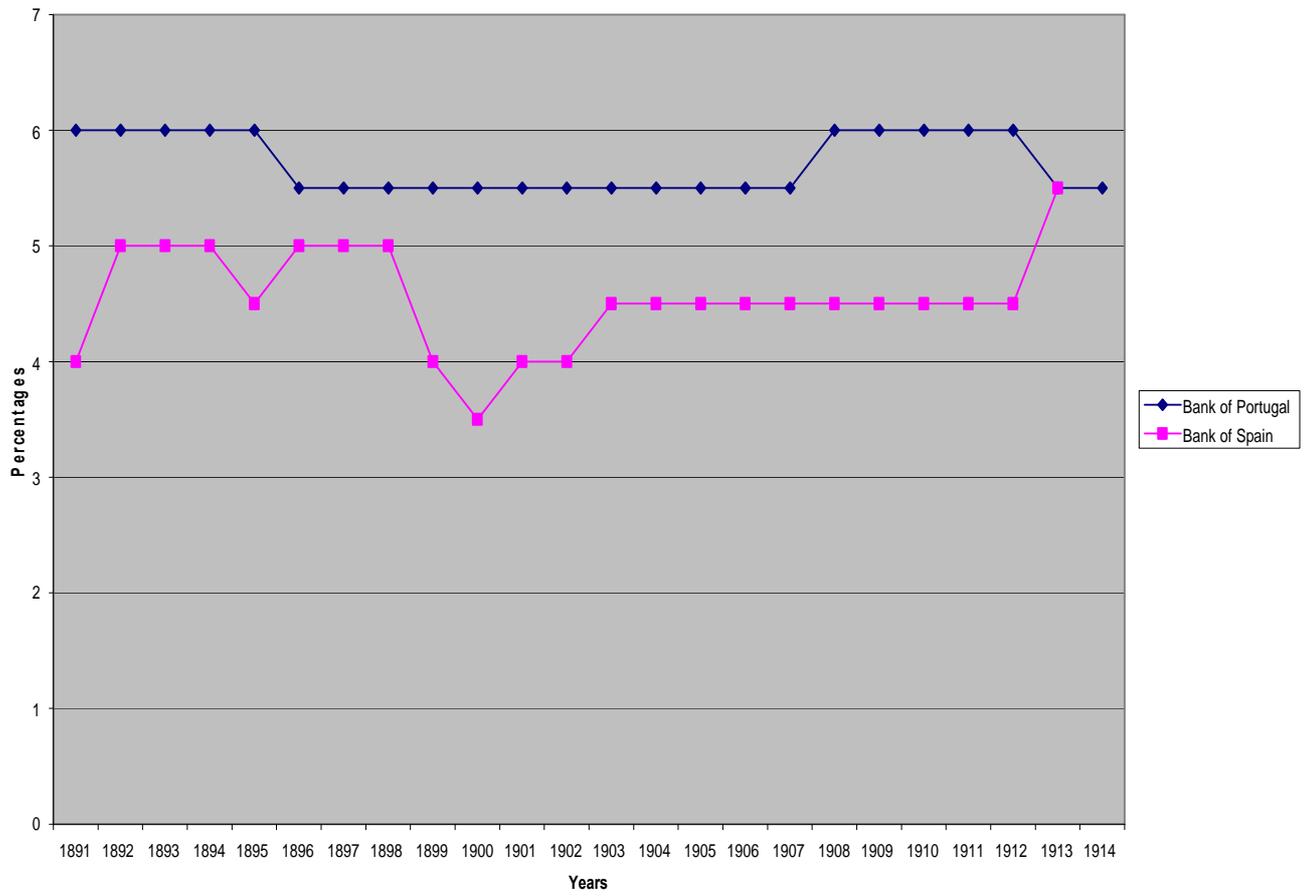
have gathered information. Most of the changes took place in 1882 or before, in the "de facto" bimetallic period where the notes were still convertible into gold and silver. Later, when the Bank interrupted gold convertibility the changes became somewhat rare until the mid-nineties. In this same period the rate was maintained in the area of 5 per cent.

During the 1891-1914, of inconvertibility in both nations, the situation was the reverse: we observe that the Bank of Spain moved its discount rate often than the Bank of Portugal. Reis argues that the use of the discount rate as an instrument to stabilize the currency, which was now floating, was entirely abandoned for the next 23 years, until 1914. The main reason was that it was thought that in a prevalent gold standard world, the only way to restore convertibility in Portugal was to contract the supply of notes and increase the gold reserve to their appropriate levels. Both of these depended primarily on the government's not on the Bank's will, hence the retreat from the more active monetary policy stand of earlier times.

