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The Origins of Central Banking in Greece

by

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DECLARATION

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ABSTRACT

The establishment of a fully fledged central bank in Greece between May 1927 and May 1928 was a prerequisite for the country's stabilisation programme prepared by the Financial Committee of the League of Nations.

Prior to 1928, the National Bank of Greece had acted as a central bank whilst at the same time being by far the biggest and most powerful commercial bank in the country. Under pressure from the League, its governors faced the challenge of transforming it into a fully fledged central bank by shedding all business that was in the province of deposit and commercial banking. They chose instead for the Bank to retain its commercial activities and instead a new fully fledged central bank was established.

This thesis explores both the central banking and commercial aspects of the National Bank from the enactment of the Law of Control in 1898 until *de jure* stabilisation in 1928. It addresses the following questions: why was the National Bank not in a position to transform itself into a fully fledged central bank on its own initiative following a path similar to that described by the natural evolution hypothesis? Why were the commercial activities of the National Bank so important that in the end it chose to retain that aspect of its business when prior to 1927 it had so fiercely guarded its central banking privileges?

It is argued that it was the way in which the governors of the National Bank combined central banking responsibilities with commercial banking that safeguarded and preserved the financial strength and consequently the reputation of the Bank throughout its entire history as a bank of issue.

The financial position of the dual-purpose Bank was also protected by the conservative and risk-averse way in which it pursued its commercial activities. The National Bank's financial strength was based on its market power and its ability to select high quality assets and liabilities which resulted in its enduring profitability and solvency. The quality of its assets and liabilities was more important for its governors than maximisation of profits *per se*.

The way that central banking reforms were implemented is also studied. The objectives and functions of the new central bank are evaluated as well as its financial position when it first opened its doors for business. It is maintained that the statutes of the Bank of Greece were at the heart of the central banking principles promoted by the Bank of England and were focused on the macro function of a central bank and on its role as the bank of the government.

This thesis also sheds light on the complex relationship that arose between Greek governments and foreign supervisors between the enactment of the Law of Control in 1898 and stabilisation in 1928. Furthermore, it asks questions about the conditionality attached to bailout loans in the late nineteenth century and in the 1920s. The impact that international financial intervention had on monetary reforms is clearly demonstrated. It is argued that monetary developments in Greece between 1898 and 1928 reflect the political economy of the time as well as the historical circumstances. Monetary reforms were shaped by the objectives of the National Bank and the constraints under which it operated rather than foreign control. These findings provide valuable insights into why Greek governments have unsuccessfully struggled to implement widespread structural reforms demanded by their lenders since 2010 and as a consequence the country has experienced a deep and protracted economic recession.

Στην οικογένεια μου

For my family

Η Ιθάκη σ’ έδωσε τ’ ωραίο ταξείδι.
Χωρίς αυτήν δεν θάβγαινες στον δρόμο.

Κι αν πτωχική την βρεις, η Ιθάκη δεν σε γέλασε.
Έτσι σοφός που έγινες, με τόση πείρα,
ήδη θα το κατάλαβες η Ιθάκες τι σημαίνουν.

Κ. Π. Καβάφης

Ithaca gave you the marvellous journey.
Without her you would have not set out.

And if you find her poor, Ithaca won’t have fooled you.
Wise as you will have become, so full of experience,
you’ll have understood by then what these Ithacas mean.

C. P. Cavafy

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LIST OF ABBREVIATIONS

BoE	Bank of England
HABOG_A3	Historical Archives of the Bank of Greece – Emmanuel Tsouderos Archive
IFC	International Financial Commission
L.D.	Legislative Decree
LMU	Latin Monetary Union
NBGHA	National Bank of Greece Historical Archive
NDBs	National Defence Bonds
RSC	Refugee Settlement Commission
The Law or the 1910 Law or the Valaorites Law	The ΓΧΜΒ Law
The New Bank	The Bank of Greece
The Old Bank or the Bank	The National Bank of Greece

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[1] Guardian, ‘Haruki Murakami cautions against excluding outsiders’, 1 November 2016.

‘*The Extracts*’ of the Council of the Corporation of Foreign Bondholders, which were used for the first time ever in academic research in Christodoulaki (2004) and have enriched parts of this work. My friends in Greece and the rest of the world provided peerless companionship and were an important source of courage and support during the ups and downs of this journey.

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INTRODUCTION

The establishment of a fully fledged central bank in Greece between May 1927 and May 1928 was a prerequisite of the country's stabilisation programme prepared by the Financial Committee of the League of Nations.

The Greek authorities resorted to the League of Nations for a second time, in the spring of 1927 in order to obtain an international loan under its auspices to stabilise the drachma and to continue work with refugees. The reconstruction scheme prepared by the Financial Committee was a typical League stabilisation plan, comprising institutional reforms focused mainly on the central banking system and the flotation of an international loan. In the Greek example, however, there was a domestic variation on the League's norms in that reorganisation of the issuing bank in Greece as recommended by the Financial Committee led to the establishment of a fully fledged central bank *de novo* which opened its doors for business on Monday, 14 May 1928, two days after the drachma had been *de jure* stabilised.

Prior to that date, the National Bank of Greece, a joint stock bank founded in 1841, had acted as a central bank whilst at the same time being by far the biggest and most powerful commercial bank in the country. In April 1927, League representatives visited Athens to investigate economic conditions in the country. The multifaceted character of the National Bank attracted severe criticism from the League officials, its activities as a commercial bank deemed to be in stark contrast to those of an orthodox central bank. Furthermore, the National Bank, being the country's central bank, was considered to be too close to the government. The following June, the Greek government officially requested the assistance of the League of Nations to obtain an international loan under its auspices. The Financial Committee asked as a prerequisite for the National Bank to be reformed so as to bring it into closer conformity with modern central banking practice by shedding all business that would normally be the province of deposit and commercial banking. Strong opposition was expressed by the governor of the National Bank who was prepared to espouse only marginal reforms of the business that the Bank pursued. The negotiations were about to reach a stalemate in late June 1927 when the deputy governor of the National Bank suggested an alternative solution which at the time appeared innovative: the National Bank would continue its commercial functions and instead it would transfer to a new bank its privilege of note issue and those of its other activities that would normally be carried on by a central bank. This proposition led to the establishment of a fully fledged central bank in Greece, the Bank of Greece.

This thesis explores the 'dual position'[2], i.e. both the central banking and commercial aspects of the National Bank from the enactment of the Law of Control in 1898 until *de jure* stabilisation in 1928. It addresses the following questions: why was the National Bank not in a position to transform itself into a fully fledged central bank on its own initiative following a path similar to that described by the natural evolution hypothesis? Why were the commercial activities of the National Bank so important that in the end it chose to retain that aspect of its business when prior to 1927 it had so fiercely guarded its issuing privilege?

The relationship between the National Bank and the government is scrutinised. The way that the government financed wars and reconstruction is also examined. The aim is to evaluate the way that public finance between 1912 and 1927 affected the financial position of the Old Bank. This naturally leads to the question of the kind of stabilisation programme that the governors of the National Bank favoured and how they envisaged it affecting its position. What did the National Bank try to achieve with stabilisation? How did its governor envisage that stabilisation would affect the status of the Bank? The National Bank pursued the implementation of a stabilisation plan accompanied by an international loan in order to liquidate part of the government debt tied to its assets. This would improve the financial position of the National Bank and enable it to expand its commercial business and take advantage of the new opportunities that a stable drachma and capital inflows would create.

The way that central banking reforms were implemented is studied. The objectives and the functions of the new central bank are evaluated as well as its financial position when it first opened its doors for business. Public debt held by the Old Bank even after having lost its central banking functions is also examined.

This thesis also sheds light on the complex relationship that arose between Greek governments and foreign supervisors between the enactment of the Law of Control in 1898 and stabilisation in 1928. Sovereign risk time series have been constructed to establish the background of the negotiating power of the Greek government on the international financial markets during the period in question. Furthermore, this thesis asks questions about government access to capital markets with assistance and support during the first era of globalisation and under the auspices of the League of Nations in the 1920s. It also examines the conditionality attached to this kind of borrowing operation.

[2] Clapham (1944, p. 372).

Chapter 1 discusses the historiography on central banking and looks at the different theories that have been developed to explain the evolution as well as the spread of the institution up to the advent of the Great Depression. Special attention is paid to the role that the Bank of England and the League of Nations played in promoting central banking orthodoxy in the 1920s. **Chapter 2** discusses Greek historiography on the establishment of the central bank in Greece and sets the objectives of this thesis. It also presents the sources employed. **Chapters 3** and **4** focus on the predecessor of the Bank of Greece, the National Bank, and explore its 'dual position' as a central bank and at the same time the most important commercial bank in the country. The monetary arrangement of March 1910 that has prompted contemporary economists and economic historians to claim that Greece adopted either the gold standard or the gold exchange standard during that month is studied in Chapter 4. The evolution of public debt and the sources of government borrowing from the outbreak of the First World War until *de jure* stabilisation of the drachma are examined in **Chapter 5**. **Chapter 6** analyses the different plans proposed for the stabilisation of the drachma and the League reconstruction scheme is scrutinised. This chapter also examines the making of the Stabilisation Loan. Finally, the parallels and contrasts between the Law of Control of 1898 and the League Stabilisation Plan of 1928 are explored. **Chapter 7** looks at the institutional arrangements surrounding the establishment of the Bank of Greece. Its aims and functions are presented along with its endowment. Chapter 7 is followed by the overall conclusions of this research.

PART I:

PRELIMINARIES

CHAPTER 1:

CENTRAL BANKING IN HISTORICAL PERSPECTIVE

1.1. Some thoughts on the evolution of central banking

1.1.1. Origins and evolution of central banking

Walter Bagehot, writing in the nineteenth century, and Vera Smith, in the mid-1930s, despite being supporters of free banking, argued in favour of central banking in their influential books.[3] Today nearly all independent countries have established a central bank whilst the influence and the scope of the alternative to central banking, that is to say free banking, has remained purely academic.

The origins of central banking are usually traced to the second half of the nineteenth century, with the Bank Charter Act of 1844 being a watershed. The monetary debate in London that followed the enactment of Peel's Act, mainly prompted by Bagehot, led to the evolution of central banking as it is known today.[4] Some scholars have maintained that central banking emerged earlier during the Suspension period between 1797 and 1821 when the Bullionist debate took place.[5] Both approaches, however, suggest that the 'home of central

[3] Bagehot ([1873] 1999); Smith (1936).
[4] See, for example, Harvey (1927, p. 10); Goodhart (1988); Capie *et al*. (1994); Capie (2002).
[5] Flandreau (2008); Bordo (2008, p. 245).

banking' is England.[6] In addition, they show that the evolution of the Bank of England from being a dual-purpose bank – that is to say, a bank that combined central banking responsibilities with commercial activities – to being a non-competitive, non-profit-maximising banking organisation which focused primarily on public duties provides the historical archetype for the development of a central bank. In fact, the dominant view of the evolution of central banking has been based on the history of the Bank of England.

Recent research, however, attempts to challenge the 'British orthodoxy' and traces the origins of modern central banks to the early seventeenth century. It focuses on the history of public deposit banks – giro banks – such as the Bank of Amsterdam and the Bank of Hamburg and argues that these banks functioned as early precursors of modern central banks since they managed to maintain a sound currency.[7] Stephen Quinn and William Roberds (2005) go as far as to claim that the Bank of Amsterdam was the 'first true central bank'.

There is a consensus in the literature on central banking, on the reasons that led to the establishment of early central banks. Early central banks were founded for political reasons connected with the exigencies of state finance.[8] Their emergence stemmed from the need of 'revenue seeking or power-hungry governments'[9] to 'finance on beneficial, subsidised terms'[10] public expenditure, especially during periods of political turmoil and war. These early central banks possibly had a monopoly in note issuing and served as the bank of the government. In addition, they pursued commercial activities and enjoyed privileges endorsed by legislation in return for financial assistance to the government.

Some nineteenth century central banks were established to unify a chaotic system of note issue.[11] These central banks were also expected to manage and protect the metallic reserves of the country in question and also to facilitate and improve the payment system. These latter functions were seen as having widespread beneficial economic consequences. The ability, however, to share in the profits of seigniorage and the greater centralised control over the gold reserves had obvious political attractions.[12]

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[6] Harvey (1927, p. 10).
[7] Quinn and Roberds (2005); Schnabel and Hyun Song Shin (2006); Quinn and Roberds (2007); Ugolini (2011). For a brief history of these early public banks, see Roberds and Velde (2014).
[8] Smith (1936, p. 167).
[9] Bordo and Redish (1987, p. 405).
[10] Goodhart (1988, p. 19).
[11] For example, see the reasons that led to the establishment of the Bank of Italy, the Bank of Japan and the Reichsbank in Goodhart (1988, pp. 105–160); Capie *et al.* (1994, pp. 154–172).
[12] Goodhart (1988, p. 4); See Bordo and Schwartz (2003) for a summary of Goodhart's views on the evolution of central banking.

Michael Bordo and Angela Redish (1987) examine the possibility that the Bank of Canada, founded in 1935, was established as an anchor in the absence of a gold standard whilst scholars who have examined the establishment of central banks after the end of the Second World War have argued that by then, it had become accepted that any self-respecting independent country should have its own central bank.[13] In the newly established countries, especially those countries which were previously colonies and became independent after the Second World War, to have a central bank was synonymous with political and economic independence.[14] As they achieved political independence, one of their first major acts was typically to create a central bank. For the first time, these countries achieved both the political sovereignty and the institutional arrangements that would enable them to implement independent monetary policies.[15]

There has been a debate over whether the evolution of central banking relied entirely on market forces or required deliberate state action.[16] This debate is focused primarily on the role of a central bank as the bank of the banks. Proponents of the free banking school argue, usually emphatically, that it was in the monopoly of note issue and other government privileges that led early central banks to assume responsibility for the stability of the financial sector. For example, Smith (1936, p. 168) argued that '[i]t was out of monopolies in the note issue that were derived the secondary functions and characteristics of our modern central banks'.[17] She identified as 'secondary functions' of a central bank its role as a bankers' bank and the power to exercise control over the credit market – a form of monetary policy. Therefore, according to Smith the monopoly in note issuing – a government granted privilege – is the essential attribute that defines a central bank and not any of the 'secondary functions'. In this case then, the emergence of a central bank is a product of 'government sponsorship'.[18]

In 1873 Bagehot stated that the government-granted privileges of the Bank of England played a crucial part in its gaining the deposits of other banks.[19] He concluded that

> with so many advantages over all competitors, it is quite natural that the Bank of England should have far outstripped them all. Inevitably, it became the bank in London: all the other bankers grouped themselves round it, and lodged their [gold] reserve with it. Thus, [the] *one*-reserve system was not deliberately founded upon definite reasons; it was the

[13] Capie *et al.* (1994, p. 37).
[14] For example, see Schenk (1993, 1997).
[15] Chandler (1962, p. 3).
[16] White (1999, p. 70).
[17] See also ibid., p. 73.
[18] Ibid., p. 70.
[19] Bagehot ([1873] 1999, pp. 92–100).

> gradual consequence of many singular events, and of an accumulation of legal privileges on a single bank which has not been altered and which no one would now defend.[20]

More recently Charles Goodhart (1988), drawing on the historical experiences of several nations, demonstrated that early central banks gained their role as a bank of the banks in the way Bagehot described. Goodhart argued that

> [o]nce such Central Banks had been established, however, their central position within the system, their 'political' power as the government's bank, their command (usually) over the bulk of the nation's metallic reserve, and, most important, their ability to provide extra cash, notes by rediscounting made them become the bankers' bank: commercial banks would not only hold a large proportion of their own (cash) reserves as balances with the Central Bank, but also rely on it to provide extra liquidity when in difficulties.[21]

Hence, according to Goodhart, market forces are responsible for the evolution of central banks as banks of the banks, and for assuming responsibility for the stability of the financial sector. He further added that 'in most cases of central banks founded in the nineteenth century, the full ramifications of their role as bankers' bank were only dimly perceived at the time of their founding; these functions developed naturally from the context of relationships within the system'.[22]

Goodhart's views on the evolution of central banking are known as the natural evolution hypothesis. In a nutshell, it is argued that central banking as it is known today emerged when private, profit-making commercial banks which also enjoyed government sponsored privileges evolved into non-profit, non-competitive public institutions whose main concern was the stability of the financial sector. The conflict between the public responsibilities of a dual-purpose bank and concerns over satisfying shareholders made the transition from a competitive, profit-maximising bank to a modern central bank lengthy and painful.[23] Thus, the defining characteristic of a central bank according to the natural evolution hypothesis is the function of the lender of last resort.[24] Monetary policy played a minor role in this evolution.[25] It is beyond doubt that acceptance of the microeconomic responsibility for the stability of the financial sector was a defining attribute in the evolution of central banking as it is known today. However, as Marc Flandreau (2008, p. 213, n. 2) remarks, Goodhart's account relied heavily on case studies prepared for the US Congress National Commission of 1908, which had an explicit mandate to examine whether a central bank was able to reduce the occurrence and severity of financial crises.

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[20] Ibid., p. 100.
[21] Goodhart (1988, p. 5).
[22] Ibid.
[23] Bordo and Redish (1987, p. 406); Goodhart (1988).
[24] Goodhart (1987, 1988); Capie *et al*. (1994, pp. 5–6).
[25] Goodhart (1988, pp. 5–6); Flandreau (2008, p. 212).

Central banking as it is recognised today is the product of a slow process, trial and perhaps historical accident. From the establishment of the Riksbank which is often regarded as the oldest surviving central bank, to the outbreak of the Great War is a long period of consolidation for the institution. By the turn of the twentieth century, central banking, either by market forces as Goodhart argues or according to Smith by government intervention, had developed its main characteristics and functions. Central banks were regarded as having a monopoly – either partial or complete – in note issuing, and as being banks of the government as well as banks of the banks. By that time ideally, central banking institutions had shed commercial activities and shareholders' interests were subordinate to their public duties. Otherwise, they 'were thought of as historical oddities to be brought into line, sooner or later, with the English mode'.[26]

1.1.2. Spread of central banking institutions

Table 1.1: Number of central banks, 1900–1990

	No. of central banks	**No. of new central banks established**
1900	18	
1910	20	2
1920	23	3
1930	35	12
1940	42	7
1950	59	17
1960	80	21
1970	108	28
1980	137	29
1990	161	24

Sources: Pringle (1994, pp. xi–xii); Capie *et al.* (1994, p. 6).

Table 1.1 above shows the number of central banks in existence at the end of each decade of the twentieth century. The Morgan Stanley Central Bank Directory (1994) provided the data used to compile this table. Table 1.1 shows that there were 18 central banks by the turn of the twentieth century, though they were by no means homogenous. This table also demonstrates that the number of central banks being established increased rapidly decade by decade,

[26] Sayers (1976a, p. 2).

particularly after the Second World War. Today, almost all independent countries have a central bank.

Capie *et al.* (1994, pp. 5–6) provided a detailed chronology of the evolution of the fully fledged model of the institution such as had been adopted by 14 of the 18 banking organisations that Table 1.1 indicates had operated as central banks by the end of the nineteenth century. With the exception of the Bank of Japan, each of them was a European bank that had evolved into a fully fledged central bank as the term is understood today. Capie *et al.* (1994, p. 5) used a functional definition to identify a banking organisation as being a central bank. They recognised a banking organisation as a central bank if it had a note issuing monopoly, was the bank of the government and had assumed the role of the lender of last resort.[27]

A common characteristic of these 18 banking institutions that are thought of as having been central banks since the nineteenth century is that they still survive today. With the exception of the Sveriges Riksbank, these were privately owned banks engaged in commercial activities whilst at the same time enjoying public privileges; they had a note issuing monopoly and had been the bank of the government since their foundation. In addition, the development of all these banks into central banks in the modern sense of the term complied with one of Goodhart's laws: their public responsibilities were eclipsing their commercial activities by the end of the nineteenth century. That is to say, their metamorphosis from banks of issue into fully fledged central banks followed a path described by the natural evolution hypothesis. By contrast, all organisations that operate as central banks now and which were established after the turn of the twentieth century began life as fully fledged central banks which had a mandate to be the sole bank of issue, the bank of the government and possibly to be responsible for the stability of the banking sector. This demonstrates that the development of central banking in most countries differed from that described by the natural evolution hypothesis. Nearly all the central banks that operate today were established from the beginning as central banks and were endowed with the latest central banking principles, powers and techniques, which were frequently in contrast with central banking practices in the country in question.

By the turn of the twentieth century, however, there were other banking organisations not recognised in Table 1.1 which, although they had central banking responsibilities, failed to evolve into the fully blown version of the institution as it became known after the mid-

[27] See Ugolini (2011, pp. 2–8) for a presentation of the functional and institutional approaches to central banking.

twentieth century. In some cases, these organisations were not encouraged either by market forces or further government intervention to evolve into central banks in the modern sense of the term, whilst in others historical circumstances did not permit their survival.

One of the early central banks that did not develop into the fully fledged mode of the institution was the National Bank of Greece, which was established in 1842. In 1927, it was regarded as 'one of the oldest banks of issue',[28] and if it had continued to pursue central banking activities from then on, then the origins of central banking in Greece would be traceable back to the mid-nineteenth century. This would have been possible if in the first instance the National Bank had confined its activities to central banking responsibilities and had shed the commercial business that was not compatible with orthodox central banking as defined by the Financial Committee of the League of Nations in June 1927. The National Bank chose to retain its commercial aspect, however, and so instead a new central bank, the Bank of Greece, was established. Continuity in central banking in Greece from the mid-nineteenth century until today might yet have been maintained if in 1928, the newly established central bank had taken over the name of the Old Bank becoming the 'National Bank of Greece' as a member of the League committee responsible for the reform had recommended privately. This was never officially proposed, however, as the governors of the Old Bank of issue in Greece would never have consented.[29]

Table 1.1 therefore demonstrates firstly the number of early central banks that had evolved into the fully fledged model of the institution by 1900 following a path described by the natural evolution hypothesis, and secondly that once the idea of central banking had been consolidated then the norm became the establishment of central banks *de novo*. A question occurs, however: why did so many countries establish a central bank *de novo* even though there was already in place some kind of monetary authority that was pursuing central banking functions? It is, therefore, important to look at the reasons that prevented early central banks from developing into fully fledged models of the institution. In this way, further light will be shed on the evolution of central banking as well as the way in which the institution spread. This thesis aspires to provide insights into the matter in question by examining the evolution of central banking in Greece between the enactment of the Law of Control in 1898 and the establishment of the Bank of Greece in 1928.

[28] Historical Archives of the Bank of Greece – Emmanuel Tsouderos Archive [hereafter HABOG_A3], S1Y1F4T1, p. 2.
[29] Bank of England, [hereafter BoE], Archive 0V9/190/93.

1.1.3. In search of a definition of central banking

The natural evolution hypothesis provides a convincing explanation of the development of central banking as it is known today. However, it neither explains why the British 'orthodoxy' became the dominant dogma and was adopted by the rest of the world nor sheds any light on the way in which it spread.

A question asked in the literature is 'what makes an institution a central bank'.[30] This question becomes even more pertinent when it is related to historical research on central banking. Capie *et al*. (1994, p. 5) remark that to define 'central banking is problematic'. Whilst Lawrence White (1999, p. 71) notes that there is a 'surprising lack of consensus on the question' and states that economists identify central banking with at least five major roles, adding that it is not necessary for a central bank to have adopted all these roles – it suffices 'to play one or more of these roles without playing all five'. These five roles are as follows: serving as a bankers' bank, having a monopoly of note issue, acting as a lender of last resort, regulating commercial banks and conducting monetary policy.[31] Goodhart (1988, pp. 5–7) identifies an institution as a central bank if it is responsible for monetary policy which is a macroeconomic function, is the bank of the banks, acts as a lender of last resort and is possibly responsible for banking supervision. The latter are all microeconomic functions. The European Central Bank also provides an answer to the question of what a central bank is. On its website it is stated that a 'central bank is a public institution that manages the currency of a country or group of countries and controls the money supply – literally, the amount of money in circulation'.[32] A Goodhart assumption is implied in all these definitions of central banking; a central bank is a non-profit-maximising institution which is not involved in general commercial banking.

Smith (1936) proposed a definition of central banking which is echoed in the definition proposed by the European Central Bank without, however, assuming that a central bank is not involved in commercial activities. In her book published in the mid-1930s, she suggested that

> [t]he primary definition of central banking is a banking system in which a single bank has either a complete or a residuary monopoly in the note issue. A residuary monopoly denotes a case where there are a number of note issuers, but all of these except one are working under narrow limitations, and this one authority is responsible for the bulk of the circulation, and is the sole bank possessing that measure of elasticity in its note issue

[30] White (1999, p. 71). See also Capie *et al.* (1994, p. 5); Capie (2009, p. 19).
[31] White (1999, p. 71).
[32] https://www.ecb.europa.eu/explainers/tell-me/html/what-is-a-central-bank.en.html (accessed on 28 July 2016).

> which gives it the power to exercise control over the total amount of currency and credit available.[33]

The question that arises in this thesis is whether the National Bank was a central bank during the period that it enjoyed the issuing privilege. The National Bank was a dual-purpose bank which combined the public responsibilities of a central bank with commercial activities. Thus, if a definition of central banking based on the evolutionary hypothesis is adopted, then the National Bank does not qualify as a central bank. The National Bank, however, had either a residuary or a complete monopoly in note issuing, was the bank of the government and to a limited extent the bank of the banks. Furthermore, it had the financial strength and capacity to act as a lender of last resort during a period of crisis. What distinguishes the Old Bank of issue in Greece from its European counterparts is that it did not develop into a fully fledged central bank as would be recognised today. In this thesis, the National Bank is considered to be a central bank which nevertheless failed to adopt the British orthodoxy in central banking, and the aim is to examine the forces that shaped the evolution of central banking in Greece, a small open economy on the European periphery which had a stable banking system.

1.2. Central banking in the 1920s, the Bank of England and the League of Nations

1.2.1. Introduction

According to R. S. Sayers (1957, p. 21) '[t]he interwar period can perhaps be called the heyday of central banking. It was certainly the period in which central banking was most widely talked about'. Central banking was at the heart of discussions that took place in Brussels in 1920 and nearly two years later at the Genoa conference. Furthermore, central banking reforms were at the core of all reconstruction schemes prepared by the League of Nations in the 1920s. These reconstruction programmes aimed at restoring the pre-war *status quo* in international financial and monetary relations and echoed the resolutions adopted at the Brussels and Genoa conferences.

Both at Brussels and Genoa, resolutions were passed, recommending the establishment of central banks where they did not exist. They also called for central banks to be insulated from political interference.[34] The resolutions passed at both international

[33] Smith (1936, p. 168).

[34] For more on the Brussels and Genoa conferences see, for example: Archives of the League of Nations, BOX S123, File No. 6: Monetary Policy, Currency Questions, Genoa Conference Resolutions, January 1925; Federal Reserve (1922); Hawtrey (1926, pp.122–129); League of Nations (1945, pp. 10–13); Clarke (1967, pp. 34–36); Sayers (1976a, pp. 153–163); Flink (1993); Moure (2002, pp. 52–56).

financial conferences reflected the ambition of monetary authorities to overcome political divisions and problems in the international political arena, a legacy of the war, in order to design the institutional basis for the restoration of the international gold standard to its pre-war status. They also aimed at strengthening the cooperation among central bankers. At Genoa it was also proposed that the Bank of England would convene a meeting of central bankers to consider how to give effect to the recommendations adopted by the conference.[35] The primary objective of this meeting would be to develop 'the practice of continuous co-operation among Central Banks of issue, or banks regulating credit policy in the several countries'.[36]

The resolutions passed at Genoa echoed the principles of central banking that the then governor of the Bank of England, Montagu Norman, promoted (more on this later). R. G. Hawtrey, who worked at the time for the Treasury, is generally regarded as responsible for framing the resolutions of the Genoa conference on monetary policy and central banking.[37]

Any discussion of central banking during the 1920s is dominated by reference to personalities who represented certain ideas and policies that dominated before the outbreak of the First World War. These international figures who remained national central bankers attempted to establish the pre-war *status quo*.[38] Indeed, their aim was to set out the prerequisites and conditions that made the world economy function smoothly during the first era of globalisation.

1.2.2. Central banking in the 1920s and the Bank of England

Considerations of developments in central banking led the governor of the Bank of England, Montagu Norman, to draft a paper on 'Central Banks' early in 1921. He referred to it as 'Epitome' and it is presented in Table 1.2 below. This paper on the nature of central banking went through several versions and expanded as a result of Norman's correspondence with other central bankers and Henry Strakosch who was considered by Norman to be 'the best authority on the subject [of] the principles which should govern the policy of central banks in any country'.[39] He had been responsible for the founding of the South African Reserve Bank and also served as a member of the Financial Committee of the League of Nations from 1920

[35] See Federal Reserve Bulletin (1922, pp. 678–679), resolutions 3 and 12; for more on the meeting, see Cottrell (1997).
[36] Hawtrey (1926, p. 123).
[37] Sayers (1976a, p. 156); Eichengreen (1995, p. 72).
[38] Clarke (1967, p. 29.)
[39] Cottrell (1997, p. 29). See also Cottrell (1997, pp. 32–34).

until 1937. Furthermore, as a member of the League, he was involved in the preparation of the statutes of the Bank of Greece.

Table 1.2: Montagu Norman's 'Epitome' of central banking

CENTRAL BANKS
A Central Bank should not compete with other Banks for general business. A Central Bank should not take monies at interest on its own account nor accept Bills of Exchange. A Central Bank should have no Branch outside its own country. A Central Bank should not engage in a general Exchange business on its own account with any other country. A Central Bank should be independent but should do all its own Government's business – directly or indirectly – including gold and Currency. A Central Bank should be the Banker of all other Banks in its own country and should assist them to develop its business and economic resources. A Central Bank should protect its own Traders from the rapacity of other banks in its own country. [*] A Central Bank should act as the settling agent for Clearing House balances arising between the Banks of its own country, and to the widest extent practicable. [*] A Central Bank should handle domestic collections for its members and so regulate the domestic exchanges. [*] A Central Bank should have power to examine Banks which come to the Central Bank for credits and assistance. A Central Bank may have an Agency in another country. That Agency should either be in its own name or should be the Central Bank of the other country: in the former case it should do all its Banking and all Kindred business with the Central Bank of the other country. And should co-operate in practice and principle with the Central Bank of the other country. And should receive the most favoured treatment and information from the Central Bank of the other country. And should do the Banking and kindred business of its Principal's Government in the other country. March 1921

Note: Points marked by an asterisk (*) were added by Benjamin Strong to Norman's original compilation of January 1921.

Sources: Sayers (1976b, pp. 74–75); De Cecco (1994, pp. 4–5; 1997, p. 79); Cottrell (1997, p. 63).

All the characteristics, primary functions and responsibilities of central banking as it had evolved by the 1920s are listed in Montagu Norman's 'Epitome'. The governor of the New York Federal Reserve Bank, Benjamin Strong, added the three points marked with an asterisk. Norman did not refer to the note issuing monopoly of a central bank as he perhaps took it for granted. The micro functions of a central bank, that is to say its responsibilities as bank of the banks and bank of the government, are very well defined. In his 'Epitome', Norman clearly envisages a central bank as a bank of the banks and as a bank of the government. He stressed that although a central bank should be responsible for its own government's business directly or indirectly, the central bank should be independent from government interference. He put considerable effort into defining the relationship of a central bank with its counterparts abroad, so as to encourage central bank cooperation. Norman also aimed at promoting exclusive business relations among central banks.

The Comptroller of the Bank of England, Ernest Harvey, was sent to Australia in 1927 to publicise the Bank of England's ideas on central banking.[40] In an address to the Victorian Branch of the Economic Society of Australia, Harvey referred extensively to the most important principles of any sound central banking system. He covered the points that Norman referred to in his 'Epitome', but he also complemented them by stating that the central bank should possess the exclusive note issue right. He emphasised the macroeconomic function of a central bank and its non-competitive and non-profit-maximising character. Harvey too, described a central bank as the bank of other banks in the country and stressed that its assets 'should be of the most liquid character possible'. As he himself acknowledged, if the statutes of central banks established in the 1920s are examined, it will be found that these principles had been incorporated.[41] Table 1.3 below lists the main functions and responsibilities of a central bank according to Ernest Harvey and consequently the Bank of England.

[40] Harvey (1927); Sayers (1976a, pp. 206–207).
[41] Harvey (1927, pp. 12, 13, 21).

Table 1.3: Harvey's 'Functions of a central bank'

THE FUNCTIONS OF CENTRAL BANKS
1) The central bank should possess the exclusive right of note issue. 2) A central bank in its management and policy should be free from government control and the influence of politics. 3) A central bank should be entrusted with the entire banking business of its own government. 4) A central bank should be the banker of the trading banks and should act as a settling agent for clearing differences between such banks. 5) A central bank should not ordinarily compete with the trading banks for general banking business. 6) A central bank should ensure to the public the provision of adequate banking facilities on reasonable terms. 7) A central bank should not take moneys at interest on its own account. 8) A central bank should quote publicly the rate at which it is prepared to discount approved bills, and should publish at regular and frequent intervals a clear statement of its position. 9) The assets of the central bank should be of the most liquid character possible. 10) A central bank should not draw or accept bills payable otherwise than on demand. 11) A central bank should not engage in a general exchange business on its own account for the purpose of earning profits. 12) A central bank should not engage in trade, nor have any interest in any commercial, industrial, or other undertaking. 13) A central bank should have no branch outside its own country, but may have agencies abroad.

Source: Harvey (1927, pp. 16–21).

The main functions and responsibilities of a central bank as they are described in Tables 1.2 and 1.3 were endorsed by the Financial Committee of the League of Nations, and most of them were incorporated in the statutes of the central banks that either were established or reformed with the sponsorship of the League during stabilisation in the 1920s. Central banks were required to operate at arm's length from the government and their assets and liabilities to 'be of the most liquid character possible'. They were also expected to function as non-competitive, non-profit-seeking organisations, whose main mandate was the maintenance of currency stability. In fact, in the 1920s when the charter of a European central bank was revised, even if there had been no radical change in the monetary and banking policy, the privileges and profits which had been originally granted to shareholders were reduced.[42]

[42] Conant (1927, p. vi).

1.2.3. The League of Nations and central banking reforms in the 1920s

Table 1.4 shows the central banks that were established during the interwar period. Twelve new fully fledged central banks were established in the 1920s and seven during the 1930s, in total 19. The Bank of Greece and the Hungarian National Bank are central banks that were founded under the auspices of the League of Nations. Their establishment was a prerequisite for the involvement of the Financial Committee of the League in *de jure* currency stabilisation.

Table 1.4: Central banks established between 1921 and 1940

1921–1930		**1931–1940**	
Bank of Colombia	1922	Central Bank of the Republic of Turkey	1931
Bank of Latvia	1922	Reserve Bank of New Zealand	1933
Bank of Lithuania	1922	Central Reserve Bank of El Salvador	1934
Central Reserve Bank of Peru	1922	Bank of Canada	1935
Hungarian National Bank	1924	Central Bank of Argentina	1935
Bank of Mongolia	1924	Reserve Bank of India	1935
Central Bank of Chile	1925	Central Bank of Venezuela	1940
Bank of Mexico	1925		
Central Bank of Ecuador	1927		
Bank of Greece	1927		
Central Bank of Bolivia	1928		
Central Bank of China (Taiwan)	1928		

Note: After the end of the Great War in 1919, the Estonian central bank (the Bank of Estonia) was established under the aegis of the League of Nations but did not survive after the Soviet invasion in 1940; the South African Reserve Bank was founded in 1920.

Sources: Pringle (1994, p. xii); Capie *et al.* (1994, pp. 182–219).

In the 1920s, the League of Nations intervened in the stabilisation of the currency and carried out reconstruction schemes in six European countries. In each case, the Financial Committee recommended and indeed insisted that the country should reform its banking system. These banking reforms led to the strengthening of the institution of central banking. In addition, throughout the interwar period the Bank of England encouraged the strengthening of central banking not only in what may loosely be called the Dominions but also in other areas where it could exercise its influence. Needless to say, the driving force behind the Financial Committee of the League of Nations was the policy of the Bank of England. At the same time, one American Professor, E. W. Kemmerer of Princeton University headed missions to Latin America and was responsible for setting up central banks in several of the republics there. The charter of a number of central banks that were established during the interwar period, were drafted abroad by experts at the Bank of England or from the USA. These newly established central banks were endowed with the latest central banking principles, powers and techniques which were frequently in contrast with central banking practices in the country in question. A representative example of this is the Bank of Greece, a central bank established under the auspices of the Financial Committee of the League in the late 1920s. Its statutes incorporated an escape clause that allowed the New Bank to act as a lender of last resort in case of crisis. More specifically, the Bank of Greece could suspend full reserve requirements for a specified period of time, of course with some penalty. However, if use of this provision was made during the period that Greece was on the gold exchange standard, would the New Bank have been able to maintain the external value of the drachma? Had the New Bank established the credibility and authority necessary to resort to this provision without at the same time creating further panic in the market? Furthermore, the Bank of Greece received statutory independence in its purest form. In spite of this, a few months after it opened its doors for business it experienced intervention by the prime minister concerning its discount rate policy.[43] This incidence demonstrates that neither *de jure* independence nor the League supervision that the Bank of Greece enjoyed at the time could safeguard its autonomy from practices embedded in the political circles.

Table 1.4 does not convey a full picture of the spread of central banking in the 1920s. All European countries that experienced high inflation or hyperinflation in the 1920s reformed their central banking system before *de jure* currency stabilisation. Central banks were also established which did not survive beyond the Second World War because of territorial changes or the spread of communism. Central banking was reorganised to respect the new boundaries of successor countries to the Austro-Hungarian Empire. The Austro-Hungarian Bank was liquidated, as the treaty of St. Germain-en-Laye ordered in 1919. The Geneva Protocol of October 1922 provided for the establishment of a new bank of issue, and the 're-established' Oesterreichische Nationalbank began to operate on 1 January 1923.[44] The central banks of Germany, France, Belgium and Bulgaria were reformed when their currencies were stabilised.

The reconstruction schemes that the Financial Committee of the League prepared in the 1920s incorporated resolutions of the Brussels and Genoa conferences. In addition, these League stabilisation programmes recalled the international financial control introduced in countries which defaulted during the fourth quarter of the nineteenth century.[45] They were comprised of two parts: firstly, institutional reforms were implemented which created a commitment mechanism that made the stabilisation programme credible, and secondly, an

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[43] For more on this see note 158 in this thesis.
[44] Capie *et al.* (1994, pp. 143–146); Oesterreichische Nationalbank: https://www.oenb.at/en/About-Us/History/1922-1938.html (accessed on 23 May 2015).
[45] For a comparison between the Law of Control enacted in Greece in 1898 and the League stabilisation programme implemented in 1928, see Chapter 6, section 6.7 in this thesis.

international loan under the auspices of the League was floated. The focus of the institutional reforms was the central bank and accounting or auditing offices.[46] A set of guidelines were followed when central banking reforms were implemented, which echoed Montagu Norman's 'Epitome'. (See Table 1.2 above.) These guidelines were: (1) central bank independence; (2) monopoly of note issue; (3) prudence in lending and discounting operations; (4) limits on new advances to the government; (5) centralisation of the monetary transactions of all public sector entities in the central bank; and (6) proper cover and reserve backing for the note issue.[47]

Compulsory balances to be held at the central bank could of course be imposed by law, following the example of the Federal Reserve Act, but European practice went against it, and the measure had to wait a few decades before becoming widespread on the continent. None of the central banking laws of the 1920s mandated compulsory reserve requirements.[48]

Thomas Sargent's (1982) suggestions of sustainable currency stabilisation resonate the principles of the League reconstruction schemes. He argued that the essential measures that ended hyperinflation in continental countries in the 1920s were firstly the creation of an independent central bank 'committed to refuse the government's demand for additional unsecured credit', and secondly a simultaneous alteration in fiscal policy.[49] Sargent, as Steven Webb (1989, p. 74) remarks, developed his views on a successful stabilisation 'by analysing only the final stage of stabilisation'.[50] This remark further recalls the Financial Committee's policy when it was approached by countries experiencing difficulties in accessing the financial markets independently: a prerequisite was that *de facto* currency stabilisation should have been achieved before they officially offered their assistance.

