"What did Guide Investors Decisions" During the Classical Gold Standard Era? The Case of Ottoman Empire, 1880-1914*

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Abstract: It has been conventionally argued that the gold standard, as a "good housekeeping seal of approval", provided an easy access to the international financial markets for the peripheral countries during the classical gold standard era. This paper, by relying on the Ottoman case, questions the importance of the gold-related monetary regime (limping gold standard) as a determinant of investors' decisions, and attempts to answer the question of "what did guide the investors' decisions" by relying on the revisionist gold standard literature and historical data. It is concluded that International Financial Control exercised by the representatives of the creditors on the Ottoman finances was an important determinant of the cost of borrowing which was neglected by the literature.

Keywords: limping gold standard, peripheries, the Ottoman Empire, international financial control, sovereign debt

JEL Code: F33, N25

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1. Introduction

The gold standard prevailed as the dominant international monetary institution from the 1870s to the First World War. Until the late nineteenth century most countries were on a bimetallic standard with occasional periods of inconvertible paper money. Some countries were on silver alone and remained so into the twentieth century: others even switched from bimetallism to silver, following the instability caused by the gold discoveries. However, starting with the transition of Germany, France and the USA, the rest of the major trading countries adopted the gold standard one after the other, which made it emerge as a worldwide monetary system. The classical gold standard period (1880-1914) was not only characterized by the dominance of gold-related regimes (gold standard, limping gold standard or gold-exchange standard) across the world, but also by high level of financial integration through export of capital to the rest of the world.

The effects of this first globalisation were different between the core and peripheral countries of the international monetary order. Whereas in the core countries the system was characterized by stability and self-adjustment mechanism of the gold standard, most of the peripheral countries faced with instability due to lack of gold reserves, which was necessary to maintain convertibility and the sustainability of the system. Adopting a fixed exchange regime under the free capital movements caused the loss of pursuing an independent monetary policy as the trilemma hypothesis would suggest[1]. Moreover, the efforts to sustain convertibility led most of the peripheral countries into the process of increasing sovereign debt in the second half of the nineteenth century. However, in the last quarter of the century, in a very short period of time, peripheral countries of the international monetary order found themselves in insolvency, and most of the heavy borrowers declared moratoria. Under the conditions of the international financial architecture of the period, most of the insolvent countries had to agree on abandoning a significant part of the state revenues, which were used to secure the defaulted loans, to the control of the representatives of foreign creditors. International financial control (IFC) organisations, which were established one after the other, undertook different roles in each country. Sanctions to promote debt repayment were varying into a wide range including gunboat diplomacy, external fiscal control over a country's finances, asset seizures by private creditors, and trade sanctions.[2]

An interesting example of a peripheral country that passed through all these processes in the last quarter of the nineteenth century was the Ottoman Empire, and this paper will particularly focus on the Ottoman economy from 1880 to 1914 with an enquiry of the links between import of foreign capital in the form of sovereign debt, and the functioning of the gold standard in the country as a monetary regime. The Ottoman Empire adopted the "gold standard" in 1880. Besides the peculiarities and "limping" aspects of gold standard regime which we will discuss in the following sections, the Ottoman Empire had also faced with a process of increasing sovereign debt, moratorium, and finally foundation of an IFC organisation after 1881, which was assigned the task of collecting and administrating specific revenues of the state for the unpaid capital and interest service of the foreign debt.

[1] M. Obstfeld et al. "The Trilemma in History: Tradeoffs Among Exchange Rates, Monetary Policies, And Capital Mobility" The Review Of Economics And Statistics, August 2005, 87(3): 2005, pp. 423-438.

[2] K.J.Mitchener and M.D. Weidenmier, "Supersanctions and Sovereign Debt Repayment" NBER Working Paper No. 11472, July 2005, pp.32.

In this context this paper is organised as follows: in the second section we will present and discuss the existing literature on the role of the gold standard as a guide to the investors' decision. The third section will present the monetary episodes of the Empire by mostly focusing on the period of 1880-1914, which might be called as the "limping gold standard" era. In this section, we will try to picture the functioning of the monetary system and activities of the monetary authority. The fourth section will shortly present the increasing sovereign debt process of the Empire in the nineteenth century starting from 1854. The Ottoman Empire had declared moratorium on its outstanding debt in 1876, which was followed by the foundation of the Ottoman Public Debt Administration (OPDA) in 1881. Our purpose in this section is to give a broad picture of the role and influence of the OPDA on the Ottoman economy. In the fifth section, we will focus on the controversial question of what guided investors' decision during the classical gold standard era with a critical perspective, and argue that the gold standard, in the way that was operating in the Ottoman Empire, did not serve as a good housekeeping seal of approval, and it was the OPDA which gave investors a sign of credibility and of commitment to debt repayments. To test this hypothesis we will focus on the historical spread data together with other economic fundamentals of the Ottoman Empire. Finally, in the sixth section we will make some concluding remarks to summarise the arguments of this paper.

2. What did guide investors' decisions in the first era of globalisation?: a literature survey

It is generally accepted that international capital market integration was extraordinarily high between 1870 and 1914. According to Feis (1961), during this period "Europe was the world's banker". The most important capital exporter of the era was Britain, which was followed by France and Germany. Britain -specifically, the London market- was the major source of foreign capital flows, accounting for 62% of foreign investment stocks in 1870. In 1914, Britain (42%), France (20%) and Germany (13%) together accounted for 75% of total foreign investment. The big part of the remaining investment was held by Belgium, the Netherlands, and Switzerland.[3]

As regards the form of the foreign investment, roughly three quarters of European investment before 1914 was portfolio investment. Debt was seen less risky by investors, hence the uncertain environment of the period led to more bond purchases and fewer direct investments. Concerning the target of the capital flows, at the turn of the century, London, Paris and Berlin had become the borrowing centres for the governments of peripheral countries of Latin America, Eastern and Southeastern Europe. On the eve of the First World War, peripheries of the British Empire, including Canada, Australia and India, attracted nearly one−half of British investment. Latin America and the United States attracted over twenty percent of British investment. On the other hand more than half of the French and German capital was financing Europe, including Russia and the Ottoman Empire. Throughout the period, this expansion of foreign credits was followed by the outbreak of moratoria in

[3] G.Daudin et al. "Causes, consequences and sustainability of late 19th century globalisation", Working Paper, 2005, pp. 5, url: www.economics.ox.ac.uk/members/ matthias.morys/Publication_1.pdf; L.Mosley "History Repeating Itself? Sovereign Borrowing Before The First World War", NC State University, CHASS Working Paper, December 1, 2000, pp.5-6. url: http://www2.chass.ncsu.edu/stephen/mosley1.pdf.

many debtor countries including Argentina (1890), Brazil (1898), Egypt (1876), the Ottoman Empire (1876), Greece (1843, 1893), Portugal (1892), Spain (1873) and Austria - Hungary.[4]

A large body of literature explores the historical dimension of these debt crises, their solution, and the negotiation of debt-resettlement agreements between debtor countries and their creditors. These studies examine the long-run experiences of one or a small number of debtor countries, as well as the government and private creditor response to debt problems.[5] In this section we will limit our discussion only to the causes of this extraordinary increase in the sovereign lending/borrowing with specific reference to the gold standard. Therefore our main concern is to classify the answers to the question of what guided the investors' decisions in the classical gold standard period.

One strand of the literature, perhaps the most conventional one, maintains that countries *preferred* to adhere the gold standard, since it was more advantageous to solve the time inconsistency problem, to facilitate access to the international capital markets (and funds), and to provide reputation in domestic and international markets with its credibility. As the most prominent representatives of this argument, Bordo and Kydland (1995) argue that the monetary rule (i.e. the gold standard), which was followed by a number of key countries in the pre-war period, represented a commitment mechanism preventing the monetary authorities from changing planned future policy. Likewise, the gold standard that prevailed before 1914 was a contingent rule. In an event of emergency (such as war) the authorities could temporarily abandon the fixed price of gold on the understanding that convertibility at the original price of gold would be restored when emergency passed.[6] Similarly, Bordo and Rockoff (1996) argue that the gold standard was a "good housekeeping seal of approval" to point out the facilitated access of peripheral countries to capital from the core countries of Western Europe.[7]

These arguments have raised considerable amount of criticisms in the literature. The first part of these evaluations has explained the adherence/emergence of the gold standard with some other factors rather than "easy access to international capital markets". According to these arguments, factors shaping the course of transition to gold "include the level of economic development, the magnitude of reserves relative to world specie markets, whether reserves were concentrated at the central bank, and the presence or absence of imperial ties".[8] An important contribution of these critiques was the emphasis on the distinction between core and peripheries of the international monetary order. In terms of international division of labour, the classical gold standard period was characterized by different economic structures: the core countries exporting manufacturing goods and importing raw materials and agricultural products from the peripheries. Some recent studies even go further from this

[4] Mosley, 2000, pp. 6-8, R.P.Esteves, "Quis custodiet quem? Sovereign Debt and Bondholders' Protection Before 1914" Economics Series Working Papers, No.323, University of Oxford, Department of Economics, 2007, pp.42, url: http://www.economics.ox.ac.uk/Research/wp/pdf/paper323.pdf.

[5] C.Suter, Debt Cycles in the World Economy: Foreign Loans, Financial Crises and Debt Settlements, 1820–1990. Boulder, Colorado: Westview Press, 1992. C.Suter and H.Stamm (1992) "Coping with Global Debt Crises Debt Settlements, 1820 to 1986", Comparative Studies in Society and History, Vol. 34, No. 4. (Oct., 1992), pp. 645-678.

[6] M. D. Bordo and F. E. Kydland "The Gold Standard As a Rule", Explorations in Economic History, 32, 1995, pp.423.

[7] M. D. Bordo and H. Rockoff "The Gold Standard as a "Good Housekeeping Seal of Approval"", The Journal of Economic History, Vol. 56, No.2, Papers Presented at the Fifty-Fifth Annual Meeting of the Economic History Association, 1996, pp. 389.