By contrast the Bank of Spain became more active. The rate was changed ten times, most of them at the end of the XIX century and the beginning of the XXth. First the war in Cuba, Puerto Rico and the Philippines and later the financial measures and reforms introduced after 1900, with the purpose of reducing the cost of the public debt, were in the root of this unusual number of changes. When normalcy returned to the market, the Bank returned also to its old policy: a marked preference for stability to the extent that the discount rate was maintained unmodified until 1914.

With regard to the level of the discount rates in the two countries, what we observe is that, for the period 1891-1914, the Bank of Portugal kept its official rate systematically over the Bank of Spain's rate. The different varied from half percentage point to one percentage point. This suggests that during these last two decades money was more expensive in the western part of the Peninsula than in the eastern side. What can explain this different is something that has to be yet elucidated.

## THE DISCOUNT RATE



### Monetary policy: a tale of two countries <sup>(8)</sup>

The most remarkable difference between Spain and Portugal is found in their respective monetary regime. While the Lisbon authorities adopted the gold standard as early as 1854, the Madrid's governments never took the decision to introduce gold monometallism and in fact the convertibility of the Bank of Spain's notes was suspended in 1882. How can we explain this difference? What were the reasons that led the Portuguese government to implement the gold standard? Why the Spanish authorities did not join a monetary system common to all Europe?

In 1854 Portugal became the first country in Europe after Britain to adopt the gold standard. As it remained attached to this monetary regime without interruption until 1891, it can also claim to have had one of the longest continuous experiences of this kind. Its 37 years of adherence to gold monometallism exceeded the duration of the classical gold standard (1880-1914), and only a handful of the more developed nineteenth-century economies functioned for longer time spans under this arrangement.

The Portuguese monetary law of 1854 created a system that conformed in every way to the classical textbook model of the gold standard. It established gold as the single monetary standard, and only a limited number of types of coins were allowed into circulation, their precious metal content rigorously defined in strict proportionality to their respective face value. Gold in any form could be taken to the mint to be exchanged, at no cost, for legal coin. Silver, on the other hand, became subsidiary means of payment, its legal tender limited.

Over the course of the following decades the gold standard functioned with considerable success in Portugal. Fixed parity and the other basic gold standard rules, including the freedom to import and export gold in any form, were consistently and faithfully maintained. There were no serious crises and, except, for a few days in 1876, no suspensions of convertibility. Furthermore, Portugal's gold standard was also unusual in that it was one of the few cases of a system functioning with a full gold content.

In various papers Reis has explained why a poor, small, peripheral and international debtor country took the decision to adopt the gold standard as early as 1854. He argues that one essential advantage of the choice was that it ensured an important degree of continuity in Portugal's monetary affairs, rather than breaking with

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<sup>8</sup> This section has been taken without major changes from Martin-Acena (1993 and 2000) and from Reis (1996, 2000 and 2002)

the past as would have happened had silver standard been adopted. Gold monometallismo was in line with a tradition which, despite official bimetallism, went far back in Portuguese monetary history. All through the eighteenth century, gold had been widely used, as a result of the legendary mining strikes in Brazil which had flooded the country with gold and still left enough to export to England, to cover a considerable external trade deficit. During the nineteenth century there were interludes of either silver or gold predominance, but the monetary legislation of 1846-47, by flooding the country with English coins, firmly shifted it into an enduring gold era. A second type of advantage of the new system was its relative inexpensiveness, compared with what a silver standard would have cost. To institute the latter would have required a large amount of silver coining, and at least part of this from countries with which Portugal had little trade, at a time when a good deal of international commodity transactions were paid for directly in either silver or gold. The nature of Portugal's international economic relations provides another set of reasons in favour of the solutions which was followed in 1854. One of the most important of these had to do with the close economic ties between Portugal and Britain, the only standard country at the time. In the 1840s, more than half of Portugal trade was with this country. Brasil, another gold-using country, came a distant second, with a 20 per cent, which meant that only one fourth of Portugal's foreign trade was with bimetallic or silver standard countries. A similar situation existed with regard to the foreign debt. This was already sizeable and a constant headache for governments which had to acquire the sterling needed to make service payments. Again, this was the currency in which it was denominated, even those parts of it which were raised in Paris during the 1830s.