Reforms of banks of issue and the establishment of new central banks were aimed at returning to the pre-war international economic order. Their objective was to facilitate monetary stabilisation and adoption of the gold standard or the gold exchange standard, and subsequently to secure maintenance of the achieved monetary stability. The objectives and functions of central banks were carefully defined in these reforms and special attention was

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46 League of Nations (1945, pp. 19–20); Santaella (1993, pp. 11–12).
47 League of Nations (1945, pp. 19–20); Santaella (1993, pp. 11–12).
48 De Cecco (1994, p. 10).
49 Sargent (1982, p. 89).
50 Dornbusch (1988a, pp. 410–411) also challenged Sargent's thesis by arguing that to institute a central bank or to pass a budget law is not by itself enough to ensure that these institutions will in fact become what they represent on paper, especially when the costs of the implementation of a stabilisation programme become apparent. Dornbusch (1988a) instead, argued that exchange rate and interest rate policies in the transition have traditionally formed the vehicle for establishing that credibility by a *de facto* stabilisation. Then, the improving budget situation may in turn attract capital flows that reinforce the stabilisation.

given to the relationship between the government and central banks in what is now referred to as the independence of a central bank. In this way, international cooperation and capital movements could be promoted. The Great Depression changed the international economic environment and also economic thought. In addition it modified the reasons for the establishment of a central bank.

In sum, although 'the central core and rationale for the existence of a central bank is not necessarily to be found in its macroeconomic role in (discretionary) monetary management'[51] it was on that role that international pressure was mainly focused after the First World War. Under the resolutions adopted at the Genoa Conference in the spring of 1922, central banks were obliged to pursue two objectives: to facilitate currency stability and once this was achieved, to support and maintain monetary stability.[52] The objective of the central banking reforms that were carried out under the supervision of the Financial Committee of the League was to create central banks which would operate at arm's length from governments and in this way be able to enforce monetary discipline. Therefore, central banking reforms in the 1920s were aimed primarily at making central banks statutorily independent of their governments and at restoring monetary policy to the *status quo ante*.

[51] Goodhart (1988, p. 7).
[52] Federal Reserve (1922, pp. 678–680).

CHAPTER 2:

CENTRAL BANKING IN GREECE:
HISTORIOGRAPHY, METHODOLOGY, QUESTIONS AND SOURCES

2.1. Central banking in Greece before the establishment of the Bank of Greece

2.1.1. Central banking and the National Bank

Before the establishment of a fully fledged central bank in Greece in 1928, the National Bank, a joint stock bank established in 1841, carried out the public responsibilities of a central bank whilst at the same time being by far the biggest and most powerful commercial bank in Greece.[53] From its institution in 1841 to 1864 and again from 1920 up to May 1928 the National Bank had a complete monopoly in note issue as it was the only issuing bank in Greece. Between 1864 and 1920 it had a residuary monopoly in note issue as it shared the issuing privilege with the Ionian Bank, the Bank of Epirus-Thessaly and the Bank of Crete.[54] Nevertheless, the National Bank was the most important issuing bank, responsible for the bulk of the banknotes in

[53] Prior to the founding of the National Bank, an attempt to organise a currency and banking system in Greece was made by the first governor of the new country, Count Ioannis Kapodistrias, in 1828. In 1828, upon his arrival in Greece, Kapodistrias introduced the phoenix as the currency of the newborn country and founded the National Financial Bank which survived until 1834. The phoenix was replaced at par by the drachma in 1832 which remained as legal tender in Greece until January 2002 when the euro was introduced. For more information, see Valaorites ([1902] 1988, pp. 1–5); Spiliotopoulos (1949, pp. 10–17); Alogoskoufis and Lazaretou (1997, pp. 39–45); Dritsas (1999, pp. 10–13).

[54] The Ionian Bank had a note issue privilege between 1864 and 1920, the Bank of Epirus-Thessaly between 1882 and 1899 and the Bank of Crete from 1913 to 1920.

circulation during the entire period of its history as an issuing institution. For example in 1914, approximately 95 per cent of the banknotes in circulation were banknotes issued by the National Bank. The origin of the remaining 5 per cent of banknotes in circulation was either the Ionian Bank or the Bank of Crete.[55]

In the nineteenth century the National Bank was characterised by a conservative perspective as well as by a lack of innovative entrepreneurial initiative.[56] It can be compared with other continental 'public banks',[57] which combined unique public responsibilities with commercial activities. The structure of the assets and liabilities of the Greek bank of issue was close to the early North European central banking model, where 'solidity of collateral' was more important than the liquidity that the classical model of central banking dictated.[58] However, the National Bank is distinguished from those continental banks of issue as it never evolved into a fully fledged central bank. A defining moment in the transformation of continental banks of issue into fully fledged central banks was when their commercial interest started to eclipse. By contrast, the National Bank did not allow the loss of its commercial aspect either on its own initiative or through government intervention and consequently did not evolve into a fully fledged central bank.

As a bank of issue, the National Bank developed very close links with the government and enjoyed a comparative advantage vis-à-vis the other banking institutions. The state centralised its payments system and all its deposits at the Bank and the National Bank controlled all the government financial accounts. It also negotiated foreign loans for the government and played a paramount role in the country's adoption of a metallic system. This comparative advantage was important for the development and prosperity of the National Bank because the credit market in the country was small and the banking system underdeveloped. However, this privileged position as the issuing bank in the country and as the bank of the government within a fairly stable banking system did not encourage the Bank to develop in such manner as would pave the way for its transformation from a dual-purpose bank into a fully fledged central bank.

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[55] The picture remains the same if the issuing privilege of the National Bank in the nineteenth century in comparison with that of the other banks of issue is examined. For example in 1869, 79 per cent of the banknotes in circulation were banknotes issued by the National Bank whilst the remaining 21 per cent were issued by the Ionian Bank. In 1897, 86 per cent of the banknotes in circulation were issued by the National Bank. The remaining 14 per cent of the banknotes in circulation were issued in equal proportions by the Ionian Bank and the Bank of Epirus-Thessaly. The years were chosen randomly to show that the National Bank had a residuary monopoly in the note issue in the nineteenth century. The data on banknotes in circulation used are from Kostelenos (1995 pp. 400–401).

[56] Dertilis (1989, p. 10).

[57] In reality they were private institutions.

[58] Tarkka (2009).

On the eve of the outbreak of the Great War, the National Bank combined public responsibilities with pure banking activities. It was the bank of issue in the country, the guardian of the gold and foreign exchange reserves and the bank of the government. At the same time, it was the most important commercial and deposit bank. Its commercial activities included short- and long-term credits to the private sectors of the economy, i.e. discounts, loans to the agricultural sector, loans on pledged securities and merchandise, mortgage loans and loans to public entities.

It has been argued that before the First World War, the National Bank was on the way to transforming itself into a central bank, a process that had been adopted deliberately by its governors.[59] In 1914, however, the National Bank was competing with the other banks for general business and its commercial aspect was flourishing. Furthermore, there is evidence that in 1913 the National Bank tried to curtail the expansion of other banks in the country.[60] This is a clear indication that the National Bank, despite enjoying the privileges of an issuing bank, did not intend to abandon commercial activities and evolve into a fully fledged central bank.

When the League representatives visited Athens in April 1927, although the National Bank had a monopoly in the issuing privilege and undertook the public responsibilities of a central bank it bore little resemblance to an ideal central bank as described by the governor of the Bank of England, Montagu Norman, in his ‘Epitome’. The National Bank had a complete monopoly of the note issue privilege and was the bank of the government but not the bank of the banks. At the same time, it was still the most important commercial and deposit bank in Greece, which could influence the conditions of credit directly through its own business. More importantly part of its assets were not of the ‘most liquid character possible’ as the model of central banking promoted by the Bank of England required.

The National Bank as an issuing bank and as a private institution pursued public functions whilst at the same time it had to satisfy its shareholders. The main public duties initially of a bank of issue were to maintain a stable currency and to guard the metallic reserves whilst at the same time being the bank of the government. As a joint stock bank its ‘duty to the proprietors’[61] was the dividend it paid and its commercial strength.

[59] Kostis (2003, pp. 65–66).
[60] Ibid., p. 81.
[61] Clapham (1944, p. 372).

In 1919, Alexandros Diomides, then a sub-governor of the National Bank, stated at an annual meeting of its shareholders that the National Bank was a private institution which at the same time had a public character.[62] This statement as the sub-governor himself admitted, described the way that the Bank functioned and its duties to the government. In fact, it was the way that the governors of the National Bank had managed 'the two conceptions of their business',[63] i.e. central banking responsibilities with commercial banking that safeguarded and preserved the financial strength and consequently the reputation of the Bank during its entire history as an issuing institution. A financially sound and strong National Bank created the systemic stability that characterised the Greek banking system and made it a respectable ambassador for the Greek government abroad.

During periods of well understood emergencies such as wartime and/or periods when the Greek government had no access to financial markets, a reluctant private bank financed the immediate needs of the government using the printing press and occasionally its own reserves. During such emergencies the commercial aspect of the National Bank receded. The National Bank curtailed its commercial activities to support the financial requirements of the government. Its financial position was weakened as a great part of its balance sheet was tied to illiquid government debt. Once the emergency had passed and attempts were made to rationalise the monetary system and the economy as a whole then it was 'duty to the proprietors'[64] of the National Bank that guided the policies of its governors. When stabilisation was pursued the central bank played a paramount role. Stabilisation would strengthen its position in the market and give it the opportunity to enhance its commercial aspect. This policy acted as self-regulation that helped the National Bank to protect its financial strength and reputation throughout its entire history as a bank of issue. A financially sound National Bank created the systemic stability that characterised the Greek banking system. It was the way that its 'dual position'[65] as a central bank and as a commercial banking institution was managed that made the Bank one of the most significant and stable institutions in Greek economic history, an organisation that can be classified as a national institution.

[62] Kostis (2003, p. 175).
[63] Clapham (1944, p. 372).
[64] Ibid.
[65] Ibid.

2.1.2. International financial intervention and the development of central banking in Greece, 1898–1928

During the period in question the Greek government twice resorted to capital markets to borrow with assistance and supervision: in 1898 and once again 30 years later, in 1928. On both occasions conditionality was introduced related to central banking practices in Greece.

After the Greek government's default in 1893 a long period of discussion over the settlement of the foreign debt of the country started, initially between Greece and foreign bondholders and then between Greece and the Great Powers, that is to say Britain, France, Germany, Russia, Italy and Austria. A debt compromise was finally achieved in 1898 after Greece had been defeated in the 1897 war with Turkey and was forced to pay a war indemnity. The debt compromise led to the enactment of the Law of Control or the ΒΦΙΘ Law as it is known in Greek and the flotation of the 2.50 per cent Guaranteed Loan in 1898. The Law of Control was a legal document specifying the obligations of the Greek government in order for the Great Powers to support it borrowing from the capital markets. It was a detailed plan for the reconstruction of the Greek public debt and specified the establishment of the International Financial Commission (IFC). The IFC was an international body that assumed responsibility for the service of the Greek public debt that was placed under its jurisdiction. Accordingly, the Greek government assigned a large part of its public revenues to the IFC and the latter administered these in accordance with the terms of the Law of Control.[66] The IFC was a debt management committee which at the same time supervised monetary policy in Greece, as the Law of Control stipulated strict rules governing the issue of banknotes and by doing so defined the relation of the central bank to the government. It should be noted that the Law of Control did not stipulate that Greece had to adopt the gold standard, as is usually claimed by modern scholars.

In 1898, the Greek government partially surrendered its fiscal and monetary sovereignty – a fact that was resented in Athens and caused a lot of dispute. Greek governments often clashed with the representatives of the Great Powers in Athens over the interpretation of certain aspects of the Law of Control. During the negotiations with the League, in Geneva in June 1927, Greek representatives were therefore anxious to avoid any kind of control or any sort of foreign intervention in Greek public affairs.

The governor of the National Bank moved to the Ministry of Finance as a minister and headed the negotiations with the representatives of the mediatory powers. The National

[66] For more see United Kingdom, House of Commons (1898, pp. 11–13); Andreades (1939, pp. 482–486); Wynne (1951, pp. 320–325).

Bank, through its governor, might have not only endorsed but also influenced the conditionality incorporated in the Law of Control which related both to monetary policy and to the way that internal public debt was reconstructed. As is shown in this thesis, the measures stipulated by the Law of Control helped the National Bank to improve its financial strength and expand its commercial activities. Furthermore, conditionality incorporated in the Law of Control constrained monetary policy and helped the bank of issue to control monetary developments in Greece for as long as the conjuncture allowed it. A suggestion by its sub-governor led to a monetary arrangement in March 1910 which helped the drachma to maintain its Latin Monetary Union (LMU) parity up to 1919. This 1910 monetary arrangement, or ΓΧΜΒ Law as it is known, has led contemporary economists and economic historians to argue that Greece introduced either the gold standard or the gold exchange standard during that year. By contrast, before the 1980s it was generally believed that the Greek currency had remained inconvertible throughout the period from September 1885 when the gold standard was suspended until May 1928 when the gold exchange standard was *de jure* adopted.

The influence of the IFC on Greek fiscal and monetary developments is usually thought to have been effective. The drachma appreciated and indeed reached its LMU parity in 1910, remaining at par until 1919. In addition, the service of the public debt continued smoothly until April 1932 when the Greek government defaulted. In fact, the interest rate paid to bondholders of external public debt increased and reached its contractual level in the 1920s as Table A4.1 in Appendix A4 indicates. Last but not least the Greek government managed to return, although very cautiously, to the capital markets in 1902. This thesis, however, departs from the view that the presence of the IFC in Athens was the main reason for the successful monetary advances and the improvement of the creditworthiness of the Greek government on the international capital markets. Here it is argued that the 'credibility', in other words the successful implementation of the Law of Control, rested on acceptance of conditionality and willingness to implement it.[67] Firstly, a powerful institution, the National Bank, was committed to strict monetary rules introduced by the Law of Control. The Old Bank was also able to control and influence monetary developments. Secondly, the appreciation of the drachma was in line with the prevailing political economy in Greece. Both the government and the National Bank were in favour of a stable drachma close to its LMU parity. It is also important to highlight that monetary discipline was followed for as long as the historical circumstances allowed it. As is extensively discussed, inflationary policies were used to finance Greek participation in the Great War and the Asia Minor campaign in spite of the presence of the IFC in Athens. Last but not least, the improvement of the creditworthiness of

[67] For more on 'credibility' and a successful stabilisation, see Sargent (1982, 1984). For criticism of Sargent's idea of 'credibility' and stabilisation, see Dornbusch (1988b).

the Greek government after the enactment of the Law of Control, as measured by a Greek government loan's spread on the London market relative to the British consols, is a more complex and multifaceted issue than is generally assumed in the literature. This question, however, is beyond the scope of this thesis. Future research could shed light on this complex issue, that is to say to what extent the IFC was responsible for the improvement of the Greek sovereign risk, and perhaps more importantly, the way that the Law of Control and Greek sovereign risk were intertwined.

The Greek government resorted to the League of Nations for a second time in the spring of 1927, in order to borrow on the international capital markets under its aegis. The reconstruction scheme prepared incorporated institutional reforms focused primarily on central banking practices in Greece, which led to the establishment of a fully fledged central bank, the Bank of Greece, whilst its precursor continued pursuing commercial activities, remaining at the same time the most important commercial bank in Greece.

The National Bank itself would not have implemented such radical reforms of its own volition in 1928. By the time the Greek delegation arrived in Geneva in June 1927 to request officially the assistance of the League in stabilising *de jure* the drachma, the National Bank had already lost its monopoly on mortgage credit of its own accord to a newly established National Mortgage Bank. This was the only monopoly that the bank of issue had enjoyed since its foundation in 1842 and one which it willingly conceded to another banking institution in the late 1920s. As Table 3.7 in Chapter 3 demonstrates the significance of mortgage credit as an asset item of the Old Bank had diminished by 1926 in favour of more liquid assets, following a long period of war and high inflation. The newly established mortgage bank was after all very close to the National Bank.

In June 1927 the governors of the National Bank faced the dilemma either of radically reforming the bank of issue so as to comply with central banking principles advocated by the Bank of England, or retaining its dual-purpose status and letting the Greek authorities 'seek succour elsewhere'.[68] As is explained in detail in Chapter 7, in the end a compromise was reached after a suggestion from the sub-governor of the bank of issue: the National Bank could continue its commercial activities and instead it would transfer to a new bank the issuing privilege and all the activities and responsibilities which belonged to a central bank. Thus, the governors of the National Bank amended recommendations by the Financial Committee of the League and in this way safeguarded the financial strength and consequently

[68] Venezis (1955, p. 35)

the market power of the National Bank. Furthermore, the architects of the central banking reform protected certain privileges of the Old Bank and thus its unique status in the Greek banking market. The League stabilisation programme attracted considerable opposition in Athens which threatened the existence of the New Bank in the 1930s. However, the National Bank did not participate in this controversy and never attempted to regain the central banking privileges that it had lost as a result of the implementation of the League's stabilisation programme.

By the time that the 1898 Law of Control and the 1928 League stabilisation programme were signed, conditionality had been accepted by those that were most affected. By contrast, after the outbreak of the current economic recession successive Greek governments have been expected to implement widespread structural reforms demanded by their lenders which, however, have mustered very little support. Resistance and delays in the implementation of structural reforms in a fairly unstable and polarised political environment are among the most important reasons that have led to a deep and protracted economic recession. A 'war of attrition' with distributional implications among different socio-economic groups has taken place and the burden of a huge and rapid fiscal adjustment has been shifted onto those that can bear it least, and to future generations.[69]

2.2. The establishment of the Bank of Greece in the historiography

Contemporaries regarded the establishment of the Bank of Greece as a symbol of foreign intervention in the country and compared its creation with the introduction of the Law of Control in 1898. Since then, this observation has been repeated occasionally.

'The founding of the Bank of Greece was accomplished to facilitate the reformation of the monetary conditions that had been created by the wars that the country had engaged in, as well as the economic repercussions thereof. It was an important step towards the modernisation of the economic institutions of the country.'[70] Kostas Kostis (1986, p. 115) writes that 'the establishment of the Bank of Greece as the central bank of the country was regarded and since then has been regarded as an attempt to rationalise the Greek economy and as an indication of state interference in regulating economic activities'. He further argues that it is difficult for this interpretation to be challenged, and adds that the establishment of the New Bank was not a Greek initiative, restating in this way the argument that the creation of

[69] For a 'war of attrition' and stabilisation, see Alesina and Drazen (1991) and Casella and Eichengreen (1996).
[70] Bank of Greece (1978, p. 9).

the central bank symbolised foreign intervention into Greek political and economic issues. Meanwhile, Thanasis Kalaphatis (1999, p. 25) relates the establishment of the Bank of Greece to the ΓΧΜΒ Law of 1910 and sees it as a result of government intervention in the banking system.[71] Christos Hadziiossif (1993, p. 249) goes a bit further by arguing that the splitting of the National Bank was aimed both at helping Greece to incorporate itself into the international economic system and at facilitating the flow of capital in and out of Greece.

Previously, G. Vouros (1938, p. 6) had stressed the fact that the banking reforms that led to the establishment of the New Bank were a necessary by-product of changes in the economy post 1923, i.e. after the Asia Minor debacle and indeed G. Pyrsos (c1935, p. 15) suggested that this reform was vital for the economic reconstruction of the country.

More recently Michalis Psalidopoulos (2011, pp. 74–75; 2014, p. 77) argued that a public debate between the governor of the National Bank and Britain's representative on the IFC which was conducted largely in the pages of *The Times* of London in the autumn of 1925, helps to understand why foreign creditors introduced central banking reforms a couple of years later.[72] This public debate in *The Times* which created quite a stir in Athens, highlights ideological differences between these two men in addition to difficult choices related to monetary policy that the governor of the National Bank faced in 1925. In the end, however, as is discussed in Chapter 6, the influence of the IFC on central banking reforms was very limited.

Study of the establishment of the central bank in Greece has been approached along the following lines. Scholars that treated this issue in the 1930s, 1940s, and 1950s gave a detailed chronological description of the events as well as of the dispute that the creation of the Bank of Greece provoked since it was hardly welcomed by Greek banks or politicians. Literature concerning the New Bank was intended to examine how it operated after its establishment and mainly came to light during a commemoration of an anniversary of the Bank of Greece. Present day scholars that have referred to the creation of the Bank of Greece have only done so as part of broader research on the interwar period. Hence, the reasons that led to the establishment of the central bank in Greece remain to be examined.

It is hard to dispute the earlier interpretations where the core of the argument has been that the establishment of the New Bank was necessary to facilitate the reconstruction of the

[71] The enactment and evolution of ΓΧΜΒ Law of 1910 is extensively examined in Chapter 4 of this thesis.
[72] For more on the articles in *The Times*, see Psalidopoulos (1989, pp. 320–325); Pepelasis Minoglou (1993, pp. 128–130).

economy after a long period of war and monetary upheaval in the 1920s. It is also implied that these banking reforms were beneficial for economic development. However, these explanations refer to the consequences of the establishment of the central bank rather than to the reasons for banking reforms in the late 1920s.

Internal forces resulting from macroeconomic policy and the condition of the banking system in Greece in the late 1920s, would not have led to the establishment of a fully fledged central bank in that period. On its own initiative, the National Bank was prepared to implement only minor changes such as the establishment of the Mortgage Bank in 1927, the only operation it seems it was willing to concede to another institution. In addition, the political climate tended to support the general inertia of the National Bank towards real change.

There is reference in the literature to Eleftherios Venizelos, by far the strongest political figure in Greece after 1909, having stated in an interview in Britain's *Morning Post* in 1917 that 'the National Bank would be reorganised and would become simply a bank of issue'.[73] This was actually said not in an interview in the Morning Post but in the Greek parliament. (The *Morning Post* published a report of the occasion when the Prime Minister, Venizelos answered a question about a loan that the previous pro–German Greek government had contracted with Germany on which the National Bank had acted as an intermediary.[74]) However, his reaction to the banking reforms, when in 1928 he returned to the country and to power, indicates that the changes he could have implemented were not much different from those that the National Bank had favoured.

Serious concern about the condition of the banking system in Greece had always been expressed by scholars. First, A. Soutsos (1882, vol. I, p. 518) criticised the multifaceted character of the National Bank, and expressed doubts as to whether it could fulfil all its functions properly. On the same grounds, Ch. Damiris in a book published in 1920 criticised the National Bank, stressed the fact that it had too much power over the monetary and banking system and argued for change. It is interesting that Damiris was the only one who referred to the fact that the National Bank had never been the bank of the banks and had no legal obligation to fulfil such a function.[75] Finally, N. Bakopoulos (1920) published a book on central banks wherein he described the functions and objectives of a full blown version of the institution but did not refer to or criticise the National Bank. These objections and criticism

[73] Pyrsos (c1935, p. 16).
[74] The *Morning Post*, 20 August, 1917.
[75] Pyrsos (c1935, pp. 16–17).

over the size, functions and power of the National Bank had very limited impact and could not by themselves have led to fundamental changes in the banking system.

2.3. Objectives and contribution of the thesis

The focus of this thesis is twofold: firstly, to examine the evolution of central banking institutions in Greece between the enactment of the Law of Control in 1898 and *de jure* stabilisation of the drachma in 1928. Secondly, to explore the impact that foreign supervision had on the evolution of central banking in Greece, given the complex relationship that Greece had with its foreign creditors. To these ends, the characteristics of central banking in Greece, a country on the European periphery, prior to the establishment of the Bank of Greece are unravelled and contrasted with the central banking standards that foreign creditors had adopted and promoted at the time.

This study looks at the 'dual position' of the National Bank; it examines its role both as a central bank and as the most important commercial bank in Greece. A crucial question that is asked is why the dual-purpose National Bank was not in a position to transform itself into a fully fledged central bank on its own initiative following a path similar to that of other European central banks and described by the natural evolution hypothesis. Furthermore, it asks why the commercial activities of the Old Bank were so important that, in the end, it chose to retain that aspect of its business moving forward, when prior to 1927 it had so fiercely guarded its central banking privileges. Hence, an important contribution of this thesis is a painstaking and in-depth analysis of the tension between the public responsibilities of the National Bank as a central bank and its duty to its proprietors.

Time series are constructed using not only quantitative material such as the published balance sheet of the National Bank but also a variety of qualitative sources to illustrate the evolution of the National Bank as a bank of issue, bank of the government and as the most important commercial bank in Greece. The objective is to explore the way in which the governors of the Old Bank managed 'the two conceptions of their business',[76] i.e. central banking responsibilities and commercial banking, whilst safeguarding the financial strength and consequently the reputation of the National Bank throughout its entire history as a dual-purpose bank. Furthermore, the time series constructed show changes that a long period of war, high inflation and subsequent reconstruction brought to the commercial aspect of the National Bank and to its role as an issuing bank and a bank of the government. Highlighting

[76] Clapham (1944, p. 372).

changes that occurred in the structure and composition of the assets and liabilities of the dual-purpose National Bank between the enactment of the Law of Control in 1898 and the spring of 1927 when the League of Nations was approached helps to understand what the governors of the Old Bank sought to achieve through stabilisation and how they envisaged stabilisation would affect its financial status.

The time series constructed demonstrate that the changes brought about by a long period of war and monetary upheaval to the structure and composition of the balance sheet of the Old Bank determined banking reforms in the late 1920s. It is shown that the National Bank used to focus its commercial activities on mortgage credit and time deposits. However, the significance of these two items on the balance sheet of the Bank decreased because of a long period of war and high inflation. This change on the Old Bank's balance sheet also explains why, of its own volition, it conceded its mortgage credit privilege to a newly established mortgage bank in June 1927. Moreover, the newly constructed time series graphically indicate that the relationship between credits supplied to the economy and bilateral public debt held by the National Bank fundamentally altered after 1918.

A further contribution of this thesis is that the monetary arrangement introduced in March 1910, which is known as the ΓΧΜΒ Law or the Valaorites Law, is extensively examined; its principles and evolution until 1919, the last time it was used to increase the money supply, are scrutinised. This monetary arrangement has prompted contemporary economists and economic historians to argue that Greece adopted a clearly defined monetary rule during that year, even though there is no agreement amongst them on which standard Greece did in fact introduce. However, before the 1980s it was believed that the Greek currency had remained inconvertible throughout the period from September 1885, when the gold standard was suspended, until May 1928, when the gold exchange standard was *de jure* introduced. An objective here is to draw attention to the discrepancy between the way that monetary change in Greece in 1910 is seen in recent economic history literature and the way it was considered by scholars and policy makers at the time. Furthermore, it will be demonstrated that the way the ΓΧΜΒ Law was employed to increase the banknotes in circulation after the outbreak of the Great War, and indeed to finance the active participation of Greece in the war, was one of the most important reasons for the high inflation experienced at the time.

To a large extent, the long-term impact of war on the financial structure is a result of the need for direct and indirect funding of any conflict and its preparation as well as of the cost of possible reparations. Therefore, both conventional and unconventional methods used by the Greek government to finance a long period of war and its aftermath are examined in detail. The objective is firstly to study the extent to which the National Bank itself financed government expenditure during a period when the Greek government had no access to international financial markets; secondly, to analyse the impact that government borrowing had on the Old Bank; and finally, to acknowledge the origins of the monetary upheaval of the 1920s. It can be shown that high inflation stemmed from the way that the printing press was used to monetise budget deficits. As is evidenced, the Old Bank proved to be the main source of financial support for the government and a complex relationship was created between them. High inflation in the 1920s wiped out a significant part of the nominal value of bilateral public debt denominated in drachmae owned by the National Bank without entirely eliminating it. The National Bank aimed at reducing it still further during *de jure* stabilisation.

The creditworthiness of the Greek government on the London market between the enactment of the Law of Control in 1898 and the implementation of a League stabilisation programme in 1928 is also examined. The objective is to demonstrate the negotiating power that the Greek government had in that market. In addition, research into the press of the period shows that market participants were kept well informed, and promptly too, about developments in Greece and thus were able to evaluate country risk during a time when a system of formal rating had not been developed.

The stabilisation plans proposed by the different participants are explored and ideological disparities as well as differences in the way that they envisaged that stabilisation would affect institutions with respect to fiscal and monetary policy are exposed. The aim is to highlight differences amongst those involved or tempted to become involved in the stabilisation of the drachma, that is to say the National Bank of Greece, the Greek Ministry of Finance, the IFC, the Bank of England and later the Financial Committee of the League of Nations.

A comparison of foreign intervention and financial support between the Law of Control of 1898 and the Geneva Stabilisation Plan of 1928 is carried out, as these institutional arrangements were harbingers of the establishment of the International Monetary Fund. The aim is to reveal both the similarities and differences in institutional reforms sponsored by foreign creditors during those two distinctive periods. Differences in the flotation of the respective loans are also denoted.

The restructuring of domestic public debt in 1898 is briefly discussed. The aim is to demonstrate the way in which the financial position of the Old Bank was affected by this debt readjustment. This thesis also illustrates the way in which government debt held by the National Bank before central banking reforms was distributed between the Old Bank of issue and the New Bank. The objective is to strengthen the argument made that the National Bank during the negotiations with foreign creditors both in the late nineteenth century and in the late 1920s sought to achieve a compromise, which at the same time would be favourable to its financial position.

The negotiations with the League representatives are discussed in detail and the objections raised by the governor of the National Bank to its metamorphosis from a dual-purpose bank to a modern central bank are presented. The objective is to show that the particular domestic variation on the League of Nations' norms that led to the establishment of a fully fledged central bank in Greece in 1928 happened with the consent of the National Bank. In fact, it is demonstrated that the ways in which central banking reforms were carried out were aimed at strengthening the financial position of the Old Bank of issue. How cautiously news of the central banking reform was announced and circulated in Athens is also shown. Finally, the thesis closes with an analysis of the institutional arrangements surrounding the establishment of the Bank of Greece. The objectives and functions of the new central bank are described and its financial position upon commencement of operations is evidenced.

This thesis contributes to the understanding of the origins of the central banking reforms in Greece in the late 1920s as part of the process of currency stabilisation. It unravels the political economy at the root of these reforms and sheds light on the factors that impeded the transformation of the National Bank from the bank of issue in Greece and the bank of the government into a fully fledged model of a central bank. It places in historical perspective issues of political economy that shaped central banking reform in the 1920s and led to a domestic variation on the League of Nations' norms. It is also demonstrated that the evolution of the institution of central banking in Greece follows a disparate route from that described by the natural evolution hypothesis formed by Goodhart and based on a comparative analysis of the experience of several mainly European nations. In this way, this thesis seeks to provide insight into the formation of the institution of central banking and its application to small open economies. Examination of the establishment of the Bank of Greece can help to draw broader conclusions about the evolution of central banking and the establishment of central banks *de novo*. Furthermore, it examines the contribution of the League of Nations and the Bank of England to the evolution of central banking in the 1920s and highlights the main principles of this institution as they were then.

2.4. Overview of the archival sources and data used

The research in this thesis relies on a variety of sources both qualitative and quantitative that are geographically spread between Athens, London and Geneva. In Athens, archival research has been carried out at the following archives: the Emmanouil Tsouderos Archive at the Bank of Greece, the Historical Archives of the National Bank of Greece, the Alexandros Diomides Archive deposited at the Greek Literary and History Archive, which is now part of the National Bank of Greece Cultural Centre, and last but not least the Alexandros Diomides Archive at the Historical Archives of the National Bank. In addition to the archives in Athens, the Bank of England Archive and the Midland Bank Archive in London, as well as the League of Nations Archive at the United Nations in Geneva were consulted. The Hambros Bank Archive available at the Guildhall Library was also visited. However, the archival material on Greece for the period in question at Hambros Bank Archive is insignificant. The documents on Greece there primarily refer to the period prior to the outbreak of the First World War.

The thesis also draws on printed primary material such as the press of the period, both Greek and British, parliamentary papers and records of debates, publications of the League of Nations and contemporaneous literature. Invaluable information from the British press for the purpose of this thesis provides material systematically collected from a wide range of mainly daily press and organised in a continuous format of cutting books by the Council of the Corporation of Foreign Bondholders. These cutting books are now held at the Guildhall Library in London.

The Emmanouil Tsouderos Archive deposited at the Bank of Greece covers the period from the early 1920s until the Second World War and does not bear the hallmark of a personal archive to any great extent. By contrast, both archives of Alexandros Diomides consist mainly of personal correspondence. The material at the Tsouderos Archive is very rich and includes reports written for a variety of purposes, statistical data for his own information, correspondence, cables and cuttings from the press of the day. It provides extensive and valuable information on the 1920s and in particular on the negotiations for the stabilisation of the drachma between Athens, the Bank of England and the League of Nations.

The Historical Archives of the National Bank are probably the richest and most significant archives in Greece for an economic historian writing on the period before the Second World War. It is an invaluable repository from which to draw both qualitative and quantitative material for the analysis in this study.

The Annual Reports of the National Bank have been used extensively here to construct a variety of time series covering the period in question. As a primary source for the 1920s, however, it has its limitations. Accountancy practices that were employed during the monetary upheaval of the 1920s obscure the real financial position of the Bank during that period. The consequent difficulty stems from the way that assets and liabilities denominated in gold and foreign exchange were reported on the balance sheet of the Bank. The advisor to the Bank of Greece, Horace C. Finlayson described this very vividly in his annual report for 1929. Finlayson wrote that the balance sheet published by the National Bank every six months prior to the reorganisation of the banking system 'succeeded in solving the problem of adding four chairs to four o'clock to make eight! Gold francs (or drachmae) were added up together with paper drachmae so that the statements are bewildering even to the most discerning eye'.[77] The outcome of this practice is to understate the value of figures denominated in gold drachmae that appear on the balance sheet of the National Bank from the point where the drachma began depreciating in 1919 until stabilisation. Consequently, what is reported as total assets on the balance sheet of the National Bank in the 1920s prior to stabilisation is an understatement of its true financial position.

The material found in the archives in Athens is complemented by primary sources from the Bank of England Archive. This primary material comprises a variety of documents ranging from reports on Greece to minutes of meetings between Greek officials and representatives of the Bank of England. Most of the material used in this thesis is drawn from Sir Otto Niemeyer's Papers.[78] Niemeyer joined the Bank of England as an Advisor in 1927 having previously been Controller of Finance at HM Treasury. Apart from his general responsibilities on the overseas side of the Bank of England, he also was a member of the League of Nations Financial Committee from 1922 to 1937 and the chairman of that Committee in 1927 when the Reconstruction Plan for Greece was prepared. He also worked feverishly to propagate central banking orthodoxy throughout the entire interwar period.

Last but not least, the League of Nations Archive in Geneva was visited. The most important primary sources kept at Geneva can, however, also be found at the Bank of England Archive and/or in archives in Athens. Furthermore, the entire collection of the printed material of the League kept at its archive is also available at the British Library of Political and Economic Science.

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[77] BoE Archive, OV9/192/2.

[78] Bank of England Archive, Overseas Department, Sir Otto Niemeyer's Papers (OV9). It covers the period from 1922 until 1965 and consists of 592 pieces. His papers whilst he was at the Treasury are deposited at the Bank of England Archive. Bank of England (1998, p. 58).

In the 1920s, governments started collecting data and encouraged publications where the data amassed were presented. The Greek government was no exception and in the 1920s began publishing the *Statistical Yearbooks* which contain data on all aspects of the economy from public finance to literacy.[79] The data collected as well as the indices produced in these *Yearbooks* have been widely used both by contemporaneous scholars and contemporary economic historians.

Contemporary economic historians have either collected together data and/or constructed time series covering a broad spectrum of the economy.[80] The balance sheet of the National Bank published twice a year is the principal source of the data for the history of this institution. In his research, Kostis has made extensive use of this source to organise data covering different aspects of the history of the National Bank and to produce financial ratios covering the period between the late nineteenth century and the outbreak of the Second World War.[81]

A variety of price indices constructed either at the time in question or by contemporary economic historians is available. Firstly, the *Statistical Yearbooks* provide a retail price index and a cost of living index. Neither indices are weighted and the method used to construct them is apparently that of the arithmetic mean. In addition, all data employed for their construction are available in the *Statistical Yearbooks*. Secondly, during the 1920s Xenophon Zolotas (1928, 1929) constructed a number of price indices (including a monthly retail price index), which, however, do not cover the whole period in question here. In his usual fashion, Zolotas neither disclosed his sources for the data used nor the methodology employed. It is, however, highly probable that he used the very same data available in the *Yearbooks*.[82] Thirdly, a price index based on a Laspeyres formula and on the data in the *Statistical Yearbooks* was constructed by George Kostelenos for the period in question.[83] Fourthly, a GDP deflator has been estimated on the basis of a selection of ten items and based on the Paasche formula.[84] Finally, George Mitrofanis has constructed a price index.[85] However, no information is available either on the method employed or the data used for the construction of this price index.

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[79] General Statistical Service of Greece (1931–1940).
[80] For example, see Kostelenos (1995); Kostis (2003); Dertilis (2005); Kostelenos *et al.* (2007); Lazaretou (2014).
[81] Kostis (1990, 2003).
[82] Kostelenos (1995, p. 64).
[83] Ibid., pp. 310–316.
[84] Kostelenos (2007, pp. 159–164).
[85] Dertilis (2005, p. 1048).

The most important price indices available are presented in Figure 2.1. A comparison of them reveals some differences. In spite of these differences, however, the general picture that they produce for the period in question remains the same. In this thesis, all price indices mentioned above are treated with caution, a consideration that places constraints on the analysis. The main reservation stems from the fact that the items used for their construction are not representative of all the sectors of the economy, having been taken mainly if not exclusively from the primary sector. Certainly, no items are included from the tertiary sector. The Kostelenos *et al.* (2007) deflator is employed whenever necessary. This deflator is presented in Table 2.1 below. In addition, inflation rates for the period between 1915 and 1929 have been calculated using the Kostelenos *et al.* deflator, as well as the general price index included in the *Statistical Yearbooks*. These inflation rates are presented in Table 6.1 in Chapter 6.