[8] B.Eichengreen and M.Flandreau, "The Geography of the Gold Standard", CEPR Discussion Paper No. 1050 (October), 1994, pp.2.

dichotomy between core and periphery, and present the hierarchy of international monetary order by dividing peripheries into more groups.[9]

The second part of the criticisms against the conventional literature has argued that the gold standard was not an important indicator that guided investors' decisions during the classical gold standard period. The question asked by this strand of literature is: if it was not the gold standard, then what were the historical determinants of the ability of a country to borrow internationally, and in a long-term basis in the nineteenth century? The answers might be summarised as follows:

1. *Health of Public Finance*: According to this argument, investors looked carefully to the ability of the states to collect resources and maintain good records of interest payments, therefore the health of the public finance of borrowing country was the main indicator for lenders. Hence, the real debt burden and economic growth of a country were more important indicators of credit worthiness than membership in the gold club[10]. Investors also developed risk analysis methods by relying on these indicators; and these methods were the key contributions to the mechanism of pre-World War I globalisation.[11]

2. *International Trade:* Trade and market liquidity were more important than the credibility and commitment of governments as far as international borrowing is concerned. "Only a major change in countries' ranking in the world trade order (which might have been the outcome of institutional change, for better of for worse)" could affect the investors' decisions.[12]

3. *"Empire Effect" and/or "Home Biases":* British colonies were able to borrow in London at significantly lower rates of interest than non-colonies precisely because of their colonial status, which mattered more than either gold standard adherence or the sustainability of fiscal policies. According to this argument, the gold standard effect disappears once the sample of sovereign borrowers is expanded to include many smaller countries in the peripheries of the world economy.[13] In more general terms, the capital "circulated within the scattered regions of worldwide 'nations' that were bound together by constitutional and legal arrangements", which is referred in the literature as "home biases".[14]

[9] "[…]the monetary order of the late nineteenth century is best described as having been made up of at least three groups, rather than the two groups as generally referred to".M.Flandreau and C.Jobst, "The Ties that Divide: A Network of Analysis of the International Monetary System, 1890-1910" The Journal of Economic History, Vol. 65, No. 4 (December 2005), pp.25.

[10] M.Flandreau and F.Zumer, The Making of Global Finance, 1880–1913. Paris: Organisation for Economic Cooperation and Development, 2004.

[11] M.Flandreau, "Caveat Emptor – Coping with Sovereign Risk Under the International Gold Standard" in International Financial History in the Twentieth Century – System and Anarchy, edited by M.Flandreau et al., Cambridge University Press, 2003.

[12] Flandreau and Sussman, "Old Sins: Exchange Clauses and European Foreign Lending in the 19th Century" CEPR Discussion Paper No.4248, 2004, pp. 4.

[13] N.Ferguson and M.Schularick "The Empire Effect: The Determinants of Country Risk in the First Age of Globalisation," Journal of Economic History.V. 66, N.2, 2006.

[14] M. Flandreau "Home Biases – Nineteenth Century Style" Journal of the European Economic Association April-May 2006 4(2–3), pp. 641. As a part of this debate, Obstfeld and Taylor (2003) argue that Empire did not matter for the pre-war gold standard, but it might have been important for the interwar period. According to the authors in the

4. *Capital Productivity As a Function of Human Capital*: As an emphasis on "push factors", it is argued that the capital flows of the nineteenth century were determined by largely capital productivity, neither by the gold standard nor by the "Empire effect". In line with this argument, "British capital heading abroad […] went where it was most profitable—chasing natural resources"[15]. Moreover, this profitability was determined by "[…] in order of importance, schooling, natural resource endowment, and immigration (plus other demographic features)".[16]

5. *Debtors' Reputation*: Political disturbances, economic fundamentals, and the market's memory about the sovereign's default record were the main elements of debtors' reputation, which guided investors' decision[17]. Existence of violence in the form of civil war or war was also an important determinant of the debtors' reputation, therefore investors' decision: "financial markets penalized unstable borrowing countries involved in domestic or external wars, which typically had an immediate effect on their cost of foreign debt".[18]

6. *Intermediaries' Reputation*: To overcome the problem of information asymmetries in the financial markets of the nineteenth century, investors (and also borrowers) followed, as a guide, the reputation of the intermediary underwriting/issuing organisations, since they could not learn about borrowers but they could learn about underwriters. "When borrowers accessed global capital markets through the agency of a highly capitalized underwriter, investors were prepared to pay a higher price".[19]

7. *Institutions –other than the Gold Standard*: Enforcing private contracts, protecting property rights, ensuring the rule of law, and stimulating sound macro economic policy influenced the investors' decision.[20] However, we can argue that it is hard to assess the effect of institutions separately, since institutions are also part of the explanation for the other approaches.

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sovereign bond market before 1914, "the gold standard did indeed confer a 'seal of approval', whereas two key macro fundamentals, the public debt and terms of trade, seem to have mattered little, if at all […] Membership in the British Empire was neither a necessary nor sufficient condition for preferential access to London's capital market before 1914". M.Obstfeld and A.M.Taylor, "Sovereign Risk, Credibility And The Gold Standard: 1870-1913 Versus 1925-31" The Economic Journal, 113 (April), 241–275, 2003, pp. 265. moreover for a recent and comprehensive critique of the Empire effect argument see O. Accominotti et al. "Black Man's Burden: Measured Philanthropy in the British Empire, 1880-1913", CEPR Discussion Paper Series, No.6811, 2008.

[15] M.A. Clemens and J.G. Williamson, "Where Did British Foreign Capital Go? Fundamentals, Failures and The Lucas Paradox 1870-1913" NBER Workind Paper, No.8028, 2000, pp. 27.

[16] Ibid, pp.29.

[17] Esteves, 2007.

[18] P.Mauro et al., Emerging Markets and Financial Globalisation Sovereign Bond Spreads in 1870–1913 and Today, Oxford University Press Inc., New York, 2006, pp.6.

[19] Flandreau and Flores, "Bonds and Brands: Lessons From the 1820s", CEPR Discussion Paper, No.6420, 2007, pp.2.

[20] T.Beck and R.Levine, "Legal institutions and financial development", NBER Working Paper No. 10126, Cambridge, Massachusetts, 2003; R. La Porta et al.,"Law and finance" Journal of Political Economy 106(6), 1998; D.North and B.Weingast, "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century Britain" Journal of Economic History, Vol. 49, 1989.

Obviously it is not possible to give a straightforward answer to this important debate in this small section. However, by relying on this presentation, it can be argued that the importance of the gold standard for providing facilitated access to international capital markets should not be taken at face value. Especially when it comes to the peripheries, where the self-adjusting mechanism of the gold standard did not operate perfectly, the importance of other factors like public finances, international trade, home biases, capital productivity, intermediary organisations and institutions, should also be carefully taken into account as hypotheses to be tested. In this context, our primary aim in the following sections will be to try to test the explanatory power of these arguments with the historical facts of the Ottoman economy in the nineteenth century. As a second contribution we will also argue that the aforementioned literature ignored the importance of IFC organisations, which were fundamentally important to guide investors' decisions for the period under study.

3. A "limping" gold standard: the monetary regime of the Ottoman Empire in the nineteenth century

There were three major monetary regulations during the nineteenth century in the Ottoman Empire:

1. Monetary regulation of 1834: This was the first step of the Empire towards bimetallism. The government abandoned the silver standard by accepting gold and silver as legal tender.
2. Bimetallism (1844-1880): With this reform, the government *formally* declared the bimetallic monetary standard. Moreover, by issuing a new series of coins, it brought the existing gold-silver ratio into a closer level with the world bullion market.
3. Limping gold standard (1880-1914): The state moved towards a "limping gold standard" (*topal mikyas*) by preserving a fixed ratio between gold and silver.

In this survey our focus will be the period of limping gold standard (1880-1914). However, given that the previous coins issued after the regulations of 1834 and 1844 were in circulation up to 1914, we will also need to mention shortly the transition from bimetallism to limping gold standard. In order to answer the question whether the Ottoman Empire had a stable monetary system during this period, we will concentrate on the exchange rates disparities of Ottoman silver and gold coins and British gold sovereign, as an indicator of stability of the monetary regime. Apart from the coins in circulation during the period 1880 to 1914 the monetary authority -the Imperial Ottoman Bank (IOB)[21]- issued gold-backed banknotes as well. Starting with the reform of 1880, the IOB became the sole monetary authority in the Empire until the Great War. In order to show how gold standard functioned in the Empire, and what were its "limping" aspects, we will give an overview of the monetary activities of the IOB.

[21] The IOB, founded in 1863 by British and French capital, would act as a kind of "central bank" in addition to its commercial operations until the end of the Empire. After 1863 the Ottoman government promised not to issue any paper currency and the bank was granted the monopoly of issuing gold-backed banknotes. However, the Ottoman government suspended this privilege one more time in 1870s. This was the last epoch of the kaimes. From 1880 to 1914 the only paper money in circulation was the IOB bank notes. For a detailed presentation of the activities of the Imperial Ottoman Bank see Edhem Eldem, A History of the Ottoman Bank, Istanbul, 1999. A.Autheman, The Imperial Ottoman Bank, The Ottoman Bank Archives and Research Centre, Istanbul, 2002.

3.1. Coinage regulations and exchange rates in Istanbul and the other provinces of the Ottoman Empire

The beginning point of the Ottoman monetary history in the nineteenth century would be the 1844 reform of *tashih-i sikke.*[22] Starting with this reform, the government formally adopted bimetallism with a fixed gold-silver ratio, hence abandoned the debasements of silver coins as a means of raising fiscal revenue.[23] However, it is also important to mention a preceding regulation that led the Empire to a *de facto* bimetallic system. In 1834, a new series of gold and silver coins were issued by the Mint[24] with a correspondent gold silver ratio equalled to 14.133. The first three rows of the Table 1 summarise the coinage information of the 1834 reform.

Table 1

Coins of the Ottoman Empire: 1834-1914

Coin Type	Weight (gr.)	Fineness	Metallic Content	Legal Value (*kuruş*)	Mint Equivalent	R	Mint Ratio
1834						15.73	14.13
Silver *kuruş*	2.138	44%	0.940	1	1.063		
Gold *lira*	1.604	83%	1.33132	20	15.02		
1844						15.85	15.09
Silver *kuruş*	1.2027	83%	0.998	1	1.0017		
Gold *lira*	7.216	91.67%	6.614	100	15.117		
1880						18.05	15.88
Silver *kuruş*	1.2027	83%	0.998	1	1.0017		
Gold *lira*	7.216	91.67%	6.614	105.25	15.913		

Source: *Jurgen Schneider, Oskar Schwarzer and Friedrich Zellfelder, Wahrungen der Welt 8 – Afrikanische und Levantinische Devisenkurse im 19. Und 20. Jahrhundert*, Stuttgart: Franz Steiner Verlag, 1994. George Young, *Corps De Droit Ottoman*, Vol.5, Oxford, 1906. Edhem Eldem "Chaos and Half Measures: The Ottoman Monetary 'System' of the Nineteenth Century", 2006. Edhem Eldem, *A History of the Ottoman Bank*, Istanbul, 1999.

[22] An English equivalent of this term would be the "adjustment of coinage".