The success of the gold standard in Portugal is the more remarkable when we consider that during the entire period no Portuguese government was able to balance the budget and at times the public accounts showed deficits that were almost half of total expenditure. Furthermore, the Portuguese balance of trade showed also a persistent annual deficit which for the period 1865-1890. Stability was maintained however thanks to various facts. First place because the State was always capable to cover reductions in revenue by mean of a succession of loans operations. Even if these loan were not the most successful, given the high cost of placement, the fact is that until 1890 it was possible to secure a considerable flow of long-term funds for this purpose, either at home or abroad, thus avoiding recourse to solutions (monetization of the public debt) that could have been dangerous from a monetary point of view. On the other hand, the

trade deficit was covered by capital imports, because indeed Portugal was a net recipient of capital (private portfolio and government loans. More important or significant was that Portugal received a huge flow of funds from Portuguese residents in Brazil. In part these funds comprised remittances sent to families in the home country, predominantly male labourers, and the remainder was made up of dividends and interest on portfolio investment in Brazil, as well as profits from business in that country. The importance of the flow from Brazil was such that it not only exceeded the trade deficit but was almost sufficient to cover the whole of the negative balance on the current account. Good reputation with regard to the debt service, fairly vigorous annual increases in revenues provided reasonable indication of the state's continuing ability to fulfil its financial obligations, high interest rates compared to other debtors, the small size of the economy of the country, a sound record with regard to internal political and social tranquillity and non involvement in international conflict, and finally, continued adherence to the gold standard and the firm commitment of the authorities to this regime can explain altogether why Portugal was able to attract so much capital to finance both the budget and the trade deficits.

The Bank of Portugal played also a significant role in the operation of the gold standard. But like most of the other European central banks its monetary policy resorted more to non traditional monetary instruments, the so-called "gold devices, than the use of the traditional monetary instruments, such as the discount rate or the variations in the reserve ratio.

In fact, the Bank of Portugal did not observe any of the so-called "rules of the game" of the gold standard. The oldest and simplest is the Bloomfield-Nurkse criterion, which states that a central bank was in observance of these rules when it behaved in ways that would hasten adjustment to a shock, specifically by not sterilizing gold flows. In practice, reserves (non-earning international assets) should vary inversely with domestic income-generating assets. Data for Portugal shows that for most of the period, the Bank not only deviated frequently from the rules but it did so often on a considerable scale. The Bank of Portugal did not either follow the rules of the game with regard to the discount rate. The second criterion, also suggested by Bloomfield, requires that the discount rate of central banks, their principal instrument of intervention in the market, vary inversely with their reserve ratio. In the case of the Bank of Portugal, this did not happen either during the period under consideration. The evidence strongly suggests that the Bank did not respond systematically to losses of reserves by

raising its discount rate and conversely. A third version of the "rules of the game" stipulated that metallic reserves must be kept at a safe level at all times. Obviously a central bank that failed to do so was not only running risks in terms of inconvertibility but also giving a "wrong" sign to the market that made it hard to believe in its commitment to the monetary standard. Again in this case, looking at the performance of the Bank of Portugal in this respect, it is noticeable once again how frequently this widely respected rule went unobserved.

The way the Bank of Portugal used to assure convertibility and to maintain confidence in the gold standard was through the "gold devices", the name given to any of the mostly concealed measures that were used in order to solve their problems, when they found inconvenient to use the proper instruments of monetary control that the situation required. Essentially, the object was to raise the transactions cost to customer of redeeming notes or deposits for gold and, in practice, to drive the gold export point below its legal level.

At the Bank of Portugal, several gold devices were in use. Rationing credit was one of them. It limited economic activity and thus helped improve the country's external position and reduced the demand for gold. On occasions, the Bank paid out notes in copper and silver instead of gold, which was illegal and therefore could not be kept up for long. A third measure was to refuse credit customers who were believed to be speculating in the exchanges, when the rate for bills in London began to get close or even fall below the gold export point. The Bank's preference went to other two devices, the first of which simply consisted in replenishing its coffers with gold obtained generally abroad, when the level got too low; most commonly it was done by directly importing English sovereign, which were legal tender in Portugal, and were acquired in London, on credit or were paid for from the earning assets that the Bank held there at its bankers. A final device to defend the pressure that arose when the exchange rate for bills on London reached or neared the gold export point and it became cheaper, for payments, to export this metal than to remit bills. To dissuade this reaction, the Bank of Portugal had another device: it would offer to sell paper on London at a rate more favourable than that of the market, thus making the export of paper less tempting and causing the exchange rate to move away from the gold export point.