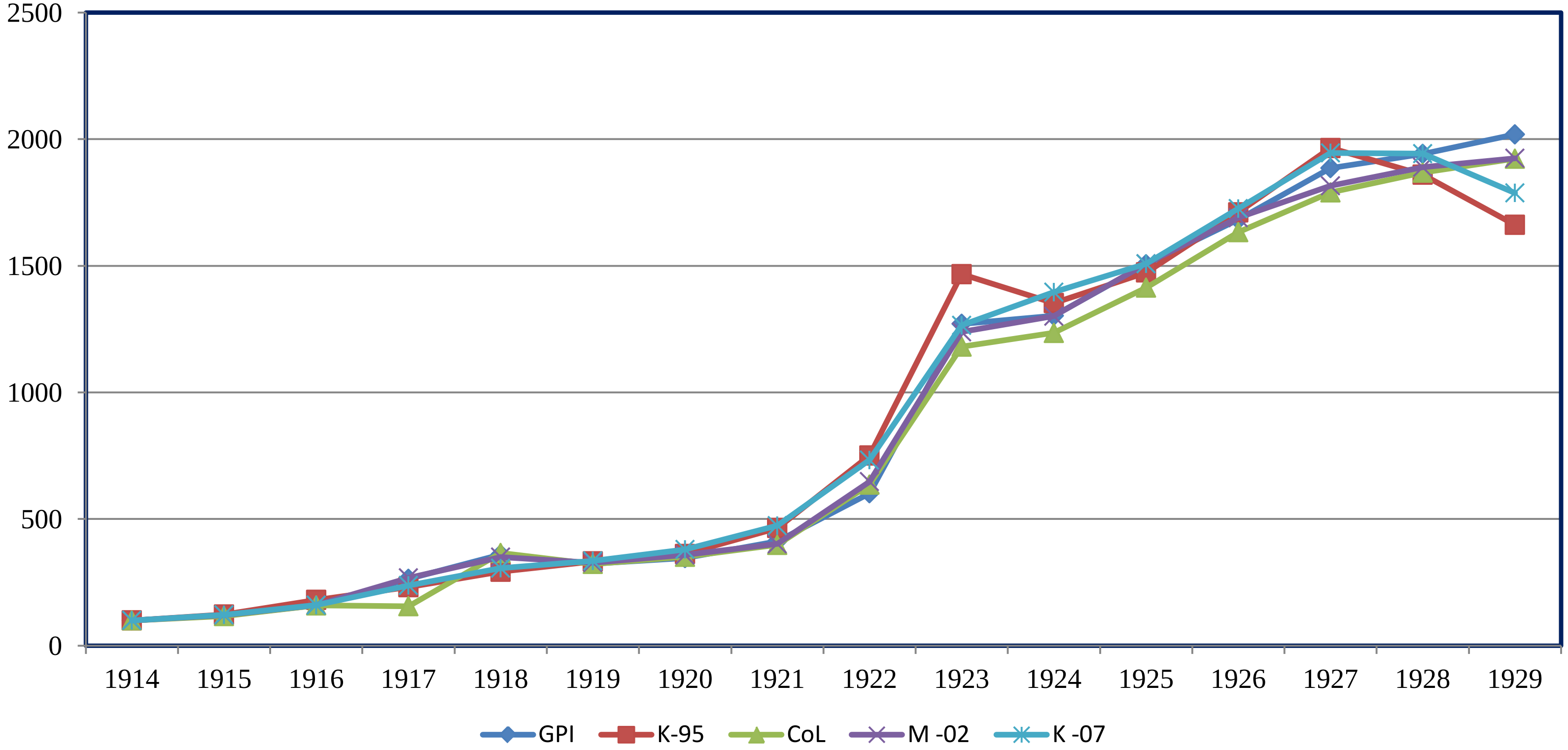

Figure 2.1.: Price indices, 1914–1929

Note: GPI stands for General Price Index for the index in the *Statistical Yearbooks*; K-95 and K-07 is for Kostellenos indices published in 1995 and 2007 respectively; CoL is for the cost of living and M-02 is the index that George Mitrofanis constructed.

Sources: See Table A1.1 in Appendix A1.

In this thesis, resort to available published data is made selectively and with caution. In general the approach that has been adopted is to return to the original sources and construct new time series, often of high frequency data when this has been possible. Therefore, a number of new time series have been constructed that are related to the fiscal, monetary and exchange rate issues studied here. Time series of the creditworthiness of the Greek government on the London Stock Exchange between 1896 and 1930 have also been constructed. Furthermore, this thesis brings together a wide array of data that demonstrate the financial position of the National Bank, its relation with the government and the manner in which the printing press was used as a tool of monetary policy during the period in question.

Table 2.1: Kostelenos *et al*. (2007) deflator

(Base year 1911=1)

1898	1.09	1914	1.10
1899	1.01	1915	1.34
1900	1.22	1916	1.76
1901	1.43	1917	2.62
1902	1.07	1918	3.36
1903	1.05	1919	3.68
1904	0.91	1920	4.18
1905	0.89	1921	5.21
1906	0.93	1922	8.05
1907	0.98	1923	13.90
1908	0.97	1924	15.34
1909	1.02	1925	16.57
1910	0.98	1926	18.97
1911	1.00	1927	21.38
1912	0.99	1928	21.35
1913	0.97	1929	19.65
		1930	17.52

Notes:
(1) Rebased from the original deflator where the base year is 1914 (1914=1).
(2) This is a deflator based on a sample of ten items.
Source: Kostelenos *et al.* (2007, Table 7-II, column headed 3, p. 38 of CD).

PART II:

THE PRECURSOR OF THE CENTRAL BANK IN GREECE:

THE NATIONAL BANK OF GREECE

CHAPTER 3:

THE NATIONAL BANK AS COMMERCIAL BANK

3.1. Structure of the banking system in Greece in 1927

On the eve of their reform Greek banks could be divided into three categories. In the first category the National Bank of Greece, instituted in 1841, stood alone not only because of its dual-purpose character as a bank of issue and as a commercial bank but also because of its size which enabled it to dominate the country's banking system. Next came a handful of banks, established around the turn of the century and finally a third category of small, mainly local banks, most of which were established after the end of the First World War. In addition, there were some foreign banks operating in the country and two special institutions, namely the Post Office Savings Bank and the Deposit and Loans Fund. Finally, during that same year, on 1 June 1927, the National Mortgage Bank, a bank specialising in mortgage credit had started to operate. Table 3.1 below shows the banks that operated in Greece in 1927, the year of their foundation and the number of branches that each of them had. As Table 3.4 below shows, 17 of these banks were listed on the Athens Stock Exchange.

Table 3.1: The banking system in Greece in 1927

	Year of Establishment	Central Offices	Number of Branches[1]
National Bank of Greece	1841	Athens	83
Bank of Athens	1893	Athens	98
Bank of the Orient[(6)]	1904	Athens	7
Popular Bank[(6)]	1905	Athens	11
Commercial Bank of Greece	1907	Athens	34
National Mortgage Bank[(2)]	1927	Athens	
Bank of Piraeus	1916	Piraeus	2
Bank of Industry[(4)(*)]	1918	Piraeus	5
Bank of the National Economy[(*)]	1918	Piraeus	5
General Bank of Greece[(5)]	1918	Athens	3
Maritime Bank of Piraeus	1918	Piraeus	
Greek Bank of Commerce, Industry and Shipping	1918	Athens	
Central Bank of Greece[(*)]	1919	Athens	
Bank of Chios	1919	Athens	2
Amar Bank	1920	Salonika	
Cosmadopoulos Bank[(*)]	1921	Volos	4
Greek Securities Bank[(5)]	1921	Athens	
Bank of Thessaly[(*)]	1921	Volos	
Bank of Commerce	1922	Athens	
Bank of Property[(4)(*)]	1923	Athens	
Trapezomesitiki A.E.[(*)]	1923	Athens	
Anglo-American Bank of Greece[(*)]	1923	Athens	
Bank of Trikkala	1924	Trikkala	
Bank of Samos[(*)]	1924	Athens	
Tobacco Industry & Karavasilis Bank	1924	Athens	2
Bank of Greek Commercial Credit	1924	Athens	11
Panhellenic Bank of Commerce, Industry and Companies[(*)]	1924	Athens	
Bank of Property of Piraeus[(4)(*)]	1924	Piraeus	
Nikas' Brothers, Banking and Commercial Company	1924	Piraeus	
Bank of Archipelago[(*)]	1924	Athens	
Bank of Attikis	1925	Piraeus	
Bank of Commerce and Industry[(*)]	1925	Volos	
Bank of Messinias[(*)]	1925	Kalamata	
Bank of Athenian Credit[(*)]	1925	Athens	
Bank of Larissa	1925	Larissa	
Benveniste Bank[(*)]	1925	Salonika	
Bank of Crete[(3)]	1925	Herakleion	
Bank of Greek Merchants[(*)]	1925	Athens	
Zarifis, Eugenidis & Sia Bank	1925	Athens	

	Year of Establishment	Central Offices	Number of Branches[1]
Bank of Commerce and Industry of Volos	1925	Volos	
Bank of Peloponnisos[(5)(*)]	1925	Gastouni	
Bank of Lakonias	1926	Athens	5
Union Bank	1926	Salonika	
Servo-Greek Bank	1926	Salonika	
Agrarian Bank of Greece[(4)]	1926	Athens	
Bank of Agrarian Credit[(4)(*)]	1926	Almiros	
Pavlos' Bank[(5)]	1926	Athens	
Popular Saving A.E.	1927	Athens	
Post Office Savings Bank	1914	Athens	
Foreign Banks in Greece			
Ionian Bank	1839	Athens	
Bank de Salonique	1888	Salonika	
Banque Ottomane		Salonika	
Angloagean Bank of Commerce Ltd		Salonika	
American Express Co. Ltd	1920	Athens	

Notes:
[*] The banks marked with an asterisk were either liquated or went bankrupt after 1929.
[1] The Number of branches of each bank refers to 1928.
[2] The National Mortgage Bank started operations on 1 June 1927.
[3] The Bank of Property of Crete was renamed Bank of Crete in 1927.
[4] The Bank of Property and the Bank of Property of Piraeus were designed to specialise in mortgage credit, the Agrarian Bank of Greece and the Bank of the Agrarian Credit in agricultural credit and the Bank of Industry in industrial projects. In practice, however, none of these banks pursued aims set out in their respective statutes.
[5] In 1927 the General Bank of Greece was merged with the Popular Bank and the Greek Securities Bank with the Bank of Industry; the Bank of Peloponissos and the Pavlos' Bank were both liquated; the Maritime Bank of Piraeus was merged with the Sea Ventures Ltd Company.
[6] The Bank of the Orient was acquired by the National Bank in 1932. In that same year the Popular Bank was bought by the Ionian Bank.

Sources: Charitakis *et al*. (1932, pp. 377–378); Kyrkilitsis (1934, pp. 4–12); Galanis (1946, pp. 122–125); Bank of Greece (1978, pp. 50–51); Kostis and Tsokopoulos (1988, pp. 64–67); Kostis (1990, pp. 148–153); Dritsa (1990, pp. 235–236); Alogoskoufis and Lazaretou (1997, pp. 150–153); Christodoulaki (2002, pp. 253–254).

One of the principal characteristics of the Greek banking system was its considerable stability which was mainly due to the 'great weight and prestige' of the National Bank, a profit maximising dual-purpose bank which at the same time was a conservative and risk-averse institution. It was a branch banking system and as Table 3.1 illustrates, in 1928 there were in total 272 branches of various banks spread all over the country. Two banks, the Bank of Athens and the National Bank, had established by far the most branches: the Bank of Athens had 98 branches whilst the National Bank had established 83. Then, the Commercial Bank of Greece followed with 34 branches. The majority of the rest of the banks had no branches at all as Table 3.1 demonstrates whilst those having branches, had established only a few.

After the end of the Great War the banking system in Greece expanded rapidly with the establishment of a great number of small, primarily local banks. This was prompted firstly, by the introduction of a law in 1920 relating to limited companies which encouraged bankers to turn their offices into small family banks and in this way to benefit from the taxation advantages that this law provided.[86] As a consequence by the end of the 1920s nearly no bankers' offices remained. Secondly, the increase in the market with the annexation of the New Areas after the end of the Balkan Wars and the influx of over a million refugees from Asia Minor created the conditions for the expansion of the banking system. Last but not least, the monetary upheaval of the 1920s also encouraged the establishment of small local banks.[87]

The central bank, that is to say the National Bank, had no statutory powers over the banking system.[88] According to the legal framework as it related to banks before 1926, any limited company could undertake banking activities. Only in 1926, a couple of years before the banking reforms, was a law introduced that required any new bank being established to have capital of at least 15 million drachmae.[89] This legal prerequisite checked the establishment of new banks after 1926.[90] Nevertheless, these banks were small, primarily family banks and the main source of their profits seems to have been speculation on the exchange rate. Aggelopoulos (1928, p. 53) estimated that in 1924, 52 per cent of the gross profits of the banks came from foreign exchange operations, 51 per cent in 1925 but only 39 per cent in 1927.[91] When the drachma was *de facto* stabilised in 1927 not only did the more precarious of the new banks stop popping up but also those that had been established started experiencing difficulties. During the Great Depression many of the small local banks either closed down or were acquired by other healthier banks.[92]

Another characteristic of the banking system was that it was not competitive and lacked diversification and specialisation. The banks in Greece were primarily deposit banks and the new banks that appeared in the 1920s followed this tradition. There were, however, exceptions

[86] This was the Law 2190/1920. For more, see Aggelopoulos (1928, pp. 31–32); Kostis (1997, p. 27).
[87] Kyrkilitsis (1934); Bank of Greece (1978, p. 48); Kostis (1987, p. 220); Kostis and Tsokopoulos (1988, p. 59); Dritsa (1990, p. 239); Alogoskoufis and Lazaretou (1997, p. 129).
[88] Mazower (1991, p. 71).
[89] Kyrkilitsis (1934); Kostis (1997, p. 179, n. 43).
[90] For the number of new banks that were established each year between 1922 and 1930, see Kyrkilitsis (1934, p. 20).
[91] Alogoskoufis and Lazaretou (1997, p. 130); Kostis, (1997, p. 174, n. 14).
[92] About 12 of them closed down in the early 1930s. See Kyrkilitsis (1934, pp. 12–14); Alogoskoufis and Lazaretou (1997, p. 130).

signalling a need for diversification in the banking system. For example, the Bank of Industry established in 1918 by a group of industrialists had as its objective the promotion and support of industry.[93] The Bank of Property and the Bank of Property of Piraeus aimed at specialising in mortgage credit whilst the Agrarian Bank and the Bank of Agrarian Credit at agricultural credit. All these new banks, however, remained small and undercapitalised and did not manage to encourage competition in the system whilst their professed specialisation remained a mere pledge in their statutes.

All in all, the increase in the number of banks operating in Greece in the 1920s did not bring fundamental changes in the banking sector. The real transformation of the banking system in Greece happened in a short span of time, namely between 1927 and 1929, when the country obtained three specialised banking institutions: firstly in 1927 a mortgage bank, the National Mortgage Bank; then in 1928 a central bank, the Bank of Greece; and finally in 1929 an agricultural bank, the Agricultural Bank of Greece. These sweeping banking reforms led to the modernisation and rationalisation of the banking system in Greece and perhaps constitute the most important transformation of the banking system in the country in its entire history.

The size of the National Bank was huge and it dominated the market with almost monopolistic powers. The representatives of the League that came to Athens in April 1927 to investigate the economic situation in the country stressed this characteristic of the National Bank in their report.[94]

Total assets or liabilities are usually used as a measure to compare the size of banks. The National Bank, however, was a dual-purpose bank, a bank of issue and at the same time the biggest commercial bank in the country. A comparison of total assets or liabilities of the National Bank with a sample of other Greek banks is in any event distorted by the fact that the total of the banknotes in circulation was reported on the balance sheet of the National Bank. Moreover, the 1920s was a period of high inflation and accountancy practices employed by banks to record both assets and liabilities denominated in foreign exchange and gold often distorted their real financial position. This is particularly the case with the National Bank, as has been explained in Chapter 2.

In this thesis, the deposits and market capitalisation of a handful of banks are used as measures to assess the size of the National Bank vis-à-vis other banking institutions in

[93] Kyrkilitsis (1934, p. 87); Kostis and Tsokopoulos (1988, p. 60).
[94] See HABOG_A3S1Y1F4T1, pp. 1–100.

Greece. Both measures paint the same picture; the National Bank was far bigger than any of the other banks.

Table 3.2: Deposits in 1926

	Deposits (in thousands of drachmae)	**As % of Total**	**As % of Grand Total**
National Bank of Greece (1841)[2]	3,479,103.99	60.91	41.26
Bank of Athens (1893)	1,215,410.70	21.28	14.41
Popular Bank (1905)	424,984.00	7.44	5.04
Commercial Bank (1907)	396,316.00	6.94	4.70
Piraeus Bank (1916)	88,816.00	1.56	1.05
Bank of Industry (1918)	106,801.00	1.87	1.27
Total:[1]	5,711,431.69	100.00	67.73
Grand Total:[3]	8,432,900.00		100.00

Notes:
[1] This is total deposits in thousand of drachmae that the six banks cited above received. Part of these deposits was denominated in gold drachmae. For example, 4.05 per cent of the deposits of the National Bank in 1926 were deposits in gold drachmae.
[2] Government deposits at the National Bank are not included. In 1926, 12.40 per cent of the total deposits of the National Bank were government deposits.
[3] This is the total of deposits that Kyrkilitsis (1934, p. 42) reported. Kyrkilitsis did not cite the original source of the data that he reported, nor provided information on the number of banks included.

Sources: Annual Report of the National Bank for 1926; Annual Report of the Bank of Athens for 1926; Kyrkilitsis (1934, p. 42); Kostis and Tsokopoulos (1988, pp. 182–196).

Table 3.2 shows the total deposits that the National Bank and a sample of other commercial banks received in 1926. These are the Bank of Athens, the Popular Bank and the Commercial Bank established before the outbreak of the Great War and the Piraeus Bank and the Bank of Industry established in 1916 and 1918 respectively. Deposits reported in Table 3.2 are sight, time and savings deposits whilst the government deposits that the National Bank held as a consequence of its role as the bank of the government are not included. 1926 was chosen as a benchmark for the comparison as it was the last year before any of the banking reforms of the late 1920s was carried out. A few months later, in June 1927, the Bank handed over to the newly established Mortgage Bank the majority of its time deposits.

Table 3.2 shows that the National Bank alone attracted approximately 40 per cent of the total deposits in the country. In other words, it received 60 per cent of the deposits of the sample of six banks presented in Table 3.2. It is evident that the National Bank was nonetheless the predominant deposit bank in Greece. The Bank of Athens follows with 14 per cent of the total deposits in spite of having had a widely spread network of branches as Table 3.1 above shows. In addition, the deposits of the Bank of Athens represented only one-third of the commercial deposits of the National Bank. The Popular and the Commercial Bank held only 10 per cent of total deposits between them. Finally, Table 3.2 shows that the banks established after the outbreak of the Great War had not managed to capture a significant part of the deposit market by 1926. For example in 1926, the deposits of the Piraeus Bank established in 1916 were only 1 per cent of the total deposits in the country whilst the Bank of Industry's were 1.27 per cent.

Another way to compare the size and the power of the National Bank vis-à-vis the country's other banks is to compare the share capital of the National Bank with that of other banks. Table 3.3 shows the book value of the share capital and the reserves of the National Bank alongside some banks established before the outbreak of the war as well as the Bank of Piraeus and the Bank of Industry founded in 1916 and 1918 respectively. However, to compare the book value of the capital stock of the banks included in Table 3.3 is misleading. The share capital of the National Bank cannot be compared with the book value for example of the capital of the Bank of Industry.[95] The stock capital of the National Bank had remained the same since 1884, the last time that it was increased. On the other hand, the Bank of Industry raised its stock capital between 1918 and 1925 which was a period of high inflation. The third column of Table 3.3 shows the reserves of the banks mentioned above. The reserves of the National Bank quoted in this table do not include the reserves that it was required by law to maintain after 1923 as the central bank in Greece. Half of these reserves that the National Bank was required to hold as the bank of issue in Greece in fact belonged to the government. In 1926 these reserves amounted to 120 million drachmae.

[95] For example, see Kyrkilitsis (1934, p. 21); Kostis (1987, p. 233; 1990, p. 166).

Table 3.3: Bank capital in 1926
(in drachmae)

	Paid Up Capital[1]	Reserve Funds	%[2]
National Bank of Greece (1841)	20,000,000	220,000,000[3]	57.73
Bank of Athens (1893)	72,000,000	40,000,000	8.25
Bank of the Orient (1904)[4]			
Popular Bank (1905)	15,000,000	2,133,000	0.44
Commercial Bank (1907)	47,400,000	106,830,000	22.03
Piraeus Bank (1916)	10,000,000	6,755,000	1.39
Bank of Industry (1918)	50,000,000	49,280,000	10.16
Total:		424,998,000	100.00

Notes:
[1] This is the book value of the paid up capital of each bank. Non-comparable.
[2] Percentage of reserve funds of each bank in total reserves of the banks listed above.
[3] The reserve funds of the National Bank according to 2577 law of 1921 are not included in the funds cited above. In 1926, these reserves amounted to 120 million drachmae; half of these reserves belonged to the government.
[4] The capital and reserves of the Bank of the Orient were reported in francs; 35,000,000 francs as capital and 8,163,187.25 francs as reserves.
Sources: HABOG_A3S1Y1F4T1, p. 97; the data for the National Bank come from its Annual Report for 1926; Kostis and Tsokopoulos (1988, pp. 182–196).

Table 3.4 below shows all the banks that were listed on the Athens Stock Exchange. In addition, it shows the number of shares and the average price of the share of each bank in 1926 as well as its market capitalisation. It is apparent again that the most important bank was the National Bank. At the time, 36 per cent of the market capitalisation of the banking sector was vested in National Bank. Once again, the Bank of Athens follows with 22 per cent. The Commercial Bank holds the third place with 12 per cent of the market. In addition, Table 3.4 demonstrates yet again, though in a different way, that the size of the banks established after the outbreak of the First World War remained small indeed.

In sum, in spite of the expansion in the number of banks after the outbreak of the Great War, the National Bank still remained the most important bank in Greece in the spring of 1927 when the representatives of the League visited Athens. Its size, compared to the other banking institutions, was huge and its commercial aspect dominated the lending market. Last but not least, it continued to be the principal bank of deposit.

Table 3.4: Market capitalisation of banks in 1926[1]

	No of Shares	Price of Share[2]	Market Capitalisation	%[3]
National Bank of Greece (1841)	20,000	41,503.83	830,076,600.00	36.32
Bank of Athens (1893)	720,000	709.91	511,135,200.00	22.36
Bank of the Orient (1904)	280,000	606.24	169,747,200.00	7.43
Popular Bank (1905)	21,429	5,983.49	128,220,207.21	5.61
Commercial Bank of Greece (1907)	474,000	574.16	272,151,840.00	11.91
Bank of Piraeus (1916)	100,000	445.83	44,583,000.00	1.95
Bank of Industry (1918)	200,000	542.49	108,498,000.00	4.75
Bank of the National Economy (1918)	150,000	257.50	38,625,000.00	1.69
General Bank of Greece (1918)	n.a.	2,354.41		
Central Bank of Greece (1918)	95,000	347.83	33,043,850.00	1.45
Cosmadopoulos Bank (1921)	45,000	903.66	40,664,700.00	1.78
Maritime Bank (1918)	n.a.	129.33		
Bank of Chios (1919)	40,000	626.75	25,070,000.00	1.10
Bank of Thessaly (1921)	n.a.	170.16		
Bank of Greek Commercial Credit (1924)	100,000	280.08	28,008,000.00	1.23
Anglo-American Bank	n.a.	89.50		
Tobacco Industry & Karavasilis' Bank (1924)	15,000	3,716.20	55,743,000.00	2.44
Total:			2,285,566,597.21	100.00

Notes:
[1] All banks listed on the Athens Stock Exchange in 1926 are cited above.
[2] Average price of the share of each bank at the Athens Stock Exchange in 1926.
[3] Percentage share of each bank in the total market capitalisation of the banking sector.

Sources: Ministere de l´Economie Nationale-Statistique Generale de la Grece (1929); Mitzalis (1931, pp. 6–41).

3.2. Credits to the Economy

3.2.1. Introduction

The National Bank opened its doors for business on 22 January 1842 (Julian calendar) as a mortgage bank which at the same time enjoyed issuing privileges. Indeed, according to its initial statutes three-quarters of the banknotes it placed in circulation could be covered by mortgage loans. This provision was, however, annulled in 1843 as mortgage bonds, being a long-term investment, were not considered a suitable asset with which to cover the banknotes in circulation.[96]

The National Bank developed all kinds of commercial banking activities as time went during the 'long' nineteenth century. In 1861 agricultural credit was added to its portfolio whilst three years later, in 1864, loans and current accounts against securities were permitted. In 1871, the Bank was also allowed to participate in limited companies under the condition that they operated within the Greek borders. In addition, in 1880 its mortgage activities were expanded further to include loans to legal entities. In 1897, loans could be given on pledged warrants and in 1900, loans as well as advances against merchandise were authorised.[97]

The National Bank continued to pursue all these different activities up to the late 1920s when banking reforms were implemented. In particular, the evolution of both mortgage and agricultural credit in Greece up to the late 1920s was closely correlated with the development of the National Bank. The Bank was the only bank in Greece prior to the banking reforms of the late 1920s that supplied loans to the agricultural sector, mortgage credit and loans to legal entities. In 1926, prior to any banking reform, the National Bank added a new activity to those mentioned above that was related to the settlement of refugees in urban areas in Greece: it engaged itself in the indemnification of urban refugees in Greece for their property left behind in Asia Minor.

In this section of Chapter 3, credits provided by the National Bank to the economy are examined. Credits to the economy include all credit, short- and long-term, granted to the productive sectors of the economy. They include discounts, loans against securities and merchandise, loans to the agricultural sector, mortgage credit and loans to legal entities. Discounts, loans against securities and merchandise were short-term credit as they were usually granted for three months. Loans and advances to the agricultural sector stood alone; in

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[96] Kyrkilitsis (1934, p. 128).
[97] Valaorites ([1902] 1988, pp. 230–231).

general, they were furnished for a period between six to nine months. By contrast, mortgage credit and loans to legal entities were mainly long-term credit.

In its entire history as a dual-purpose bank, the National Bank had always pursued commercial activities in a conservative and risk-averse manner. Loans were supplied cautiously and the solvency of its clients was carefully scrutinised. Principal officials of the National Bank assured the representatives of the League of Nations that visited Athens in late spring of 1927 that the entirety of the commercial credit provided by the National Bank was considered 'absolutely sound'.[98] Certain rules were followed and exceptions were made only in rare cases. The same report listed the general rules applied by the Bank to all the commercial credit that it provided. No credit was automatically renewed and renewal was possible only after the guarantees attached had been thoroughly examined. No prior notice was necessary to terminate a credit at the date of its repayment. Current accounts were an exception to this and prior notice of termination was required. In addition, a current account could be closed whenever it was judged that the guarantees provided had diminished. The Bank could make available different types of credit to a customer but the total loaned was always aligned with that customer's solvency.[99]

As is repeatedly asserted, the commercial aspect of the National Bank was an essential part of the Bank during its entire history as a 'dual bank', i.e. whilst it combined central banking responsibilities with commercial activities. In this section, the evolution of the commercial activities of the National Bank between 1898 and 1930 are examined and the changes that occurred during a long period of war and monetary upheaval are highlighted. Examination of the commercial credits provided by the National Bank to the productive sectors of the economy also sheds some light on credit conditions in Greece. This analysis also reveals that the National Bank was not on the way to transforming itself into a fully fledged central bank following the evolutionary model of other European central banks. In the spring of 1927, when the League of Nations was approached, the National Bank was involved in all kinds of commercial activities and had no resemblance at all to the model of a central bank pioneered by the governor of the Bank of England.

The investments of the Bank in other banks and companies, just one of its asset classes, are not examined here. The focus is on short- and long-term credit as well as loans to the agricultural sector. In addition, the activity related to the indemnification of urban refugees in Greece, although an activity close to the commercial interests of the National

[98] HABOG_A3S1Y1F4T1, p. 87.
[99] Ibid., p. 68.

Bank, is studied in the section on its relationship with the government. This task was intertwined with the dual character of the Bank and was retained when the Bank of Greece was established. In fact during the first couple of years of the National Bank as a commercial bank that are examined here this activity had an important position amongst its assets.

Firstly, some general information on the commercial activities of the National Bank is provided. Secondly, the size of the commercial activities of the National Bank as a percentage of GDP of the country and the total assets of the National Bank is examined. Thirdly, the evolution of credits to the economy at constant 1911 values is estimated and the changes that occurred during the period in question are pinpointed. Fourthly, a comparison of the commercial credit furnished by the National Bank and by the Bank of Athens is attempted. Subsequently, the share of each commercial task in total credits is studied. In this way, the character of the National Bank as a commercial bank is further examined. Finally, this part finishes with some concluding remarks.

This is the first time that time series related to the commercial aspect of the National Bank have been constructed and analysed methodically. By this means the evolution of its commercial aspect during the period in question has been exposed. It should be stressed, however, that no similar analysis on the commercial activities of the National Bank from 1842 up to 1897 has been carried out so far. Without such research, an examination of the evolution of the commercial role of the National Bank during its entire history as a dual-purpose bank is not possible.

3.2.2. A description of the commercial activities of the National Bank

Discounts:

Discounts included bills discounted and current accounts against personal guarantees. The Bank discounted bills for a period up to three months. Subsequently, bills could be renewed up to three times under the condition that the amount involved was insignificant. In the 1920s, they were discounted against personal guarantees and by statute should have borne at least two signatures.[100]

Discounting took place on the basis of nominal lists, carefully compiled by personnel of the National Bank. These lists were revised each year. Both an individual and a business had to be included in those lists in order to be able to present a bill for discounting.[101]

[100] Ibid., p. 69.
[101] Ibid.

Loans against Securities:

Credit against securities was given for a period up to three months. It could be renewed if the securities deposited offered sufficient margin. The stocks and bonds eligible for collateral varied from government bonds denominated either in gold or drachmae to shares of business enterprises such as wine companies or building societies.[102]

Loans against Merchandise:

Advances and current accounts against merchandise were also granted for a maximum period of three months and could be renewed up to three times if the guarantees provided sufficient margin.

The evaluation of pledged merchandise was carried out by experts from the Bank and was repeated each month. In the event that the margin had decreased, the National Bank required either a decrease in the debt or additional guarantees.[103]

According to the League Report of 1927, the National Bank furnished advances of up to 50 per cent of the market value of merchandise. The maximum of 50 per cent of the market value was enjoyed by only a few products. For example the equivalent percentage in the case of tobacco was 30 per cent. On the other hand, it is noted that the Bank furnished advances of up to 75 per cent of the market value of cereals, which was clearly an exception.[104]

Agricultural Credit:

Agriculture was the most important economic activity in Greece throughout the period in question in this thesis as well as the exclusive source of export goods. The National Bank had a monopoly on granting credits to this sector up to 1929 when the Agricultural Bank of Greece was established. In the nineteenth century, credit to farmers by the Bank of Epirus-Thessaly was fairly insignificant. In addition, loans that could be supplied by small local state banks that specialised in agrarian credit and operated in the New Areas annexed after the Balkan Wars remained negligible.[105] Furthermore, the commercial banks that were established after the turn of the twentieth century did not include agricultural credit into their activities as the business was not regarded as profitable.[106] Interest rates for credit to farmers were set by law and as a result did not allow sufficient profit.

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[102] Ibid., pp. 94–95.
[103] Ibid., p. 78.
[104] Ibid.
[105] Kyrkilitsis (1934, p. 98, n. 1 and 108, n. 1); Kostis (2003, pp. 193–195).
[106] HABOG_A3S1Y1F4T1, p. 74; Kyrkilitsis (1934, pp. 102–103).

When the National Bank was established in 1841, its charter vaguely stated its obligation to the agricultural sector.[107] Twenty years later in 1861 when the issuing privilege of the National Bank was renewed, credit to the agricultural sector was added formally as a responsibility. That year, the commercial activities of the Bank were extended by law in such a way so as to include loans to farmers. From then on the National Bank was obliged to grant farmers up to 2 million drachmae each year.[108] Agricultural credit, however, appears on the balance sheet of the National Bank as a separate entry only after 1893.[109] In 1896 an agreement between the National Bank and the government increased the credit that the National Bank had to make available to the agricultural sector to at least 10 million drachmae each year.[110]

Once again when the issuing privilege of the National Bank was renewed in 1914 for the last time in its history as an issuing bank, it was agreed to increase credit to agriculture to 25 million drachmae.[111] During that year an institutional development also occurred which is regarded as a turning point in the literature on the evolution of agricultural credit in Greece.[112] In 1914, a law was passed that allowed for the establishment of agricultural co-operative societies.[113] After that year, the National Bank started channelling credit to the agricultural sector through those co-operative societies. By the end of 1915 nearly 5 per cent of the credit granted by the Bank to the agricultural sector had been given to co-operatives. In 1922, half of the credit to agriculture was granted directly to farmers and the other half to co-operatives. By 1928, however, only 25 per cent of the agricultural credit was supplied as loans directly to farmers, whilst the remaining 75 per cent was given to co-operative societies.[114] During this period the number of co-operative societies in Greece increased very rapidly; from 150 in 1915 to 4,148 in 1926 the majority of which were engaged in credit activities.[115]

Agricultural credit was usually a six- to nine-month credit.[116] Loans to farmers were rarely renewed other than in the case of destruction of the harvest and under the condition that additional guarantees were not required. Credit to farmers was limited and intended to cover the needs of basic subsistence from season to season. Only a small portion of the credit granted to agriculture was aimed at capital improvements or the improvement of the value of

[107] Kyrkilitsis (1934, p. 97, n. 1).
[108] Ibid.; Valaorites ([1902] 1988, p. 36 and p. 230).
[109] Agriantoni, (1986, p. 383).
[110] Valaorites ([1902] 1988, p. 166).
[111] See Annual Report of the National Bank for 1915 (1916, p. XIV).
[112] Kyrkilitsis, (1934, p. 99); Kostis (1987, p. 157).
[113] Kostis (1987, pp. 185–194; 2003, pp. 193–195).
[114] Kyrkilitsis (1934, p. 103); see also Kostis (1987, p. 187).
[115] Kostis (1987, p. 343, n. 321); See also HABOG_A3S1Y1F4T1, p. 74.
[116] HABOG_A3S1Y1F4T1, p. 74; Kyrkilitsis (1934, p. 98 and 101).

the land; for example for the undertaking of drainage projects, the building of warehouses or even for the purchase of land and tools. In such cases, the credit was given for a maximum of five years.[117]

The interest rate charged by the National Bank on agrarian credit was determined by law and it was usually lower than its discount rate. In addition, after 1914 the interest rate for credit channelled to agricultural co-operative societies was lower by 1 per cent than that directed to individual farmers.[118] Credit to the agricultural sector, which as already noted was monopolised by the National Bank was, however, available only to large farmers who could comply with the requirements set for collateral. Small farmers and peasants depended on informal chains of credit where punitive interest rates were charged whilst at the same time usurious interest rates were banned by law.

In 1919 the Law of Fictitious Chattel of Tobacco Crop was passed. Before the introduction of this law, agricultural loans were regulated only by the Law of Chattel Mortgage of 1836, which virtually repeated Roman-Byzantine Law.[119] Moreover, in 1920 a further legal change occurred: the agricultural warrant was introduced.[120] Between 1914 and 1920, therefore credit conditions for farmers improved considerably with the introduction of the law that allowed the establishment of agricultural co-operatives and the two further legal changes, the introduction of the Law of Fictitious Chattel of Tobacco Crop and the agricultural warrant. Prior to these institutional changes, legislative efforts to facilitate and improve agrarian credit concerned themselves solely with devices to prohibit usury rather than with the reorganisation of the general legal principles of the chattel mortgage and loan contract.[121]

A further turning point for agricultural credit conditions during the period in question and indeed the most important institutional reform for agriculture up to the end of the interwar period was the establishment of an agricultural bank, the Agricultural Bank of Greece, in 1929. It is generally believed that with the establishment of the Agricultural Bank, credit conditions for farmers improved fundamentally and credit became available to the agrarian sector at large at an affordable price. These issues, however, are beyond the scope of this thesis. Further research needs to be carried out to establish the veracity of such claims, as well as the timing of the de-escalation of punitive interest rates for the agrarian sector.

[117] Kyrkilitsis (1934, pp. 102–103).
[118] Kyrkilitsis (1934, pp. 106–107); Kostis (1987, p. 344, n. 323).
[119] Pepelasis (1959, p. 189).
[120] Kyrkilitsis (1934, p. 99); Kostis (1987, p. 161; 2003, pp. 196–197).
[121] Pepelasis (1959, p. 189).

When the Greek government was negotiating a stabilisation programme with the League of Nations, the minister of agriculture, Alexandros Papanastasiou, was campaigning for the establishment of an agrarian bank which would be responsible for agricultural credit in Greece.[122] In addition, this prospective agrarian bank would undertake compulsory expropriation of land and the rehabilitation of all landless peasants, regardless of whether or not they were refugees. This proposal, which would have led to the establishment of an autonomous agrarian bank operating independently from the National Bank, faced fierce opposition both from the National Bank and the political world in Athens.[123] Furthermore, archival material at the Bank of England shows that the Refugee Settlement Commission (RSC) – the committee that was responsible for the settlement of refugees in rural areas in Greece – also objected, in fact strongly, to the establishment of an independent agrarian bank. In spite of strong opposition to this project, in February 1928 an agreement was signed between the National Bank and the government that provided for the establishment of an autonomous organisation, known in the literature as the Agrarian Bank, which would aim at improving the welfare of the agricultural community at large. This agreement between the National Bank and the government, however, was never approved by parliament and as a consequence the Agrarian Bank was never founded. The principal argument was that this new banking institution would not be adequately capitalised.[124]

Nevertheless, two years later in January 1930, the Agricultural Bank of Greece opened for business. The statutes of this bank were, however, very different from those of the proposed Agrarian Bank and its foundation was directly related to the establishment of the Bank of Greece. Upon his return to Greece, after the Bank of Greece began its operations in May 1928, Venizelos raised objections to the way that the minister of finance of the all party government which had *de jure* stabilised the drachma, had handled the issue of covers of the National Bank.[125] In brief, a new agreement between the Old Bank and the government provided that part of the surplus value of the covers that under the stabilisation programme were maintained by the National Bank as compensation for the early loss of its issuing privilege, would be used as capital for the establishment of an Agricultural Bank. As a result, part of the surplus value of the covers was given as a 'dowry' to the Agricultural Bank which started business in January 1930.

[122] For more, see Veremis (1987, pp. 255–262); Kostis (1987, pp. 266–275; 2003, pp. 293–299 and 303–309).
[123] For more, see Veremis (1987, pp. 259–262); Kostis (1987, pp. 258–287).
[124] Veremis (1987, p. 261).
[125] Kostis (1987, pp. 291–293; 2003, pp. 400–405).

The establishment of the Agricultural Bank signalled the end of the banking reforms that began with the establishment of the Mortgage Bank in June 1927. In those three years, the National Bank lost its privileges and the monopolies that it held: it ceased being the issuing bank and the bank of the government as well as conceding its monopoly on mortgage and agricultural credit to two newly established specialised banking organisations.

Mortgage Credit:

The National Bank monopolised mortgage credit in Greece up to 1927 when the National Mortgage Bank of Greece was established. Its mortgage credit consisted of two different categories of loans: general mortgage loans to the public and loans to legal entities. Credit to legal entities included loans to municipality, ports and other legal organisations. A small portion of the general mortgage credit could have been medium-term credit given on mortgage guarantees. This portion of mortgage credit, which was in fact insignificant, is included here with mortgage loans.