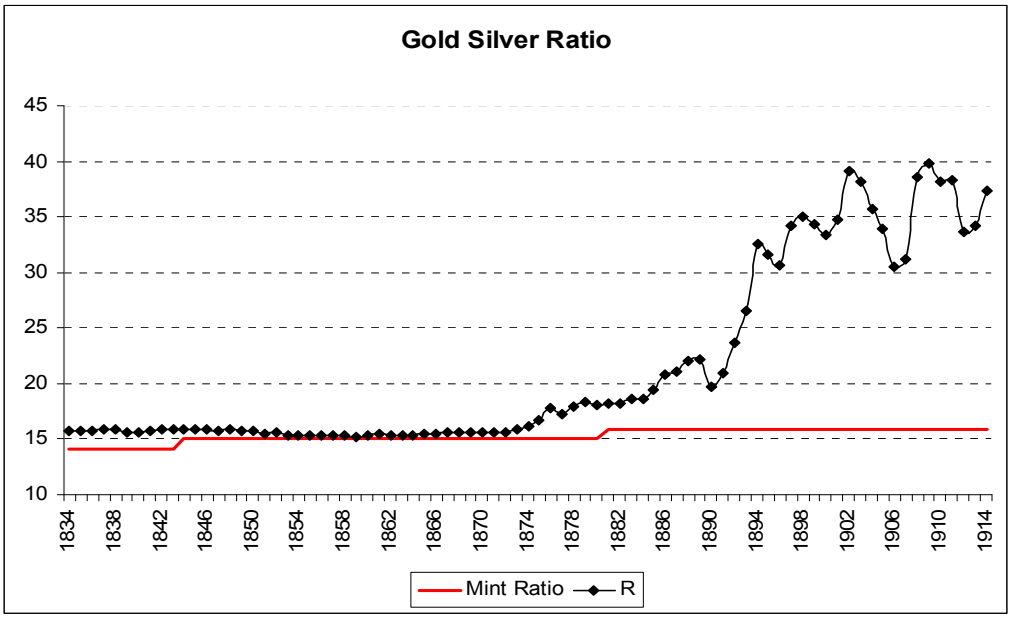
[23] S.Pamuk, A Monetary History of the Ottoman Empire, Cambridge University Press, 2000,pp.186.

[24] According to the regulation of 1834, the newly issued silver altılık weighted 12.83 grams with 44% fineness, whereas 1 gold mahmudiye weighted 1.604 grams with 83% fineness. Since the legal relationship between mahmudiye and altılık was put as 5 mahmudiye = 100 silver kuruş. The gold lira (mahmudiye) was minted with denominations of 1 (yirmilik), ½ (onluk), ¼ (beşlik), together with silver kuruş with denominations of 6 (altılık), 3, 1½. More importantly, the value of mahmudiye was linked to the silver kuruş as 5 mahmudiye = 100 silver kurus. Jurgen Schneider, Oskar Schwarzer and Friedrich Zellfelder, Wahrungen der Welt 8 – Afrikanische und Levantinische Devisenkurse im 19. Und 20. Jahrhundert, Stuttgart: Franz Steiner Verlag, 1994. GeorgeYoung, Corps De Droit Ottoman, Vol.5, Oxford, 1906. Edhem Eldem "Chaos and Half Measures: The Ottoman Monetary 'System' of the Nineteenth Century", 2006. Edhem Eldem, A History of the Ottoman Bank, Istanbul, 1999.

In this table the "metallic content" (MC) of a coin refers to net gold and silver content, which is the product of weight of a coin and its fineness. "Legal value" (LV) is the nominal value of the coin, which is showed in denominations of *kuruş*. The legal value between two coins is fixed by the monetary authority, and it was set as 1 gold *lira* (*mahmudiye*) equal to 20 silver *kuruş*. "Mint equivalent" (ME) is by definition the value of a coin divided by the product of its fineness and its weight. The ME was not announced to the public, they were only informed of the name of the coin (gold *mahmudiye*) and its legal value (20 *kuruş*). The fineness and the weight had to be inferred or anticipated. The "mint ratio" (MR) is simply the ratio of the mint equivalent of gold to silver, which is calculated by MEg / MEs. This shows the *official* relationship between 1 gram of gold and 1 gram of silver. Evidently, during this period there was also a large world bullion market in which the relative price of gold to silver fluctuated. This international gold and silver ratio is shown in the table as R.[25]

Chart 1

International Gold-Silver Ratio and Mint Ratio



Source: The gold–silver ratio (R) is from, Lawrence H. Officer, "The Price of Gold, 1257-2007," Measuring Worth, 2008, URL: http://www.measuringworth.org/gold/. The Mint Ratio is calculated from the relevant pages of Young (1906), Schneider (1994), Eldem (2006).

To clarify our terminology, we define a coin as undervalued, if it has a ME lower than that of another coin. In a parallel way, if the R exceeds the MR in a specific point of time, then the Mint undervalued gold and overvalued silver, and if R is lower than the MR in a specific point of time, then the Mint overvalued gold and undervalued silver. Since the R changed over time (See Chart 1), even if

[25] This terminology is based on A.Redish, Bimetallism: An Economic And Historical Analysis. Cambridge, 2000, pp. 27-28.

the monetary authority chose the ME so as to avoid undervaluing either metal at the date the coins were valued (in this case in 1834), the market price ratio would invariably deviate from the ratio of ME over time, causing one of the metals to become undervalued.[26] Turning back to the 1834 reform, as we can see from the Table 1, the Mint set the MR as 14.133, which was lower than the international gold-silver ratio (R) at that time.

With the 1844 reform, the government *formally* declared the bimetallic standard in which the silver *kuruş* and the new gold *lira* were both accepted as legal tender, freely convertible at the fixed rate of 100 *kuruş* for one gold *lira* and obtainable at the Imperial Mint. The new gold coins began to be produced in 1843 and the new silver coins were issued in the following year along with an official declaration from the Imperial Mint.[27] Since the official rate was 1 gold *lira* equalled to 100 silver *kuruş*, the correspondent gold silver ratio was 15,09 (See Table 1). Therefore, the gold and silver coins introduced with the 1844 reform were undervalued. Although the gold *mahmudiye* was redeemed with the 1844 reform, the silver currency was not redeemed (*beşlik* and *altılık*). These two silver coins circulated side by side in the market until 1888, finally the government had the resources to redeem all overvalued silver coins.[28]

From 1844 to 1880, the Ottoman Empire sustained the existing MR (See Chart 1). With the reform of 1880, the Ottoman government moved away from bimetallism; and gold was accepted as the standard for Ottoman currency. According to the new decree, which was issued on 5 January 1880, the monetary standard of the Empire would be the gold *lira* of 100 *kuruş*, and this standard would be applied in all revenues of the state, starting from 13 March 1880. As to silver, the legal value of the *mecidiye* (20 *kuruş* valued silver coin) which had until then circulated (at least in theory) at 20 *kuruş* was reduced to 19 *kuruş*. Although it was not stated directly, in practical terms, this meant that the state was fixing the effective rate of the gold *lira* at 105.26 *kuruş* in silver.[29] The market rate of silver *kuruş* was already depreciating against gold *lira* since 1873 by following the general trend in the world markets. Therefore, the decision of making silver cheaper aimed to bring the official rate closer to the market rate.

Thus, with the reform of 1880, the Ottoman Empire was adopting the "gold standard" by closing down minting of silver coinage, *but* at the same time accepting the silver with a reduced rate. The MR, with a 5 percent increase over the previous bimetallic ratio of 15.09 now stood at 15.88 (See Table 1). In other words, the state was moving towards what is called in the literature a "limping gold standard" (*topal mikyas*)[30] by preserving a fixed ratio between gold and silver. In this regime, unlike a gold standard, the silver was still retaining its value as legal tender on a par with gold. The coinage of silver was limited, however, it still had equal rights with gold in economy. Moreover, whereas in a gold

[26] Redish, 2000, pp.29-30.

[27] According to new reform the silver kuruş was issued with denominations of 20 (mecidiye), 10, 5, 2, 1. Moreover, the other legal tender was the gold lira with denominations of 5, 2½ , 1, ½ , ¼. 1 gold lira weighted 7.216 grams with a fineness of 22/24, whereas 1 silver kuruş weighted 1.2027 grams with 83% fineness.

[28] In practice, however, the government did not command sufficient resources to withdraw all previous coinage from circulation by compulsory redemption. As a result, it was soon forced to recognize them as legal tender and even announce the official rates at which each of them would be accepted. Pamuk, 2000, pp.206-8; Eldem, 2006; Eldem, 1999.

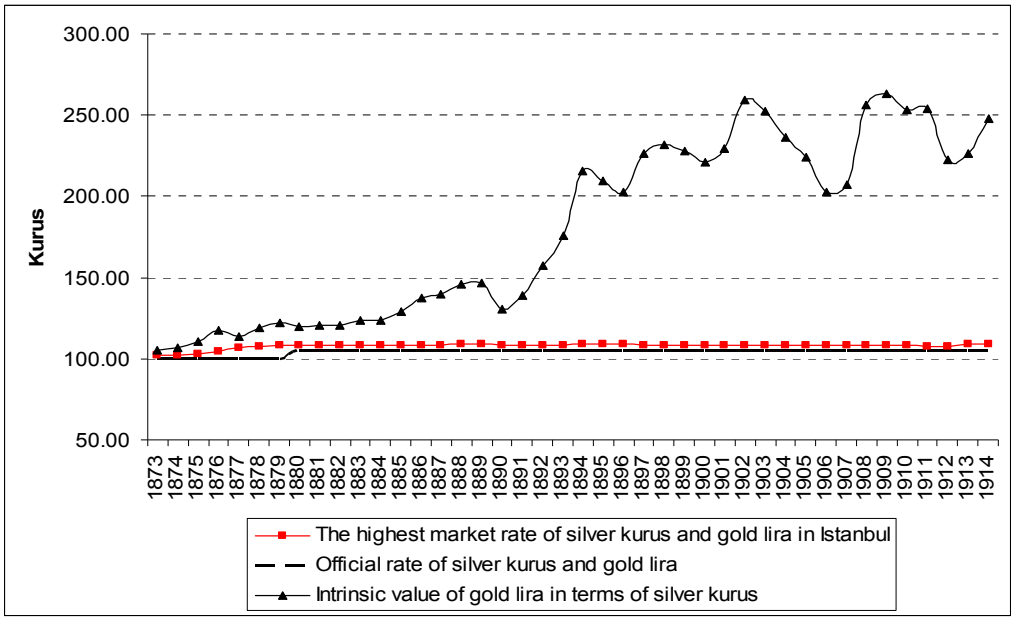
[29] Calculated as [100 * (20/19)]. Young, 1906, Eldem, 2006.