Besides all these, the Bank of Portugal also had special permanent and well-established relations with some prestigious financial institutions in London and Paris. Thanks to this link, the Portuguese central bank had easy access to the international

capital market. In times of plenty, the bank held liquid balances in foreign currencies, and in times of stress it could always resort to these balances and obtain fresh resources from those institutions in order to maintain convertibility until confidence was restored.

In May 1891 convertibility into gold was suspended. This was to have been temporary but in fact it was never reintroduced, apart from a few months in 1931. According to Mata and Valério (1996) the end of the gold standard in Portugal was due to a general lack of confidence (<sup>9</sup>). First, Brazil was undergoing a period of social and political instability, because of the abolition of the slavery (1888) and the overthrow of the monarchy (1889). This caused sharp decline in remittances from Brazil as a result of a fall in that country's exchange rate. The second blow to the gold standard's feasibility was the Portuguese government's increasing difficulty in gaining access to international capital markets during the late 1880s. Attempts to raise loans in 1889 and 1890 met with market resistance. All this happens against the backdrop of other unfavourable circumstances. There was a diplomatic conflict with Great Britain over several territories in Southern Africa, leading to a British ultimatum (1890) demanding Portuguese withdrawal from the territories that today form the states of Malawi, Zambia and Zimbabwe. Third, Baring Brother, the London banker of the Portuguese government, was for a while on the verge of bankruptcy, mainly because of its South American business. Baring has been the Portuguese government's bank for some time, but instead of helping when Portugal's difficulties emerged, they called in its floating debt loans and produced still more pressure on the balance of payments. Finally a republican revolution broke out on January 31, 1891, in Oporto (this was promptly put down). Fifth, an attempt to issue a loan in foreign markets to provide external liquidity failed. A run on the bank to exchange bank notes for gold coins could not be stopped. A sixty day moratorium was passed on May 9, 1891, during which the monetary authorities tried to ensure a return to normalcy by importing metal to be coined, but it was impossible to overcome the difficulties. As a consequence the Portuguese gold standard collapsed.

In the years that followed a return to convertibility remained an article of faith for all government, although for a while it was an open question whether this should be on a bimetallic or gold monometallism basis. Although these views never lost their appeal, from the mid-1890s onwards gold monometallism held sway.

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<sup>9</sup>In what follows we reproduce the arguments and words of these two authors.

The fact these efforts never bore fruit is all the more surprising when one considers that over the period 1891-1914 the two monetary and financial variables most relevant to this problem performed in a manner that was hardly contrary to such an outcome. Despite the absence of the discipline that the gold standard imposed, once the financial crisis was over governments were remarkably restrained when it came to note issue. Likewise budget deficits in the 1890s fell to less than half they have been in the previous decade and were similar still in 1900-14, with some years even turning up a surplus. Paradoxically, after 1891 the authorities behaved much more as though the country were on the gold standard than they had when this had been the case.

Why did Portugal fail to return to the gold standard, particularly at a time when countries throughout the periphery were making every effort to join it? The difficulty of returning to convertibility at the old parity and sustaining it can be explained by several factors. One was the persistent divergence between Portugal's real exchange rate and the official par value. While international prices steadily fell to a trough between 1891 and 1896 and only regained their former level in 1907, Portuguese prices did the opposite. Another was that capital imports were much reduced in comparison and borrowing abroad dwindled to practically nothing. Three factors were undoubtedly decisive here. Lack of international credibility in the case of the government loans; the uncertainty regarding the exchange rate under an inconvertible regime; and third, Portugal's weak economic potential compared with other peripheral economies such as Brazil and Argentina. Opposition to restoration of the gold standard at par appears to have come from at least two powerful interest groups: manufacturers and landowners. The former disliked floating exchange rates because they made planning difficult, but viewed a stable currency at the old parity disapprovingly as it could cut the prices of competing foreign goods on the home market by a large percentage. For landowners, the reason for opposition was not so much fear a revival of agricultural imports but rather the danger that an orthodox budgetary policy, as would be required to underpin a renewal of the gold standard, would spell increased taxes on land.