The interest rate charged on mortgage credit was set by law. Furthermore, the interest rate paid by legal entities was lower than that charged on mortgage loans to the general public. In the 1920s, loans to public entities could have an amortisation period of up to 40 years but in practice they did not exceed a maximum period of 30 years.[126] Credit to legal entities was secured by a pledge to the National Bank on the revenues of these organisations. In most cases the revenue of legal entities were paid directly to the National Bank and after the annuity was deducted the surplus was reimbursed to the organisations concerned.[127]

The National Bank could issue bond loans in order to collect capital for mortgage credit. Before the 1927 reform, the Bank had provided mortgage credit facilities floating loans exclusively for this purpose on five occasions: twice in the middle of the 1920s and three times prior to the outbreak of the First World War.[128]

The first serious attempt to organise and expand mortgage credit in Greece occurred in 1920 with the publication of the 2413 law.[129] It has been argued that previous attempts to organise mortgage credit had been obstructed by the National Bank.[130] The 1920 law specified that any joint stock bank with a capital of at least 10 million drachmae could exercise mortgage credit. It was, however, never implemented and four years later was

[126] HABOG_A3S1Y1F4T1, p. 80.
[127] Ibid., p. 81.
[128] Kyrkilitsis (1934, pp. 130–131).
[129] For more on this law, see Kostis (2003, pp. 246–247).
[130] Kostis and Tsokopoulos (1988, p. 63).

replaced by a new law which indeed regulated mortgage credit in detail. The 1924 mortgage law denoted that the paid up capital of a joint stock bank exercising mortgage credit facilities should be at least 50 million drachmae and its activity had to be centred exclusively on mortgage credit and loans to legal entities.[131]

The 3221 law of 1924 laid the foundations for the establishment of the Mortgage Bank of Greece by the National Bank itself in 1927. This monopoly on mortgage credit that the Bank had enjoyed since its foundation in the nineteenth century was the only one of its privileges that it conceded voluntarily during the banking reforms of the late 1920s. It is possible that the governors of the National Bank were encouraged by Hambros Bank officials to take this initiative.[132] Hambros Bank was the official bank of the Greek government in London and had at the same time established close links with the National Bank. Both the governor and the sub-governor of the National Bank had spent long periods of time in London meeting officials at the Bank of England and also visiting Hambros Bank's headquarters. They may have realised that the mortgage credit activities of the National Bank could have easily been an impediment to achieving their aim of accessing the London financial market. In the City, it was believed that an institution could not be engaged in central banking and at the same time pursue mortgage credit activities. Nevertheless, a week after the Mortgage Bank opened its doors for business in June 1927, an agreement was signed between the Mortgage Bank and the Hambros Bank that provided for the issue of a loan on the London market. This loan was guaranteed by the National Bank and was aimed at increasing the available capital for mortgage loans supplied by the new bank.[133]

The National Bank conceded to the newly established mortgage bank all the assets and liabilities that related to its role as a mortgage bank. Indeed, it handed over to the new mortgage bank most of its long-term assets and liabilities. That is to say that in terms of assets the National Bank ceded all its mortgage loans as well as most of the credit that it had extended to legal entities. In addition, it passed on to the new bank real estate that had been acquired by confiscation. At the same time, the liabilities that the National Bank passed on to the Mortgage Bank consisted of time deposits and the loans that had been issued to fund mortgage credit.

The initial capital of the Mortgage Bank was 80 million drachmae divided in shares of 1,000 drachmae each. Three-quarters of this capital, that is 60 million drachmae, was

[131] Kyrkilitsis (1934, pp. 129–130).
[132] Kostis (2003, pp. 247–248).
[133] Kyrkilitsis (1934, p. 133); Kostis (2003, p. 252).

covered by reserve funds of the National Bank, which subsequently distributed *gratis* the equivalent amount of shares as compensation to its shareholders: one share of the National Bank corresponding to three shares of the Mortgage Bank. The remaining capital of 20 million drachmae was also contributed by the National Bank, this time using its cash reserves. The shares that the Bank obtained were included in its portfolio of investments.[134]

[134] Annual Report of the National Bank for 1927 (1928, pp. X–XI).

3.2.3. Structure and evolution of credits supplied to the economy by the National Bank

Table 3.5: Credits to the economy as a percentage of GDP

	% of GDP
1898	15.98
1899	20.88
1900	21.50
1901	20.65
1902	23.04
1903	23.76
1904	27.22
1905	27.02
1906	27.73
1907	28.81
1908	30.26
1909	27.71
1910	27.81
1911	24.24
1912	26.71
1913	22.71
1914	18.80
1915	18.02
1916	13.78
1917	9.86
1918	6.98
1919	8.89
1920	10.04
1921	8.50
1922	9.86
1923	6.92
1924	10.82
1925	11.79
1926	9.85
1927	7.04
1928	9.36
1929	13.92
1930	14.87

Sources: Table A1.2 in Appendix A1 and Table A2.2 in Appendix A2.

Table 3.5 above shows total credits to the private economy as a percentage of GDP. Credits to the economy include all credit, short- and long-term, furnished to the real economy. In other words, they include discounts, loans against securities and merchandise, loans to the agricultural sector, mortgage loans and loans to legal entities. The table shows that from 1899 to 1913, total credits to the economy by the National Bank fluctuated between 20 per cent and 30 per cent of GDP. In 1908, they accounted for over 30 per cent of GDP, the maximum share observed during the entire period in question. Credits to the economy as a percentage of GDP in 1898 were only 16 per cent, the lowest percentage share observed prior to 1913. Since no similar research has been conducted, it makes it difficult to know if the level of credits to the economy as a percentage of GDP in 1898 is an outlier or if it denotes the dominant trend of a period that ended with the enactment of the Law of Control.

A change in the relationship between the Bank and the economy is noticed after the outbreak of the Great War. Between the outbreak of the First World War and the end of the period in question, total credits to the economy as a percentage of GDP shrank substantially, indicating 'a loosening of the links' between the National Bank and the economy.[135] In particular, between 1917 and 1928 when the National Bank lost its central banking privileges, total credit to the economy fluctuated between 7 per cent and nearly 12 per cent. Credits to the economy as a percentage of GDP fell to as low as 7 per cent in 1918 and again in 1923. They were also 7 per cent of GDP at the end of 1927, the year that the National Bank conceded long-term assets to the newly established Mortgage Bank.

After the banking reform, credits to the economy as a percentage of GDP increased, pointing to an improvement in the relationship between the National Bank and the economy. The same *caveat*, however, applies again: no similar data exist for the period after the banking reforms to examine the relationship of the National Bank with the economy.

Table 3.6 shows credits to the economy as a percentage of total assets of the National Bank between 1898 and 1919 and then again between 1928 and 1930. As has been mentioned before, accountancy practices during the monetary upheaval of the 1920s obscure the real financial position of the Bank during that period. The value of figures denominated in gold drachmae or foreign exchange that appear amongst the assets of the National Bank was understated from the time when the drachma began depreciating in 1919 until stabilisation. As a result, what was reported as total assets on the balance sheet of the National Bank in the 1920s prior to stabilisation was an understatement of its true financial position. It should be

[135] Bouvier (1984, p. 37).

noted that a small portion of credits to the economy was denominated in gold drachmae. In spite of this, however, total credits to the economy have been estimated assuming that they paint a fairly accurate picture, since their fraction expressed in gold drachmae was small indeed.

Table 3.6: Credits to the economy as a percentage of total assets of the National Bank
(Data is as at the end of the period)

	% of Assets
1898	31.86
1899	36.46
1900	39.91
1901	41.55
1902	42.01
1903	44.46
1904	42.92
1905	43.45
1906	43.47
1907	47.06
1908	47.31
1909	47.04
1910	43.41
1911	41.61
1912	37.53
1913	26.45
1914	32.02
1915	28.02
1916	23.06
1917	16.67
1918	11.80
1919	12.52
1928	42.72
1929	54.89
1930	51.39

Sources: Author’s calculations using the data in Tables A2.1 and A2.2 in Appendix A2.

Table 3.6 shows that between 1898 and 1910, credits to the economy granted by the National Bank represented a significant part of its total assets, fluctuating between 31.86 per cent and 47.31 per cent. Between 1901 and 1911 they remained above 40 per cent, reaching their highest percentage of 47.31 in 1908.

Table 3.6 also shows that from 1910 until 1919, credits to the economy as a percentage of the assets of the National Bank decreased constantly, in spite of their increase in nominal values during that same period. They fell to as low as 11.80 per cent of total assets in 1918. In March 1910, the ΓΧΜΒ Law was enacted and subsequently the balance sheet of the National Bank experienced a period of rapid expansion which was primarily due to this Law. (For more on the ΓΧΜΒ Law see Chapter 4.) Banknotes in circulation increased rapidly and at the same time the gold and foreign exchange reserves of the Bank were augmented, as the ΓΧΜΒ Law dictated, by the same amount as the newly printed banknotes. As Ioannis Valaorites, the father of this Law, remarked insightfully in 1913 the ΓΧΜΒ Law 'did not increase at all the resources that the Bank could make available to trade, industry and agriculture'.[136] To recap, the fall that can be seen in the commercial credits furnished by the National Bank as a percentage of its assets between 1910 and 1919 is due not to a decrease of their volume but to the rapid expansion of the balance sheet of the National Bank caused mainly by the ΓΧΜΒ Law. As Table A2.2 of Appendix A2 shows, credits to the economy increased in nominal drachmae between 1911 and 1919. However, that having been said they increased more slowly than the rate of the expansion of the total assets of the National Bank.

In the 1920s prior to the establishment of the Bank of Greece, the share of credits to the economy as a percentage of total assets of the National Bank must have remained low. By the end of the Asia Minor campaign, the structure of the assets of the National Bank was very different from that observed between the introduction of the Law of Control in 1898 and the enactment of the ΓΧΜΒ Law in 1910. Illiquid government debt owned by the National Bank had increased. Credits to the economy at nominal prices had also swollen but their pace of increase was slower than that of total assets. As Table A2.3 of Appendix A2 demonstrates, this rise in credits to the economy was below the rate of inflation.

After the introduction of the ΓΧΜΒ Law the significance of credits to the economy supplied by the National Bank as a percentage of its total assets shrank. Credits to the economy as a percentage of the total assets of the National Bank remained small until the banking reform in 1928. This decrease in the significance of credits to the economy in the total assets of the National Bank was due to changes in the structure and composition of its assets. During that period the National Bank did not give up any of its commercial activities nor did it intend to do so. The decrease in the total credits to the economy as a percentage of its assets was caused firstly by the operation of the ΓΧΜΒ Law and secondly by changes in

[136] Kokkinakis (1999, p. 540).

the balance sheet of the National Bank produced by a long period of war and monetary upheaval.

The balance sheet that the National Bank published at the end of 1928 followed the Bank having lost its issuing privilege and been transformed into a pure commercial bank. As expected, the share of credits to the economy as a percentage of its assets surpassed those of the immediate period prior the introduction of the ΓΧΜΒ Law. At the end of 1928, credits to the economy accounted for nearly 43 per cent of the assets of the National Bank whilst the following year they made up over half of its assets; the maximum percentage share observed during the entire period in question here.

Credits to the economy by the National Bank at 1911 prices were estimated using the data gathered in Table A2.2. The price index produced by Kostelenos *et al*. (2007) was used as a deflator. It was, however, rebased from 1914, the base year of the original time series, to 1911 – the last year that Greece was not engaged in war prior to the outbreak of the Balkan Wars. Every different category of credit to the economy by the National Bank was estimated at constant prices in addition to total credits to the economy and the result is presented in Table A2.3 of Appendix A2. Subsequently, the time series of credits to the economy at constant prices were transformed into ratio form with 1911 again as the base year. In addition, total short- and long-term credit expressed as a ratio was also estimated and shown in Table A2.4 of Appendix A2.

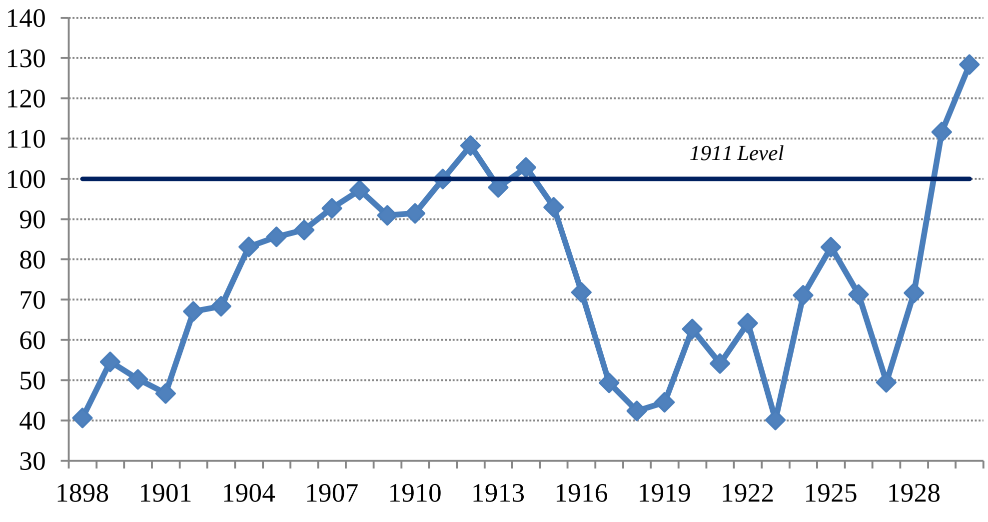

Figure 3.1: Credits to the economy at 1911 values (1911=100)
Source: Table A2.4 in Appendix A2.

Figure 3.1 above displays total credits to the economy at 1911 values expressed as a ratio. This figure demonstrates that credits to the economy increased until 1912. This increase in total credits is also denoted in Tables 3.5 and 3.6 above, where credits to the economy are expressed as a percentage of GDP and of total assets of the National Bank. Then, a constant decrease is noticed until 1918. Between the end of the Great War and the stabilisation of the drachma in 1928 total credits to the economy at 1911 values fluctuated from year to year as both Figure 3.1 and Tables A2.3 and A2.4 in Appendix A2 demonstrate. As is mentioned above, total credits to the economy at nominal prices increased considerably in the 1920s. Credits to the economy by the National Bank at nominal prices dropped only in 1927 – the year that the Mortgage Bank was established. Figure 3.1, however, demonstrates vividly that this rapid increase in total credits at nominal prices in the 1920s was purely inflationary. In the 1920s, prior to the stabilisation of the drachma, total credits to the economy at 1911 prices remained low – close in fact to their level at the beginning of the century. Moreover they were volatile. It is noticeable that in 1923 total credits to the economy at constant values reached the lowest level observed since the outbreak of the Balkan Wars. They surpassed their 1911 level only in 1929. As is demonstrated below, however, by then the composition of total credits to the economy had radically changed because of the banking reforms of the late 1920s.

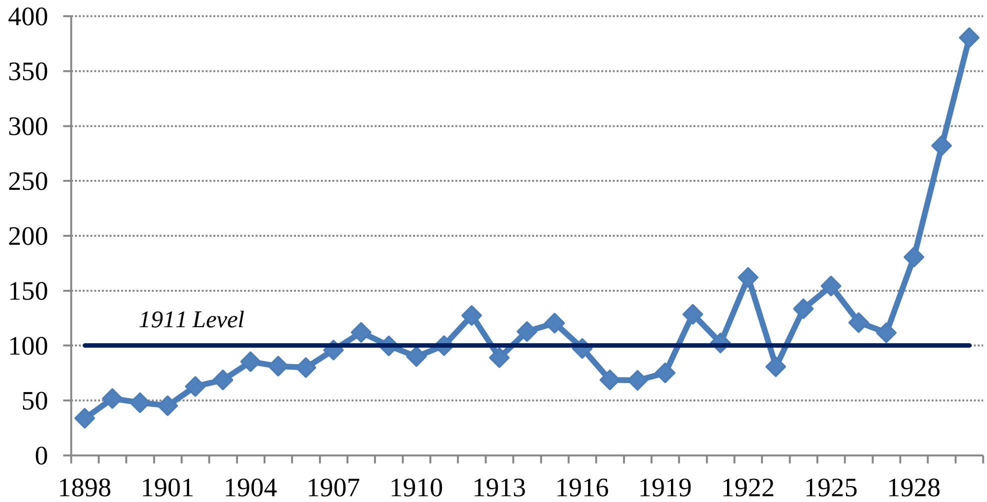

Figure 3.2: Total short-term credit to the economy at 1911 values (1911=100)
Source: Table A2.4 in Appendix A2.

It should be reminded that the data used for the analysis here have been hand-collected from the balance sheet of the National Bank and show its position at the end of each year. Figure 3.2 displays short term credits to the economy at 1911 prices as a ratio. Short-term credits include discounts and credit against securities as well as merchandise. The data employed in

Figure 3.2 are presented in Table A2.4 of Appendix A2 and demonstrate that short-term credits at 1911 values increased until 1908. Subsequently, between 1909 and 1923 they fluctuated around their 1911 level. It should be noted that between 1916 and 1919 short-term credits at constant values remained below their 1911 level. By contrast, after 1924 they persistently surpassed their 1911 level and after the banking reforms experienced a rapid increase until the end of the period in question.

Table A2.4 in Appendix A2 also presents discounts and credit against securities and merchandise. It indicates that both discounts and credit against securities followed the same path as total short-term credits. On the other hand, credit against merchandise increased abruptly in 1903. This sudden increase was due to credit being furnished by the National Bank to the Currant Bank, an organisation established in 1899 to focus on the currant problem.[137] This loan was guaranteed by currants. It should also be noted that between 1916 and 1927, credit against merchandise ballooned and that by the end of the period so much so that it took up an important position amongst credits to the economy provided by the National Bank.

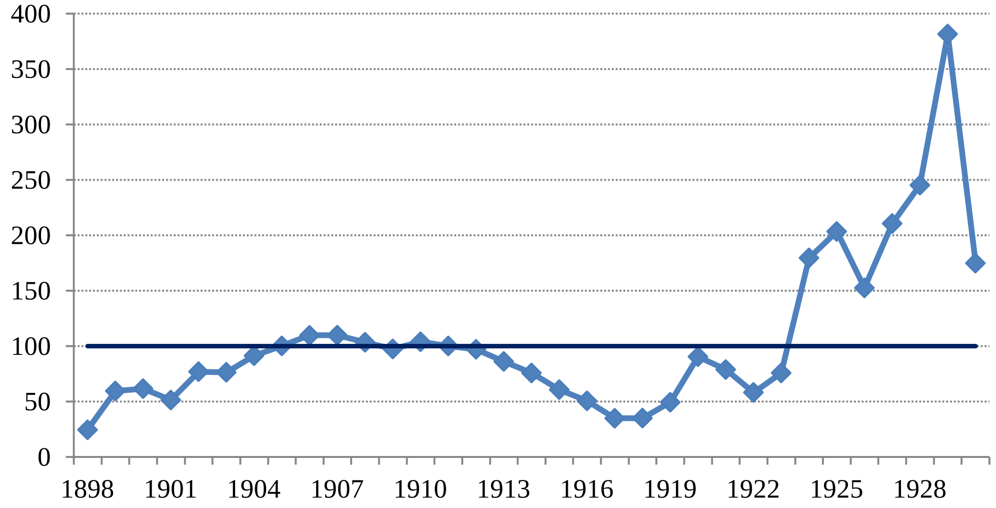

Figure 3.3: Agricultural credit at 1911 values, 1898–1930 (1911=100)
Source: Table A2.4 in Appendix A2.

Figure 3.3 shows credit furnished by the National Bank to the agricultural sector during the period in question. Agricultural credit expressed at 1911 prices increased until 1905. Subsequently, it remained stable, close to its 1911 level until the outbreak of the First Balkan War in 1912. By contrast, between 1913 and 1923 agricultural credit provided by the National Bank was constantly below its 1911 value. Figure 3.3 shows that after 1924 the National

[137] Kostis and Tsokopoulos (1988, p. 38).

Bank started supplying credit generously to the agrarian sector. Credit to farmers increased rapidly until the establishment of the Agricultural Bank in 1930. It is usually argued in the literature that the institutional changes described above, i.e. the establishment of co-operative societies and the legal changes implemented in 1919 and 1920 fostered this rapid increase in credit to the agrarian sector after the end of the Asia Minor debacle.

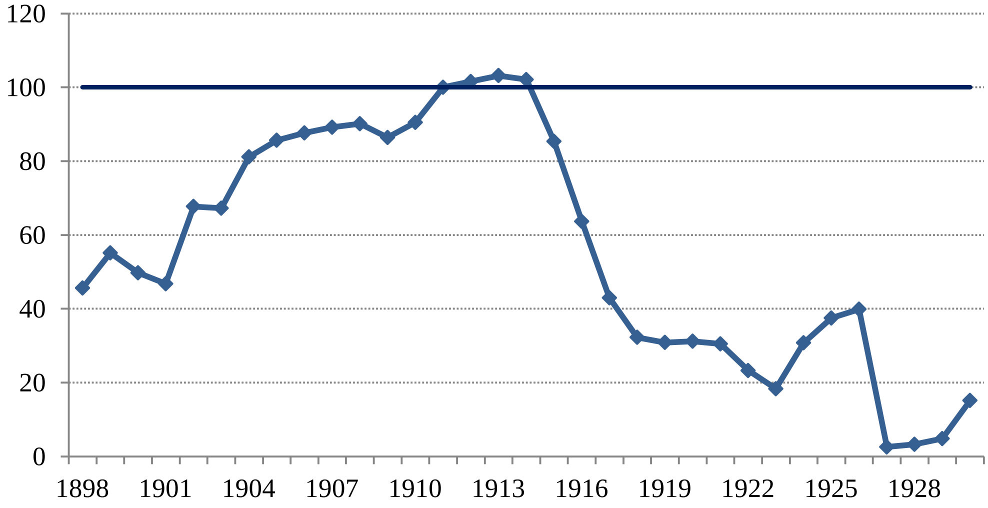

Figure 3.4: Total mortgage credit at 1911 values, 1898–1930 (1911=100)

Source: Table A2.4 in Appendix A2.

Figure 3.4 presents total mortgage credit at 1911 prices during the period in question. Total mortgage credit is composed of general mortgage loans and loans to legal entities. Figure 3.4 indicates that total mortgage credit at constant values increased up to 1911 and then remained stable until the outbreak of the First World War. Subsequently, total mortgage credit fell considerably and indeed remained below its 1911 level until the end of the period in question. After the establishment of the Mortgage Bank in 1927 as Table A2.2 of Appendix A2 demonstrates, the National Bank stopped supplying general mortgage credit. This table also shows that after 1927 the Bank continued granting some mortgage credit though entirely made up of loans to legal entities.

Examination of the structure of credits to the economy will shed further light on the nature and characteristics of the commercial aspect of the National Bank. This analysis will also expose changes that occurred in the commercial aspect of the Bank from the enactment of the Law of Control in 1898 until the establishment of the Agricultural Bank in 1930.

Table 3.7: Percentage share of each category of credits to the economy by the National Bank

	Short-Term Credit					Mortgage Credit		
	Discounts	Loans against Securities	Loans against Merchandise	**Total Short-Term Credit**	**Agricultural Credit**	Mortgage Loans	Loans to Legal Entities	**Total Mortgage Credit**
1898	17.32	5.54		22.86	4.89	40.61	31.64	72.25
1899	17.63	8.43		26.06	8.89	38.03	27.02	65.05
1900	18.20	7.93	0.10	26.23	10.01	36.18	27.59	63.77
1901	18.36	7.78	0.45	26.59	8.96	35.42	29.03	64.45
1902	16.74	8.55	0.38	25.67	9.35	34.26	30.72	64.98
1903	16.07	8.66	2.86	27.59	9.11	34.50	28.80	63.30
1904	15.03	9.83	3.33	28.19	8.96	34.92	27.93	62.85
1905	16.41	8.01	1.64	26.06	9.55	36.70	27.70	64.40
1906	14.41	7.31	3.42	25.14	10.25	37.20	27.42	64.62
1907	14.17	8.84	5.39	28.40	9.67	36.86	25.07	61.93
1908	13.95	12.00	5.68	31.63	8.68	35.92	23.77	59.69
1909	13.14	13.17	3.80	30.11	8.74	36.40	24.75	61.15
1910	13.43	9.94	3.65	27.02	9.27	37.26	26.44	63.70
1911	12.30	11.44	3.70	27.44	8.17	34.53	29.86	64.39
1912	13.19	16.84	2.27	32.30	7.32	32.95	27.44	60.39
1913	9.04	13.51	2.40	24.95	7.18	37.41	30.45	67.86
1914	12.48	16.51	1.10	30.09	6.00	31.31	32.59	63.90
1915	11.81	21.99	1.77	35.57	5.32	29.67	29.44	59.11

	Short-Term Credit					Mortgage Credit		
	Discounts	Loans against Securities	Loans against Merchandise	**Total Short-Term Credit**	**Agricultural Credit**	Mortgage Loans	Loans to Legal Entities	**Total Mortgage Credit**
1916	10.99	20.37	5.85	37.21	5.74	28.90	28.15	57.05
1917	10.31	16.98	10.94	38.23	5.75	26.73	29.29	56.02
1918	5.50	7.85	30.93	44.28	6.73	22.72	26.27	48.99
1919	10.08	8.24	28.02	46.34	9.03	21.17	23.46	44.63
1920	13.46	11.07	31.69	56.22	11.77	16.84	15.18	32.02
1921	11.90	12.62	27.39	51.91	11.87	20.06	16.16	36.22
1922	17.44	19.84	32.01	69.29	7.39	13.68	9.63	23.31
1923	15.53	12.50	27.21	55.24	15.40	19.25	10.11	29.36
1924	21.37	10.52	19.64	51.53	20.62	18.16	9.70	27.86
1925	24.05	12.18	14.74	50.97	19.99	19.12	9.92	29.04
1926	23.86	11.79	10.90	46.55	17.46	22.95	13.05	36.00
1927	39.04	13.50	9.41	61.95	34.76	0.00	3.30	3.30
1928	33.57	13.52	22.06	69.15	27.93	0.00	2.92	2.92
1929	32.42	15.46	21.45	69.33	27.91	0.00	2.77	2.77
1930	41.44	17.71	22.15	81.30	11.11	0.00	7.59	7.59

Source: Author's calculations using the data collected in Table A2.2 in Appendix A2.

As has been mentioned previously, the National Bank had a monopoly on mortgage and agricultural credit and at the same time it furnished all kinds of short-term credit, i.e. discounts and loans against securities and merchandise. Table 3.7 presents each different category of commercial credit as a percentage share of total credits supplied by the National Bank. In addition, it shows the share of short-term and mortgage credit in total credits to the economy.

Table 3.7 shows vividly that mortgage credit was the most important commercial activity pursued by the National Bank up to end of the Great War. It also demonstrates that at the beginning of the century mortgage credit still remained the most important commercial activity of the National Bank, despite the fact that it was engaged in central banking functions. Between 1898 and 1918 mortgage credit, i.e. both general mortgage loans and loans to legal entities had the lion's share of total credits to the economy. During this period, at least 50 per cent of the total credits granted by the National Bank consisted of mortgage loans; in 1898 the percentage share of mortgage loans was 72.25 per cent whilst by 1917 it had dropped to 56.02 per cent. At the same time, the percentage share of agricultural credit granted by the National Bank varied at between 5 per cent and 10 per cent of total credits.

A long period of war and monetary upheaval altered the structure of credits to the economy on the balance sheet of the National Bank. The banking reforms of the late 1920s, however, changed fundamentally the nature of the National Bank as a commercial bank. In 1926, short-term credit represented 47 per cent of total credits supplied by the National Bank and agricultural credit 17 per cent whilst mortgage credit had dropped to 36 per cent of total credits. By the end of the following year a radical change had occurred in the structure and composition of the commercial aspect of the Bank because of the establishment of the National Mortgage Bank. In 1927, the National Bank conceded general mortgage credit and the majority of the loans that it had provided to legal entities to the newly established mortgage bank. As a result, mortgage credit fell to 3.30 per cent of total credits to the economy whilst the percentage share of short-term credit rose to 62 per cent and that of agricultural credit to 35 per cent. As Table 3.7 shows discounts alone accounted for approximately 40 per cent of the total credits furnished by the National Bank in 1927. Moreover, in 1930 a further change in the commercial status of the National Bank was realised with the establishment of the Agricultural Bank. At the end of that year the percentage share of short-term credit increased still further, accounting for 81 per cent of total credits to the economy. Thus, in the late 1920s the Bank conceded two monopolies which had been important for its commercial status since its foundation; it lost its monopoly on mortgage and agricultural credit. Furthermore, its business mainly concentrated on granting short-term credit.

3.2.4. A comparison of the National Bank with the Bank of Athens

In this section of Chapter 3, credits to the economy furnished by the National Bank are compared with credit granted by the Bank of Athens. This comparison helps to illustrate further the importance and strength of the National Bank on the Greek market. It also exposes the differences between the National Bank as a commercial bank and other banks. The Bank of Athens was established in 1893 and until the end of the period in question it remained the most important rival of the National Bank for general commercial business. The Bank of Athens, upon its foundation, expanded its business beyond the borders of the Greek Kingdom to include areas with thriving Greek communities. For example, by 1910 the Bank of Athens had created a widespread network of branches in Greece, the then autonomous Crete, Turkey and Egypt, as well as in London, Khartoum and Limassol.[138]

Geopolitical changes in the Balkans and the Ottoman Empire at the time affected the status of the Bank of Athens. Some areas where the Bank of Athens operated were annexed by Greece and after the Asia Minor debacle it was forced to abandon completely its business in Turkey. In the 1920s, it still pursued business abroad in areas like Egypt and Cyprus and expanded successfully its business network in New York and Boston.[139] By contrast, the National Bank whilst being a dual-purpose bank operated exclusively within Greek borders. Having said that, after the end of the Great War the National Bank founded short-lived branches in areas later ceded to Greek administration by the Treaty of Serves.[140] For example, in January 1920 the Greek bank of issue opened a branch in Smyrna, 'a city with more Greek inhabitants than Athens'.[141] Beyond any financial objectives, however, the presence of the National Bank in Asia Minor aimed at supporting Greek irredentism and facilitating the use of the drachma as a medium of exchange in an area that remained under Turkish sovereignty and where the lira continued to be the legal tender.[142] In 1919, the administration of the Bank also explored the possibility of extending their business in the USA. However, it was 1926 before they managed to open an agency in New York and an office in Chicago to attract Greek diaspora savings.[143] Subsequently, after the National Bank lost its issuing privilege the Bank

[138] See ibid., p. 49.
[139] Kostis (2003, pp. 319–320).
[140] Annual Report of the National Bank for 1919, p. H; Annual Report of the National Bank for 1920, p. IB; Spiliotopoulos (1949, pp. 100–101).
[141] Clogg (1992, p. 93).
[142] For more on the presence of the National Bank in Asia Minor, see Veremis and Kostis (1984).
[143] See Spiliotopoulos (1949, p. 101 and p. 107); National Bank of Greece (2006, p. 110).

tried to strengthen its presence in the USA by forming the Hellenic Bank Trust Company in New York.[144]

A further crucial difference between the commercial aspect of the National Bank and the Bank of Athens was that the latter specialised in short-term credit as did most of the other banks in Greece. Some mortgage credit was reported on the balance sheet of the Bank of Athens after 1901 but it remained insignificant throughout the period in question. On the other hand, as it has been mentioned above, the National Bank had a monopoly on mortgage credit until 1927. Between 1898 and 1926 mortgage credit fluctuated, as Table 3.7 shows, between 72 per cent and 28 per cent of total credits furnished to the economy by the National Bank. In addition, the National Bank was the only bank in Greece to provide credit to the agrarian sector until the establishment of the Agricultural Bank.

Table A2.6 in Appendix A2 presents credit supplied by the Bank of Athens as compared with that by the National Bank. In the first column, credit supplied by the Bank of Athens is juxtaposed with the short-term credit supplied by the National Bank. Mortgage credit given by the Bank of Athens is subtracted from the total credit that it furnished. The second column of this table compares total credits to the economy granted by the two banks. Figure 3.5 illustrates the content of Table A2.6.

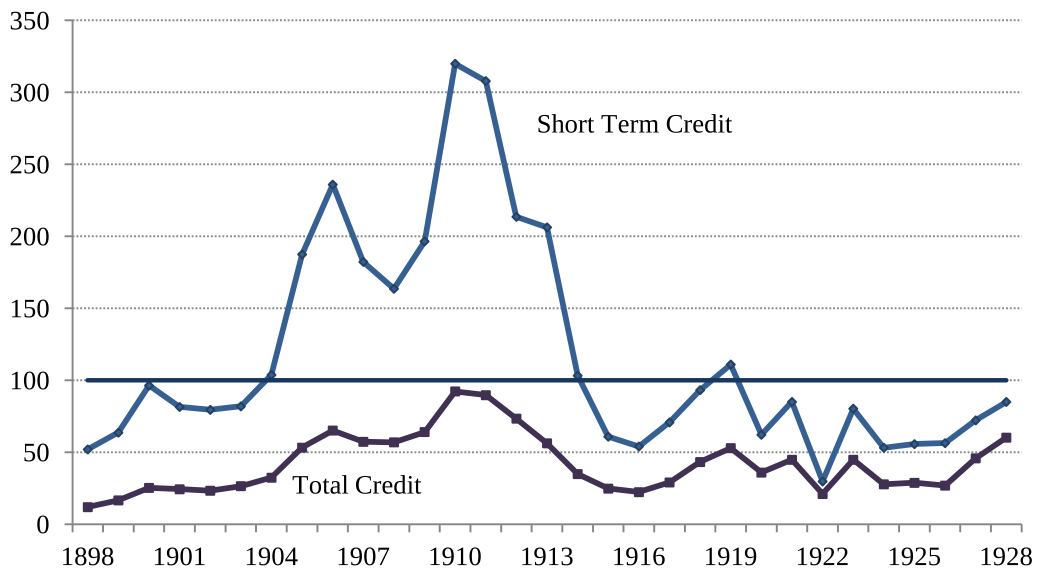

Figure 3.5: Credit supplied by the Bank of Athens as a percentage of credit supplied by the National Bank, 1898–1930

Source: Table A2.6 in Appendix A2.

[144] See Annual Report for 1929, p. XII.

Between 1898 and 1910, total credit supplied by the Bank of Athens as a percentage of credits to the economy by the National Bank fluctuated from 12 per cent to 92 per cent. By contrast, from 1911 until 1916 credit provided by the Bank of Athens as a percentage of total credits by the National Bank shrank rapidly. The Bank of Athens experienced widespread difficulties after 1907, which climaxed with the outbreak of the First World War that led it to the verge of bankruptcy. After 1907 total credit to the economy by the Bank of Athens as a percentage of total credits granted by the National Bank fluctuated between 21 per cent and 60 per cent displaying at the same time considerable volatility from year to year.

A comparison of short-term credits supplied by the two banks indicates that between 1904 and 1914, short-term credit provided by the Bank of Athens constantly surpassed short-term credit provided by the National Bank. During this period short-term credit by the Bank of Athens in comparison with that of the National Bank ballooned. Subsequently, short-term credit by the Bank of Athens remained persistently below that granted by the National Bank until the end of the period in question. Credit by the Bank of Athens as a percentage of short-term credit supplied by the National Bank in 1919 was an outlier.

The comparison between credit granted by the Bank of Athens and the National Bank carried out above demonstrates that the latter continued to dominate the credit market in Greece on the eve of the banking reforms of the late 1920s. It also exposes differences in the commercial aspect of the National Bank from that of other banks. Up to the end of the Great War, mortgage credit dominated total credits to the economy provided by the National Bank whilst by contrast, the handful of other Greek banks concentrated exclusively on short-term credit. The Bank of Athens did not manage to undermine the position of the National Bank as the most prominent commercial bank in Greece. It experienced initially, a rapid pace of expansion of its business as it is shown in Tables A2.5 and A2.6 in Appendix A2 and in Figure 3.5 above but it did not, however, manage to challenge successfully the status of the National Bank as a commercial bank on the Greek market.

3.3. Deposits

3.3.1. Introduction

The sub-committee of the League of Nations that was preparing the central banking reforms in Greece in late June 1927 recommended that the National Bank should wind up or transfer all interest bearing activities including deposits to other banks. As an alternative, a new commercial bank could be established to take over all the commercial activities of the

National Bank. By then, a principal tenet of central banking was that a central bank 'should not take monies at interest on its own account'.[145] The governor of the National Bank, Alexandros Diomides, however, centred his objections to the reforms by the League on deposits. He was determined that the Bank maintain the right to accept interest bearing deposits in any circumstances. He called the National Bank a pure 'Banque de Depots' and was aware that his resolve not to divest the Bank of its right to receive interest bearing deposits would lead to the collapse of a stabilisation plan under the auspices of the League of Nations.[146] It was inevitable that reform of the National Bank which would have restricted its deposits to such non-interest bearing deposits as a central bank can generally accept would have curtailed its predominance on the Greek commercial banking market and would in fact have brought about its transformation into a fully fledged central bank.

On the eve of the outbreak of the First World War, the National Bank attracted nearly 63 per cent of the total commercial deposits gathered by all the banks in Greece as Table 3.8 below demonstrates. Government deposits that the National Bank held as a consequence of its role as the bank of the government are not included. If the total deposits of a sample of the four most prominent banks out of the seven joint stock banks that operated in Greece at the time is examined, then the percentage share of the National Bank as a percentage of the total deposits of these four banks increases to nearly 75 per cent. Nevertheless, Table 3.8 demonstrates unequivocally the hegemony of the National Bank on the deposit market in Greece at the outbreak of the First World War. Furthermore, it indicates how uneven the allocation of deposits amongst the big banks in Greece was with the National Bank taking the greatest part of them. This was one of the most important characteristics of the banking system in Greece that persisted throughout the entire interwar period, notwithstanding the banking reforms of the late 1920s. The Bank of Athens managed to attract nearly 15 per cent of the total deposits gathered at Greek banks at the time whilst the Popular and the Commercial banks enjoyed a mere 5 and 3 per cent respectively.

[145] See Table 1.2 in Chapter 1.
[146] For more, see Chapter 7; See also HABOG_A3S1Y1F40T13, pp. 1–16; Venezis (1955, pp. 27–35).

Table 3.8: Deposits in 1914

	Deposits (in thousands of drachmae)	As % of Total	As % of Grand Total
National Bank of Greece (1841)	300,704.67	74.15	62.82
Bank of Athens (1893)	69,552.96	17.15	14.53
Popular Bank (1905)	22,607.00	5.57	4.72
Commercial Bank (1907)	12,685.00	3.13	2.65
Total:[1]	405,549.63	100.00	84.72
Grand Total:[2]	478,700.00		100.00

Notes:
[1] This is the total deposits in thousands of drachmae of sight, time and savings deposits, that the four banks cited above received. Government deposits at the National Bank are not included.
[2] This must be the total of deposits of the seven joint stock banks that operated in Greece at the time. These were the four banks mentioned in this table, plus the Bank of the Orient, the Ionian Bank and the Bank of Thessaloniki.
[3] Figures for deposits other than those at the National Bank and the Bank of Athens may not be accurate.

Sources: Annual Report of the National Bank for 1914; Annual Report of the Bank of Athens for 1914; Charitakis (1932, p. 379); Kyrkilitsis (1934, p. 42); Kostis and Tsokopoulos (1988, pp. 182–196).

After the outbreak of the First World War the banking sector in Greece expanded rapidly with the establishment of numerous, mainly local, undercapitalised banks. (See Table 3.1 above.) As a result, the percentage share of the National Bank of the nation's total deposits shrank. In 1926, approximately 41 per cent of these deposits were channelled to the National Bank as Table 3.2 above indicates. Again government deposits held by the National Bank are not included. Although the Bank of Athens had established a widespread network of branches, as Table 3.1 shows, it only managed to garner approximately 14.50 per cent of total deposits in 1926, a percentage similar to that indicated in Table 3.8 for 1914. The Bank of Industry and the Piraeus Bank, two of the most prominent of the newly established banks, collected almost 1.30 and 1 per cent respectively. Table 3.2 also implies that roughly one-quarter of total deposits were directed to banks established after the outbreak of the Great War. Thus, Table 3.2 in conjunction with Table 3.1 suggests that the average percentage share of deposits at each one of these primarily local banks, established after 1914, was considerably less than 1 per cent. These small, undercapitalised banks gathered mainly deposits from the local community which took advantage of the high interest rates that they offered.[147]

[147] Galanis (1946, p. 25).