[30] Topal mikyas was the expression used by contemporaries to define the monetary standard of the Empire. It literally means "limping standard".

standard system any banknote was directly exchangeable for gold, under the limping gold standard the monetary authority reserved the privilege of giving gold or silver.[31] Similarly in the Ottoman Empire the existing silver coins retained full legal tender in payments to the state, and the Ottoman economy continued to heavily rely on silver for most daily transactions. The gold was at the centre especially in relations with the world economy while silver fluctuated according to supply and demand in internal commerce.[32]

Chart 2

Intrinsic, market and official value of the kuruş in terms of lira (1873-1914)



Source: Young, 1906; Officer, 2008; Eldem, 2006; Schneider et al, 1994; Biliotti, 1909.

As it can be seen from the Chart 2, during the period 1880 to 1914, although the intrinsic value[33] of gold *lira* in terms of silver *kuruş* depreciated heavily due to the increase of the gold-silver ratio in the world markets; the exchange rate of *kuruş* in Istanbul was stable, and the highest value was fluctuating in the range of 107 to 109 *kuruş*. In other words, the government was effectively putting a premium on silver and therefore creating a very attractive market for silver coinage[34]. However, this did not cause any speculative arbitrage in Istanbul.

[31] L. Pasvolsky "The Gold Standard before and after the War" Annals of the American Academy of Political and Social Science, Vol. 165, (Jan., 1933), pp.172.

[32] Pamuk, 2000, pp.217.

[33] Intrinsic value is defined as the market value of the constituent metal within a coin. Here it is calculated by [(R*MCg)/MCs].

[34] Eldem, 1999, pp.204.

We might suggest some explanations for this continuous overvalued circulation of silver coins relative to the world market. First of all, the Imperial Mint had closed down minting of silver coinage with the reform of 1880; therefore it was not possible to increase the amount of silver coins in circulation by simply taking the bullion to the Mint. Therefore the only risk for the sustainability of system was the foreign silver coins which could be used as a means of arbitrage. As regards the latter, a circular letter of the government dated 25 January 1883, had already banned the circulation of foreign coins in most of the provinces.[35] Later on, another circular letter of the Sublime Porte on 14 February 1887 prohibited altogether the importation of silver coins into the Empire, and expanded the effect of THE ban to the provinces of Baghdad, Mosul, Benghazi, Tripoli, Hedjaz and Yemen.[36] In this context, we may argue that, despite the heavy deterioration of the international gold-silver ratio, the IOB and the Porte were successful to maintain the fixed relationship between gold and silver coins -at least in Istanbul.[37]

In order to understand how well the gold standard functioned in the Empire, we also need to analyse the exchange rate between foreign coins and Ottoman coins. As a hunch, it may be argued that, as long as the metallic contents of the two gold-standard countries' coins do not change, the exchange rate between them (the mint parity) would we stable over time, apart from the fluctuations caused by the gold points[38]. According to the available sources[39], 1 gold *lira* could be bought in Istanbul with 18s.2/3d.[40] In other words the exchange rate between gold *lira* and gold sovereign in Istanbul was £1 = 1.1077 *lira*. In 1897 this exchange rate slightly changed and became £1 = 1.1072 *lira,* which lasted until 1914. As regards the exchange rate between silver *kuruş* and the British pound sterling, things were more complicated due to the depreciation of silver in the world markets.

[35] Eldem, 1999, pp.207; Young, 1906, pp.13. footnote 2.

[36] Eldem, 1999, pp.204; Young, 1906, pp.14 footnote 3.

[37] We will discuss the differences of monetary practices in the provinces of the Ottoman Empire below.

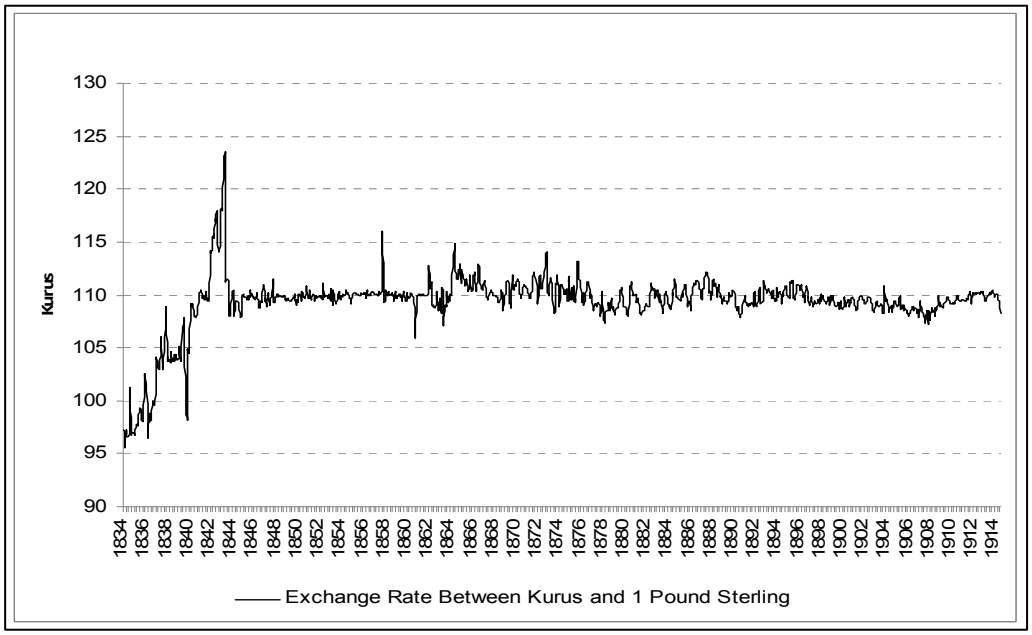
[38] Gold points are defined as the levels of the exchange rate plus transportation costs at which it became profitable to engage in arbitrage because of a deviation between the market and mint prices of gold. See Vernengo (2003).

[39] Banking Almanac (1876-1915).

[40] The unit of account in Britain was the pound sterling (gold), comprising twenty shillings (20s) each of twelve pence (12d). The weight of the 1 pound sterling (gold sovereign) was repeatedly lowered until when it was revived after the Great Recoinage law of 1816, when the metallic content of gold was fixed at 7.3224 grams. Moreover, the silver shilling weighted 5.6552g with a fineness of 0.925.

Chart 3

Silver Kuruş and British Pound Exchange Rate in Istanbul



Source: Schneider et al. 1994. The exchange rate between the British pound and the silver kuruş in Istanbul for three months is used from 1834 to 1914.

As it can be seen from the Chart 3, after the reform of 1844, the exchange rate fluctuated within the range of 105 to 115 *kuruş*. These fluctuations were due to the differences in market prices, which was determined by the gold-silver points. Gold points would permit the exchange rates of two gold standard currencies to fluctuate within a range without producing gold shipments. Similarly under a bimetallic/limping gold standard "gold-silver price ratio points" would permit the ratio fluctuate within a range without producing either on premium on one metal or its complete replacement by the other.[41] Based on this evidence, it may be maintained that the monetary authority (the IOB) was successful to sustain a stable exchange rate between the British gold sovereign and the Ottoman silver *kuruş* from 1880 to 1914 in Istanbul.

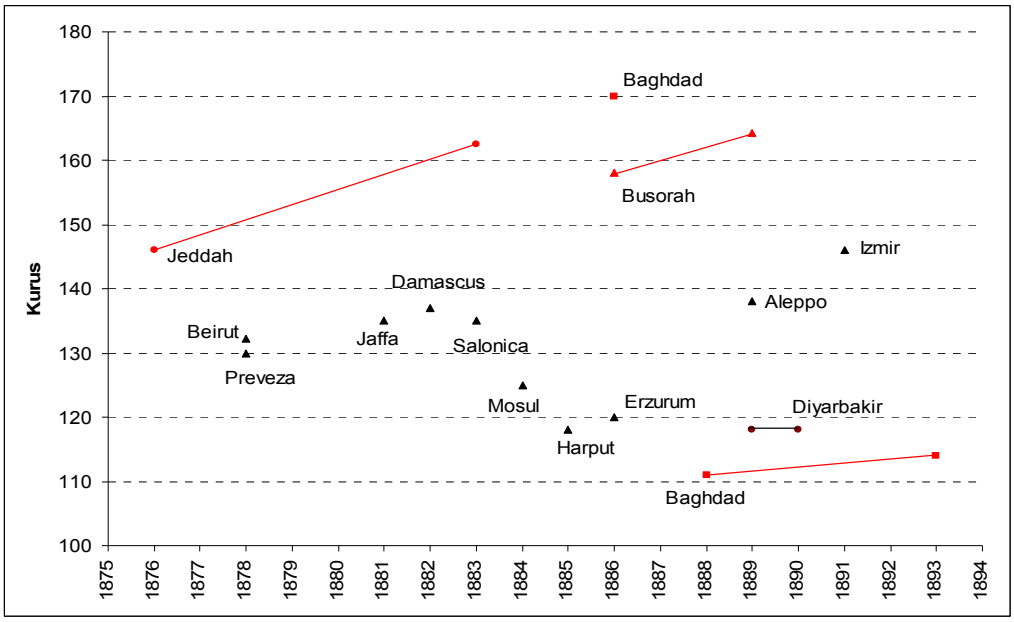
At this point a legitimate question to ask would be whether the exchange rates in the provinces followed the similar patterns in Istanbul. In the absence of detailed time series for the provinces of the Ottoman Empire, this question is relatively harder to answer. However, it is also possible to bring together several archival and secondary sources to have a general idea of the prevailing situation in the provinces. Chart 4 summarises the average market exchange rate between silver *kuruş* and British gold sovereign and silver *kuruş* from 1876 to 1893 for selective years.[42]

[41] M.Friedman, Money Mischief, 1992, pp.60.

[42] Between 1883 and 1893 from the relevant issues of British Diplomatic and Consular Reports on Trade and Finance, Foreign Office UK, Annual Series. 1905 and 1914 are from Scneider et al 1994, pp.41. 1907 is from A.Biliotti, 1909, pp.124. Moreover, see S.Pamuk, "From Bimetallism to the 'Limping Gold Standard': The Ottoman

Chart 4

Exchange rate between British gold sovereign and silver kuruş in several Ottoman



Source: The relevant issues of the British Diplomatic and Consular Reports on Trade and Finance, Foreign Office UK, Annual Series (1876-1893).

As a first impression, it may be argued that the premium for gold over silver usually increased with the distance from Istanbul depending on the transportation costs.[43] However, there were also extreme exchange rate differences, which may not be explained simply by the distance from Istanbul. For instance, as Young (1906) informs that in Izmir the value of Ottoman lira varied between 102 and 178 *kuruş*. This variation was determined by the type of good which was purchased with silver *kuruş*. For the payments of taxes, salaries, and other operations of the administration one lira accounted for 102 *kuruş*, whereas for the bills of exchange it was 125 *kuruş*, and finally in the spot market the value of the lira was equal to 178 *kuruş*.[44]

Another interesting example would be the province of Beirut. In 1883, the exchange on London for 3 months bills was 134.25 *kuruş* and the value of the British gold sovereign was 134.75 *kuruş*. In Beirut most of the market transactions were carried out with silver *mecidiye*s manufactured abroad, having the same value and being the exact counterpart of the *mecidiye*s coined by the government. This would create an opportunity for arbitrage, since the intrinsic value of the silver *mecidiye* was about 15

Monetary System in the Nineteenth Century", East Meets West – Banking, Commerce and Investment in the Ottoman Empire, ed. P.Cotrell, Ashgate, 2008, pp.21-22, Eldem, 1999, pp.150-151.