The main and immediate consequence of the collapse of the gold standard was the depreciation of the Portuguese currency. As Mata (1991) explains, the réis exchange rate remained unaltered during all the gold standard period at the fixed parity of 4.832 thousand réis per pound sterling. With the demise of the regime and the suspension of convertibility, and in the absence of government intervention, the currency depreciated sharply to 7.108 réis per pound in 1898. Then it made a strong recovery gaining all what

had lost the previous seven years and in 1906 the exchange rate hit the value of 4.582 réis per pound. But it was a short lived come back since after that date the Portuguese currency depreciated once again to 5.663 réis per pound and it continued its slide down up to the mid twenties when it hit an overall minimum of 133.950 réis per pound.

The Spanish case appears in striking contrast with the international experience. Spain never adopted the gold standard. Convertibility of paper money into gold and/or silver was maintained until 1883, when eventually it was discontinued. Resumption never took place, neither before 1914 nor after. Thereby, contrary to most European currencies, the "peseta" remained inconvertible and its exchange rate fluctuated in terms of gold throughout<sup>(10)</sup>

In the middle of the 19th century the monetary situation in Spain was rather complex. Its main features were: a) a large heterogeneity of coins in circulation, with an abundance of foreign money, especially French currency; b) an apparent lack of unity within the system, with partial autonomy in Catalonia, and c) an acute shortage of coinage due to an insufficient stock of silver, coupled with a very low level of fiduciary circulation as a result of the virtual non-existence of national credit institutions. In addition, the Spanish system suffered from the secular problem of the continuous extraction of silver coins due to their high metallic content, which was even superior to the franc "germinal" created by the French revolutionary government after 1803.

The unit of account of the system was the "real de vellón" (worth 0.25 pesetas), and the prevailing monetary regime allowed for the free minting of silver and gold on private account, as well as for the unrestricted importation and exportation of precious metals. The mints were the property of the State and they took in unwrought gold and silver at prices which were determined by law. Furthermore, the coinage of copper money -whose nominal value was above its intrinsic value- was carried out exclusively by the State.

In April 1848 the first modern monetary reform of the Spanish coinage system took place with the "de jure" adoption of a bimetallic regime. Between 1848 and 1868, the year in which the peseta was created, successive governments implemented a series of monetary reforms, all aimed at achieving the same objectives: to nationalize the metallic circulation as far as possible and create a silver coin whose intrinsic value, at the very highest, would be equal to that of the French coin, or perhaps lower, in an effort to put an

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<sup>10</sup> For a different view of the Spanish monetary policy in the period, see García-Iglesias (2005) and Ródenas and Bru (2006)

end to the extraction of silver. With such reforms, the authorities attempted to bring the Spanish coinage system close to that of France, their main trading partner.

In 1868 the Spanish authorities approved a currency reform introducing a bimetallic standard and establishing the "peseta" as the monetary unit. The official rate of exchange between gold and silver was set at the ratio of 1:15,5 similar to that adopted by the countries which in 1865 formed the Latin Monetary Union (LMU). Later, in 1874 the Bank of Spain was granted the monopoly of issue in the entire country, although the government retained the power to establish the limit of the quantity of banknotes in circulation and the rules regulating the relationship between the note issue and the reserve requirements. At the official ratio, notes were freely convertible both into gold and silver.

After 1873 the price of silver in international markets began to fall, and by 1876 the market exchange ratio of silver for gold rose to 18 to 1. To cope with the "de facto" undervaluation of gold, two options were open to the authorities: the defence of bimetallism with successive and continuous devaluations of the official silver price, trying to adjust it to its market value, or to demonetize silver, suspend the minting of new silver coins and adopt the gold standard. The latter was the course followed by the majority of the European countries, including the signatories of the LMU, which in 1878 suspended the free coinage of silver and eventually deserted the bimetallic standard.

In Spain there was an attempt to follow the example of the LMU; in 1876 the government discontinued the free coinage of silver on private account and gold coinage was resumed after having been suspended in 1873. Furthermore, the "Junta Consultiva de la Moneda" (The Committee on Currency Reform) recommended the interruption of the minting of silver and the adoption of the gold standard. The government, however, ignored the recommendations of the Junta. But as the market price of silver fell, the unaltered official ratio undervalued gold relative to the market and, as predicted by Gresham's law, silver eventually drove gold out of circulation and the gold reserves of the Bank of Spain dwindled. Convertibility of notes into gold was maintained until the middle of 1883 thanks to successive trade surpluses and a constant stream of capital imports. The suspension took place in the summer of 1883 and the decision came after a contraction in foreign investment associated with the Paris stock-market crash of January 1882. The measure was taken, so the argument goes, to defend the metallic reserves of the Bank of Spain and to check the disappearance of gold from circulation and the export of gold. However, the suspension did not bring the desired effects and gold coins in fact went out of circulation.