M. S. Eulambio (1924, p. 178), writing in 1924, asserted that the ‘power of [the National Bank] rested upon real wealth – the wealth of the whole nation’. He further added that ‘one-half of the Bank’s deposits represent[ed] funds owned by Greeks living outside the borders of the Greek Kingdom’. The claimed share of deposits from the Greek diaspora in the total deposits of the National Bank that Eulambio suggested should be received with great caution. His assertion does, however, show that confidence in the Bank was ‘unlimited’. Indeed throughout its history as a bank of issue, the National Bank never experienced a run, despite wars as well as turbulent political and economic conditions in Greece.

Deposits at the National Bank can be divided into two categories: deposits of the government and deposits of other agencies as may be loosely called the commercial deposits. Deposits of other agencies or commercial deposits or general deposits are terms that will be used interchangeably in this thesis and will all refer to the same thing. Deposits of other agencies consisted of sight, time and savings deposits.

The National Bank enjoyed certain privileges as a deposit bank vis-à-vis the other banks in the country, which were vigorously protected during the central banking reform. These privileges created a comparative advantage for the National Bank over the other banks. For example, all legal entities deposited their surplus funds with the National Bank. Banks also used to deposit their available funds at the Bank. After central banking reforms, the National Bank retained the exclusive right to receive deposits from legal entities. An agreement between the government and the National Bank signed in February 1928 allowed the latter to gather exclusively all the surplus funds of legal entities right up to the end of 1950, in violation of the 1927 Geneva Protocol. The Protocol clearly stipulated that the surplus funds of legal entities deposited at the National Bank should be transferred to the newly established central bank.[148] The literature has seen this as an attempt to protect the Old Bank.

In this section of the thesis, deposits at the National Bank between 1898 and 1930 are examined. Deposits are distinguished between government deposits and deposits of other agencies and each category is examined separately to evaluate their significance for the Bank. In this way, the ‘dual position’ of the National Bank as the bank of the government and at the same time the most important ‘Banque de Depots’ in Greece is further illuminated.

[148] For more, see Pyrsos (c1935, pp. 123–139); Kostis (1986, pp. 80–83); Pepelasis Minoglou (1993, pp. 178–179).

The main objective is to analyse the evolution of the National Bank as a 'Banque de Depots' during the period in question. It will be shown that although the National Bank had been the deposit bank of the government throughout its entire history as an issuing bank in Greece it remained the predominant deposit bank on the eve of the banking reforms indicating that it was not on the way to transforming itself into a fully fledged central bank of its own volition. In spite of an increase in the number of commercial banks during the period in question, the National Bank maintained its hegemony as a 'Banque de Depots' as Table 3.2 demonstrates and protected its 'dual position'. The most important change that occurred was a slow but continuous shift from time to sight deposits. At the beginning of the period, time deposits accounted for the majority of total deposits at the National Bank, but as Table 3.11 illustrates, by the middle of the 1920s their share of the total deposits had decreased; by then sight deposits made up the lion's share, the outcome of a long period of war and monetary upheaval. This change on the liabilities side of the balance sheet of the Bank was in tune with changes in mortgage credit; mortgage credit granted by the National Bank was gradually reduced after the outbreak of the Great War and as Table 3.7 above demonstrates, its significance as an asset item diminished, again a result of a long period of war and high inflation.

Firstly, deposits made by both the government and by other agencies are examined as a percentage of the total deposits and liabilities of the Bank. Secondly, deposits at the National Bank were estimated at 1911 values and in this way the impact of a long period of war and monetary upheaval can be seen. Thirdly, the composition of general deposits into sight, time and savings deposits is examined and changes are pinpointed. Finally, deposits of other agencies at the National Bank are compared with deposits at the Bank of Athens the second biggest bank in Greece.

As has been noted again and again because of the accountancy practices followed by the National Bank in the 1920s, the value of figures denominated in gold drachmae that appeared on its balance sheet was understated. A small portion of deposits, both government and commercial deposits, were denominated in gold drachmae and were added together with deposits in nominal drachmae. Here the same practice is followed in the hope that the outcome paints a reasonably accurate picture. The fraction of deposits on the balance sheet of the National Bank in gold drachmae was small as Tables A2.10 and A2.11 in Appendix A2 demonstrate.

3.3.2. Structure and evolution of deposits at the National Bank

The National Bank received deposits from the government and from the public in general throughout its history as an issuing bank. Any balances after the service of government loans were deposited at the National Bank. The IFC also deposited its funds at the Bank which also accepted deposits from the public as if it were an ordinary commercial bank. Furthermore, all state undertakings deposited their surplus funds exclusively with the National Bank. Banks also deposited their available funds at the National Bank. All these privileges of tradition created a comparative advantage to the National Bank in relation to other commercial banks that operated in Greece.

Deposits, however, from legal entities as well as from other banks were not reported separately. They were included with the deposits that an ordinary commercial bank accepts. Galanis (1960, p. 13) maintained that the deposits of legal entities at the National Bank at the point when the Bank of Greece was established were approximately one-tenth of the total deposits in general at banks in Greece. Deposits made by other banks at the Athens and Piraeus offices of the National Bank in 1926 were very volatile, fluctuating between 6 per cent and 18 per cent of the total sight deposits of the National Bank.[149] The interest rate paid by the National Bank on both deposits by legal entities and by other banks was less than that which it paid on the deposits of the general public.[150]

[149] HABOG_A3S1Y1F4T1, p. 90.
[150] See Circulars of the National Bank (Various Years).

Table 3.9: Government deposits and deposits of other agencies as a percentage of the total deposits of the National Bank, 1898–1930

	Government Deposits	*Deposits of other Agencies*
1898	23.20	76.80
1899	37.58	62.42
1900	25.23	74.77
1901	24.36	75.64
1902	34.16	65.84
1903	20.40	79.60
1904	24.97	75.03
1905	20.45	79.55
1906	16.95	83.05
1907	12.50	87.50
1908	4.81	95.19
1909	4.75	95.25
1910	9.60	90.40
1911	14.89	85.11
1912	3.04	96.96
1913	3.23	96.77
1914	3.87	96.13
1915	3.92	96.08
1916	2.42	97.58
1917	3.61	96.39
1918	22.68	77.32
1919	5.45	94.55
1920	6.13	93.87
1921	4.29	95.71
1922	5.04	94.96
1923	4.79	95.21
1924	13.84	86.16
1925	14.32	85.68
1926	12.40	87.60
1927	*30.78*	*69.22*

Notes: On the balance sheet of 1927 government deposits and deposits of other agencies were reported together. Government deposits and deposits of other agencies for 1927 was calculated using information provided by the governor of the National Bank in the annual report for that year.

Source: Author's calculations using the data in Table A2.7 in Appendix A2.

Table 3.9 shows deposits made by the government and those of other agencies as a percentage of the total deposits of the National Bank between 1898 and 1930. It clearly demonstrates that deposits of other agencies dominated throughout the period in question. Furthermore, as commercial deposits at the Bank increased, the share of government deposits decreased.

Government deposits at the Bank were also very volatile, fluctuating severely from year to year as is demonstrated in Table A2.7 in Appendix A2 which presents government deposits, deposits of other agencies and total deposits at the National Bank during the period in question.

Some years, namely 1899, 1902, 1911 and 1918 stand out as outliers. During these years government deposits were unusually high mainly because of government borrowing. Government deposits in 1927 also appear to be an outlier. Table A2.7 shows that government deposits increased considerably during that year. In 1927 the National Bank changed the format of its balance sheet and government deposits were reported together with deposits of other agencies. The governor of the Bank in his annual report presented commercial deposits separately without, however, making any reference to government deposits.[151] This information was used here to separate government deposits and commercial deposits from the total deposits of the National Bank. Nevertheless, this abrupt increase in government deposits in 1927 cannot be explained and should be received with caution.

In the early years of the twentieth century, government deposits dropped from approximately 25 per cent of the total deposits of the National Bank to 12.50 per cent. Between 1908 and 1923, government deposits remained below 10 per cent of the total deposits of the National Bank, fluctuating between 2.42 per cent and 9.60 per cent if one excludes 1911 and 1918 which, as mentioned above, are both exceptional years. In 1924, the share of government deposits increased to approximately 14 per cent whilst at the end of 1926 they still accounted for nearly 12.50 per cent.

Thus, the main characteristics of government deposits at the National Bank at this time are: firstly, their volatility from year to year and secondly their somewhat insignificant share in the total deposits. This is verified by Table 3.10 which presents both government and commercial deposits as a percentage of total liabilities of the National Bank. Table 3.10 further shows total deposits at the Bank as a percentage of its liabilities.

[151] Annual Report of the National Bank for 1927 (1928, p. XIV).

Table 3.10: Deposits at the National Bank as a percentage of its liabilities, 1898–1930

	Government Deposits	*Deposits of other Agencies*	*Total*
1898	5.59	18.52	24.11
1899	10.40	17.27	27.67
1900	6.64	19.68	26.32
1901	7.04	21.88	28.92
1902	10.92	21.06	31.98
1903	6.39	24.93	31.32
1904	8.39	25.21	33.60
1905	7.26	28.25	35.51
1906	6.62	32.44	39.06
1907	4.86	34.06	38.92
1908	2.06	40.73	42.79
1909	1.97	39.53	41.50
1910	4.14	39.03	43.17
1911	6.70	38.33	45.03
1912	1.18	37.75	38.93
1913	1.21	36.17	37.38
1914	1.67	41.45	43.12
1915	1.57	38.49	40.06
1916	0.89	35.81	36.70
1917	1.15	30.83	31.98
1918	7.22	24.61	31.83
1919	1.69	29.29	30.98
1928		71.70	71.70
1929		75.63	75.63
1930		76.32	76.32

Sources: Tables A2.1 and A2.7 in Appendix A2.

Both Tables 3.9 and 3.10 show that deposits of other agencies – that is to say deposits of the general public and other deposits that the National Bank attracted as a consequence of its privileged position, for example deposits from legal entities and other commercial banks – remained important for the Bank throughout the period in question. In 1900, nearly one-fifth of the total liabilities consisted of deposits of other agencies. By the outbreak of the First World War, general deposits represented approximately 40 per cent of its total liabilities. During this period, deposits of other agencies experienced a continuous increase both in nominal and at 1911 values as Tables A2.7 and A2.8 show. The year 1909 appears to have been an exception. Subsequently, deposits of other agencies as a percentage of the liabilities of the National Bank dropped. This decrease in deposits of other agencies as a percentage of its liabilities was, however, due for the most part to the expansion of the balance sheet of the National Bank following an increase in the banknotes in circulation.

Table 3.10 also illustrates the profound change that the banking reforms brought to the National Bank: after the establishment of the Bank of Greece, the National Bank was indeed transformed into a pure 'Banque de Depots'. Following the loss of the issuing privilege, deposits accounted for over 70 per cent of the Bank's liabilities.

Table A2.8 in Appendix A2 shows deposits at the National Bank at 1911 prices. This table also presents commercial deposits at 1911 values, expressed as a ratio. Commercial deposits expressed as a ratio are illustrated in Figure 3.6.

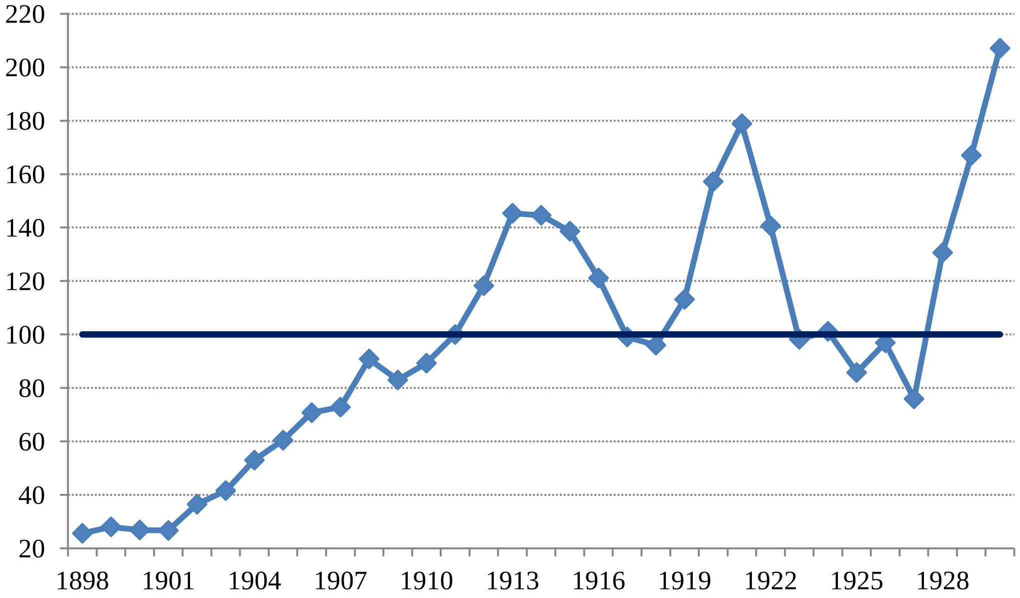

Figure 3.6: Deposits of other agencies at 1911 prices (1911=100)

Source: Table A2.8 in Appendix A2.

Figure 3.6 and Table A2.8 show that deposits of other agencies at 1911 values increased steadily up to the outbreak of the First World War. During this period, deposits were boosted in particular by remittances from Greek emigrants to the USA. This rise in the deposits at the National Bank is also demonstrated in Tables 3.9 and 3.10 and occurred during a period when the Bank experienced constant expansion.

After the outbreak of the Great War deposits at the National Bank remained high. A noticeable decrease in the deposits of other agencies at 1911 prices occurred only during the active participation of Greece in the war when inflation rates were soaring. Subsequently, during the Asia Minor campaign deposits remained high. They reached even higher levels than those on the eve of the outbreak of the First World War. After the Asia Minor debacle, however, deposits at constant values decreased to close to their 1911 levels. In 1925, when the

National Bank experienced serious liquidity problems, deposits sank to their lowest level since 1911. In fact in 1925, deposits at nominal prices even fell by nearly 12 per cent from the year before as Table A2.7 demonstrates. Two years later the Mortgage Bank was established and the National Bank passed on to this new institution time deposits of a nominal value of 562 million drachmae which represented two-thirds of the time deposits reported in December 1926.[152]

After the National Bank had lost its issuing privilege it became a pure 'Banque de Depots'. In 1928, as Figure 3.6 and Tables A2.7 and A2.8 show, deposits increased remarkably both at nominal drachmae and at 1911 prices whilst inflation remained very low. After the stabilisation of the drachma all banks were obliged by law to use the stabilisation rate to update all their assets and liabilities denominated in gold drachmae or foreign exchange.[153] This suggests that deposits reported on the balance sheet of the National Bank in the 1920s were to some extent understated. The same can be said of all banks as an abrupt increase in deposits reported on their balance sheet after the stabilisation is observed. See, for example, Table A2.12 where deposits at the Bank of Athens are presented.

The first signs of distress in the banking sector appeared in 1929. Firstly, a bank founded in 1923, the Anglo-American Bank, went bankrupt and a few months later the Bank of Thessaly, established in 1921, suspended payments.[154] As a result deposits fled mainly from medium size banks that were considered weak to large banks and in particular to the National Bank.[155] In this way the difficulties being experienced by the banking sector because of the stabilisation of the Greek currency and/or the Great Depression further enhanced the position of the National Bank as the most important 'Banque de Depots' in Greece.

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[152] Ibid.

[153] See Tables A2.10 and A2.11 in Appendix A2 for deposits denominated in gold drachmae and reported on the balance sheet of the National Bank between 1920 and 1927.

[154] Kostis (1986, pp. 65–66).

[155] Galanis (1946, pp. 23–25).

Table 3.11: Composition of Deposits at the National Bank, 1898–1930

	Sight Deposits	*Time Deposits*	*Savings*
1898	30.44	65.66	3.89
1899	16.31	79.43	4.26
1900	19.94	75.99	4.07
1901	26.72	69.54	3.75
1902	18.80	77.04	4.16
1903	17.64	78.17	4.19
1904	19.21	76.68	4.11
1905	15.15	79.70	5.15
1906	21.86	72.27	5.87
1907	13.96	78.78	7.27
1908	16.15	76.54	7.31
1909	18.12	73.25	8.63
1910	17.42	72.11	10.47
1911	21.02	66.83	12.15
1912	24.56	63.01	12.42
1913	26.66	57.84	15.51
1914	29.58	56.46	13.96
1915	32.86	52.32	14.83
1916	37.12	48.36	14.52
1917	44.57	40.96	14.47
1918	45.82	38.05	16.12
1919	43.49	41.36	15.14
1920	42.35	46.54	11.11
1921	37.82	51.62	10.56
1922	44.68	46.10	9.22
1923	53.15	38.27	8.58
1924	56.79	35.91	7.30
1925	52.91	37.54	9.55
1926	58.38	25.66	15.96
1927	65.81	9.86	24.33
1928	66.72	14.45	18.83
1929	64.55	14.05	21.40
1930	53.78	21.28	24.94

Source: Table A2.9 in Appendix A2.

Table A2.9 in Appendix A2 presents commercial deposits of the National Bank at nominal prices between 1898 and 1930 divided into sight, time and savings deposits whilst Table 3.11 shows each category of deposits as a percentage share of the total commercial deposits at the National Bank.

Table 3.11 above demonstrates that time deposits had the lion's share of the total deposits of other agencies at the National Bank more or less up to the outbreak of the Great War. Between 1898 and 1910 over 70 per cent of total general deposits were time deposits. After 1910, time deposits' share of total deposits began decreasing and in 1916, for the first time during the period in question and possibly during the entire history of the National Bank as a bank of issue, they accounted for less than 50 per cent of its total deposits. In 1923, time deposits shrank even more as a result of new legislation passed to combat exchange rate instability and at the same time to provide foreign exchange to the government.[156] Table 3.11 demonstrates that with the establishment of the Mortgage Bank the share of time deposits dropped below 10 per cent during that year, whilst on the other hand, the share of sight deposits in total deposits of the National Bank experienced a constant increase during the entire period in question. By 1927, nearly 66 per cent of the total deposits of the National Bank were sight deposits. The share of savings in the total deposits increased steadily until the end of the First World War. In the early 1920s, however, that share fell.

Table 3.11 combined with Table 3.7 which presents the percentage share of each category of commercial credits to the economy demonstrates the nature of the National Bank as a commercial bank before the central banking reform. At the beginning of the period in question and until at least the outbreak of the Great War, the National Bank in spite of the fact that it was the issuing bank in Greece, clearly specialised in mortgage credit. Both tables show that the National Bank was heavily involved in long-term activities; mortgage loans and time deposits. It was the long period of war and monetary upheaval together with the establishment of the Mortgage Bank which led the National Bank to focus primarily on short- to medium-term activities. This shift in the nature of its commercial activities, however, does not indicate that the National Bank was evolving of its own volition into a pure central bank following the model of other European banks of issue. It indicates that the commercial banking sector in Greece was moving towards specialisation.

3.3.3. A comparison of deposits at the National Bank and the Bank of Athens

Although Tables 3.2 and 3.8 demonstrate that the National Bank was the most important deposit bank in Greece throughout the period, a further attempt is made to establish the status of the National Bank as a deposit bank on the Greek market. This time, the deposits at the Bank of Athens, the second most important bank in Greece, are compared with deposits of other agencies at the National Bank during the entire period in question. The Bank of Athens was founded in 1893 as a pure bank of deposits and for this reason it established very rapidly

[156] Annual Report of the National Bank for 1923 (1924, pp. XXIII–XXIV); Tsalikis (1923, pp. 30–32).

a widespread network of branches. In addition, it operated beyond the Greek borders, in areas with thriving Greek diaspora communities. All deposits, however, irrespective of their origin were reported together on the balance sheet published by the Bank of Athens every year.

By means of comparison, Table A2.13 and Figure 3.7 present deposits of the Bank of Athens as a percentage of the National Bank. This comparison aims to evaluate further the position as well as the evolution of the National Bank as the principal deposit bank in Greece.

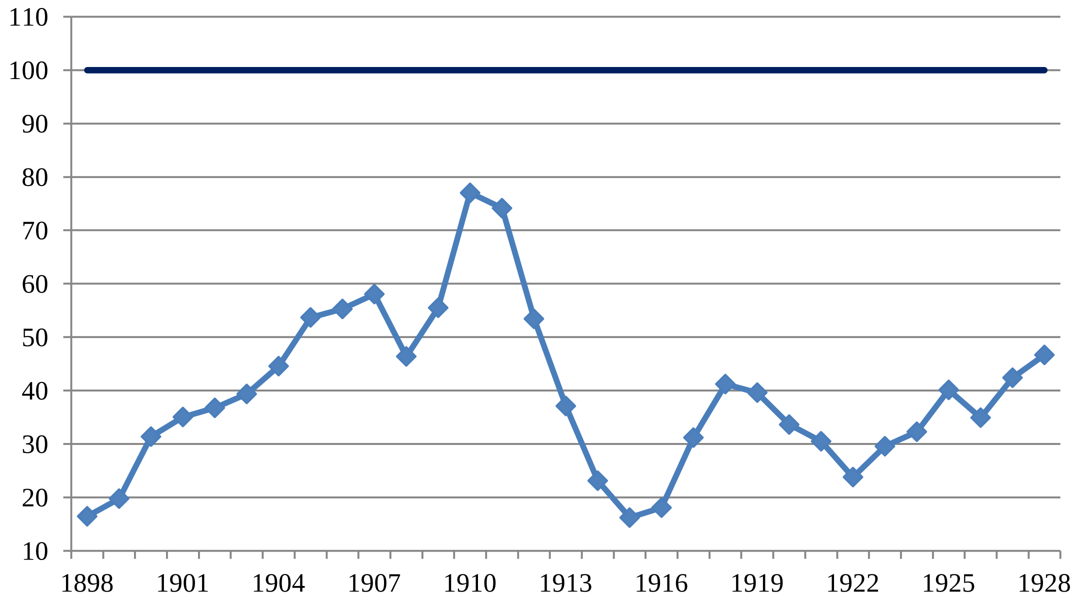

Figure 3.7: Deposits at the Bank of Athens as a percentage of the National Bank's general deposits

Source: Table A2.13 in Appendix A2.

Figure 3.7 demonstrates that deposits at the Bank of Athens increased rapidly up to 1910 making the Bank of Athens a serious competitor to the National Bank. In fact during this period deposits at the Bank of Athens increased more rapidly than commercial deposits at the National Bank. The difficulties that the Bank of Athens experienced between 1911 and 1916 are clearly demonstrated in Figure 3.7, as well as in Tables A2.12 and A2.13.[157] In 1915, deposits at the Bank of Athens as a percentage of deposits at the National Bank hit their lowest level dropping to approximately 16 per cent of the total commercial deposits at the National Bank. Subsequently, after the Bank of Athens had been reorganised, its deposits as a percentage of commercial deposits at the National Bank increased as is demonstrated above in Figure 3.7. This increase was not sustained for long. In the early 1920s, deposits at the Bank of Athens as a percentage of total deposits of other agencies at the National Bank dropped and

[157] For the problems that the Bank of Athens faced between 1911 and 1916 as well as the attempts that were made at its reorganisation see Kostis and Tsokopoulos (1988, pp. 42–52).

then again rose following the end of the Asia Minor debacle. In 1928, after the stabilisation of the drachma when these comparisons become more credible because all banks had to revalue their assets and liabilities using the stabilisation price of the drachma, deposits at the Bank of Athens accounted for nearly 47 per cent of the deposits at the National Bank.

During the period in question, deposits at the National Bank evolved according to the general economic and monetary conditions in Greece. The Bank maintained its hegemony in the deposit market in Greece throughout its entire history as a dual-purpose bank. In June 1927, when the Greek representatives made an official request of the Financial Committee of the League of Nations to support the *de jure* stabilisation of the drachma, the National Bank was still a strong commercial institution which at the same time enjoyed note issuing privileges. During the period in question the National Bank had shifted its focus from long-term to short- and medium-term activities, as Tables 3.7 and 3.11 demonstrate. This shift was further consolidated with the establishment of the Mortgage Bank in 1927.

3.4. Interest rates

3.4.1. Interest rates on credits to the economy

Research on interest rates in Greece before the outbreak of the Second World War is limited to fleeting references in the literature in spite of their importance for economic growth. In this section of the thesis, an overview of interest rates, mainly those of the National Bank both for loans to the economy and for deposits is attempted using information from primary as well as secondary sources.

Table 3.12 and Figure 3.8 show changes in the discount rate of the National Bank during the period in question. The change in the discount rate in December 1928 was made by the newly established central bank, the Bank of Greece.[158]

[158] Although autonomy in its purest form was incorporated in the statutes of the Bank of Greece, a few months after its establishment the Prime Minister began pressing for a reduction in its discount rate, which was hardly justified by economic conditions. This intervention was neither approved by Horace C. Finlayson, the foreign advisor to the Bank of Greece, nor Otto Niemeyer who continued to monitor closely developments in Greece. On 2 December, the discount rate was, however, reduced from 10 per cent to nine per cent – a reduction that remains controversial. For example see Zolotas (1929, pp. 196–197); Kyrkilitsis (1934, p. 166); and Loberdos (1936, pp. 54–55). As this example indicates, even the statutes of the Bank of Greece together with foreign supervision could not safeguard its independence. It also needed a political consensus or at least a sufficient degree of political support to be able to maintain a position of independence.

Table 3.12: The discount rate of the National Bank, 1914–1928

1903	6.50
19 July 1914	8.00
11 November, 1914	6.50
8 March, 1918	6.00
6 September, 1918	5.50
1 January, 1920	6.00
15 May, 1920	6.50
1 January, 1923	7.50
23 February, 1925	8.50
18 August, 1925	10.00
7 July, 1926	11.00
6 June, 1927	10.00
2 December, 1928[1]	9.00

Note: [1] The change in the discount rate in December 1928 was implemented by the newly established central bank, the Bank of Greece and not the National Bank.

Sources: Annual Report of the National Bank for 1914 (1915, pp. δ'–ε'); *Statistical Yearbook of Greece for 1930* (1931, p. 269); *Statistical Yearbook of Greece for 1939* (1940, p. 494).

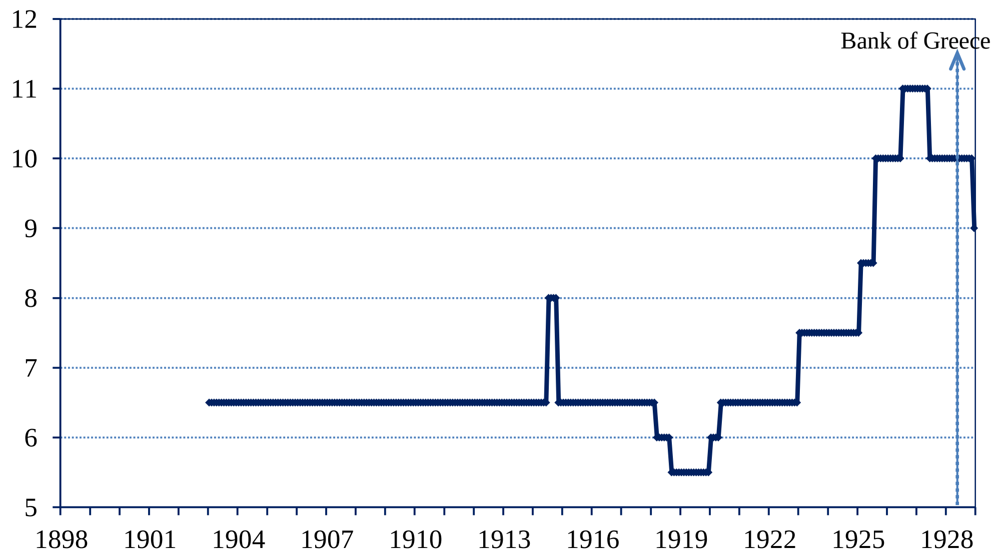

Figure 3.8: The discount rate of the National Bank, 1914–1928 (%)

Source: Table 3.12 above.

Table 3.12 and Figure 3.8 show that initially the discount rate was seldom changed. In the 1920s, changes became more frequent but still did not reflect the monetary upheaval of the time.

Table 3.13 below shows the rate charged by the National Bank for loans to farmers, agricultural co-operatives and unions of agricultural co-operatives. These loans were mainly for farming and were usually of a period between six and nine months. Interest rates for agrarian credit were fixed by law and, as the table below indicates were rarely changed despite the turbulent economic and monetary conditions in the country.

Table 3.13: Interest rate paid by farmers, co-operatives and unions of co-operatives (%)

	Farmers	Co-operatives	Unions of Co-operatives
1 January 1905	6.00		
1 January 1915	6.00	5.00	
27 November 1925	10.00	8.00	7.00
10 April 1928	12.00		

Notes:
(1) The laws ΒΩΞ΄ of 18 March 1903 and 656 of 20 February 1915 were milestones for credit granted for farming by the National Bank during the period in question. The 1903 law provided for a decrease in the rate charged to 6 per cent after 1 January 1905. At the same time the National Bank agreed to increase credit to agriculture to 21 million drachmae. In 1915, the Bank undertook to increase loans for farming to 25 million drachmae. In addition, preference had to be given to co-operatives and unions of co-operatives where the rate had to be 5 per cent or below.
(2) In November 1925, a decree provided that the rate of the National Bank for farming loans could not be higher than the discount rate. The same decree stipulated that the rate for loans to co-operatives had to be at least 1 per cent lower than the discount rate and to unions of co-operatives at least 0.50 per cent lower than the rate charged on farming loans to co-operatives.
Sources: National Bank of Greece: Circular No. 2, 5 January 1905, pp. 364–365; Circular No. 71, 31 July 1914; Circular No. 22, 10 April 1928; National Bank (September 1925); National Bank (1926, p. 2248); National Bank (1928, pp. 687–688).

Legislation related to agricultural credit that was passed in 1903, 1915 and 1925 determined interest rates for agrarian loans during the period in question. The 1903 law allowed for a reduction in the interest rate for farming loans to 6 per cent that became effective on 1 January 1905. Subsequently, in 1915 when the issuing privilege of the National Bank was extended to the newly annexed areas after the end of the Balkan Wars, the Bank agreed to increase credit to the agricultural sector from the 21 million drachmae provided for by the law of 1903 to 25 million drachmae. In addition, preference had to be given to agrarian co-operatives which enjoyed a lower rate by one hundred basis points than individual farmers who continued to pay 6 per cent. In November 1925, the interest for farming loans was linked to the discount rate. A decree provided that the interest rate for loans by the National Bank to farmers could not be higher than the discount rate. The same decree also stipulated that the rate for loans to co-operatives had to be at least 1 per cent lower than the discount rate and to unions of co-operatives at least 0.50 per cent lower than the rate charged on farming loans to co-operatives.[159]

The interest rate for mortgage credit was also determined by law. A piece of 1925 legislation which aimed at regulating mortgage credit, linked the mortgage rate to the yield of bonds issued to finance mortgage loans and to the deposit rate. It was stipulated that the difference between the mortgage rate and the yield of mortgage bonds or the deposit rate could not be more than two percentage points. Previously, the custom was that legislation specified a ceiling for the mortgage rate.[160]

Table 3.14: Interest rate paid on mortgage loans (%)

1903	7.00
1 October 1910	6.50
1 April 1915	6.00
1 April 1925	8.00
17 December 1925	9.00
24 May 1926	10.00

Notes:
(1) The law that was introduced in 1925 to regulate mortgage credit linked the mortgage rate to the yield of bonds issued to finance mortgage loans and to the deposit rate. It was stipulated that the difference between the mortgage rate and the yield of mortgage bonds or the deposit rate could not be more than two percentage points. Previously, the law specified a ceiling for the mortgage rate.
(2) Circular No. 47 of 23 June 1926 referred to mortgage credit granted to legal entities. The rate specified for mortgage loans to legal entities was the same as that for mortgage credit to the general public.
Sources: National Bank: Circular No. 105, 10 August 1915; Circular No. 25, 6 April 1925; Circular No. 1, 12 January 1926; Circular No. 47, 23 June 1926; Circular No. 22, 10 April 1928; National Bank (September 1925); National Bank (1928, pp. 687–688).

In addition to discounts, agricultural credit and mortgage loans, the National Bank provided loans against merchandise and securities. The rate for loans against merchandise and securities usually followed changes in the other interest rates. For example, in May 1920 the rate for loans against merchandise and securities increased from 6 per cent to 6.50 per cent.[161] Then, in December 1922 the rate for loans both against merchandise and securities was raised

[159] See National Bank (September 1925).
[160] Ibid., p. 8.
[161] National Bank of Greece, Circular No. 51, 16 May 1920.

to 8 per cent.[162] In September 1925, the rate for loans against merchandise was increased again, this time to 11 per cent.[163] There were, however, exceptions to the general rate charged against merchandise; for example when tobacco and raisins were used as collateral then the interest rate charged was different.[164]

The rate charged for credits to the economy was usually increased by 1 per cent when loans were renewed. The evidence to hand shows that commission was charged when credit was granted against securities and merchandise. Furthermore, available evidence shows that lower rates were charged by the headquarters of the National Bank for some loans against merchandise and securities, and in other flourishing urban centres, than in the rest of the country.[165]

Table 3.12 above shows that the discount rate of the National Bank was raised to 11 per cent in the 1920s whilst the discount rate of other banks was 15 per cent. At the same time, interest rates on the unofficial credit market fluctuated between 20 and 25 per cent.[166] This noticeable difference between the rates charged for loans by banks and on the unofficial credit market was not a result of the monetary upheaval experienced after the end of the Great War. Neither was it a product of the liquidity problems that the credit market faced in the mid-1920s.

As would be expected when the National Bank was established in 1841 an unofficial credit market existed.[167] Informal credit networks that had already developed by the mid-nineteenth century continued to operate alongside the formal banking sector for more than a century after this. These informal credit networks consisted of merchants, ship-owners, insurance companies, landowners, credit offices and local money lenders and operated alongside the formal banking institutions. A system of 'chain finance' was created whereby the National Bank lent 'to the most creditworthy who in turn, lent to others on a descending

[162] National Bank of Greece, Circular No. 113, 31 December 1922.
[163] National Bank of Greece (September 1925, pp. 5 and 7).
[164] In 1925, the rate charged for loans granted against tobacco was 12 per cent; that is to say it was one per cent higher than the general rate for loans against merchandise. For more, see ibid., p. 7.
[165] Circular No. 51 of 16 May 1920 referred to a rate increase for a particular type of loans against merchandise and securities from six to six and a half per cent in Athens, Piraeus, Patras, Corfu, Syra, Volos, Zakynthos, Salonika and Smyrna. For the rest of the country it was raised from six and a half per cent to seven per cent.
[166] Zolotas (1929, pp. 188 and 197); Kyrkilitsis (1934, p. 67).
[167] Zolotas (1926, pp. 93–94); Dritsa (1990, p. 245); Stasinopoulos (2000, pp. 318 and 326, n. 28); Petzmezas (2003, pp. 94–95); Dertilis (2005, p. 172).

scale of creditworthiness'.[168] This 'chain finance' system which still survived during the period in question kept interest rates at exorbitant levels.[169]

A conservative and risk-averse National Bank did not challenge the informal credit networks that operated but instead did business with them, as they could provide high quality collateral and were low risk and creditworthy customers. Thomadakis (1981, pp. 353–354) showed that the clientele of the National Bank between 1873 and 1884 included bankers and usurers.[170] Research, however, on the relationship between the banking sector and the non-banking credit system remains limited.[171] The literature has not so far tackled crucial questions related to the National Bank and the cost of capital in Greece. Could the National Bank in fact have challenged effectively informal credit networks in Greece during the 'long' nineteenth century? This is a question that only future research will answer.

'Chain finance' on the one hand, and on the other the fact that legislation determined the interest rates for agricultural and mortgage credit, indicate that the use of the discount rate of the National Bank was not effective as a monetary policy instrument.

3.4.2. Interest rates on deposits

Table 3.15 shows interest rates paid by the National Bank on deposits in the 1920s. The rate for sight deposits at the National Bank fluctuated between 1 per cent and 4 cent in the 1920s. At the same time, banks and bankers enjoyed lower interest rates for their sight deposits at the National Bank than those cited in Table 3.15. Between July 1909 and December 1919, the interest rate for sight deposits at the Bank was 1 per cent and before 1909 it had even been zero.

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[168] Thomadakis (1985, p. 66).

[169] For a general description of this 'chain finance' system, see Franghiadis (2007, pp. 60–66). For a more detailed analysis of the credit lines between export merchants, local money lenders and small farmers, mainly related to currant viticulture in southern Greece between 1830 and 1893, see Franghiadis (1990, pp. 130–143). See also Petzmezas (2003, pp. 94–105). In a nutshell, export merchants lent to local money lenders who in turn were obliged to deliver currant fruit to them. Subsequently, local money lenders lent growers who repaid them with currants. Export merchants had access to the official credit system in Greece or could easily borrow from abroad. They usually charged local money lenders 12 per cent, whilst the money lenders charged small farmers on loans against promised deliveries of currant fruit 20 per cent and 24 per cent. The interest rate charged on loans to small farmers when other kind of crops were involved could rise to 30 per cent or even 40 per cent. However, very little is known about the informal credit networks relating to crops other than currants. Research so far has been focused primarily on the way that the production of currant fruit was financed as it was the most important export good during the nineteenth century.

[170] See also Franghiadis (1990, pp. 137–139).

[171] See, for example Dertilis, (2005, pp. 172–177).

Table 3.15: Interest rates paid by the National Bank on deposits (%)

	Sight Deposits	Time Deposits	Savings Account
Before 1920[1]	1.00	1.25–4.00[2]	
1 January 1920	2.00[3]	2.50[4]	
18 February 1925	3.00	3.25–7.00[5]	4.00[6]
23 November 1925	4.00	4.25–7.00[7]	5.00
1 August 1927	3.50[8]	4.25–7.00	4.50

Notes:
[1] Between July 1909 and December 1919, the rate for sight deposits was in general 1 per cent whilst previously it had been zero.
[2] The interest rate for time deposits varied between 1.25 and 4 per cent depending on the period of maturity. In 1920, a savings account was limited to 3,000 drachmae.
[3] Banks and bankers enjoyed lower sight deposit rates than the general public in the 1920s. For example, in 1920 the sight deposit rate for banks and bankers remained at 1 per cent. Then, in August 1923 it was further decreased to 0.50 per cent and in May 1924 it became 0.25 per cent. The rate for sight deposits of banks and bankers was later increased and remained at 1 per cent until the end of July 1927. On 1 August 1927 it was again decreased to 0.50 per cent.
[4] This rate was for a period of up to six months.
[5] The interest rate for time deposits fluctuated between 3.25 per cent and 7 per cent in February 1925 depending on the period of maturity. It was 3.25 per cent for time deposits of up to six months, 3.5 for up to one year, 4 per cent for up to two years, 5 per cent for up to four years, 6 per cent for up to five years and 7 per cent for up ten years and beyond.
[6] In February 1925, savings accounts were limited to 10,000 drachmae or 400 sterling, or 2,000 dollars or 10,000 French Francs. In November of that same year the interest rate for savings increased to 5 per cent and at the same time the limit for a savings account raised to 50,000 drachmae.
[7] After November 1925, the interest for time deposits varied between 4.25 per cent and 7 per cent. It was 4.25 per cent for time deposits for up to six months, 4.50 for up to one year, 5 per cent for up to two years, 5.50 per cent for up to 4 years, 6 per cent for up to five years and 7 per cent for up to ten years and perpetual deposits.
[8] In 1927, the rate for government deposits was set at 1 per cent whilst for legal entities it varied between 1 and 3 per cent. The rate for deposits of tobacco companies was 2 per cent.