[43] Pamuk, 2008, pp.21.

[44] Young, 1906, pp.2, footnote 2.

kuruş, while its current value was about 18.5 *kuruş*. Finally, the rate at which the *mecidiye* was accepted by the government was 19 *kuruş*. The manner in which these coins were put into circulation was principally by the purchase of grain for export, and with the price realised other *mecidiye*s are manufactured.

It may be maintained that both the Government and the local authorities were aware of this extreme exchange rate differences. For instance, specifically for Baghdad in 1888, the Ottoman government issued a decree, which would reduce the value of coins in circulation about one-third. The reason behind of this decree was to give an impetus to the import trade. It is also possible to see that the relative cost of a British gold sovereign before and after the reduction became respectively 170 and 111 *kuruş*.[45] Similarly, in August 1889 the local administration of Basra had proposed to lower by edict the current values of coins in circulation, as was done in Baghdad. However this had been refused by locals as it would create a negative impact on the trade of this province.[46] In a sense, the Porte had introduced some exceptions for the ban of circulation of foreign coins, and would act according to the demand of the local authorities depending on the specific conditions of the province in terms of its international trade opportunities and linkages.

Related with this issue, it should also be noted that in some parts of the Empire the Ottoman *lira* and silver *kuruş* were not a common medium of exchange. In a broad sense; in the provinces of Beirut and Izmir, the gold coins were not in circulation and silver *mecidiye* was dominant. In Syria and Palestine the dominant coins in circulation were the undervalued silver coins of *beşlik* and *altılık*. In Basra, the Persian *keran* was the principal coin in use; and in Hejaz and Yemen, the Austrian *thaler* (Maria Theresa *thaler*) had replaced the Ottoman silver *kuruş*.[47]

For the contemporaries, the monetary system of the Empire was a complete puzzle. For instance, in 1891, the consul of Basra was stating that the Ottoman coinage system was "a very difficult matter to deal with. It is hard enough to understand oneself on the spot, and still harder to explain to others. Certain silver coins carry an invariable legal value, while others vary in their value (as compared with the Turkish lira) as the rate of silver rises or falls".[48] It might be argued that some modern Ottoman historians also follow a similar attitude towards the functioning of the system in the provinces. According to E.Eldem, "such disparities had no direct relationship to the intrinsic value of money but rather to a complex set of conventions deeply anchored in a tradition of monetary pluralism and chaos".[49]

How can we explain these disparities in the exchange rates and different "monetary zones" which prevailed in different parts of the Empire? It may be argued that the existence of different territorial currency zones and disparities of the exchange rates were the "limping" aspects of the gold standard in the way that functioned in the peripheries of the system. There were several reasons for the subsistence of different coins and exchange rates. To start with, the existence of large scale counterfeiting activity affected the differences in the exchange rates. "Large inflows of counterfeit but standard coinage"[50] in

[45] 1889 Annual Series Turkey- No 551. Trade of Baghdad for the year 1887-88.

[46] Consular Reports, No 719 -1890.

[47] Eldem, 1999, 150-151; FO Consular Reports relevant years.

[48] Consular Reports, No 1142, 1892, the report for the year of 1890-91 on the trade of Baghdad and Bussorah, pp.12.

[49] Eldem, 1999, pp.150. Also see Eldem 2006.

[50] Pamuk, 2008, pp.22.

the provinces could not be controlled by the government. Moreover, the scarcity of fractional coins and small change determined local demand for silver standard and sub-standard coins. Because of this problem, the silver coins with small denominations circulated at a premium without reacting to the changes in the international price of silver.[51] The government, being aware of this problem, tried to increase the amount of small-denominated silver coins, especially at the beginning of the 1890s. Apart from that there were also institutional measures which were put into force. As we mentioned above, the government had already banned the circulation of foreign silver coinage within the Empire by issuing several decrees. Moreover, for particular provinces, where the exchange rate disparities increased, the government tried to introduce exchange rate restrictions, as it was exemplified with the province of Baghdad.

We may also assess this issue in the wider context of currency substitution problem. The demand for a specific currency, besides other factors, would be determined by the broad transactional network.[52] To be more specific, as it can be seen from the example of Beirut, the specific international trade conditions of this region determined the choice of currency and exchange rate disparity. On the other hand for the case of Yemen and Hejaz the predominance of Maria Theresa *thaler* could be explained with the path dependency of currency usage. In this province, the Maria Theresa *thaler* had been the principal currency for a long period of time. Therefore the credibility of this coin coming together with other factors affected the demand. Although these explanations can provide an insight for the functioning of the system in the provinces of the Ottoman Empire, to understand and identify the different monetary zones within the Empire, further archival research is needed.

3.2. The Imperial Ottoman Bank as a Monetary Authority: 1880-1914

Up to here we limited the discussion with the exchange rate of the coins and coinage regulations. Evidently, an analysis of the functioning of the Ottoman monetary system in the nineteenth century would not be complete without taking into consideration the paper currency. For the purposes of this study, the most important period to be studied would be the paper money experiment under the "limping gold standard". With the monetary reform of 1880, the IOB became the only authority to issue gold-backed banknotes. From this time on, until the Great War, the IOB banknotes were the only legal paper currency in the market, circulating together with the gold and silver coins.

According to the article 9 of the Act of Concession, the payment of these gold convertible IOB notes would be demandable only at the place issue, in Istanbul. On the other hand, the article 11 was imposing a limitation on the issue of the banknotes: " the Bank for the space of two years from the date of its opening shall keep a reserve in hand equal in amount to at least half its notes in circulation, and after that period of two years has elapsed to the amount at least of one third".[53] Although until 1880 the amount of IOB banknotes were at a stable and low value, after the reform of 1880, the IOB started increasing the amount of banknotes in circulation (See Chart 5).

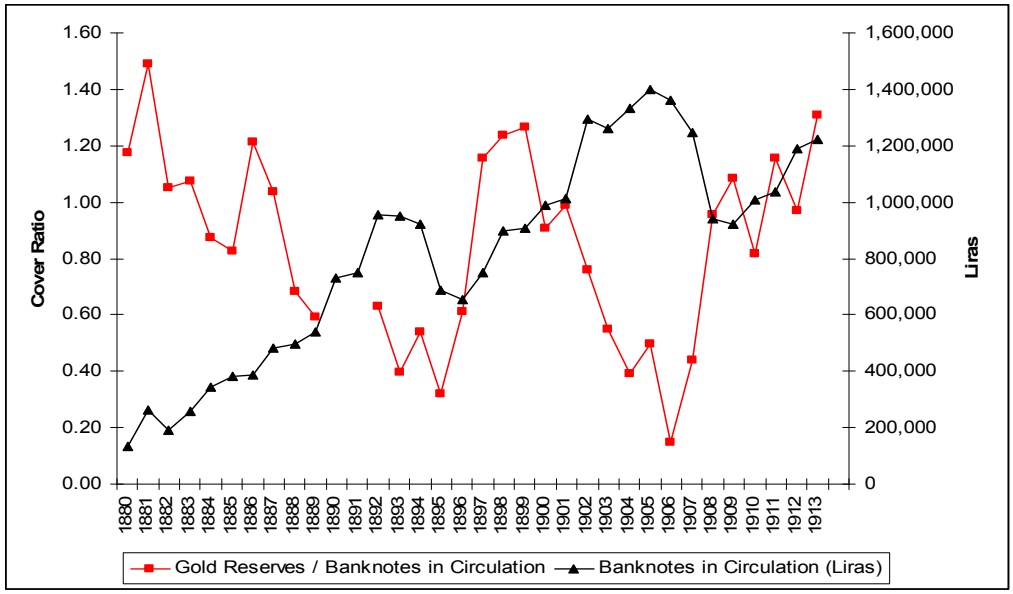
[51] Eldem, 1999, pp.151.

[52] Benjamin J. Cohen, The Geography of Money, Cornell University Press, London 1998, pp.97.

[53] The Concession "Reglement" and Statutes of the Imperial Ottoman Bank (1875), Guildhall Library, MS 23963. Pamuk, 2000, pp.212; Eldem, 1999 pp.463-466.

Chart 5

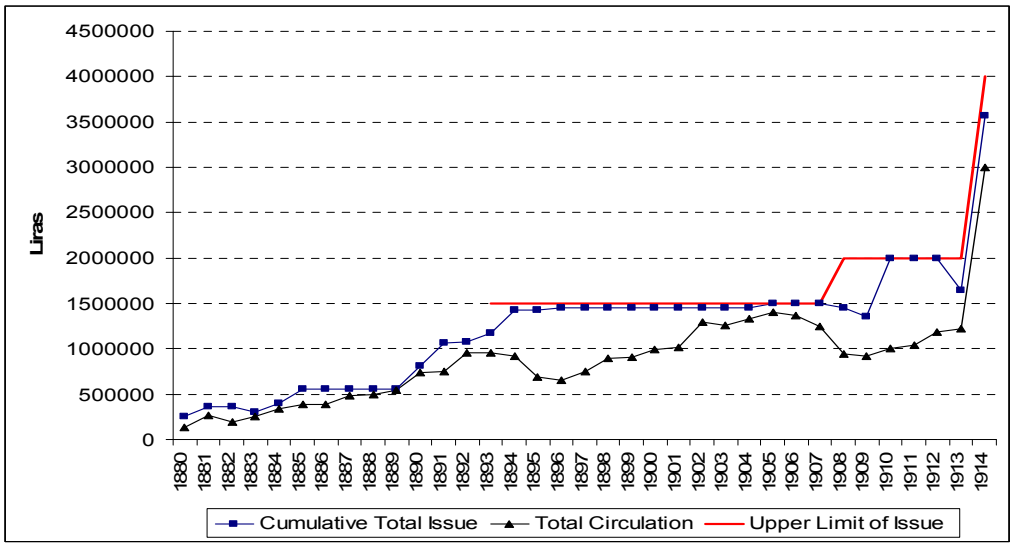
Banknotes in Circulation and Cover Ratio: 1880-1914



Source: The data is provided by Edhem Eldem, based on Cash Reserve Ledger, Banknotes Ledger and Balance Sheets and Reports of the IOB (1863-1914). Moreover, MS-23977 Vol.1 – The Balance Sheets and Reports of the Ottoman Bank (1863-1914) is used. See also Eldem (1999, 2006).