After the suspension of convertibility, the authorities allowed the Spanish currency to float freely on the exchange market but, contrary to what one would have expected, there was not an immediate decline in its international value. As figure 6 exhibits, the price of the peseta in terms of the pound hardly varied and for a few years remained at the rate that it had reached at the beginning of the decade. Various factors may explain this stability. Firstly, because of a positive balance of trade which might have eased pressure on the market. Secondly, the public deficit remained within reasonable limits and the capital market did not receive large issues of short-term Treasury bills. Between 1883 and 1887 the monetary base hardly increased, and neither did the money supply. In addition, Spanish interest rates were consistently higher than international interest rates. Finally, it can be argued that speculators, who witnessed the quick recovery of Bank of Spain reserves, expected a swift resumption of specie payments at par. Accordingly, they sold gold against pesetas hoping to make profits once the exchange rate appreciated.

Towards the end of the decade, and especially after 1890, the situation changed. The value of the peseta fell mildly but continuously between 1890 and 1896. The decline started in 1888. At first it was slow and then it accelerated, with the result that between 1888 and 1895 there was a depreciation of the exchange rate from 25.6 to 28.9 pesetas to the pound. After 1895 the exchange rate rose sharply till it attained a maximum in 1898, when the pound was valued at almost 40 pesetas, which represented 50 per cent depreciation relative to parity. There can be no doubt that the non-adoption of the gold standard caused speculators to change their expectations and begin to lose faith in the Spanish currency, reselling their stocks of pesetas. Furthermore, barring 1894 and 1895, years of surplus, the public budget deficit persisted, and the fact that Spanish prices and international prices evolved differently also contributed to the rise in foreign rates. Likely, the slight negative growth in the money supply in this same period prevented a more pronounced depreciation of the peseta. But after 1896, public spending increased rapidly and the budget deficit widened, especially in 1898 and 1899, when large extraordinary expenditures were approved to finance the war in Cuba. To cover the deficit the Treasury was forced to borrow heavily from the public and the Bank. Large amounts of short-term bills were floated; part of this amount was taken by the private non-banking sector, part by the financial system which increased its liquidity considerably and part was placed in the portfolio of the central bank; furthermore, the Treasury also asked for advances from the Bank of Spain. The result was a substantial increase in the money supply which experienced an unprecedented rate of growth, the Treasury secured a significant reduction

in the Bank of Spain's discount rate, from 5 to 3.5 per cent, a measure which was aimed at reducing the cost of the debt. Domestic prices increased quickly and sharply, widening the gap relative to foreign prices. Simultaneously interest rates fell and the peseta depreciated rapidly in relation to the pound, to such an extent that at the turn of the century the Spanish currency had lost about 30 per cent its value in 1880.