Sources: National Bank: Circular No. 151, 30 December 1919; Circular No. 69, 7 August 1923; Circular No. 12, 18 February 1925; National Bank (September 1925, pp. 7–8); National Bank (1928, pp. 689–690); Annual Report of the National Bank for 1927 (1928, p. XIV).

Table 3.16 shows interest rates on deposits advertised by banks in the Athens Economist in 1921 and 1926. This table indicates that other banks tended to offer higher deposit rates than the National Bank. In addition, it demonstrates that the sight deposit rate of the National Bank and other big banks converged in the middle of the 1920s, a result of the credit conditions in Greece at the time. This table also indicates that small local banks established after the outbreak of the Great War tended to pay higher rates to attract customers. The depositors at these small banks were usually locals, acquaintances of their directors who at the same time played the role of a creditor to these provincial banks.[172]

Table 3.16: Interest rate paid on deposits at various banks (%)

	Sight Deposits	*Time Deposits*	*Savings Account*
	1921		
Commercial Bank (1907)	3.00	4.50	4.50
Bank of Industry (1918)	3.50	4.50	5.50
	January and March 1926		
Ionian Bank (1839)	4.00	4.50	
Bank of Athens (1893)	4.00	4.75	5.00
Bank of Industry (1918)	4.00	5.00	5.00
General Bank (1918)	4.50		5.00
Bank of Thessaly (1921)			6.00
Pavlos' Bank (1926)	5.50		7.00
	December 1926		
Ionian Bank (1839)			5.00
Bank of the Orient (1904)	4.00	5.00	5.00
Bank of Piraeus (1916)			6.50
Bank of the National Economy (1918)			6.00
Panhellenic Bank (1924)		12.00	8.00
American Express (1920)	4.00		5.00

Notes:
(1) The deposit rates quoted above for 1921 were advertised in the *Athens Economist* of 11 January and 3 May 1921. Those for 1926 are from the *Athens Economist* of 30 March 1926 and 25 December 1926.
(2) The rate given in 1921 for time deposits referred to time deposits of a period of maturity of one year.
(3) In January 1921, savings accounts of the Commercial Bank were limited to 4,000 drachmae and of the Bank of Industry to 5,000 drachmae.
(4) In January 1926, the rate of time deposits given is for a period of one year. In December 1926, the rate advertised by the Bank of the Orient was for a maturity period of six months. This bank offered a 6 per cent rate for time deposits of a two-year period. The Ionian and the Panhellenic banks did not specify any period for the time deposit rate advertised.
(5) In 1926, the rates advertised for savings applied to a variety of different accounts. For example, the Bank of Industry offered a saving account for up to 10,000 drachmae, the General Bank for up to 15,000 drachmae, the Bank of Athens for up to 30,000 thousand drachmae whilst Pavlos' Bank, the Bank of the National Economy and the Panhellenic Bank offered accounts for up to 75,000 drachmae. The American Express limited its savings account to 100,000 drachmae. Neither the Ionian Bank nor the Bank of Piraeus specified the size of their savings account.

Sources: *Athens Economist*: 11 January 1921; 3 May 1921; 2 January 1926; 9 January 1926; 30 March 1926; 25 December 1926.

[172] Galanis (1946, p. 25).

3.4.3. Concluding remarks

A comparison between the rates charged for loans and paid for deposits provides striking evidence of the lack of competitiveness of the Greek banking system. In addition, the persistence of credit facilities other than banking and the charge of shadow interest rates in spite of the increase in the number of banks after the end of the Great War indicate the backwardness of the credit market in Greece.

The spread between the discount rate and the rate for sight deposits at the National Bank fluctuated between four and a half and 7 per cent. The discount rate of other banks moderately varied between 11 and 15 per cent during the period in question which points to a considerable spread between the interest rate charged for discounts and the rate paid for sight deposits.[173] This considerable spread between loan and deposit interest rates is convincing evidence indicating the lack of competitiveness of the banking system in Greece.

Greek banks were regarded as profitable.[174] An indication of their profitability is the spread between the rates of their loans and deposits. The tables presented in this section indicate a comfortable difference between the loan and deposit interest rates of the National Bank. This difference was increased when credit was renewed or when commission was added. The next section of this chapter deals with the financial position and strength of the National Bank during the period in question.

3.5. Profit and loss statements

3.5.1. Some thoughts on the profitability of the National Bank

The National Bank published an income statement twice a year, in June and December throughout its entire history as a bank of issue. After the central banking reforms it published an income statement only once a year, in December. These income statements provide ample information on revenue, expenses, net profits as well as data on dividend paid to shareholders each semester. On occasions, its governors acknowledged that the Bank retained unpublished profits, a practice that was not uncommon in banking institutions at the time.[175] Nevertheless,

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[173] The Scottish banking system of the nineteenth century is regarded as highly competitive. The spread between loan and deposit interest rates was typically only one to two percentage points. See White (1999, p. 83).

[174] Kyrkilitsis (1934, pp. 47–53).

[175] Annual Report of the National Bank for 1921 (1922, p. XXI); Annual Report of the National Bank for 1922 (1923, p. XXVII); See, for example, Cassis (1994) Chapter 5 for a general discussion on the unpublished profits of various banks at the time.

these profit and loss statements still provide a wide range of information that can be used to assess the financial position of the National Bank.

Kostis and Kostelenos (2003) used these profit and loss statements to estimate risk indicators and performance ratios for the National Bank between 1897 and 1940.[176] An examination of these financial ratios leads to the following observations. Firstly, the financial ratios estimated indicate that the National Bank, a privately owned institution, had adopted a conservative attitude towards risk. Secondly, the results that the financial ratios yield for the period between 1928 and 1940 when the National Bank operated as a purely commercial bank, are much as theory would lead to expect. By contrast, both the risk indicators and performance ratios that refer to the period that the National Bank acted as a dual-purpose bank, did not always provide the results that theory would suggest. Finally, the financial ratios estimated imply that the late 1920s may have marked a watershed in the evolution of the National Bank.

When total assets is used to calculate a financial ratio for the period that the National Bank served as a dual-purpose bank then the result may not be what theory suggests. For example, both return on assets and the liquidity multiplier estimated by Kostis and Kostelenos (2003) indicate that the performance of the National Bank between 1910 and 1919 was not the one expected by theory. In addition, the liquidity multiplier shows that risk for the National Bank increased during this period. The authors argue that this deterioration in the performance of the Bank was due to an increase in the price level between 1910 and 1919. For the estimation of both ratios total assets are needed: total assets are used in the denominator to calculate return on assets and in the nominator when the liquidity multiplier is calculated. Between 1910 and 1919, however, the National Bank experienced a rapid increase in total assets and consequently total liabilities, primarily because of the operation of the ΓΧΜΒ Law. This expansion of the balance sheet of the National Bank was entirely a result of its role as an issuing bank.

Profitability measures and other financial ratios such as those estimated by Kostis and Kostelenos (2003) are simple measures that are used to examine the economic performance of banks and companies. The National Bank was a complex private institution that combined public responsibilities with commercial activities. It is difficult for these financial ratios to

[176] See the CD included in Kostis in collaboration with Kostelenos (2003). They estimated the following risk indicators: liquidity risk, interest rate risk, credit risk, capital risk and solvency risk. Whilst the performance ratios estimated are return on equity and assets, liquidity multiplier, profit margin and asset utilisation.

reflect the fact that the National Bank was a dual-purpose bank that operated during complex historical conditions.

As the authors themselves noted, the financial ratios that they estimated indicate that the performance of the National Bank, a privately owned institution, which for most of the period that they examined combined public responsibilities with commercial activities was rational. The question that they pose is if indeed maximisation of profits was a priority of its governors given the historical conditions during the period that they examine. They add that if the priority of the administration of the National Bank was not to maximise its profitability then tools such as those used to evaluate the performance of commercial banks may not be appropriate to the case.

A rational question that is posed is to what extent the public responsibilities of the National Bank curbed its profitability as a commercial bank. At the same time, however, it could be argued that its privileges as the central bank in Greece enhanced its profitability. The National Bank remained a financially strong institution throughout its entire history as a dual-purpose bank. Its financial strength was a result of the way that its governors balanced the two conceptions of their business: ‘duty to the proprietors’ as a commercial bank and on the other hand ‘duty to the public’ as a bank of issue – two responsibilities that could at times conflict.

The National Bank’s financial strength was based on its market power and its ability to select high quality assets and liabilities which resulted in its enduring profitability and solvency. In this thesis, the term profitability does not necessarily mean that the aim of its management was the maximisation of profits, despite the fact that the National Bank was a private institution. The good quality of its assets and liabilities given the constraints under which it operated was more important for its conservative and risk-averse governors than maximisation of profits *per se* in the conventional sense of the term. A great number of the assets and liabilities of the National Bank were related to the monopolies and privileges that it enjoyed. Furthermore, its policy as a commercial bank was to lend against a variety of good collateral, to low risk, creditworthy customers from its establishment in 1842 to the end of the period in question.

3.5.2. Composition of the revenue of the National Bank

The National Bank’s revenue came from interest charged on credits granted to the economy; from holding public debt and foreign exchange reserves deposited abroad; from owning property and shares of other banks and companies; from renting safe deposits and keeping securities and bonds for its customers. Income statements also included an entry entitled revenue resulting ‘From different profits’. The source of revenue included in this entry was specified only in 1920. The profit and loss statement of December 1920 stated that revenue ‘From different profits’ was comprised of revenue from foreign exchange differences, commission on capital movements and other profits in general.

Table 3.17:
Composition of income of the National Bank, 1898–1930
(as a percentage of total income)

	Credits to the Economy	Public Debt	Bilateral Government Debt	Foreign Exchange Reserves	Different Profits	Sundry
1898	56.90	24.15	12.39	3.62	1.12	1.82
1899	58.43	25.67	7.40	3.32	2.24	2.95
1900	64.99	19.77	7.47	1.92	3.29	2.56
1901	65.31	19.34	7.14	2.77	2.32	3.13
1902	65.84	18.56	6.92	2.53	3.50	2.66
1903	68.76	16.68	6.64	2.59	2.37	2.97
1904	66.86	15.54	6.17	4.32	2.77	4.35
1905	65.31	15.21	6.51	5.72	4.13	3.11
1906	65.90	14.27	5.62	7.06	3.82	3.33
1907	64.91	13.06	5.45	9.95	2.53	4.10
1908	63.36	13.74	5.04	10.47	2.85	4.54
1909	62.88	14.15	5.39	10.50	2.33	4.74
1910	62.09	15.21	5.32	11.40	1.60	4.38
1911	59.83	14.86	3.64	16.37	1.60	3.71
1912	57.37	13.76	3.22	17.80	4.79	3.07
1913	45.61	20.63	2.66	24.63	4.14	2.33
1914	43.84	22.59	2.16	22.58	6.88	1.95
1915	41.82	30.29		16.12	10.23	1.54
1916	33.90	28.82		26.61	9.24	1.43
1917	28.74	27.90		34.98	7.09	1.28
1918	25.64	23.26		43.44	6.50	1.15
1919	28.32	21.42		42.25	6.99	1.02
1920	24.25	34.00		23.48	17.28	0.99
1921	23.92	8.08	23.09	13.67	21.59	9.65
1922	28.95	7.84	15.69	8.06	28.40	11.07
1923	36.97	6.57	19.54	7.67	27.86	1.39
1924	46.70	7.09	13.71	7.12	23.91	1.48
1925	50.65	15.90	8.96	13.79	9.55	1.14
1926	44.80	16.39	2.79	16.31	18.25	1.46
1927	52.83	14.42	6.05	9.75	14.89	2.07
1928	60.12	14.28	3.02	7.59	12.44	2.54
1929	71.02	9.86	1.66	5.87	8.09	3.49
1930	69.63	14.30		4.19	6.82	5.06

Sources: Author's calculations using the Profit and Loss Statements of the National Bank, 1898–1930.

In Table 3.17 above, the revenue of the National Bank has been grouped into six categories. The percentage share of each category in the total income of the National Bank has then been estimated. All earnings from interest charged on credits granted to the economy were gathered together and their percentage share of the total earnings is given in the first column of Table 3.17. Revenue from public debt owned by the National Bank was grouped into two categories whenever possible, depending on the information provided by the income statements: income from public debt traded on stock exchanges and income from illiquid public debt held by the National Bank as a consequence of its role as a central bank. The fourth column of Table 3.17 presents the percentage share of the revenue of the National Bank which is related to foreign exchange reserves deposited abroad. The fifth column refers to earnings from what was called ‘Different profits’. Finally, the last column, entitled ‘Sundry’, includes earnings from property, shares of banks and companies that the National Bank owned and other income derived from miscellaneous sources.

It should be noted that Table 3.17 does not demonstrate if income from a particular category increased or decreased during the period in question. If this table is compared with tables in chapters three and four that present the evolution of commercial credits and public debt then it could be inferred implicitly if revenue from credits granted to the economy or public debt held by the National Bank increased or decreased.

Between the enactment of the Law of Control and the outbreak of the First Balkan War the main bulk of the revenue of the National Bank came from credits supplied to different sectors of the economy. During this period revenue from interest rates charged on credits supplied to the economy fluctuated between 56 per cent and 69 per cent of total income of the National Bank. Revenues from public debt take second place. Earnings from public debt traded on stock exchanges, as Table 3.17 demonstrates, constituted the majority of the income from public debt; between 13 per cent and 25 per cent of total income stemmed from public debt traded on stock exchanges. On the other hand, between 4 per cent and 12 per cent of total income resulted from bilateral government debt in spite of the fact that it composed a significant item in the total assets of the National Bank as Table 4.6 in Chapter 4 demonstrates.

The percentage share of income derived from foreign exchange reserves deposited abroad was increasing between 1898 and 1911. Revenue from foreign exchange reserves increased from 2 per cent in 1900 to 16 per cent of total revenue in 1911. In fact, in 1911 revenue from foreign exchange reserves surpassed those from public debt traded on stock exchanges for the first time during the period in question. The share of revenue from foreign exchange reserves as a percentage of total revenue indicates that the National Bank was increasing its foreign exchange reserves during this period. In addition, the introduction of the ΓΧΜΒ Law in 1910 helped the Bank to further augment its reserves in foreign exchange; indeed in 1912, earnings from foreign exchange reserves became the second most important source of income with revenue from total public debt in third place.

Between the Balkan Wars and the Asia Minor debacle the importance of the different sources of income of the National Bank altered, mirroring changes in its balance sheet. The picture drawn during this period is not consistent. Up to the point of the active participation of Greece in the Great War, earnings from credits to the economy continued to be the most important source of income. Subsequently, between 1917 and 1922 revenue from either foreign exchange or total public debt became the most important source of income for the National Bank.

In 1920, the percentage share of income from 'different profits' swelled noticeably. As Table 6.2 in Chapter 6 indicates, 1920 was the first year of considerable foreign exchange instability in Greece. This, coupled with the information provided by profit and loss statements, that is to say that 'Different profits' also includes earnings from foreign exchange dealings indicating that the National Bank most likely speculated on the foreign exchange market at the time.[177]

After the end of the Asia Minor campaign, credits to the economy were once more the most important source of income for the National Bank. Revenue from 'different profits' continued to be considerable before stabilisation, competing with earnings from total public debt for second place.

After *de jure* stabilisation, when the National Bank operated as a purely commercial bank, nearly 70 per cent of its income, as Table 3.17 shows, derived from credits supplied to the economy. Public debt remained the second most important source of income but this time it represented only a small fraction of its total earnings.

Thus, credits to the economy provided the lion's share of the income of the National Bank. During the long period of war and monetary upheaval, however, credits to the economy did not always constitute the most important source of revenue. This change was a product of

[177] See statements of profits and losses between 1920 and 1930. See also Kostis (2003, p. 172).

exceptional historical conditions and not the result of a deliberate policy on the part of the National Bank.

3.5.3. Evolution of revenue, expenses and dividend of the National Bank

Figure 3.9 demonstrates the way in which the total revenue of the National Bank at constant 1911 prices evolved between 1898 and 1930. This figure indicates that revenue of the National Bank at constant prices increased until the outbreak of the Great War. (See also Table A2.18 in Appendix A2.) Subsequently, revenue fell until the Armistice. Figure 3.9 also shows that during the Asia Minor campaign, revenue increased spectacularly. Indeed income at constant prices in 1921 and 1922 reached unusually high levels that had not been reached before, during the period in question, and were surpassed only in 1930. After 1923, the National Bank's earnings fluctuated. They remained, however, above their 1911 level and in fact after 1925 income at constant prices exceeded its 1914 level.

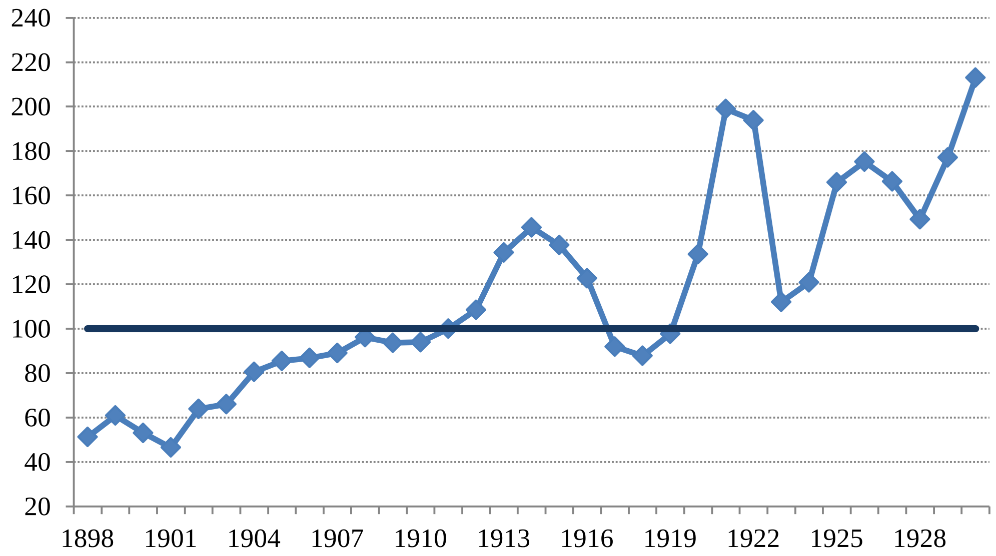

Figure 3.9: Revenue of the National Bank at 1911 prices, 1898–1930 (1911=100)
Source: Table A2.18 in Appendix A2.

An examination of revenue alone reveals very little about the financial position of the National Bank. Therefore, the evolution of expenses is also examined and compared with the development of revenue. Figure 3.10 shows the expenses of the National Bank at constant prices. It demonstrates that expenses increased until the outbreak of the First World War. Then, they decreased until the Armistice, following the same pattern as revenue. In the 1920s, expenses fluctuated considerably but remained above their 1911 level.

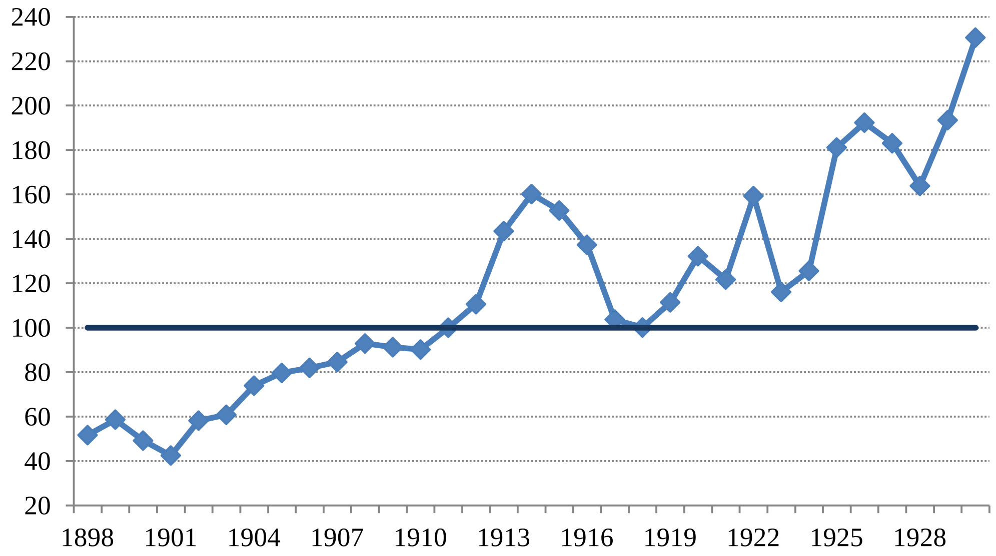

Figure 3.10: Expenses of the National Bank at 1911 prices, 1898–1930 (1911=100)
Source: Table A2.18 in Appendix A2.

It should be noted that revenue increased faster than expenses before the outbreak of the Balkan Wars and between 1921 and 1922. However, during the rest of the period the rate of increase in expenses was faster than the rate of increase in revenue. In the 1920s, the rise in expenses was mainly due to an increase in personnel cost as the number of staff increased as well as the number of branches that the Bank operated.

Figure 3.11 and Table A2.19 in Appendix A2 compares expenses with the revenue of the National Bank. It shows expenses as a percentage of revenue during the period in question. Expenses of the National Bank as a percentage of revenue increased considerably between 1905 and 1919. In addition, between 1923 and the end of the period in question, expenses as a percentage of revenue fluctuated between 80 and 85 per cent, a percentage share higher than that observed before the Balkan Wars.

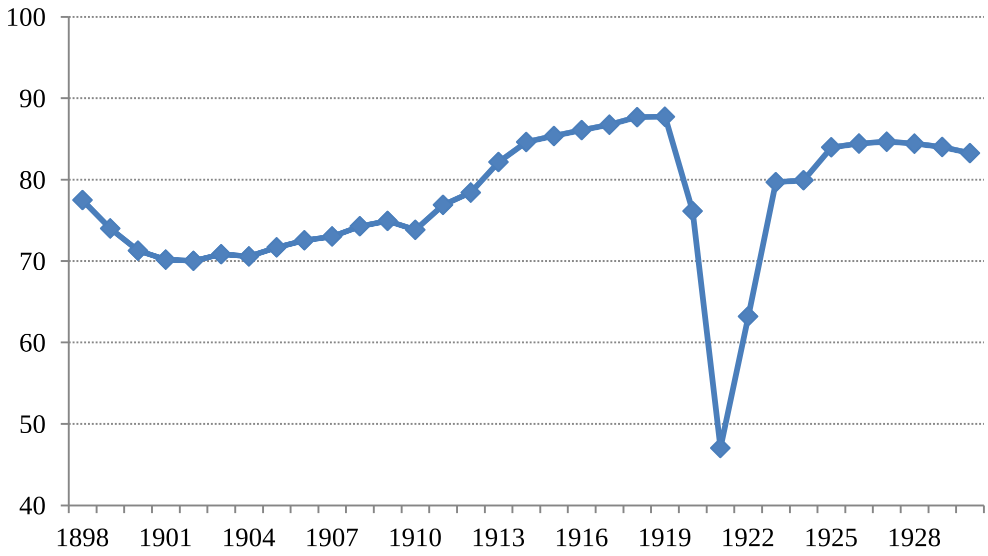

Figure 3.11: Expenses as a percentage of revenue, 1898–1930

Source: See Table A2.19 in Appendix A2.

Figure 3.12 shows the evolution of net profits of the National Bank at constant 1911 prices between the enactment of the Law of Control and stabilisation. It demonstrates that net profits increased until 1904. Subsequently, they remained stable until the end of the Balkan Wars, a fact that points to the conservative character of the National Bank. During the Great War net profits decreased. By contrast, between 1920 and 1923 the National Bank's profits were generally high. This short time-span also appears to be an outlier in figures related to revenue. During those three years the National Bank enjoyed extraordinarily high earnings which, to a great extent, stemmed from unpublished profits. Legislation related to the National Bank and passed in 1920, encouraged the publication of unpublished profits from previous years.[178] Subsequently, net profits remained close to their 1911 level and after the banking reforms the trend seems to be upward.

[178] Annual Report of the National Bank for 1921 (1922, p. XXI); Annual Report of the National Bank for 1922 (1923, p. XXVII).

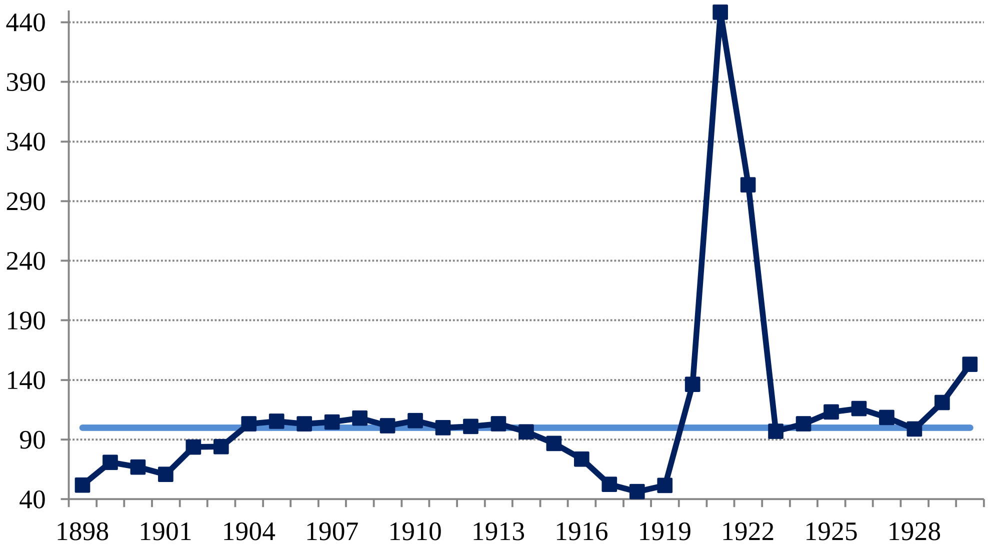

Figure 3.12: Net profits of the National Bank at 1911 prices, 1898–1930
(1911=100)

Source: Table A2.21 in Appendix A2.

Net profit margin or ratio, that is to say net profits as a percentage of revenue, has been calculated and presented in Figure 3.13 and Table A2.22. The percentage share of net profits in the National Bank's revenue decreased to below 20 per cent after 1912 reaching a very low level in 1918 and 1919. As expected, in 1921 and 1922, the net profit margin was unusually high. After 1924, it dropped again and remained below 20 per cent until the end of the decade.

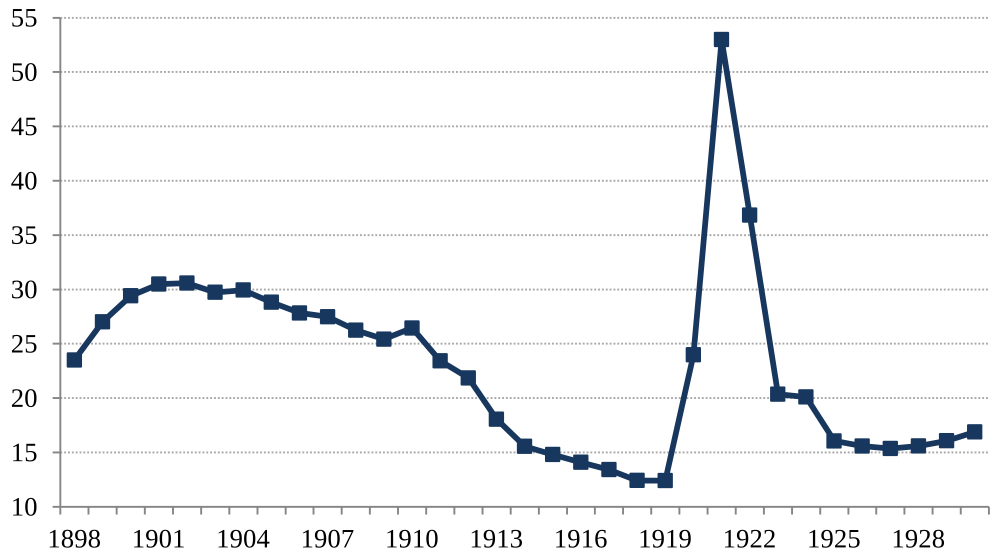

Figure 3.13: Net Profit Margin, 1898–1930

Source: Table A2.22 in Appendix A2.

Figure 3.13 indicates that there was a higher margin of safety for the National Bank until the outbreak of the Balkan Wars. This is in tune with the observation that revenue increased at a greater rate than expenses up to 1911, leading to higher profit margins. By contrast, during the rest of the period, with the exception of the period from 1919 to 1922, expenses grew at a greater rate than revenue leading to lower profit margins.

Figure 3.14 indicates the percentage of net profits of the National Bank distributed as a dividend. The percentage share of net profits distributed fluctuated between 80 per cent and 95 per cent between 1898 and 1919. By contrast in 1920, a mere 30 per cent of net profits of the bank of issue was distributed as a dividend. The following year this share dropped further to 11 per cent. This change in the dividend policy of the National Bank in 1920 is explained by changes related to its role as a bank of issue and the way that it was taxed.

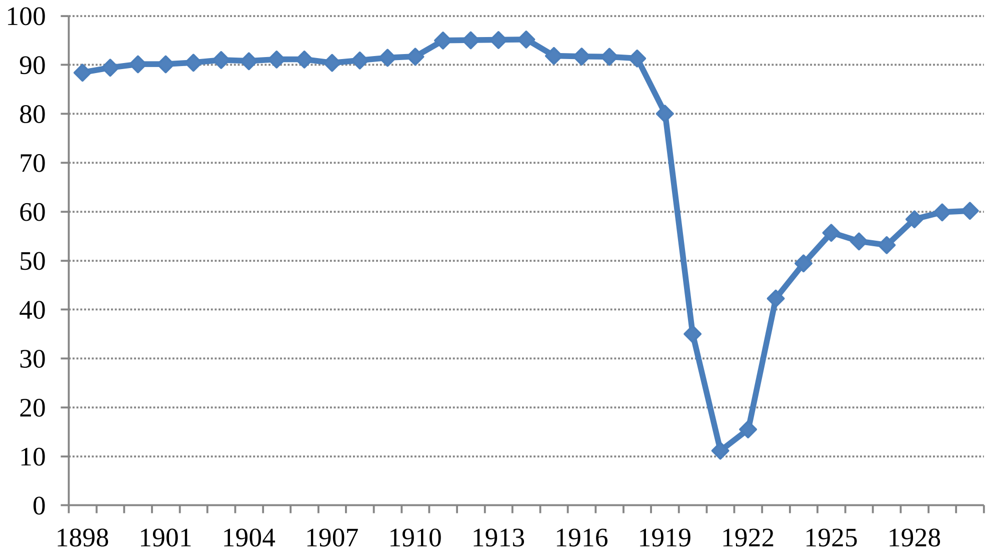

Figure 3.14: Percentage of net profits of the National Bank paid as dividend, 1898–1930
Source: Table A2.24 in Appendix A2.

Figure 3.15 shows the annual dividend paid per share at 1911 prices each year during the period in question. It indicates that dividend paid at 1911 prices increased until 1905 and then fluctuated at around the same price until 1913. After the outbreak of the Great War the dividend fell. In the 1920s, the annual dividend distributed per share was smaller than that paid between 1910 and 1913. The governors of the Bank, however, emphasised to shareholders that dividend had increased to unprecedented levels, referring of course to nominal rises.

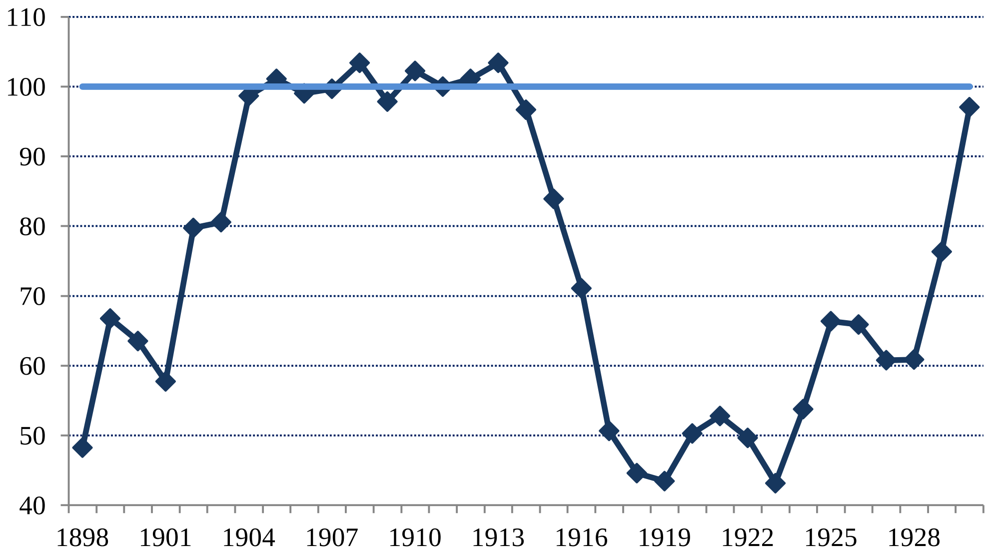

Figure 3.15: Annual dividend paid per share by the National Bank at 1911 prices, 1898–1930 (1911=100)

Source: Table A2.25 in Appendix A2**.**

CHAPTER 4:

THE NATIONAL BANK AS CENTRAL BANK

4.1. The National Bank as an issuing bank

Between the outbreak of the First World War and the stabilisation of the drachma the issuing privilege of the National Bank was extended three times and the government resorted to the printing press over and over again to finance war. As a consequence the money stock increased by more than seventeen-fold between 1914 and 1928.[179] Figure 4.1 illustrates this increase very vividly.

During the entire period in question the money supply did not consist of one simple issue, but of several issues added together with different legal bases. Tables 4.1 and 4.4 summarise the different categories of banknotes that were in circulation in 1914 and in 1928 when the National Bank finally lost its issuing privilege. In both tables, banknotes in circulation were organised in categories according to the legal provisions related to their issue and at the same time in the way that were reported on the balance sheet of the National Bank. These different issues of banknotes also illustrate the complex relationship between the National Bank and the government.

[179] Money stock here is M0 which means that only banknotes in circulation are included. Throughout the thesis money stock is used interchangeably with banknotes in circulation and money supply.

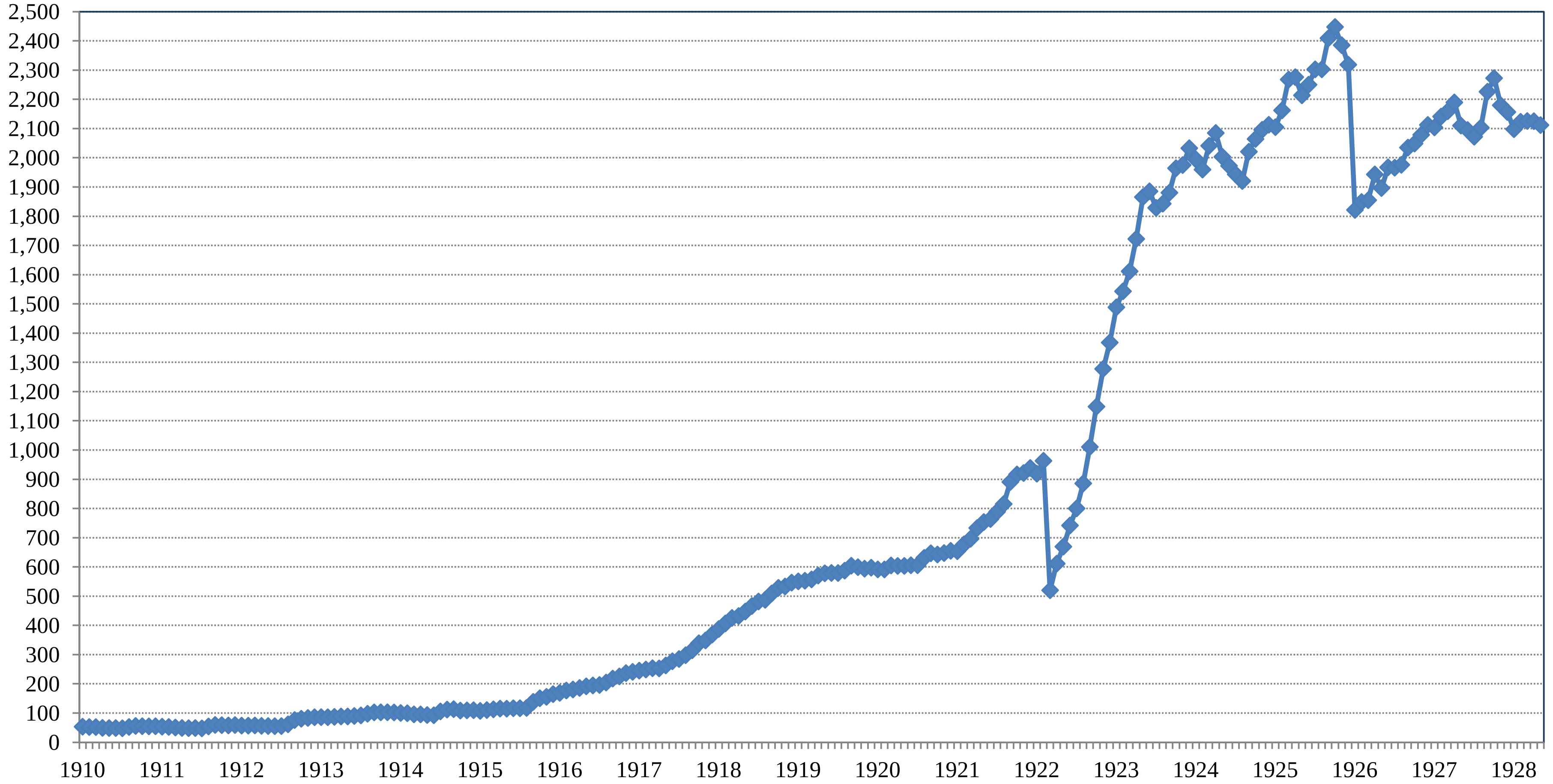

Figure 4.1: Banknotes in circulation, 1910–1928
(January 1914=100)

Source: Author’s calculations using data in Table A3.1 in Appendix A3.

All banknotes in circulation were exchanged according to their nominal value and the public was not aware of the different laws that led to their printing. Nor did the banknotes themselves indicate their origin. During discussions over the stabilisation of the drachma in Geneva in June 1927, the Financial Committee of the League recommended the amalgamation of all the different banknote issues into one that would be regulated by the same legal arrangements.[180]

In this section of Chapter 4 the role of the National Bank as a bank of issue is examined. Firstly, therefore, the monetary arrangements that prevailed on the eve of the outbreak of the First World War will be examined so as to assist with understanding the methods employed to increase the banknotes in circulation between 1914 and 1927. Secondly, a question is posed regarding the kind of monetary rule that Greece introduced in 1910. This year is usually cited by contemporary economic historians and economists as the year that Greece adopted either the gold standard or the gold exchange standard, depending on their view. By contrast, before the early 1980s it was generally believed that the Greek currency had remained inconvertible throughout the period from September 1885, when the gold standard was suspended, until May 1928 when the gold exchange standard was *de jure* introduced. What was the monetary arrangement in Greece in 1910 that has prompted scholars to argue more recently that Greece adopted a clearly defined monetary rule during that year, even though there is no agreement amongst them on which rule Greece in fact introduced? Thirdly, the methods employed for the increase in the banknotes in circulation between the outbreak of the First World War and the stabilisation of the drachma will be presented. In this way, the position of the National Bank as a bank of issue will be further exposed. In addition, the origins of the monetary upheaval of the 1920s will be pinpointed.