Chart 6

Banknotes in Circulation and Total Size of Issue: 1880-1914



Source: same as Chart 5.

Although the cover ratio was still much above the legally imposed rate of 30%, because of the rapid increase of banknotes in circulation, on 20 January 1893 the government imposed a limit on the right of issue of the bank with an imperial decree. According to this new regulation the upper limit of the banknote issue was limited with 1,500,000 liras. In 1894, the year following the decision to limit its issue to a maximum of 1,500,000 liras, the bank brought its total issue 1,427,657 liras. It should be underlined that this was not the amount in circulation. In the very same year, IOB balance sheets show the amount of banknotes in circulation as 1,000,000 liras. In other words, one third of the banknotes stowed away as the banknote reserves. As it can be seen from Chart 6, the IOB would put these banknotes into circulation gradually until 1905, when the ratio of circulation to issue reached to 93%, and the cover ratio was around 50%.[54]

In 1908, the IOB had already reached to its limit of issue banknotes; therefore it started negotiating with the government to increase the limit. Following the negotiations, on 22 October 1908 the IOB was finally granted an authorisation to increase the limit of issue to 2,000,000 liras. However due to the financial crisis of 1907 the total amount of circulation was stabilised around 1,000,000 *lira*s until the August 1914. In the first couple of months of the Great War, in order to finance the extraordinary military expenses, the government increased the upper limit of issue to 4,000,000 *lira*s. Finally, in April 1915, the Ottoman government enabled an act, which suspended the exclusive privilege of issue of the IOB, and authorised the ministry of finance to issue to the amount of 6,500,000 *lira*s of paper money, under the name of *evrak-i nakdiye.*[55]

3.3. Monetary standard of the Ottoman Empire from 1880 to 1914: An assessment

If one follows the arguments of conventional literature, the Ottoman Empire did successfully switch to the gold standard, and the monetary authority did sustain the convertibility of the its gold-backed banknotes from 1880 onwards. However, as it was aimed in the above presentation, a close look to the monetary activities and regulations of the period reveals the "limping" or peculiar aspects of the functioning of this monetary standard in the Ottoman Empire.

First of all, unlike a core country, the Ottoman Empire did not have sufficient resources to redeem the silver coinage in circulation. The silver coins were in the centre of the domestic transactions, therefore the state continued to accept unlimited amounts of silver in its operations, and the gold was at the centre of the international dealings. Given the depreciation of the silver in the international markets, the monetary authority also had to deal with speculative activities of arbitrage in order to protect its gold reserves. In this regard, the efforts of the Porte and the IOB were enough to sustain the stability of the exchange rates between Ottoman currency and other gold standard countries' currencies only in Istanbul. As regards the provinces of the Empire, the territorial exchange rates and monetary zones continued to prevail throughout the period in line with the specific conditions of each province.

Concerning the paper currency from the monetary reform of 1880 to 1914, the government took necessary measures to limit the issue of banknotes by imposing several restrictions. This definitely helped to sustain the credibility of the IOB notes. On the other hand, the IOB notes did not have a

[54] The Concession "Reglement" and Statutes of the Imperial Ottoman Bank (1875), Pamuk, (2000: 212), Eldem, (1999: 463-466), Eldem, 1999, pp.161.

[55] Eldem, 1999, pp.257-259, 269, 308.

widespread usage within the Empire. Their nominal value was relatively higher, and their circulation became restricted only in Istanbul. As a result the big share of the monetary transactions relied on a combination of several silver and gold coins rather than bank notes. In the next section we will add another dimension to this picture by focusing on the sovereign borrowing process and international financial control as the most important sources of gold for the Ottoman Empire.

4. Moratorium and international financial control: road to the Ottoman public debt administration

The Ottoman government for the first time began to sell long-term bonds in the European financial markets in order to finance the Crimean War, in 1854; and this soon became the most important means of dealing with the budgetary difficulties. In the early stages of this process, the Ottoman government was supported by British investors; and in the following two decades, it borrowed large sums in London and Paris. From 1854 to 1863 the Ottoman government had contracted 6 loans with a total face value of £39 million sterling (See Table 2). These loans had been secured with several direct and indirect tax revenues, custom duties, and Egyptian tribute. Apart from the IOB, the intermediary institutions located in London and Paris, such as Dent Palmer, Rothschild[56], Credit Mobilier, Comptoir d'Escompte were acting as underwriters.

Table 2

Summary of Foreign Loans (1854-1914)

Period	Number of Contracted Loans	Total Face Value (million £)	Average Nominal Interest Rate (%)	Average Price of Issue (%)
1854-1863	6	39	5.6	73.7
1863-1876	9	177.1	5	60.9
1876-1881	1	5	5	52
1881-1914	25	146.38	4.24	85.39

Source: *Reports of Corporation of Foreign Bondholders* (1912-1914); William H. Wynne, *State Insolvency and Foreign Bondholders* V.2, Yale University Press, 1951; Donald C.Blaisdell, *European Financial Control in The Ottoman Empire*, New York, 1966; Emine Zeynep Kiray, *Foreign Debt and Structural Change in the "Sick Man of Europe"*, PhD Thesis Submitted to MIT, 1988; C.Clay, *Gold for The Sultan*. Tauris: New York, 2000; Peter Lindert, *Sovereign Debt Historical Data*, url: http://www.econ.ucdavis.edu/faculty/fzlinder/Sovereign%20Debt%20Historical%20Data.htm

By the second half of the 1860s, due to the continuous budget deficits, the government was in need of new bond issues in order to maintain debt repayments. Therefore, from 1863 on an increasing phase of borrowing began, which eventually led to accumulated debts (See Table 2). A moratorium was in

[56] Rothschild was an exception. It acted as an underwriter only for the Guaranteed Loan of 1855.

sight but the financial markets kept the process going because of the high rates of return.[57] However, the financial crises of 1873 led to the end of overseas lending by the European financial markets, and the Ottoman government declared a moratorium on its total outstanding debt in 1875-76, which stood at almost £200 million sterling.[58] During the period 1876-1881, the Ottoman government managed to contract only one loan: The defence loan of 1877, which was granted by Great Powers to support the Ottoman Empire against to Russian expansion.[59]

The post-war years were marked by efforts for solvency. The Congress of Berlin in June 1878 brought an end the Ottoman conflict with Russia. It was in fact during the Berlin Congress that the claims of the bondholders first received official attention of the Great Powers.[60] The bondholder organisations, including a committee established in Istanbul in March 1878, had lobbied their respective governments in the weeks before the representatives of powers met in Berlin in June 1878.[61] The several parts of the Berlin Treaty directly addressed the question of Ottoman debt. First of all, it was agreed that the newly independent Balkan States[62] would become responsible for a proportionate share of the debt. Moreover the Russian government in particular accepted that the pre-war debts had priority over indemnity; and the Ottoman government in particular undertook to do everything in its power to give its creditors satisfaction. Most important of all, beyond this resolution, initiated by the Anglo-French committee was passed according to which the powers recommended to the Porte the institution of a financial commission:[63]

> "The Powers represented at the Congress desire to recommend to the Sublime Porte the establishment at Constantinople of a Financial Commission, composed of specialists, named by their respective Governments, which Commission shall be charged to examine into the complaints of the bondholders of the Ottoman debt, and to propose the most efficacious means for satisfying them as far as is compatible with the financial situation of the Porte".[64]

After the Treaty had been signed, the representatives of the bondholders began to press the Porte with their proposals for the settlement of the financial question.[65] However, the formal negotiations between representatives of foreign creditors and the Ottoman government had not started until September 1881. At this year, the first meeting between the parties took place in Istanbul, and after long negotiations[66], the decree of *Muharrem*[67] was signed on the 20th of December 1881 between the

[57] Pamuk, 2000,pp.213; E.Eldem, "Ottoman Financial Integration with Europe: Foreign Loans, the Ottoman Bank and the Ottoman Public Debt", European Review, V.13, N.3, 2005.

[58] Pamuk, 2000, pp.214.

[59] For the details of this specific loan see C.Clay, Gold for The Sultan. Tauris: New York, 2000, pp. 369-380.

[60] D.Blaisdell, European Financial Control in the Ottoman Empire, AMS Press: New York, 1966, pp. 84-85.

[61] Clay, 2000, pp.383.

[62] The treaty recognized the complete independence of the principalities of Romania, Serbia and Montenegro and the autonomy of Bulgaria.

[63] Clay, 2000, 383.

[64] Parliamentary Papers, Turkey No.39 (1878), pp.268.Blaisdell, 1966, pp,85.

[65] Blaisdell, 1966, pp.86.

[66] The negotiations lasted until December 1881. During this period the parties organised 24 meetings. M.H.Saglam, Osmanli Devleti'nde Moratoryum 1875-1881 – Rusum-i Sitte'den Duyun-i Umumiyye'ye. Tarih Vakfi Yurt Yayinlari, Istanbul, Appendix, 2007.

[67] Muharrem was the name of the month in Islamic calendar, in which the decree was signed.

representatives of the English, French, Dutch, German, Italian and Austro-Hungarian bondholders and the Ottoman government. According to the decree:[68]

- The outstanding debt of the Empire was reduced from about £191 million to £96 million. The unpaid interest payments, which were amounted £62 million, were reduced to approximately £10 million.[69] Finally, the yearly charges on the debt were also reduced from approximately £13.6 million to £2.7 million.
- In Istanbul, a council of administration would be established to represent the bondholders, and to act in their interests. The council would consist of bondholder representatives of each creditor group or country plus a member of the Ottoman government.[70]
- The government agreed to transfer its right of the administration of revenues from the monopolies of tobacco and salt, stamp duty (*varaka-i sahiha*), duties on spirits, and duties on fishing, the silk tithe of several provinces, which were shown as a guarantee for the payment of contracted loans to the OPDA.[71]
- The OPDA would have the right to decide upon all modifications and improvements, which may be introduced in the taxes of these monopolies and items.[72] These revenues would be used for the payment of interest and sinking fund of the Ottoman debt. Moreover, the OPDA would have the direct administration, collection and encashment of the above stated revenues.[73]

Overall, the arrangement meant that about one fifth of the state's revenues would be surrendered to the administration until the complete settlement of the outstanding debt.[74] It should be noted that concerning the role of the OPDA in economic and financial development of the Empire, there are contradicting views in the Ottoman historiography. Some studies emphasise the fact that the OPDA restored the creditworthiness of the Empire. From 1886 to 1914, the Ottoman state managed to contract another 23 loans, totaling just over £150,000,000 at an average issue rate of over 85%, and an average interest rate of barely more than 4%.[75] In contrast, the effective rates of interest paid by the government before 1875 had fluctuated between 10-12% despite stable international prices (See Table 2).[76] In the following section, we will focus on this argument by an analysis of the Ottoman bond spreads.