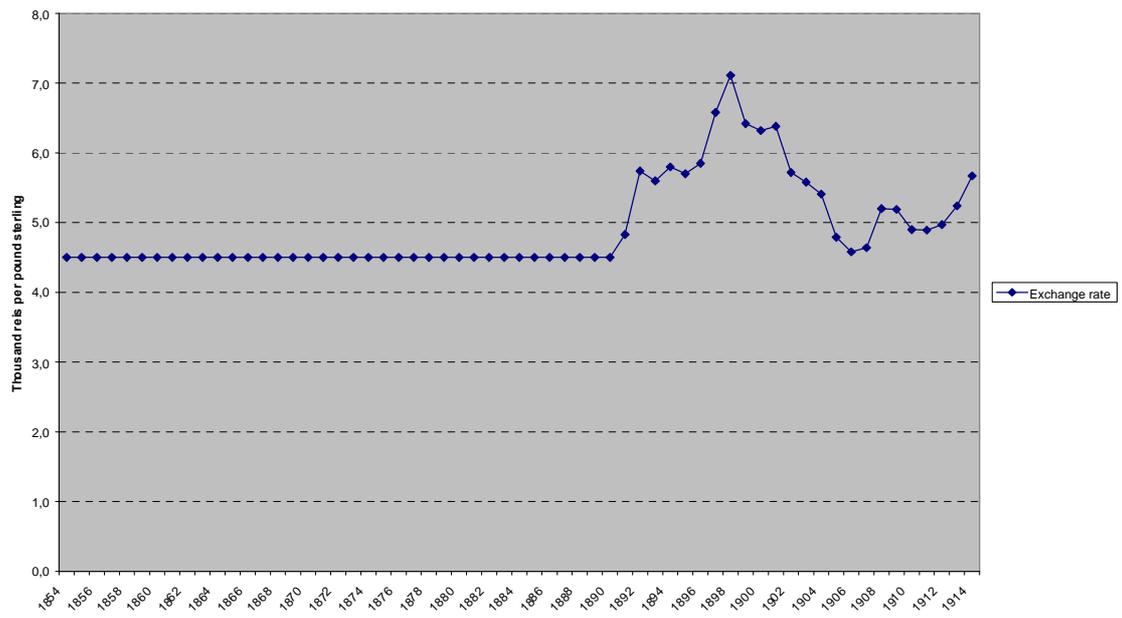
The end of the Spanish American War, in which Spain lost its last overseas colonies, permitted the return to financial orthodoxy and monetary stability and signaled a marked downward tendency in the exchange rate. At first there was a quick fall, followed by a temporary rise and eventually, between 1900 and 1914, a constant appreciation. In those thirteen years the peseta managed to recover almost all of its previous value, reaching by 1914 a rate of 26.1 pesetas to the pound, a mere 4.6 per cent below of its value in 1880.

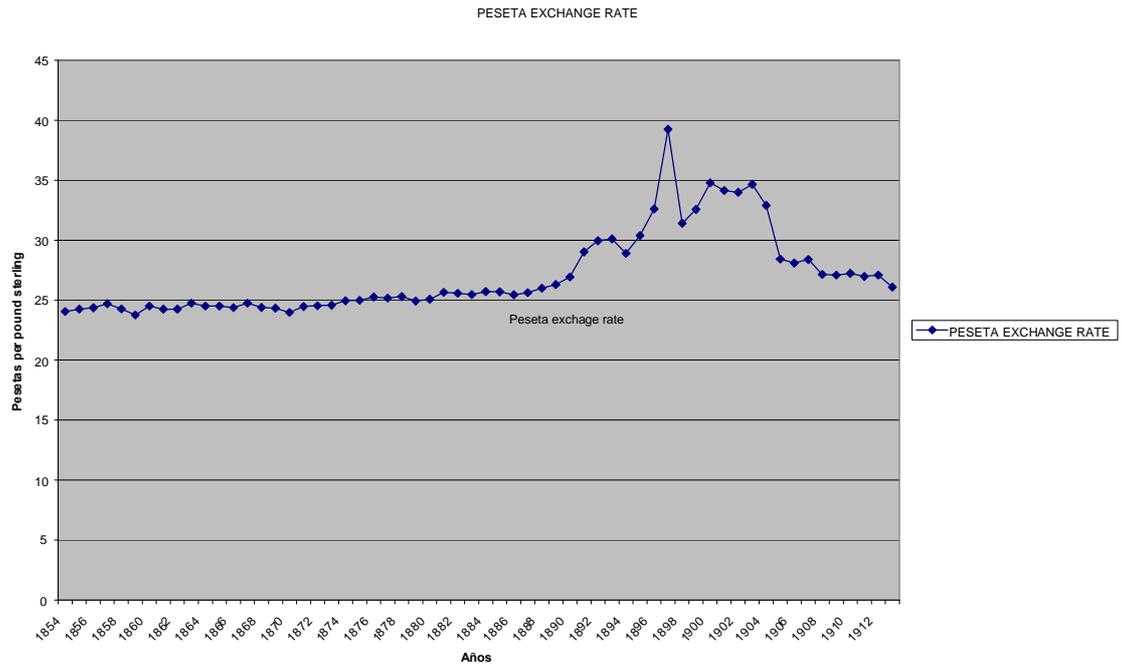
After 1900 the authorities introduced a deflationary financial policy aimed at stabilizing the exchange rate. During the following five years and until 1905, the stock of money contracted, while the Ministry of Finance carried out a massive policy of conversion of Treasury bonds outstanding. Besides, a fiscal reform approved in 1900 allowed for successive budget surpluses until 1909. Prices were stabilized and within a few years there was a convergence towards international levels; thereby the difference between Spanish domestic prices and international prices narrowed quite appreciably.