4.1.1. Money supply in 1914

After the end of the Balkan Wars the land area of Greece and its population was doubled as a result of the annexation of Epirus and Macedonia. In those newly annexed areas the Greek currency was not the only currency that was used as a medium of exchange in 1914; the Turkish lira and gold coins were also used in everyday transactions. Payments to the Greek army still stationed in those areas, however, facilitated the substitution of the drachma in place of the other currencies in circulation. It is believed that only in 1916 did the drachma begin to be the dominant currency in those areas.[181] Consequently, any attempt to estimate the money supply in Greece in 1914 should take this fact into account.

[180] Pyrsos (c1935, p. 46).
[181] NBGHA_A1Σ18Y1Φ164E1.

As Table 4.1 below illustrates, the system of banknote issue in 1914 can be divided into three categories: firstly, banknotes that were in circulation because of the note issue privilege; secondly, banknotes issued for the account of the government and finally, those in issue because of the ΓΧΜΒ Law of 1910.

Table 4.1: Summary of banknotes in issue in 1914
(in Drachmae)

A) Banknotes issued because of the privilege of note issue		
1) Note issue right of the National Bank under Law ΑΣΟΓ/1885		60,000,000
2) Transfer of the issue right of the Bank of Epirus-Thessaly to the National Bank, Law ΒΧΜΑ/1899		6,000,000
3) Note issue right of the Ionian Bank		7,000,000
4) Note issue right of the Bank of Crete		10,405,000
	TOTAL:	83,405,000
B) Banknotes issued for the account of the government		
	Initial Amount	*Balance on 31 December 1914*[1]
Law ΒΦΙΘ/1898	94,000,000[2]	60,951,000
C) Banknotes issued under the ΓΧΜΒ Law of 19 March 1910		
	Balance on 31 December 1914	*Legal Maximum*
	153,513,000[3]	200,000,000
	GRAND TOTAL:	344,356,000[4]

Notes:
[1] Balance of banknotes in circulation under the Law of Control at the end of December 1914.
[2] Total forced circulation of banknotes and coins in 1898 when the Law of Control was introduced.
[3] Banknotes in circulation under the ΓΧΜΒ Law at the end of December 1914. The National Bank was permitted to circulate up to 200 million drachmae using this Law.
[4] On 31 December 1914, the legal maximum of note issue laid down by the above laws was 344,356,000 drachmae. The actual number of banknotes in circulation on that date was 252,206,000 drachmae. This number does not include banknotes that were in circulation because of the issuing privilege of the Ionian Bank and the Bank of Crete.

Sources: Table A3.1 in Appendix A3; NBGHA_A1Σ22Y6Φ1E32; HABOG_A3S1Y1F4T1, p.7; United Kingdom House of Commons (1898, p. 14); Annual Report of the National Bank for 1914 (1915).

4.1.1.1. Issuing privilege

As has been discussed before, in 1914 there were three banks in the country that enjoyed the note issuing privilege: the National Bank, the Ionian Bank and the Bank of Crete. By this time, however, one of them, the Ionian Bank had already agreed that it would transfer its issuing privilege to the National Bank in 1920.[182]

The National Bank had the legal right to circulate banknotes to the value of 66 million drachmae: 60 million drachmae in its own right and a further 6 million drachmae following the acquisition of a minor issuing bank, the Bank of Epirus-Thessaly in 1898.[183]

The Ionian Bank, established in 1839, had the issuing privilege for the Ionian Islands and could circulate up to 7 million drachmae in banknotes. The third bank of issue in Greece, the Bank of Crete, founded in 1899, was granted the issuing right for Crete which at the time was an autonomous area. The Bank of Crete could issue up to approximately 10.5 million drachmae in banknotes. The National Bank contributed to the share capital of the Bank of Crete and owned 8 thousand shares out of a total of 40 thousand. Crete was annexed by Greece in 1913 and in 1920 the Bank of Crete's issuing privilege was transferred to the National Bank. Hence, in 1920 with both minor banks of issue, the Ionian Bank and the Bank of Crete, handing over their issuing rights, the National Bank then had a complete monopoly of note issue until 1928 when the Bank of Greece was established.

4.1.1.2. Law of Control

Article 30 of the Law of Control of 1898 set a precise timetable for the retirement of government debt in banknotes.[184] The Law of Control stipulated that from 1900 onwards the government had to cancel banknotes of at least 2 million drachmae every year until debt in banknotes of forced circulation had been gradually reduced to 40 million drachmae. At the time of the enactment of this law, government debt in forced currency was 74 million drachmae and small notes of one and two drachmae guaranteed by the banks of issue amounted to 20 million drachmae.[185] In addition, the Law of Control specified that no new forced currency loan could be made to the Greek government without the assent of the IFC until its debt in banknotes of forced currency had been fully paid off.

[182] Annual Report of the National Bank for 1903 (1904); Eulambio (1924, p. 21); Spiliotopoulos (1949, pp. 80–81).
[183] Valaorites ([1902] 1988, pp. 207–209).
[184] See United Kingdom, House of Commons (1898, pp. 14–15); Valaorites ([1902] 1988, pp. 187–188).
[185] Of the 74 million drachmae 71 million had been granted by the National Bank, 2 million by the Ionian Bank and 1 million by the Bank of Epirus-Thessaly. Whilst of the 20 million in small notes, 10 million drachmae had been granted by the National Bank and the remaining ten had been granted by the Ionian Bank and the Bank of Epirus-Thessaly in equal shares. For the origin of this government debt to the banks of issue see Katselidis (1996, pp. 295–297 and 305).

This measure introduced by the Law of Control was characteristic of the deflationary measures implemented in countries that experienced a debt crisis in the late nineteenth century.[186] The Law of Control provided for a slow but substantial withdrawal of forced currency from circulation. The retirement of 2 million drachmae in 1900, when this measure was implemented for the first time, was the equivalent of 1.43 per cent of the total banknotes that could be circulated during that year. In total, however, the Law of Control required a substantial cumulative retirement of approximately one-fourth of the total monetary base of 1900 *ceteris paribus*.

The Greek government abided by this provision of the Law of Control even in the early 1920s when the printing press was liberally used, and finally the target stipulated was achieved in 1925.[187]

4.1.1.3. ΓΧΜΒ Law

Article 30 of the Law of Control which was introduced in 1898, encouraged monetary discipline in Greece; it strictly prohibited the National Bank from using the printing press to support lending to the government without the consent of the IFC, until the debt in banknotes from the forced circulation had been fully paid off. Article 30, however, incorporated an escape clause which allowed for an increase in the number of banknotes in circulation on condition that this was for the 'needs of trade'.[188]

This article of the Law of Control defined the obligations of the Greek authorities relating to monetary issues. It was the only article in the entire Law of Control, or ΒΦΙΘ Law as it is otherwise known, that dealt with monetary matters. Article 30 also set out the supervisory duties of the IFC regarding monetary policy in Greece.

[186] For Argentina see Della Paolera and Taylor (2001, pp. 72–74 and 106).
[187] See data in Appendix A3, Table A3.1.
[188] United Kingdom, House of Commons, Greece No. 1: Greek Law of Control (1898, pp. 14–15). More precisely Article 30 of the Law of Control read as follows: 'The debt in bank notes of forced currency, amounting to 74,000,000 drachmas as well as the debt in small notes of 1 or 2 drachmas, guaranteed by the banks of issue amounting to 20,000,000 drachmas, shall be withdrawn, from the year 1900 onwards, annual payments of which the minimum is fixed at 2,000,000 drachmas.

This withdrawal may cease with the assent of the International Commission, when the debt in bank notes has been reduced to 40,000,000, drachmas.

No new forced currency loan may be concluded by the Government without the assent of the International Commission, before the debt in bank notes of forced currency has been fully paid off.

No other fiduciary issue may be ordered or authorised by the Government beyond such as may take place to meet the needs of trade within the limits fixed or to be fixed by the Statutes of the present and future banks of issue.'

It should be noted that the Law of Control did not stipulate that Greece had to introduce the gold standard as is asserted in the literature dealing with the period in question. However, it could be argued that adhering to the monetary policies defined by article 30 might have led to the adoption of the gold standard which was the prevailing monetary standard at the time.

The escape clause incorporated in article 30 of the Law of Control was used in 1910 to introduce article eight of the ΓΧΜΒ Law which outlined the prerequisites for an increase in the money supply without the Law of Control being violated.

On 19 March 1910 (Julian calendar), two laws were enacted by the Greek government: the ΓΧΜΑ Law which dealt with coinage and the ΓΧΜΒ Law or the Law hereafter, the primary purpose of which was to authorise the flotation of a loan on the international financial markets.[189] Articles one to seven of this law dealt specifically with the flotation of a loan of up to 150 million gold drachmae, whilst article ten proposed the restructuring of the government loans denominated in gold and placed under the jurisdiction of the IFC.

The ΓΧΜΒ Law, however, is still remembered and discussed for its eighth article which introduced the most important monetary reform in Greece between the suspension of convertibility in 1885 and the adoption of the gold exchange standard in 1928. It provided an innovative way to increase the money supply and at the same time to safeguard the external value of the drachma.

Article eight of the ΓΧΜΒ Law is also often called the Valaorites Law as it was the brainchild of Ioannis Valaorites, the sub-governor of the National Bank.[190] Valaorites drafted the article and the minister of finance agreed to add it to the ΓΧΜΒ Law. The IFC did not raise any objections.

Article eight of the ΓΧΜΒ Law authorised the National Bank to increase for its own account, the banknotes in circulation beyond the limit that its issuing privilege allowed on condition that these freshly printed notes were used to buy gold and foreign exchange at a

[189] See National Bank of Greece (1913, pp. 233–240). In fact, the ΓΧΜΒ Law was entitled ‘About a loan up to 240,000,000 gold drachmae, about ending forced circulation and about changing the terms validated by the ΒΦΙΘ Law of 26 February 1898 of the International Control, relating to gold loans under their jurisdiction’.

[190] It has been argued that a similar scheme had been proposed by the director of the Bank of Athens, Ioannis Pesmazoglou in 1903. For example, see Kostis (2003, p. 83); Lazaretou (2007, pp. 181–193).

price that was not above par. The National Bank was then obliged to sell the gold at par plus 1 per thousand as a commission. Foreign exchange was to be sold at the equivalent of the parity of the drachma with the French franc, this time with half a per cent added as profit.[191] When gold or foreign exchange was sold then the equivalent value in banknotes had to be withdrawn from circulation. The Law also provided that an agreement between the National Bank and the government, validated by a royal decree, was necessary to determine the limit up to which banknotes could be issued by the National Bank whilst still abiding by the principles of this Law. Subsequent agreements could authorise a further increase in the upper limit of the banknotes issued under the principles stated in article eight. In addition, this article allowed the use of gold coins as a medium of exchange.

The parity that the ΓΧΜΒ Law refers to was the parity of the drachma set in 1868 when Greece joined the Latin Monetary Union (LMU), that is to say that one paper drachma equalled one gold drachma, which in turn was equal to one French franc. This parity had been reached towards the end of 1909 after a long period where the Greek currency had at first depreciated severely between 1886 and 1902 and then appreciated again.

It should be noted that the ΓΧΜΒ Law did not restrict the buying and selling of foreign exchange to the foreign exchange of countries on the gold standard, as has been argued.[192] The Law refers only to foreign exchange in general a practice followed in all the subsequent agreements between the government and the National Bank authorising the latter to increase the banknotes in circulation under the principles of article eight of the ΓΧΜΒ Law.

Article nine of the ΓΧΜΒ Law allowed for an increase in the nominal capital of any loan to be authorised under this law from 150 million gold drachmae to 240 million gold drachmae on the same terms. The proceeds of this additional part of the loan would be assigned exclusively to the repayment of the debt on forced banknotes to the bank of issue. This article of the ΓΧΜΒ Law also stated that the date of the suspension of inconvertibility would be determined by a royal decree after the National Bank had been consulted. Needless to say, this part of the loan was never issued and inconvertibility remained by law. Ultimately, the nominal capital of the loan that was floated, the Bonds Loan of 1910 as it is known, did not exceed 110 million gold drachmae.[193]

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[191] For the way that the Law was altered in the following year see Annual Report of the National Bank for 1911 (1912, p. ια).
[192] Kostis (2003, p. 88); Tuncer (2011, p. 151).
[193] For more on the Bonds Loan, see Christodoulaki *et al*. (2011, pp. 10–11); (2012, pp. 552–553).

The literature argues that the ΓΧΜΒ Law was introduced to boost the economy.[194] It is possible, however, that the main reason for its introduction was to curb the appreciation of the drachma at a time that it was fluctuating close to the Latin Monetary Union parity and with the Greek government about to float a loan on the international financial markets. Under the ΓΧΜΒ Law, the National Bank acquired the means to intervene in the foreign exchange market to maintain a stable drachma and prevent any seasonal fluctuations of the external value of the Greek currency. In addition, its objective was to increase liquidity, in particular during the period of the harvest. Last but not least, article eight of the ΓΧΜΒ Law was aimed at paving the way for the introduction of the gold standard at some time in the future when conditions were favourable. This Law proved to be an inexpensive way for the National Bank to increase its reserves both in gold and foreign exchange. As it is demonstrated in Chapter 3, these foreign exchange reserves became a significant source of profit for the Bank.

By the end of 1912, Greece was embroiled in the First Balkan War and policy makers had become complacent over the monetary arrangement in Greece. There was no talk of introducing *de jure* convertibility which would most probably have entailed a settlement of the government debt in forced circulation to the bank of issue.[195] For its part the National Bank, a private institution, enjoyed the benefits of the ΓΧΜΒ Law without the 'golden fetters'.

The Valaorites Law operated as it was designed to do until 1915, though gold parity of the drachma was maintained until 1919. In 1915 for the first time, the National Bank used Book Credits to issue banknotes under the ΓΧΜΒ Law, a practice that was repeated again and again during the Great War and which became one of the main reasons for the monetary upheaval of the 1920s. This use of the ΓΧΜΒ Law will be discussed extensively in other parts of the thesis as it developed into a controversial issue.

Article eight of the ΓΧΜΒ Law set out the prerequisites for an increase in the money supply. Subsequently, an agreement between the National Bank and the government validated by a royal decree determined the limit of banknotes which could be issued by the National Bank whilst still abiding by the principles of this Law. In September 1910 for the first time, the National Bank was authorised to issue up to 10 million drachmae. As Table 4.2 below

[194] For the reasons that led to the introduction of the ΓΧΜΒ Law see: Annual Report of the National Bank for 1910 (1911); Zolotas (1928, pp. 7–8 and 77–81); Psalidopoulos (1989, pp. 53–54); Alogoskoufis and Lazaretou (1997, pp. 83–85); Kokkinakis (1999, pp. 497–557); Kostis (2003, pp. 78–90).

[195] Valaorites even hinted in one of his reports when he served as the governor of the National Bank that convertibility could be endorsed by law without the government having repaid its debt in forced circulation to the bank of issue. See the Annual Report of the National Bank for 1910 (1911, p. ιβ΄).

shows, two more agreements between the National Bank and the government followed in a short span of time. Figure 4.2 illustrates that by the end of 1910, 17 per cent of the total banknotes in circulation were banknotes in circulation because of the ΓΧΜΒ Law and by the end of 1914 this amount had risen to 61 per cent.

Table 4.2: Evolution of the ΓΧΜΒ Law, 1910–1914

	1	2	3	4
1910				
14 September 1910	10,000,000	10,000,000	7,500,000	5.86 %
14 October 1910	5,000,000	15,000,000	14,209,000	11.26 %
18 November 1910	10,000,000	25,000,000	14,984,000	11.99 %
1911				
1 August 1911	10,000,000	35,000,000	25,000,000	20.13 %
1912				
3 July 1912	20,000,000	55,000,000	35,000,000	27.54 %
21 September 1912	20,000,000	75,000,000	56,500,000	32.37 %
24 October 1912	25,000,000	100,000,000	75,000,000	40.57 %
10 November 1912	25,000,000	125,000,000	90,000,000	40.10 %
1913				
6 May 1913	25,000,000	150,000,000	128,234,000	63.16 %
30 September 1913	25,000,000	175,000,000	149,804,000	63.70 %
1914				
30 January 1914	25,000,000	200,000,000	168,540,000	73.18 %

Notes:
(1) The first column of the table above shows the date when a royal decree authorised an increase in the banknotes issued under the ΓΧΜΒ Law.
(2) The second column, (headed 1) shows the number of banknotes that could be issued according to the royal decree.
(3) The third column, (headed 2) indicates the upper legal limit of banknotes that the National Bank was permitted to circulate under the ΓΧΜΒ Law.
(4) The fourth column, (headed 3) shows the number of banknotes issued under the ΓΧΜΒ Law that were in circulation at the end of the month given in the first column.
(5) The fifth column (headed 4) shows banknotes issued under the ΓΧΜΒ Law as a percentage of the total of banknotes in circulation at the end of the month given in the first column.

Sources: NBGHA: Α1Σ18Υ1Φ34Ε1; Α1Σ18Υ1Φ34Ε2; Α1Σ18Υ1Φ34Ε3; Α1Σ18Υ1Φ34Ε5; Α1Σ18Υ1Φ34Ε6; Α1Σ18Υ1Φ34Ε7; Α1Σ18Υ1Φ34Ε8; Α1Σ18Υ1Φ34Ε9; Α1Σ18Υ1Φ34Ε13; Α1Σ18Υ1Φ161Ε3; Α1Σ18Υ1Φ161Ε4; Α1Σ18Υ1Φ161Ε5; National Bank of Greece: Annual Report for 1910, p. ια΄ and p. η΄; Annual Report for 1911, p. ια΄; Annual Report for 1912, p. ιδ΄; Annual Report for 1913, p. ιε΄; Annual Report for 1914, p. η΄.

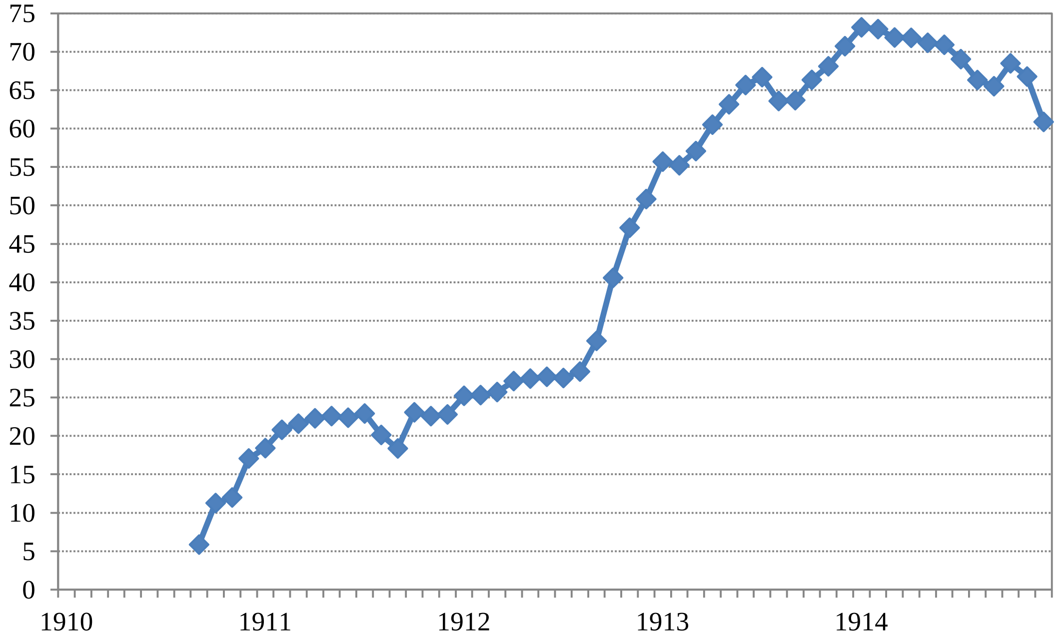


Figure 4.2: Percentage of banknotes of the ΓΧΜΒ Law in total banknotes in circulation
Source: Author's calculations using the Annual Reports of the National Bank, 1910–1914

4.1.2. Did Greece genuinely introduce either of the Gold, or Gold Exchange, Standards in 1910?

4.1.2.1. Approaches to the 1910 monetary arrangement in historical perspective

The year 1910 is usually cited by contemporary economists and economic historians as the year that Greece adopted either the gold standard or the gold exchange standard. In some literature it is stated that Greece successfully adopted the gold standard in 1910. On the other hand, there is literature in which it is argued that Greece in fact introduced the gold exchange standard that year. Furthermore, in a recent thesis it is maintained that Greece was a gold standard country in the 'conventional sense' from 1885 until 1909 or even 1910 when the country is said to have 'switched' to the gold exchange standard.[196] Previously, or at least until the 1980s it was generally believed that Greece had been on forced circulation and that its currency had remained inconvertible throughout the period from September 1885 when the gold standard was suspended until May 1928 when the gold exchange standard was *de jure* introduced. In this section of the thesis, an attempt is made to examine claims made in recent economic history literature about the type of monetary system that Greece utilised before the outbreak of the Great War and at the same time to present the dominant view amongst scholars, policy makers and consequently investors in Greek government bonds at the time.

[196] Tuncer (2011, pp. 153, Table 2.10, 155, 156, 218, 242, 305 and 308).

Table: 4.3:
Table of dates of convertible and inconvertible banknote circulation from Emmanuel Tsouderos Archive

1 January 1842	3 April 1848	Convertible
4 April 1848	15 December 1848	Inconvertible
16 December 1848	29 December 1868	Convertible
30 December 1868	14 July 1870	Inconvertible
15 July 1870	18 June 1877	Convertible
19 June 1877	31 December 1884	Inconvertible
1 January 1885	19 September 1885	Convertible
20 September 1885	Until today[1]	Inconvertible

Notes:
[1] 'Until today' is the exact phrasing in the document and refers to the date that this table was compiled, possibly 31 December 1926.
[2] Greece was following the Julian calendar until February 1923.
Source: HABOG_A3S1Y2F138T8, p.1.

Table 4.3 above illustrates the periods that the drachma was convertible into gold, as well as the periods of inconvertibility from the establishment of the National Bank in 1842 until the point when it conceded its issuing privilege to the Bank of Greece in the late 1920s. This table was compiled by officials at the National Bank possibly in December 1926, at a time when they were working on the stabilisation of the drachma after a long period of monetary instability.[197] At about this time, Zolotas (1928, pp. 6–8) also wrote that there were four periods during which the drachma was inconvertible between 1848 and 1928. A discrepancy may be noticed between Table 4.3 and the information Zolotas provided regarding the day or the month that inconvertibility was enacted or suspended. If the information, however, provided in Table 4.3 above and that provided by Zolotas is compared, it is obvious that the periods that the drachma was inconvertible and therefore also those when it was convertible coincide. In general therefore, there is a consensus in the archival material as well as in the literature published before the early 1980s, about the monetary system in Greece before the outbreak of the First World War. The gold standard was adopted on 1 January 1885 (Julian calendar) and convertibility was sustained until 19 September 1885 (Julian calendar). Subsequently, the drachma was inconvertible until 12 May 1928 when the gold exchange standard was adopted by law.

There is, however, a noticeable difference if Table 4.3, prepared by policy makers at the time, is compared with tables produced by contemporary economic historians: these days

[197] See HABOG_A3S1Y2F138T8, p. 1.

it is widely argued that Greece introduced ether the gold standard or the gold exchange standard in 1910. It is also claimed that Greece remained on a monetary standard either until 1914 or until 1919. A notable exception remains Coskun Tuncer (2011) who argues that the monetary standard in Greece between 1885 and 1910 was ‘conventionally’ characterised as the gold standard, and this in spite of the fact that the drachma remained irredeemable. In this way, Tuncer endorses the idea that Greece was on the gold standard from 1885 until 1910.[198] This idea, however, is unsubstantiated; no evidence is provided to support the claim that Greece was ‘conventionally’ regarded as a gold standard country throughout the period from 1885 until 1909. In fact, an attempt was made and convertibility was introduced on 1 January (Julian calendar) 1885 and for nearly nine months until 19 September (Julian calendar) 1885 the country did operate the gold standard. Subsequently, the drachma firstly depreciated severely and then appreciated until the end of 1909 when the LMU parity was reached; that is to say one paper drachma was equal to one gold drachma which in turn was equal to one French franc. Furthermore, it should be stressed that contrary to Tuncer’s claims, there is a consensus in the literature that Greece was not a gold standard country between September 1885 and 1910. It may be thought in fact that Tuncer’s approach lacks rigour, since on the one hand he argues that Greece was regarded as a gold standard country between 1885 and 1909 but on the other that the drachma was inconvertible and indeed fluctuated severely, and this against a background of Greece having defaulted in December 1893.[199]

4.1.2.2. What the ΓΧΒΜ Law provided and its evolution

On 19 March 1910 (Julian calendar), two laws were enacted by the Greek government: the ΓΧΜΑ Law which dealt with the question of coins and the ΓΧΜΒ Law which primarily

[198] For example see Tuncer (2011, Table 2.7 on p. 136 and Table 2.10 on p. 155).

[199] Inconsistency in this thesis does not end with the claim that Greece was ‘conventionally characterised as a gold standard country’. For example on page 271, Tuncer (2011) makes an attempt to explain the first ‘break’ in the time series that is detected by the statistical analysis. He writes that the ‘first break in 1884 is probably due to the suspension of gold convertibility by the National Bank of Greece. As discussed in Chapters 2 and 3 in the case of Greece, foreign creditors were especially apprehensive about the excessive amount of ‘forced banknotes’ in circulation. Greece’s lack of commitment to the LMU agreement and the adherence to the gold standard which lasted only six months, was reflected in a decrease in its credibility in the financial markets’. (See also Table 4.2, p. 268). However, in December 1884 when a break is detected, the drachma was inconvertible thus no ‘suspension of gold convertibility’ could take place. In fact it had been inconvertible since 1877 as it is demonstrated in table 4.3 above. It should be repeated again that Greece joined the gold standard countries on 1 January (Julian calendar) 1885 and remained on gold for nearly nine months until 19 September (Julian calendar) of that same year, not for roughly six months as is claimed by Tuncer.

Other areas of Tuncer’s thesis may not in the end survive scrutiny. For example in Table 3.10 (p. 243) it is stated that Greece floated eight loans between 1898 and 1914. In fact, between the introduction of the Law of Control and the outbreak of the First World War five loans were issued if the 2.50 per cent Guaranteed Loan of 1898 is included, namely, the 1898 Guaranteed Loan, the 1902 Railways Loan, the 1907 Loan, the 1910 Bonds Loan and the 1914 Loan.

authorised the government to issue a loan on the international financial markets.[200] Article eight of the latter law, as has been explained above, gave the right to the National Bank to issue banknotes under the condition that these banknotes were used by the Bank to buy gold and foreign exchange at a price that was not above par. The National Bank could subsequently sell this gold at par plus initially 1 per thousand as a commission and the foreign exchange at the equivalent of the parity of the drachma with the French franc this time with half a per cent added as profit. It should be stressed again that the ΓΧΜΒ Law stated that foreign exchange in general could be bought and sold and did not restrict the buying or selling of foreign exchange to that of countries that were on the gold standard at the time. Stating that the Valaorites Law restricted the buying and selling of foreign exchange to foreign exchange based on gold then both the letter and the spirit of this law are lost. The only constraint that the ΓΧΜΒ Law imposed was that the National Bank could only use the banknotes issued under the terms of this law to purchase gold and foreign exchange at a price that was not above par. In addition, the gold and foreign exchange obtained under the terms of this Law could only be sold at par plus a small profit.[201] Therefore, the banknotes in circulation under the principles of the 1910 Law had to be fully collateralised with gold and foreign exchange.

The inclusion of article eight to the ΓΧΜΒ Law, which was the most important monetary development in Greece since the suspension of gold convertibility in September 1885, has probably led contemporary economic historians and economists to claim that Greece adopted either the gold standard or the gold exchange standard in March 1910.

Contrary to claims in recent literature, however, Greece neither adopted the gold standard in March 1910, nor was one of the European countries that were on the gold standard on the eve of the outbreak of the First World War. Nor can it be said that the gold exchange standard was adopted in March 1910. If it is argued that Greece adopted the gold standard or even the gold exchange standard in March 1910 then aspects of the political economy at the time surrounding monetary issues are overlooked. In addition, both the spirit and letter of the Valaorites Law are completely ignored. At the time, the National Bank was in favour of a stable drachma at its LMU parity but was not yet ready for the introduction of the gold standard. The authorities at the National Bank were cautious not to repeat the 1885 experience when Greece remained on the gold standard for merely nine months, causing the National Bank to lose a considerable part of its reserves in trying to defend the parity of the drachma. As an alternative, the ΓΧΜΒ Law provided the bank of issue with a degree of flexibility and freedom that the gold standard did not permit, whilst at the same time paving the way for its

[200] National Bank of Greece (1913, pp. 233–240).
[201] See ibid., p. 238.

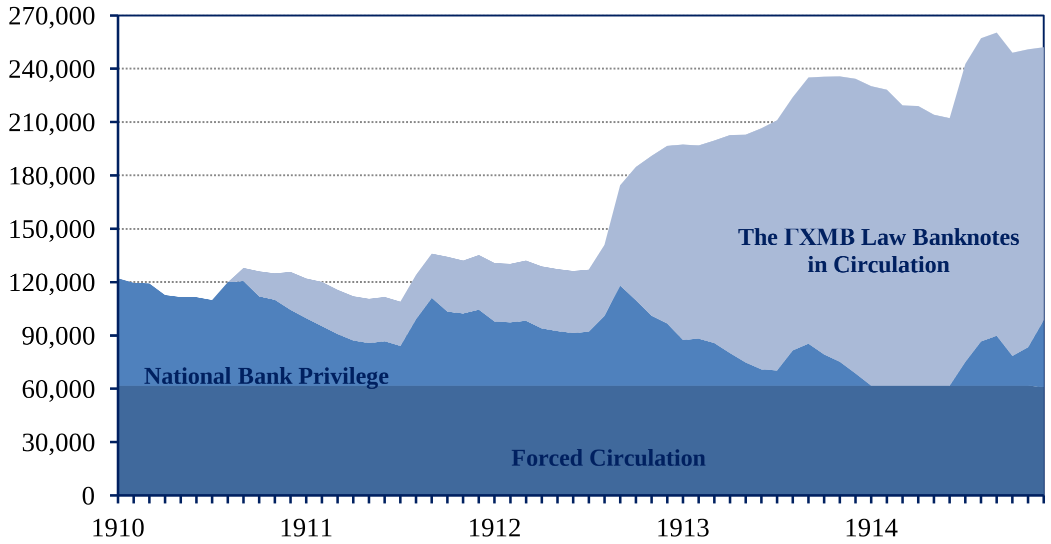
adoption when conditions allowed. Furthermore, the Law provided the National Bank with an inexpensive way to increase its gold and foreign exchange reserves.

The ΓΧΜΒ Law proposed that the National Bank be able to print a quantity of banknotes limited by decree, and subsequently to use those banknotes to buy gold and foreign currency at a rate that was not above par. In fact, this term of the Law was against one of the main tenets of both the gold standard and the gold exchange standard, whereby the bank of issue firstly had to accumulate gold or gold related reserves and then on the strength of these reserves to print banknotes. In addition, the central bank of a country on the gold standard or the gold exchange standard was required to exchange unlimited quantities of banknotes in circulation with gold or gold based foreign exchange.

The Valaorites Law obliged the National Bank to convert into gold and foreign exchange at par only the banknotes in circulation on account of this law. The remaining of the money supply, which included the banknotes in circulation under the privilege of the issuing banks as well as those of forced circulation, were not by law convertible at par into gold and foreign exchange. However, the share of the banknotes in circulation because of the ΓΧΜΒ Law gradually increased as Figures 4.2 and 4.3 demonstrate. In fact, after October 1912 the banknotes in circulation issued under the ΓΧΜΒ Law became the dominant component of the money supply. For example, by the end of December 1912 half of the banknotes in circulation were banknotes under the ΓΧΜΒ Law.

With the ΓΧΜΒ Law the drachma was pegged at its LMU parity to the French franc. At the same time, the National Bank acquired the tools to intervene in the foreign exchange market by buying or selling gold and/or foreign exchange, and in this way to maintain the external value of the drachma around its LMU parity. This commitment mechanism resembled the gold exchange standard and thus it could, if questionably, be argued that article eight of the ΓΧΜΒ Law helped Greece gradually to 'shadow' the gold exchange standard. This claim, however, should not conceal the distinctive characteristics of the Valaorites Law, the advantages of which were praised so long as the drachma remained at par, whilst its shortcomings were comprehended only in retrospect after the drachma started depreciating in 1919.

Amount of banknotes in circulation of each different category ('000 omitted)



Percentage of each category in the total banknotes in circulation

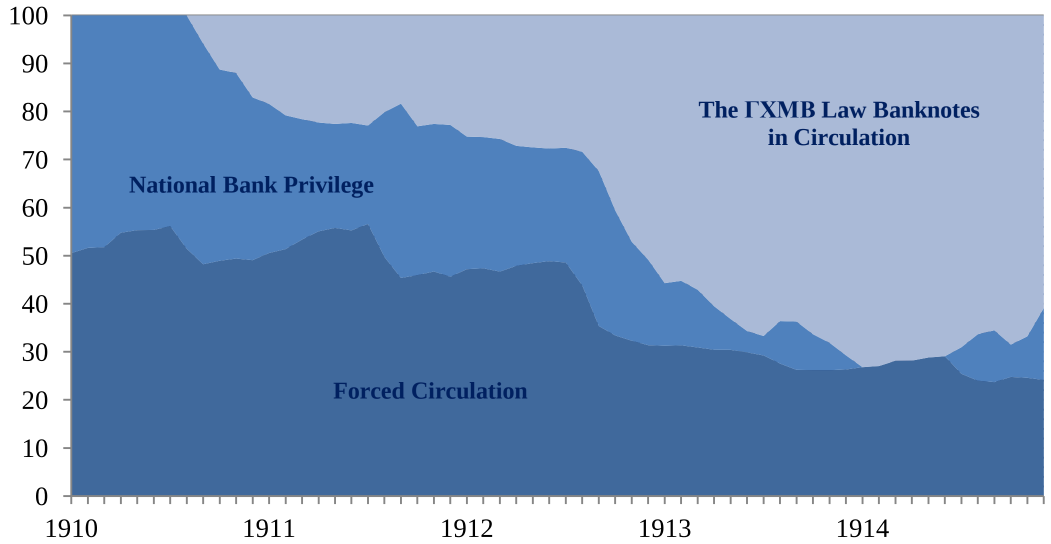


Figure 4.3: Categories of banknotes in circulation, 1910–1914

Source: Author's calculations using the Annual Reports of the National Bank, 1910–1914.

In March 1910 there were in circulation banknotes from the two issuing banks, the National Bank and the Ionian Bank, and banknotes of forced circulation which were governed by the Law of Control of 1898. (See Figure 4.3 above and Table A3.1 in Appendix A3.) The Valaorites Law gave the right to the National Bank to issue banknotes up to a certain amount specified by a royal decree under the condition that these freshly printed banknotes would be used to buy gold and/or foreign exchange.

As it has been noted before, in September 1910 for the first time, the National Bank was authorised to issue up to 10 million drachmae in banknotes. By the end of September

1910, nearly 6 per cent of the total banknotes in circulation were banknotes that had been issued in response to the Valaorites Law, whilst by the end of December of that same year this amount had risen to 17 per cent. (See Figure 4.2.) The National Bank resorted to this right repeatedly prior to the outbreak of the First World War as Table 4.2 demonstrates. As a result, the percentage share of the banknotes issued following the passage of the ΓΧΜΒ Law increased considerably. This was even more the case since the National Bank kept banknotes issued out of its own privilege as cash reserves. In addition, the withdrawal of banknotes according to the Law of Control was temporarily suspended until December 1914 as the ΓΧΜΑ Law provided. (See Figure 4.3 as well as Table A3.1 in Appendix A3.) For example, by the end of 1912, half of the banknotes in circulation were banknotes that had been issued under the ΓΧΜΒ Law. In January 1914, nearly 74 per cent of the value of the banknotes in circulation owned their origin to the Valaorites Law. This was the highest percentage share of banknotes in circulation under the principles of the 1910 Law in the total of the money supply before the outbreak of the Great War.

Consequently, it may be seen that article eight of the ΓΧΜΒ Law laid the foundations for Greece gradually to 'shadow' the gold exchange standard as it provided the bank of issue with an inexpensive way to accumulate easily sufficient reserves of gold and foreign exchange. In this way, the National Bank was able to sustain the drachma at par until 1919.

The operation of the Valaorites Law led to a degree of freedom in the monetary system and this allowed for an increase in the money supply under certain conditions. As can be seen in Figure 4.4 below, the money supply in Greece increased after the introduction of the 1910 Law. In particular, the money supply started increasing rapidly after July 1912 and by the end of 1914 it had more than doubled, as Figures 4.3 and 4.4 indicate. In addition, it provided the bank of issue with an inexpensive way to accumulate easily sufficient reserves of gold and foreign exchange and in this way to be able to sustain the drachma at par until 1919.

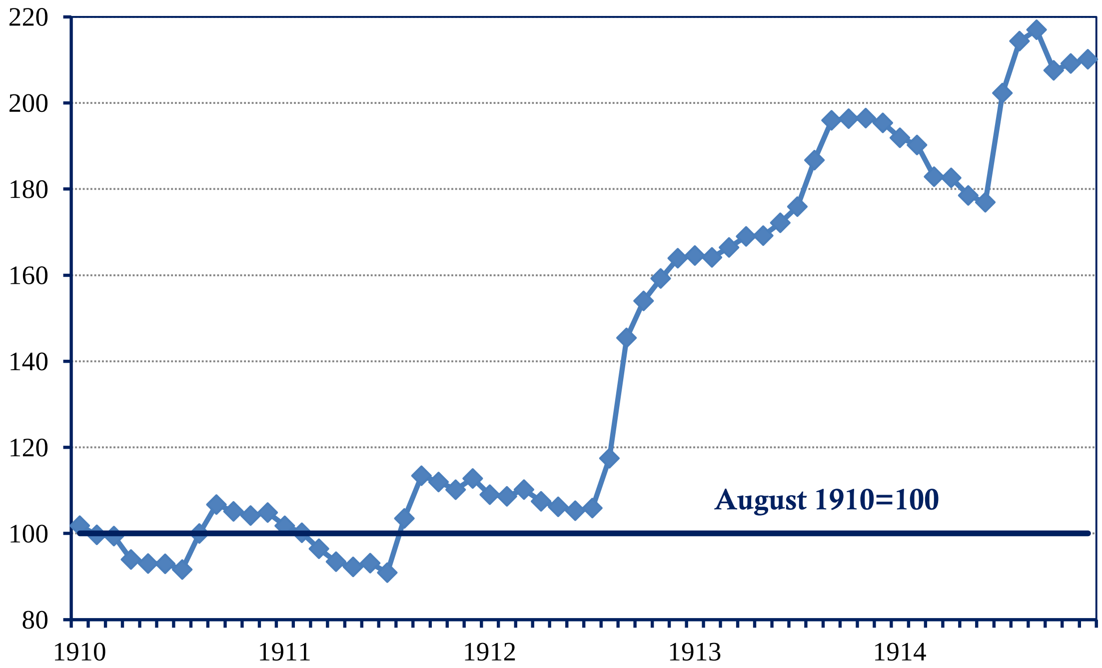


Figure 4.4: Banknotes in circulation, 1910–1914
(August 1910=100)

Source: Author's calculations using data in Table A3.1 in Appendix A3.