[68] House of Common Parliamentary Papers 1911 [Cd. 5736], "The Decress of 28 Muharrem, 1299" Annex 1, pp.685-686.

[69] Parliamentary Papers, UK, pp.672-675 Articles 1-5.

[70] Article 15 pp.680-681.

[71] For the full list of revenues which were transferred to OPDA, see House of Common Parliamentary Papers 1911 [Cd. 5736], "The Decress of 28 Muharrem, 1299" Article 8, pp. 675-676.

[72] House of Common Parliamentary Papers 1911 [Cd. 5736], Article 9, pp.677.

[73] House of Common Parliamentary Papers 1911 [Cd. 5736], Article 16, pp.683.

[74] Eldem, 2005: 442-3; Emine Zeynep Kiray, Foreign Debt and Structural Change in the "Sick Man of Europe", PhD Thesis Submitted to MIT, 1988.

[75] Kiray, 1988; Eldem, 2005, pp.443.

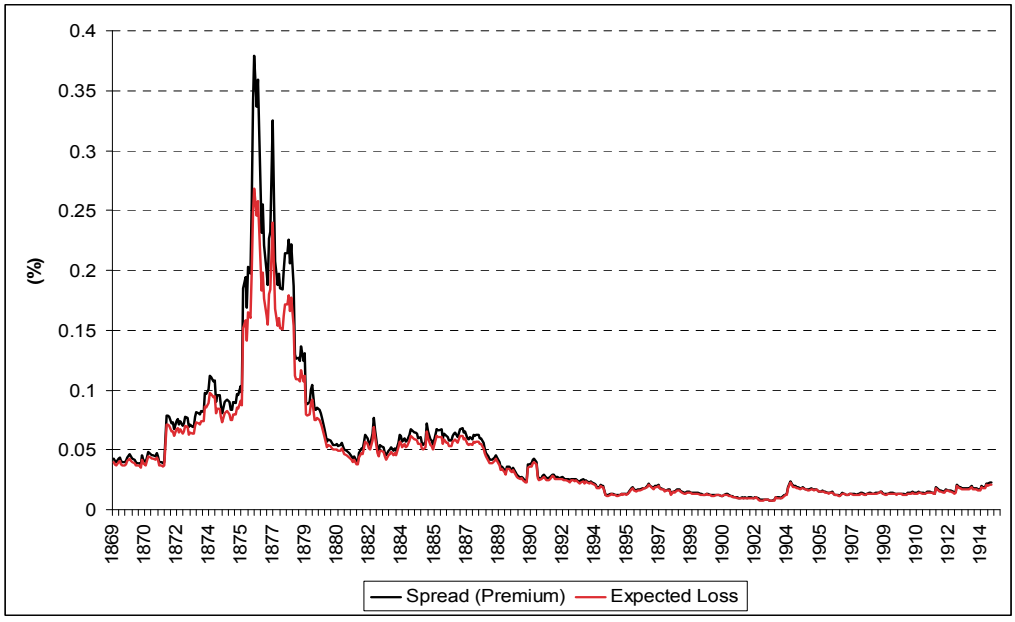
[76] Pamuk, 2000:216; Kiray, 1988.

5. "What did guide investors' decisions?" An analysis of bond spreads

In this section we will try to answer the question whether the gold standard served as a guide to foreign investors (or to the underwriters), by using the framework of previous sections. As regards the determinants of investors' decision, as we had summarised in the section 2, the literature underlines different points as oppose to the gold standard, such as health of public finance of the debtor country, the role of international trade, "Empire effect" and/or "home biases", capital productivity differentials, debtors' reputation (in the form of the existence of war or civil war in the debtor country or recent memory of default), and finally intermediaries' reputation. As an indicator of investors' decisions towards the Ottoman bonds, we will focus on the movements in historical spread as the difference between yield-to-maturity of the Ottoman bonds and 2.5% UK consol yield. By relying this historical data, we will argue that the foundation of the IFC was the main determinant of the investors' decisions towards Ottoman bonds, but not the gold standard. We will also try to analyse whether the changes in spread corresponds to any significant change in the health of public finance or balance of trade position of the country.

Chart 7

Historical spread and expected loss (1869-1914)



Sources: *Investors Monthly Manual* (1869-1914); *Reports of Corporation of Foreign Bondholders* (1912-1914); William H. Wynne, *State Insolvency and Foreign Bondholders* V.2, Yale University Press, 1951; Donald C.Blaisdell, *European Financial Control in The Ottoman Empire*, New York, 1966; Emine Zeynep Kiray, *Foreign Debt and Structural Change in the "Sick Man of Europe"*, PhD Thesis Submitted to MIT, 1988; *Global Financial Database*, UK 2.5% Consol Yield; Peter Lindert, *Sovereign Debt Historical Data*, url:
http://www.econ.ucdavis.edu/faculty/fzlinder/Sovereign%20Debt%20Historical%20Data.htm

Notes: Spread (premium) is defined as the difference between UK 2.5% Consol Yield and the Ottoman Bond Yields. For the former, from 1869 to 1914 end of month data is used. For the Ottoman Bond Yields, yield to maturity of each bond for every month is weighted by the market capitalization rate. The bonds used in the calculations are as follows: 6% Egyptian Tribute Loan of 1854, 6% Egyptian Tribute Loan of 1871, 5% Defence Loan of 1877, Priority Bonds of 1884, 4% Priority Loan of 1890, 4% Loan of 1891, 3.5% Loan of 1894, 4% Loan of 1902, 4% Unified English Script of 1903, 4% Loan of 1908, 4% Loan of 1909.[77] Moreover, following P.H. Lindert (1989), the expected loss is defined as the risk-neutral expected percentage of capital loss implied by the premium, calculated as [Premium / (1+ Yield-to-Maturity of debtor country)].

Table 3

Periodical breaks in spread (premium) for the Ottoman bonds (1869-1914)

Period	Average	Standard Deviation	Coefficient of Variation
1869-1876	0.067	0.023	0.34
1876-1878	0.23	0.059	0.25
1878-1881	0.072	0.028	0.39
1881-1914	0.026	0.018	0.68

Source and Notes: Same as Chart 7.

As it can be seen from the Chart 7 and the Table 3, the average spread for the period 1854 to 1876 was around 6%, which started fluctuating and increasing after the moratorium of 1876, and reached an average value of 23%. In 1877 the spread made another peak due to the war with Russia. However, starting from June 1878 the spread declined rapidly. As we had discussed above, the Berlin Treaty had a two-fold effect on the markets. First of all it marked the end of conflict with Russia. In this sense, we follow the argument of Mauro et al.(2005), according to which the end of violence in the form of war would effect the reputation of the country positively, and this would create a decrease in the spread.

However, our analysis also reveals the influence of an overlooked aspect of the peripheral economies on spread: foundation of an international financial control institution. As we had mentioned in the previous section, with the Berlin Treaty it was also decided to found an international financial commission in the Ottoman Empire, which would be responsible of administrating the unpaid debts and revenues, which were used to secure these loans. With the establishment of the OPDA in December 1881, the spread declined rapidly, and it had an average value of 2% until the Great War. In the first years of the Administration, the Ottoman Empire was passing through a political turmoil, moreover, the provinces of Egypt and Sudan became *de facto* part of the British Empire following the occupation in 1882. Therefore, until the 1887 the spread was still volatile. After this date the OPDA

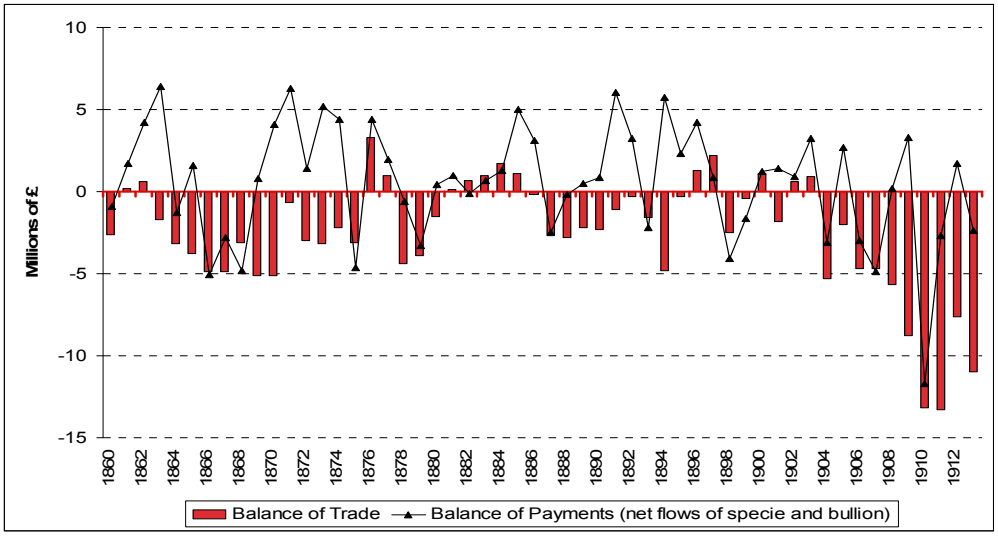
[77] This is not the first attempt to calculate spread for the Ottoman bonds in the 19th century. A similar exercise can also be found in P.Mauro et al., Emerging Markets and Financial Globalisation Sovereign Bond Spreads in 1870-1913 and Today, Oxford, 2006, pp. 35. However our calculation might be regarded as more representative, since it includes a greater number of bonds, and moreover it excludes 6% Loan of 1870, which we believe is not representative and might create a bias to include.

started increasing its revenues, and this reached to the maximum in 1888[78]. From this time onwards the only exception of the steady decline was the Baring Crisis of 1890. The panic in the international financial markets was also reflected on the Ottoman bonds as a period of rapid upsurge.

Evidently we should also consider other economic factors, which might be the cause of such decline after 1881. Following the literature, it might be argued that the fiscal strength of the country together with its ability to gain gold through international trade surplus might be an important indicator. The Chart 8 shows the balance of trade position of the Ottoman Empire from 1860 to 1914 together with the balance of payments as net flows of specie and bullion. As a first impression, it might be argued that, the balance of trade of the Empire did follow a cyclical pattern following the trends in the international markets. Moreover, net flows of specie not only depended on the trade surplus but also having ability to contract new foreign loans. Finally as regards states revenues and expenditure, from 1869 to 1914 the budget deficit was a rule with few exceptions (See Chart 9).