At the same time, the end of the war and the consequent independence of the colonies brought about a substantial repatriation of capital, which reached its maximum level in the first years of the new century. The Bank of Spain also bought up important quantities of gold in order to strengthen foreign reserves. Parallel to this, imports of foreign capital resumed after 1906. Presumably after this year foreign investors looked at the Spanish currency with more confidence and they might again have anticipated a speedy reestablishment of the convertibility of the peseta. Therefore they reconsidered their investment plans in Spanish assets and, after two decades of retreat, they channeled resources to newly developed sectors such as the chemical and the electrical industries as well as public utilities. The exchange rate immediately mirrored the impact of the reestablishment of the old pattern of the balance of payments equilibrium. Its appreciation was as quick and as spectacular as had been its previous decline. The revaluation and subsequent stabilization of the exchange rate (and prices) brought about a fall in interest rates, pushing them closer to European levels. All these developments led the authorities to reconsider the adoption of the gold standard, although no definite decision was taken.

Between 1902 and 1912 the government and parliament discussed a string of projects aimed, in one way or another, at introducing the gold standard, with full redemption of Bank of Spain's notes. We have recorded seven projects intended to secure such a goal, but none of them ended successfully. The projects failed partly because they never won the support of the Bank of Spain, and partly because of the fragility of the governments of the time. At any rate, the failure to adopt the gold standard made Spain a startling exception within the international economy.

## REIS EXCHANGE RATE





## Conclusions

The comparative monetary history of Portugal and Spain in the XIX century is an interesting case of study. Two underdeveloped, agrarian and peripheral countries, located in the same geographical area, the Iberian Peninsula, that nonetheless exhibit quite different financial experiences. Spain had a “national” bank since an early period, 1782, when the Banco de San Carlos (later baptized in 1856 Banco de España –Bank of Spain). The Bank of Portugal was born later, in 1846. Neither of these institutions were “stricto sensu” modern central banks, fulfilling unreservedly the functions of Treasury’s bank, lender of last resort and institution responsible for the conduct of monetary policy. However, the Portuguese company was closer to the concept during a long period, when the country adopted the gold standard and the Bank accepted the responsibility of keeping the stability of the exchange rate and the good health of the financial system.

We have found also significant differences with regard to the composition of the quantity of money and with regard to the monetary regime. Portugal remained attached to the gold standard for a nearly forty years, from 1854 to 1891, and gold coins were the principal mean of payments even after the convertibility was interrupted. The Portuguese monetary unit, the real, remained stable until 1891. Only after the suspension of the gold standard the exchange rate real began a depreciation that continued uninterruptedly until 1914. Spain never adopted the gold standard. Bimetallism was maintained until 1882 and after that date gold convertibility was suspended. As a consequence, the peseta began to float in the foreign exchange market and it suffered a long and protracted period of depreciation that lasted until 1900.

Thanks to a monetary regime similar to the most industrialized nations, the Portuguese economy was well connected to the European and to the international economy. Portugal received significant flows of foreign capital, mainly from Britain, that provided for a sustained and relatively high rate of growth. As it has been argued by Mata y Valério, “the gold standard period has been a very satisfactory one in what concerns economic growth in Portugal. As a matter of fact, between 1860 and 1890 Portugal real gross domestic product grew at a rate of about 2.8 per cent per year, and Portugal per capita domestic product grew at a rate of about 2.1 per cent per year. By contrast, the flexible exchange rate period was quite disappointing: between 1891 and the First World War the growth of the real gross domestic product dropped to 0.9 per cent per year, a rate which was almost totally absorbed by population growth”

Spanish growth before the suspension of convertibility (1874-1883) was 1.9 per cent and it fell thereafter to 1.1 per for the period 1883-1914. Spain performed relatively poor in comparison with other European countries. This slower rate can be partly attributed to the fact that Spain after 1883 lost contact with the international economic community. The Spanish economy did not enjoy the benefits of the growing interdependence of the European financial system that resulted from the world-wide adoption of the gold standard. Spain did not participate in the new way of international capital investment of the 1880s and the 1890s and the Spanish economy remained relatively isolated from the expanding European short-term capital market. Foreign capital ceased coming in the last twenty years of the century because the country went off the gold standard.

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