Chart 8

Balance of payments (1860-1914)

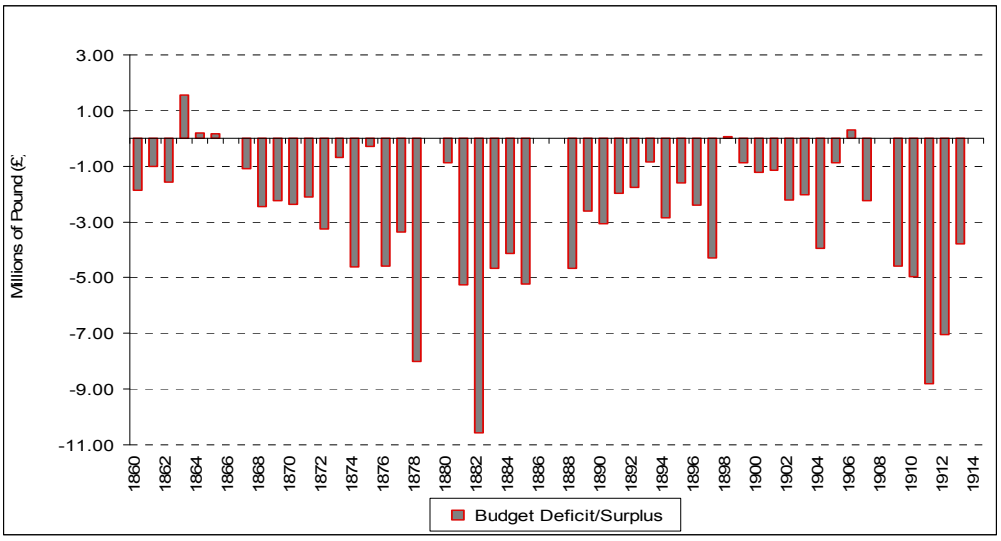


Sources: S.Pamuk, Foreign Trade, Foreign Capital and the Peripheralization of the Ottoman Empire 1830-1913, PhD Thesis University of California, Berkeley, Data Appendix, 1978. S.Pamuk, 19. Yüzyılda Osmanlı Dış Ticareti (Ottoman Foreign Trade in the 19th Century) DIE Tarihi İstatistikler Dizisi Ankara Cilt 1, 2003, pp.25. If there is a difference between the values, Pamuk, 2003 is preferred. All values are in millions of sterling pound.

[78] 17th Report of Corporation of Foreign Bondholders, London, 1890.

Chart 9

The Ottoman budget deficit or surplus in millions of pounds (1860-1914)



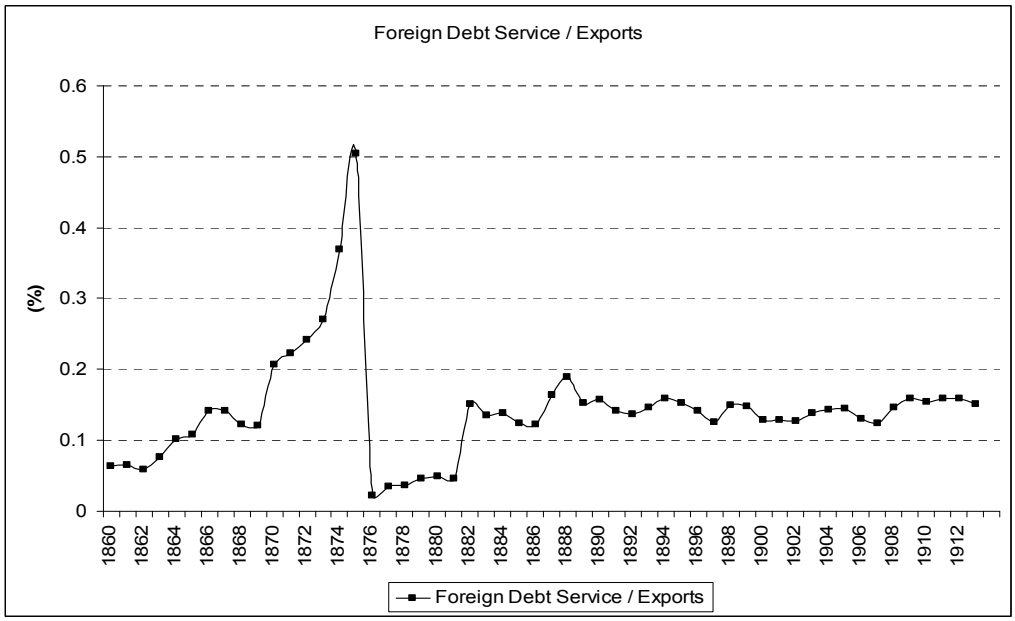
Source: Elaborated from Tevfik Güran, Osmanlı Mali İstatistikleri Bütçeler 1841-1918 (Ottoman Financial Statistics – Budgets), DIE Tarihi İstatistikler Dizisi Ankara Cilt 7, 2003, pp.8-9.

As far as the foreign investors of the nineteenth century concern, an interesting indicator to analyse would be the ratio of debt service to exports as a capacity of country to make sustainable interest payments for its outstanding amount of debt. This ratio can be used as a measure of sustainability because an increasing debt-to-exports ratio over time would imply that total debt was growing faster than the economy's basic source of external income, indicating that the country might have problems meeting its debt obligations in the future. Chart 10 shows the foreign debt service as a share of exports for the Ottoman Empire from 1860 to 1914. As it can be seen, in 1876 this ratio declined significantly due to the suspension of interest payments, and it reached a stable value after the foundation of the OPDA. As compared with other peripheries from 1880 to 1914 the ratio for the Ottoman Empire was relatively in a better situation (See Chart 11). It may be true that the fiscal strength of the country, in the sense the its capacity to make sustainable interest payments might have effected the investors decisions and the cost of borrowing. However, our point is that for the Ottoman case, this capacity was determined by the existence of the OPDA. A close look at the contemporary sources reveals that investors were informed on the activities of the OPDA. The yearly reports were presenting in detail the net amount collected from revenue sources which were assigned to the administration of the OPDA. By introducing new technologies, and making legislative and administrative changes, the revenues from the indirect contributions (salt monopoly, silk tithe, stamps, spirit and fishery taxes) continuously increased. And these revenues were assigned to payment of the defaulted bonds.[79]

[79] Annual Reports of Corporation of Foreign Bondholders, London (1881-1913).

Chart 10

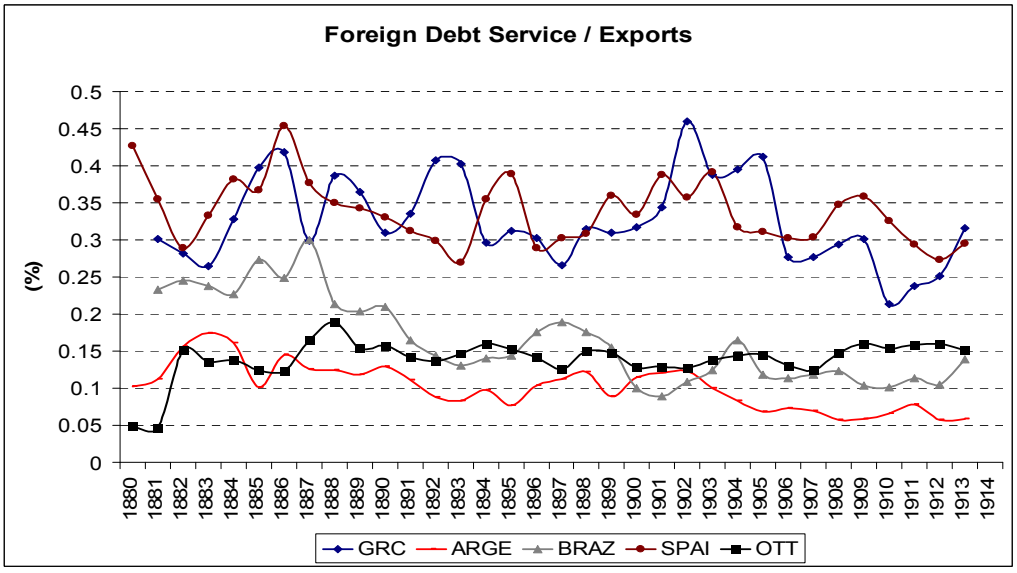
Foreign debt service to exports ratio: The Ottoman Empire (1860-1914)



Source: Calculated from Pamuk, 1978; Pamuk, 2003.

Chart 11

Foreign debt service to exports ratio: Peripheries (1880-1914)



Source: Flandreau and Zumer (2004), Pamuk, 1978; Pamuk, 2003.

6. Conclusion

If one follows the arguments of conventional literature, the Ottoman Empire did successfully switch to the gold standard, and the monetary authority did sustain the convertibility of its gold-backed banknotes from 1880 onwards. However, as it was aimed in the above presentation, a close look to the monetary activities and regulations of the period reveals the "limping" or peculiar aspects of the functioning of this monetary standard in the Ottoman Empire. First of all, unlike a core country, the Ottoman Empire did not have sufficient resources to redeem the silver coinage in circulation. The silver coins were in the centre of the domestic transactions, therefore the state continued to accept unlimited amounts of silver in its operations, and the gold was at the centre of the international dealings. Given the depreciation of the silver in the international markets, the government and the monetary authority also had to deal with speculative activities of arbitrage in order to protect its gold reserves. In this regard, the efforts of the Porte and the IOB were enough to sustain the stability of the exchange rates between Ottoman currency and other gold standard countries' currencies only in Istanbul. However in the provinces of the Empire, the territorial exchange rates and zones continued to prevail throughout the period in line with the specific conditions of each province. Therefore, "the emerging system was a compromise between the preferences of European interests and the realities of a low-income, agrarian country".[80]

If we add another dimension to this picture by focusing on the sovereign borrowing process and international financial control as the sole source of gold for the Ottoman Empire, we might also reach the conclusion that the existence of the gold standard in the Ottoman Empire did not strongly effect its ability to access the international financial markets. The limping gold standard of the Empire did not rely on paper currency but a particular combination of gold, silver and foreign coins. The most of the state revenues were based on silver coins, which intrinsically lost its value throughout the late nineteenth century. As regards the other fundamental source of gold, the trade surplus of the country was not enough to finance the needs of the state. Therefore the chances of the state to have gold heavily depended on its ability to gain access to the international financial markets. In this context it is necessary to take into account some other factors than the conventionally used economic fundamentals or the existence of gold standard. As far as the Ottoman Empire concerned, an essential turning point in the cost of borrowing was the foundation of the Ottoman Public Debt Administration which took over the state revenues in the name of creditors' rights. By focusing on the Ottoman case, we tried to show the importance of international financial control organisations for peripheral countries during the classical gold standard era. However, to understand the differences in the way they functioned in each peripheral country, and to analyse the interactions of these organisations with the existing local institutional framework a comparative research will be needed.

[80] Pamuk, 2000, pp. 217.

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