4.1.2.3. Some thoughts on the 1910 monetary arrangement

'From 1885 until [the late 1920s] the Greek monetary system had been on forced circulation of the paper drachma. From 1910 until 1919 the Greek paper drachma was at par with the gold drachma (equal to 0.29034 grams of pure gold), whilst on the other hand forced circulation continued to operate under law. The operation of the ΓΧΜΒ Law contributed towards real parity.'[202] Thus begins a document entitled 'A treatise on the stabilisation of the drachma', written possibly in late 1926 and kept in the archive of Emmanuel Tsouderos, the deputy governor of the National Bank at the time and one of the principal architects of *de jure* stabilisation in the late 1920s. The document goes on to say that since 1885 the Greek economy had been legally on forced circulation, a measure not lifted even during the period from 1910 until 1919 when the drachma remained at par.[203] At the time 'forced circulation' was often used as a term meaning inconvertibility, as forced circulation was considered to be incompatible with the gold standard. This in a nutshell, is how the monetary conditions that prevailed in Greece between 1910 and 1919 are described in archival material on the period in question as well as in literature published before the 1980s.[204]

[202] HABOG_A3S1Y2F138T3, p. 2.
[203] Ibid., p. 3.
[204] See, for example: HABOG: A3S1Y2F134T2, pp. 2 and 27; A3S1Y2F135T1, p. 1; A3S1Y2F138T3, p. 2; A3S1Y2F138T8; A3S1Y2F138T16; A3S1Y1F36T7, p. 1; Annual Reports of the National Bank

Before the 1980s the stability of the exchange rate of the drachma between 1910 and 1914 was admired. In addition, the fact that the drachma remained at par during the Great War was praised. The ΓΧΜΒ Law was credited with the stability of the Greek currency between 1910 and 1919. In fact, the chairman of the Ionian Bank, Falconer Larkworthy, an ardent advocate of the ΓΧΜΒ Law, repeatedly urged during the war 'the adoption in Great Britain of the Valaorites currency reform scheme of 1910'.[205] In 1917, at the annual general meeting of the Ionian Bank in London, Larkworthy noted the stability of the external value of the drachma despite the turmoil of war, the high level of reserves maintained in proportion to the banknotes in circulation in Greece and finally the significant return that the National Bank enjoyed from the foreign exchange reserves held as cover for the banknotes issued under the Valaorites Law and which were deposited at banks abroad. These outcomes he believed, made the 'Greek system' 'extraordinarily suggestive' to other countries.[206]

Valaorites, the father of the ΓΧΜΒ Law, as the governor of the National Bank acknowledged in the annual reports for 1910 and 1912 that the country was on forced circulation under law.[207] Valaorites, however, repeatedly made clear in the same annual reports that since the gold parity of the drachma had been achieved, then in practice forced currency circulation did not exist.[208] He added that the introduction of article eight of the ΓΧΜΒ Law protected the parity of the drachma because it encouraged the accumulation of considerable reserves in gold and foreign exchange. He also commented that because of the ΓΧΜΒ Law the suspension of forced circulation, that is to say the repayment of the government debt to the bank of issue in banknotes in circulation which might have meant considerable cost for the government, was no longer imperative. It is important, however, to note that Valaorites also recognised that with the ΓΧΜΒ Law in place the country only partially enjoyed the benefits of a system devoid of forced circulation. The monetary authority could not after all expand the number of banknotes in circulation to support the real economy.[209]

Zolotas in the late 1920s, the heyday of the gold exchange standard, also made a distinction between forced circulation by law and in practice. Although he regarded the period from 1885 to 1928 as a period of inconvertibility, he argued that a new system had prevailed

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for 1910–1914; *Financial Times*, 14 April 1915, Company Meeting Reports, Ionian Bank; Zolotas (1928, 1929); Andreades (1939); Spiliotopoulos (1949, p. 87); Bank of Greece (1978, p. 25).

[205] *Financial Times*, Wednesday, 23 May 1917: Ionian Bank Meeting. See also *Financial Times*, Wednesday, 14 April 1915: Company Meeting Reports: Ionian Bank; *Financial Times*, Wednesday, 23 May 1917: Company Meeting Reports: Ionian Bank.

[206] *Financial Times*, Wednesday, 23 May 1917: Company Meeting Reports: Ionian Bank.

[207] Annual Report of the National Bank for 1910 (1911, p. θ', p. ιβ).

[208] Ibid., p. θ'; Annual Report of the National Bank for 1912 (1913, p. η').

[209] Annual Report of the National Bank for 1910 (1911, p. ιβ΄).

in Greece between 1910 and 1919, that of the gold exchange standard.[210] He resorted to a David Ricardo treatise to support his view.[211] When, however, he examined the exchange rate policy between 1910 and 1927, he maintained that the ΓΧΜΒ Law had introduced in Greece a variation on the gold exchange standard.[212] A further reference in the 1920s relating the ΓΧΜΒ Law with the gold exchange standard was made in the report prepared by the representatives of the League who visited Athens in the spring of 1927.[213]

Preliminary research into the financial press for 1910 showed that no attention was paid to article eight of the ΓΧΜΒ Law, the clause that would become known as the Valaorites Law. This preliminary research shows that press interest was focused on the flotation of the new loan.[214] The possibility of a restructuring of the public debt that was under the supervision of the IFC was also an issue that was broadly discussed in the press. More research, however, should be carried out into the foreign press, as well as into the reports of the IFC for the period in question in order to establish how market participants in general and foreign supervisors saw monetary developments in Greece between 1910 and 1914.

Writing in the early 1920s, Andreades showed great perception when he observed that the fact that the parity of the drachma had been sustained between 1910 and 1919 could lead to the conclusion that inconvertibility had been suspended during that period. He further added that the enactment of the ΓΧΜΑ Law also in 1910, which dealt with coinage, could reinforce this view.[215] These observations from the 1920s pre-empted claims in recent economic history literature that focus on monetary changes in Greece in 1910. Nowadays, it is argued that Greece adopted either the gold standard or the gold exchange standard in 1910. At the time, the inclusion of article eight to the ΓΧΜΒ Law, a law that primarily aimed at authorising the government to float a loan on the international financial markets, aimed at solving two problems: firstly, the shortage of banknotes that was experienced in the country in particular during the second semester of the year, in other words during the period of the harvest, and secondly to sustain the drachma at par during a period that the drachma had reached its LMU parity and at the same time it was widely expected that the Greek currency would appreciate further because of the flotation of the new loan.

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[210] Zolotas (1928, pp. 7 and 79–80).
[211] Ibid., pp. 79–80. Keynes (1913, p. 22) also referred to Ricardo in his book ‘Indian Currency and Finance’ to support theoretically his arguments. India was one of the countries that were on the gold exchange standard (British pound) between 1898 and 1914.
[212] Zolotas (1928, p. 180).
[213] HABOG_A3S1Y1F4T1, p. 10;
[214] See, for example, *The Economist*, 12 March 1910, ‘The New Development in Greece’, pp. 557–558.
[215] Andreades (1939, p. 526).

In February 1911, approximately a year after the enactment of the ΓΧΜΒ Law, the new governor of the National Bank, Valaorites, stated that the monetary changes introduced by this law had achieved their aims.[216] In other words, the ΓΧΜΒ Law had helped to sustain the drachma at par and at the same time provided liquidity to the economy and a degree of flexibility to the system. In short, before the 1980s the monetary development in Greece in March 1910 was identified with the ΓΧΜΒ Law. Furthermore, article eight of the ΓΧΜΒ Law was regarded as a preliminary step that would pave the way for *de jure* introduction of convertibility and therefore adoption of the gold standard at some point in the future. It should be stressed that this monetary development was not a conscious act on the part of Greek monetary policy authorities to adopt for the country an exchange standard, let alone the gold exchange standard. In addition, although the IFC was based in Athens, the monetary change in 1910 was entirely a Greek initiative which was simply approved by the IFC. In other words the IFC did not oppose the inclusion of article eight into the ΓΧΜΒ Law, which was entirely an arrangement between the sub-governor of the bank of issue and the minister of finance. The sub-governor of the National Bank drafted it and the minister of finance agreed to add it to the ΓΧΜΒ Law which aimed at authorising the flotation of an international loan. It is, however, beyond the scope of this thesis to examine in detail the origins of article eight of the ΓΧΜΒ Law, or the schemes proposed before 1910 and the debate that took place in Athens between 1898 and 1910 regarding monetary issues.

Tuncer in his thesis argues that the role of the IFC in Greece was instrumental in the successful transition to the gold exchange standard in 1910.[217] Tuncer, however, provides no fresh evidence to challenge claims in the literature that the introduction of article eight to the ΓΧΜΒ Law was an initiative of the sub-governor of the National Bank which was endorsed by the minister of finance. The role of the IFC in the monetary advance in Greece in 1910 was simply to give their consent. It should be also repeated that in 1910 there was no deliberate intention on the part of either the government or the bank of issue to introduce the gold exchange standard as Tuncer claims. The addition of article eight to the ΓΧΜΒ Law was a measure that was aimed on the one hand at helping the National Bank to increase the banknotes in circulation and on the other to keep the external value of the drachma stable until conditions would allow the adoption of the gold standard.

Tuncer's examination of the contribution of the IFC to monetary developments in Greece between 1898 and 1910, and at the same time their fiscal responsibility and duties, is partial and lacks balance. In 1898 the Greek government conceded a substantial part of its

[216] Annual Report of the National Bank for 1910 (1911, p. ιβ΄).
[217] For example, see Tuncer (2011, pp. 153, 271, 307 and 308).

total revenues to the IFC and the primary task of the IFC was to improve the interest rate paid on Greek loans issued on the international markets before 1893 and placed under its jurisdiction. The Law of Control defined the minimum interest rate to be paid to the bondholders of the loans that the IFC supervised. The IFC, however, aimed at increasing the coupon paid for the loans under its control to their full contractual level as well as the sinking fund, using the public revenues that the government had assigned to them. Consequently, the coupon rate paid to the bondholders of the Old Loans, as the loans issued before 1893 are known, fluctuated within a band. It fluctuated between the rate set by the Law of Control and the contractual level, depending on the surplus of the public revenues assigned to the IFC.[218] The IFC was in effect a debt management committee whose role had been extended to supervise monetary and fiscal policy as well. Tuncer emphasises monetary developments in Greece between 1898 and 1914 which were not necessarily a consequence of the activities of the IFC to claim that in the case of Greece there was 'a complete loss of monetary sovereignty'. At the same time, however, he ignores its fiscal responsibilities in order to conclude that 'the issue of fiscal sovereignty in the context of the Greek Commission should be revisited'.[219] This completely neglects the role of the National Bank in establishing monetary policy as well as the political economy at the time, which was in favour of a stable drachma close to its par.

Other claims in Tuncer's thesis relating to the 1910 monetary advance also invite further scrutiny. For example, when speaking of 'the switch to the gold exchange standard' in Greece in 1910, it is repeatedly stated that 'the banknotes in circulation came down to a desirable level'.[220] It is also stated that the 'withdrawal of over-issued paper currency' ended in 1910 with the introduction of the gold exchange standard.[221] Tuncer does not, however, elaborate on what he means by 'desirable level' of banknotes in circulation. Two comments should be made here. Firstly, it should be reminded that under the Law of Control the government was required to cancel banknotes to a value of at least 2 million drachmae every year until the debt in banknotes from forced circulation was reduced to 40 million drachmae. This target was achieved in 1925, as Table A3.1 in Appendix A3 shows. Secondly, between 1898 and 1909, no significant reduction in the money supply took place as Figures 2.24, p. 150, 2.25, p. 152 and 3.5, p. 210 in Tuncer's thesis show. Then, after September 1910 the money supply increased as fresh banknotes were issued again and again under the principles stated in article eight of the ΓΧΜΒ Law, as Figures 4.3 and 4.4 above demonstrate.

[218] See Figure 6.4 in Chapter 6 and A4.1 in Appendix A4 of this thesis; See also Christodoulaki and Penzer (2004, pp. 15 and 60).
[219] Tuncer (2011, pp. 218–219).
[220] Ibid., pp. 209, 218 and 242.
[221] Ibid., pp. 218 and 242.

The importance of the share of forced circulation in the total banknotes in circulation diminished after the ΓΧΜΒ Law was implemented. In January 1910, nearly 51 per cent of the banknotes in circulation were forced banknotes. By January 1914, banknotes from forced circulation had dropped to only 27 per cent of the total. (See Figure 4.3 above.) Furthermore, government debt in forced banknotes as a percentage of the total assets of the National Bank dropped from 16.35 per cent in 1910 to only 8.40 per cent in 1914. Whilst significant, however, the decrease was due not so much to a decrease of the government debt in forced circulation to the bank of issue as to an impressive increase in the total assets of the National Bank. Debt in terms of forced circulation remained a significant obligation of the government to the bank of issue throughout the period 1910 to 1914. Furthermore, the appreciation of the drachma had increased its real value.

At the end of 1912, Greece was embroiled in the First Balkan War and by then, policy makers had been complacent with the monetary arrangement in Greece. There was no talk of *de jure* stabilisation of the drachma which would most probably have entailed the repayment of forced circulation to the bank of issue.[222] In spite of the fact that the external value of the drachma had remained stable since the end of 1909, policy makers were still cautious not to repeat the 1885 experience when Greece remained on the gold standard for merely nine months, causing the National Bank to lose a considerable part of its reserves. For its part, the bank of issue enjoyed the benefits of the ΓΧΜΒ Law without having the 'golden fetters'. Moreover, the reserves, mainly foreign exchange reserves that the National Bank accumulated because of the ΓΧΜΒ Law, proved to be an important source of profit. It should be noted at this point that in the 1920s the governor of the National Bank, Alexandros Diomides, proposed to the Bank of England that Greece could enact another law, similar to the ΓΧΜΒ Law, to stabilise the drachma at the time, rather than adopting the gold exchange standard. Needless to say that Montagu Norman, the governor of the Bank of England, did not approve this proposal. Instead, he suggested that the gold exchange standard should be introduced *de jure*.

4.1.2.4. Concluding remarks

The discrepancy between the way that monetary change, in other words the ratification of both the ΓΧΜΑ and ΓΧΜΒ Laws in Greece in March 1910, is seen in recent economic history literature and by policy makers and scholars at the time raises the important question

[222] Valaorites even hinted in one of his reports as the governor of the National Bank that they could endorse convertibility by law without the government having repaid its debt in forced circulation to the bank of issue. See Annual Report of the National Bank for 1910 (1911, p. ιβ΄).

‘*what is [economic] history’*.[223] What is it that matters in economic history: the interpretative choices of contemporary economic historians or the standards and perceptions that dominated at the time? Such questions have an important bearing on research that examines the creditworthiness of the Greek government during the period in question.

Before the 1980s, the monetary developments in Greece in 1910 were not thought to be linked either to the gold standard or to the gold exchange standard. On the other hand, before the Great War the gold exchange standard had been embraced both in some continental countries and outside Europe. It was by no means invented at Genoa in 1922.[224]

At the time, certain characteristics defined the gold standard and the gold exchange standard and were prerequisites for a country to adopt either of these monetary systems. The idiosyncratic nature of examples like the monetary arrangement in Greece in 1910 will be lost to history if research does not take them into account. Acknowledging such discrepancies and examining them will increase our understanding of how the international financial system functioned at the time and how certain countries, in this case Greece, were incorporated into that system.

4.1.3. Between the outbreak of the war and stabilisation

As Table 4.4 below demonstrates, banknotes in circulation on the eve of the central banking reform fell into four categories. Three of the four categories existed before the war: those issued as a privilege of the National Bank, those issued because of the ΓΧΜΒ Law and those for the account of the government. A new category of banknotes was added in 1923 when the National Bank was given the right to issue banknotes to buy foreign exchange on behalf of the government. Finally, in 1926 the Bank was authorised by law to issue banknotes to refund those National Defence Bonds (NDBs) that still remained in circulation when they fell due. The National Bank, however, never availed itself of this privilege.

Table 4.4 below summarises the different categories of banknotes that were in circulation on the eve of the banking reforms. At the same time, it shows the way that the money supply evolved after the outbreak of the First World War. The issuing privilege of the National Bank was extended three times and the printing press was repeatedly used to create banknotes for the account of the government whilst the ΓΧΜΒ Law was used as a vehicle by which to finance the participation of Greece in the Great War.

[223] Carr (1990).
[224] Nurkse (1997, pp. 264–265).

Table 4.4: Summary of banknotes in issue at the time of the establishment of a central bank in Greece (in drachmae)

A) Banknotes issued because of the privilege of note issue of the National Bank		
1) Note issue right of the National Bank under Law ΑΣΟΓ/1885		60,000,000
2) Transfer of the issue right of the Bank of Epirus-Thessaly to the National Bank, Law ΒΧΜΑ/1899		6,000,000
3) Transfer of the issue right of the Ionian Bank, Law ΒΩΞ/1903		7,000,000
4) Expansion of the note issue privilege of the National Bank to the New Countries, Law 656/1915		80,000,000
5) Transfer of the issue right of the Bank of Crete, Law 656/1915		10,405,000
6) Expansion of the note privilege of the National Bank under Law 2547/1920		300,000,000
7) Note issue for the needs of trade, L.D. of 3 March 1923		300,000,000
TOTAL:		763,405,000
B) Banknotes issued for the account of the government (Forced Circulation)		
	Initial Amount	*Balance on 14 May, 1928*[1]
1) Law ΒΦΙΘ/1898	94,000,000	40,000,000
2) Law 2547/1920	400,000,000	376,000,000
3) Law 2577/1921	500,000,000	470,000,000
4) Law 2855/1922	550,000,000	517,000,000
5) L.D. of 10 December 1922	600,000,000	582,000,000
6) L.D. of 3 March 1923	750,000,000	643,000,000
TOTAL:	2,894,000,000	2,628,000,000
C) Banknotes issued under the ΓΧΜΒ Law of 19 March 1910		1,139,784,175
D) Notes issued for the account of the government under the L.D. of 23 April 1923 and of 28 October 1926[2]		1,657,767,335[3]
GRAND TOTAL:		6,188,956,510[4]

Notes:

[1] Balance of banknotes in circulation under these laws that was passed to the Bank of Greece. By 14 May 1928, the government had cleared debt to the National Bank under the laws of 1920 to 1923 equal to 212,000 drachmae.

[2] Under the decree law of 23 January 1926, the National Bank was authorised to issue banknotes with which to refund the remaining NDBs in circulation when they fell due. The National Bank never availed itself of this privilege.

[3] Balance of this note issue on 14 May 1928.

[4] The legal maximum note issue laid down by the above laws and conventions was 6,188,956,510 drachmae on 14 May 1928. Against this legal maximum the total banknotes in circulation on that date were 4,363,352,807.61 drachmae.

Sources: NBGHA_A1Σ18Y1Φ165E1; NBGHA_A1Σ22Y6Φ1E32; NBGHA_A1Σ22Y6Φ2E1; HABOG_A3S1Y1F4T1, pp. 6–15.

4.1.3.1. Issuing Privilege

In 1914 the National Bank was negotiating the extension of its issuing privilege to the areas annexed after the end of the Balkan Wars with the exception of Crete where the Bank of Crete enjoyed the note privilege.[225] Talks between the two sides were tough and concluded in an agreement that became law in February 1915.[226] Under this law the issuing privilege of the National Bank was increased by 80 million drachmae. For the first time in its history as an issuing bank the National Bank was legally obliged to maintain a cover: one-eighth of this increase was backed with gold and a further one-eighth with Greek government bonds denominated in gold.[227] In other words, the National Bank had to hold one-quarter of this authorised extension of its issuing privilege in gold and government bonds denominated in gold in equal parts. It was said that this reserve arrangement had been recommended by the IFC.[228]

In 1920, the issuing privilege of the Bank was extended by 300 million drachmae, this being justified by the expansion of Greek territory as a consequence of the First World War. Two-thirds of this extension, however, was passed on to the government as a loan. Following the precedent set in 1915, the issuing bank had to retain a legal cover for this part of its issuing right. One-eighth of the banknotes issued because of the extension of the note privilege of the National Bank in 1920 was covered by gold and a further one-eighth by Greek government bonds denominated in gold.[229]

In 1923, the issuing privilege of the National Bank was extended again by 300 million drachmae for the last time in its history as a note issuing bank.[230] This extension of the issuing privilege was aimed at the 'strengthening of industry and shipping'. However, unlike the two previous extensions of the note issuing privilege, this time the National Bank was not obliged to retain any reserves for this extension of its issuing privilege.

[225] For the negotiations between the National Bank and the government, see for example Kostis (2003, pp. 96–120); See also *The Government Coup against the National Bank as it was Seen by the Press* (1914).
[226] See Annual Report of the National Bank for 1915 (1916, pp. xiii–xvii); Kostis (2003, pp. 118–120).
[227] See Article 3 of the Agreement, Annual Report of the National Bank for 1915 (1916, p. xiv).
[228] Spiliotopoulos (1949, p. 117).
[229] Annual Report of the National Bank for 1920 (1921, p. θ').
[230] See Annual Report of the National Bank for 1923 (1924).

4.1.3.2. ΓΧΜΒ Law between 1915 and 1919

Table 4.5 shows the number of banknotes that the National Bank was authorised to print as a result of the ΓΧΜΒ Law between 1915 and 1919 when this law was used for the last time. During this period, however, the principle of the law was violated as these banknotes were not covered by gold and/or foreign exchange but by Book Credits, which carried no certainty of being paid off. In fact, the ΓΧΜΒ Law became the main instrument by which to finance the active participation of Greece in the First World War, and in the end it was one of the main sources of the high inflation that the country experienced in the 1920s. These Book Credits are examined in detail in Chapter 5.

Table 4.5: Evolution of the ΓΧΜΒ Law, 1915–1919

	1	2	3	4
1916				
28 January 1916	50,000,000	250,000,000	200,000,000	51.46 %
13 June 1916	50,000,000	300,000,000	260,000,000	58.13 %
30 September 1916	50,000,000	350,000,000	300,000,000	59.83 %
25 November 1916	50,000,000	400,000,000	350,000,000	64.28 %
1917				
14 March 1917	50,000,000	450,000,000	385,000,000	66.03 %
8 June 1917	50,000,000	500,000,000	445,000,000	69.77 %
11 August 1917	100,000,000	600,000,000	490,848,000	71.61 %
7 October 1917	100,000,000	700,000,000	609,448,000	78.16 %
1918				
18 January 1918	100,000,000	800,000,000	692,859,000	77.66 %
13 March 1918	200,000,000	1,000,000,000	800,068,000	81.70 %
21 September 1918	200,000,000	1,200,000,000	975,194,000	83.13 %
1919				
19 January 1919	200,000,000	1,400,000,000	1,160,572,000	91.55 %

Notes:
(1) The first column of the table above gives the dates on which an agreement between the National Bank and the government authorised an increase in banknotes issued under the ΓΧΜΒ Law.
(2) The second column (headed 1) shows the number of banknotes that could be issued according to the agreement between the government and the National Bank.
(3) The third column (headed 2) indicates the maximum number of banknotes that the National Bank was permitted to circulate under the ΓΧΜΒ Law.
(4) The fourth column (headed 3) shows the number of banknotes issued under the ΓΧΜΒ Law that were in circulation at the end of the month given in the first column.

(5) The fifth column (headed 4) shows the banknotes issued under the ΓΧΜΒ Law as a percentage of the total number of banknotes that were in circulation at the end of the month given in the first column.
(6) In 1915, there was no increase in the money supply emanating from the ΓΧΜΒ Law.
(7) Pantelakis (1988) stated that the National Bank was authorised to issue up to 100 million drachmae on 18 January 1918, yet Eulambio (1924) mentioned that this same agreement gave the bank of issue the right to circulate up to 200 million drachmae.

Sources: NBGHA: Α1Σ18Υ1Φ34Ε17; Α1Σ18Υ1Φ34Ε18; Α1Σ18Υ1Φ34Ε19; Α1Σ18Υ1Φ34Ε21; Α1Σ18Υ1Φ34Ε22; Α1Σ19Υ1Φ34Ε4; Eulambio (1924, p. 100); Pantelakis (1988, p. 341, n. 36); Author's calculations.

Table 4.5 states the dates when a royal decree authorised an increase in the banknotes in circulation under the ΓΧΜΒ Law between 1915 and 1919. It also shows the number of banknotes that could be issued according to the agreement between the government and the National Bank. In addition, it indicates the number of banknotes that were in circulation because of the ΓΧΜΒ Law at the end of the month when a new agreement was signed as well as the banknotes in circulation because of the ΓΧΜΒ Law as a percentage of the money supply. By the end of January 1916, approximately 52 per cent of the total banknotes in circulation were because of the 1910 Law whilst by the end of January 1919 this amount had risen to nearly 92 per cent. It should be noted that the banknotes printed because of the ΓΧΜΒ Law after 1915 were inflationary as they were collateralised with Book Credits, although contemporaneous policy makers and National Bank authorities fervently argued the opposite at the time.[231]

4.1.3.3. Banknotes issued for the account of the government

As the financial markets abroad were closed, the Greek government resorted to the National Bank to finance public expenditure five times during the Asia Minor campaign. The printing press was used once in 1920, once in 1921, twice during 1922 and then once more in early 1923.[232] Table 4.4 above lists all the issues of banknotes for the account of the government and states the amount that the National Bank was authorised by law to issue each time. It also shows the remaining banknotes in circulation on the eve of the banking reforms.

These issues of banknotes were government loans. In all cases, the government was charged commission of 0.50 per cent but no interest was levied and the amortisation period was not specified. All the laws, however, that authorised the use of the printing press for the account of the government, stated that convertibility could be restored only if the government had repaid these loans to the bank of issue. At the time when discussions over the stabilisation of the drachma were taking place, the government had paid back to the National Bank only

[231] See, for example, Diomides (1922).
[232] See NBGHA_Α1Σ18Υ1Φ165Ε1.

212 million drachmae. One-third of the proceeds of the 1928 Stabilisation Loan was used therefore for the repayment of part of the remaining 2,588 million drachmae government debt to the new bank of issue.[233] The aim was to strengthen the reserve position of the Bank of Greece for *de jure* stabilisation of the drachma.

4.1.3.4. April 1923 Law

In April 1923 a decree was passed that echoed the principles of the ΓΧΜΒ Law. This decree gave the National Bank the right to issue banknotes in order to buy foreign exchange to accommodate the needs of the government.[234] The prerequisite set was that when the Bank sold foreign exchange bought for the account of the government then it had to withdraw from circulation banknotes of an equivalent value. The average price of the entirety of the foreign exchange reserves bought for the account of the government was used each time that the number of banknotes to be removed from circulation was calculated, as the legal provision required. In practice, the government gave instructions to the National Bank to buy foreign exchange on its behalf. Then the Bank printed banknotes to buy foreign exchange on behalf of the government as it was instructed. Foreign exchange purchased on these terms could be used for the requirements of the government without special authorisation. In addition, the government benefitted from any profits whilst at the same time being responsible for any losses resulting from these transactions.

4.1.3.5. Closing Remarks

On the eve of the central banking reform in Greece, total currency in circulation consisted of several note-issues added together. The terms of each of these issues were determined by different legal provisions.

Table 4.4 above indicates the legal maximum for banknotes in circulation, though the total circulation was usually below this level. At the time of central banking reforms the number of banknotes in circulation as a result of the 1898 Law of Control and the ΓΧΜΒ Law did not vary but the remainder did. The banknotes in circulation as a result of the April 1923 decree fluctuated in line with the amount of foreign exchange bought and sold for the account of the government whilst the banknotes issued because of the note issuing privilege of the National Bank would change according to the cash transactions of the National Bank. In the 1920s, banknotes issued for the account of the government were reported on the balance sheet of the National Bank together with banknotes in circulation under its issuing privilege. (See

[233] Ibid., p. 7.
[234] See Annual Report of the National Bank for 1926 (1927); Zolotas (1928).

Table A3.1 in Appendix A3.) These banknotes for the account of the government in fact represented debt to the bank of issue and decreased as the government cleared it.

Finally, a portion of the banknotes in circulation was collateralised using gold, foreign exchange and Greek government bonds denominated in gold. For example, the total number of banknotes in circulation under the decree of April 1923 was covered by foreign exchange. In addition, one-eighth of the increase in the banknotes issued under the issuing privilege of the National Bank in 1915 and again in 1920 was covered by gold and a further one-eighth by bonds of Greek government loans denominated in gold. The remaining notes in circulation were not covered by any legal reserves.

4.2. National Bank as the Bank of the Government

4.2.1. Introduction

Governments invariably turn to their central banks for financial assistance, in particular during wars or other crises. The National Bank was no exception. It lent to the government generously although only reluctantly, not only during periods of war or national disasters but also during periods that the Greek government had no access to the international financial markets. Under such circumstances the nationalist argument was usually too strong for the Bank to refuse its help to the government. As a consequence its financial position weakened during those periods. When, however, attempts at reconstruction were made, the National Bank's aim was to achieve a reduction or a reconstruction of the illiquid public debt that it owned. This ebb and flow acted as a form of self-regulation that helped the National Bank to protect its financial strength and credibility during its entire history as a bank of issue. A financially sound National Bank in turn created the systemic stability that characterised the Greek banking system.

The National Bank acted as a financial ambassador for the Greek government abroad when foreign loans were contracted, and usually underwrote any portion issued in Athens. Furthermore, governors of the National Bank moved to the Ministry of Finance during turbulent periods or had been members of the parliament. The most prominent case was that of Stefanos Streit, who served as governor of the National Bank between 1896 and 1910. In 1897, Streit became minister of finance, a post that he held for two years until the enactment of the Law of Control and the flotation of the 1898 Loan under the aegis of the Great Powers. For its part, the government deposited all available credit and funds within the National Bank;

a precedent that was to be followed by the IFC. In this way, a complex relationship developed between the government and the issuing bank in the country.

Christina Agriantoni (1986), having focused her research on the nineteenth century, calls the National Bank the bank of the government because, as she argues, public debt held by the National Bank after 1877 was a significant item on its balance sheet.[235] She compares credit granted by the National Bank to the private sector of the economy with the public debt that it held between 1861 and 1900. This comparison shows that from 1885 until 1900 public debt held by the Bank consistently surpassed credits that had been granted to the private sectors of the economy. In addition, George Alogoskoufis and Sofia Lazaretou (1997, pp. 136–137) present the percentage share of public debt in the total assets of the National Bank between 1848 and 1936.[236] Their data demonstrate that in the 1860s public debt started becoming an important item on the balance sheet of the Bank. The percentage share of public debt held by the National Bank during the period that they examine fluctuated between a minimum 3.20 per cent experienced in 1861 and a maximum of 55.90 per cent which was reached in 1898.

These estimates of public debt owned by the National Bank, however, overemphasise its role as a lender to the government and obscure its conservative and risk-averse character as a lender. The literature does not distinguish between public debt that the National Bank had granted to the government because of its role as the central bank in Greece and government debt denominated either in gold or in drachmae which was traded on stock exchanges. Government debt that was traded on stock exchanges was a liquid asset on the balance sheet of the National Bank, an asset that it had, by and large, voluntarily invested in. It also constituted a source of significant profit. On the other hand, government debt in forced banknotes, temporary loans and treasury bills held by the National Bank was regarded as a burden, a portion of its assets that curbed its liquidity and weakened its financial position. That having said, when the National Bank granted loans to the government, in particular loans in forced circulation of banknotes it sought to secure special privileges such as an extension of its issuing right, tax exemptions or the management of public revenues.

[235] The source of the data on public debt and credits to the private sectors of the economy used by Agriantoni was Stavros Thomadakis (1981). Nonetheless, Thomadakis' data on public debt held by the National Bank overstated the Bank's role as a lender to the government as credit to legal entities was included in public debt. It should also be noted that it is not clear what items Thomadakis included in his estimation of credits to the economy granted by the National Bank.
[236] Estimates of the National Bank and public debt also appear in Dertilis (2005, vol. II, pp. 1042–1050).

Notwithstanding the volume of public debt owned by the National Bank, it anyway played the role of the bank of the government during its entire history as a dual-purpose bank. The Greek government resorted to it to borrow in particular whenever it could not borrow either from the domestic market or abroad, and at the same time the National Bank was responsible for all the business of its own government. Furthermore, the National Bank stood by the government when it borrowed from abroad. More research, however, should be carried out to establish the relationship between the government and the bank of issue in Greece in the nineteenth century.

This part of Chapter 4 examines public debt held by the National Bank between 1898 and 1930. For the first time ever, and for the purpose of this thesis, public debt as it appeared on the balance sheet of the National Bank is divided into public debt traded on stock exchanges and government debt that was not traded on secondary markets, and time series were constructed accordingly. Sovereign debt held by the Bank that was not traded on stock exchanges includes debt primarily resulting from agreements between the bank of issue and the government and consisting mainly of forced circulation, temporary or long-term loans, advances and treasury bills. This debt held by the National Bank is referred to in this thesis as bilateral or illiquid public debt in contrast to public debt that was traded on secondary markets and thus was liquid.

The time series of illiquid public debt owned by the bank of issue and constructed for the purpose of this thesis are compared with the time series of credits granted by the National Bank to the private sectors of the economy and presented in the previous chapter. This comparison demonstrates the importance of commercial activities to the National Bank on the eve of the outbreak of the Balkan Wars. It also shows how significant this aspect of their business remained when the League of Nations was being approached in 1927. Finally, this exercise illustrates changes that a long period of war and its aftermath brought to the commercial character of the National Bank and to its role as a bank of the government. Highlighting these changes will later help in understanding what the governors of the National Bank sought to achieve through stabilisation in 1927.

The period in question is divided into two sub-periods. The first sub-period starts with the enactment of the Law of Control and finishes with the outbreak of the Balkan Wars. This is a period of relative peace, economic growth and expansion for the National Bank. The second sub-period covers the period from the outbreak of the Balkan Wars until after the implementation of a League sponsored stabilisation scheme. This is a long period of wars, monetary upheaval and finally reconstruction. The main objective here is to examine the role of the bank of issue as a lender to the government during two very distinct and contrasting eras and thus to shed light on the way that the National Bank combined central banking functions with commercial activities. In addition, the analysis of the two very different periods will help to demonstrate the changes that a long period of war and its aftermath brought to the National Bank.

4.2.2. Public Debt and the National Bank during a period of stability, 1898–1911

4.2.2.1. The 1893 default, domestic public debt and the banks of issue

The enactment of the Law of Control and the concomitant debt restructuring changed the relationship between the National Bank and the government. The Law of Control introduced a legal framework that strictly defined the relationship of the National Bank with the government; forced currency in circulation had gradually to be reduced and a limit was set to the number of treasury bills that the government could issue. No further borrowing of the government was allowed from the bank of issue without the consent of the IFC.

In December 1893, the Greek government suspended sinking fund payments of all external public debt whilst coupon payments were restricted to 30 per cent of their original interest rate. On the other hand, the service of the domestic public debt denominated both in gold and nominal drachmae continued to be paid in full.[237] Valaorites ([1902] 1988, pp. 137–141) in his book on the National Bank defended this preferential treatment that domestic public debt had received by arguing that this decision to exempt domestic government debt from default was based on public interest. The three privileged banks, as Valaorites called the issuing banks in Greece at the time, i.e. the National Bank, the Ionian Bank and the Bank of Epirus-Thessaly, held most of the domestic public debt. In case of a suspension of the service of domestic public debt, he argued, the financial position of the issuing banks would have been seriously damaged.

In 1898, the Law of Control provided for a restructuring of all domestic debt. Several loans denominated in drachmae were consolidated into one loan without any reduction in their capital.[238] The capital of this Unified Loan as it is known, was 76,354,000 drachmae divided into 763,540 bonds, its interest rate 5 per cent and its amortisation period 80 years.[239] In addition, the floating debt denominated in gold which consisted entirely of loans and advances from the banks of issue, was converted into bonds of the 2.50 per cent Loan of 1898. This conversion left interest charge virtually unchanged. In this way, the banks of issue

[237] Andreades (1939, pp. 441–442); Valaorites ([1902] 1988, pp. 136–137).
[238] Valaorites ([1902] 1988, p. 197).
[239] Andreades (1939, pp. 493).

acquired an asset that could be easily converted into gold, in particular when they would attempt to resume specie payments.[240]

The main arguments in favour of the preferential handling of the domestic government debt were as follows. Firstly, all bondholders of the domestic public debt already had experienced a reduction of interest rate as early as 1888, when the Tricoupis government had reduced the interest rate charged on these loans and simultaneously abolished sinking fund payments. Secondly, domestic debt was mainly denominated in drachmae which meant in a currency which had severely depreciated since these loans were issued. Finally, the conversion involved a small reduction in interest rate.[241]

It is unfortunate that not much is known about the negotiations for a debt compromise which eventually led to the enactment of the Law of Control in 1898. Andreades (1939, n. 5, p. 478) remarked that no minutes were taken during the negotiations.[242] Thus, the positions or the recommendations of the different participants are not known. In particular, it would have been worthwhile knowing the role that Stefanos Streit, the governor of the National Bank played in his capacity as minister of finance and chief representative of Greece in the negotiations. Details of the negotiations that resulted in the reconstruction of the domestic public debt which was mainly held by the National Bank would have been particularly helpful in further understanding the methods that the National Bank employed to protect its own financial strength whilst at the same time looking after the financial needs of the government.

It was, however, evident that both in 1893 and in 1898 special attention was paid to the banks of issue. Valaorites, in his book on the history of the National Bank, first published in 1902, commended that the 1898 debt consolidation was one of the most important events in its history up to then. He then added that it was perhaps the most important event in terms of establishing a sound base for the bank, because it signified the end of a period where the Bank depended entirely on the financial adventures of the government.[243]

4.2.2.2. Presentation of public debt held by the National Bank, 1898–1911

Table 4.6 presents the public debt that the National Bank held between 1898 and 1911. It is divided into debt in government bonds that were traded on stock exchanges and other public debt, primarily illiquid debt that the National Bank owned. In addition, the percentage share

[240] United Kingdom House of Commons (1898, p. 67); Wynne (1951, p. 333).
[241] Wynne (1951, pp. 333–334).
[242] Andreades (1939) stated that no minutes existed for the negotiations between Greece and the Great Powers that led to the introduction of the Law of Control in 1898. See Andreades (1939, n. 5, p. 478).
[243] Valaorites ([1902] 1988, p. 199).

of each category of public debt in total assets is presented. A general point that can be made is that both types of government debt on the balance sheet of the National Bank decreased as a percentage of its total assets during the period in question.

Table 4.6: Government debt and the National Bank, 1898–1911

	Total bilateral public debt	% of Assets	Public debt traded on stock exchanges	% of Assets
1898	82,359,389	28.88	68,450,360	24.00
1899	87,012,467	27.99	57,198,850	18.40
1900	85,430,981	27.09	57,865,000	18.35
1901	84,403,682	25.58	58,381,440	17.69
1902	83,278,575	23.81	57,596,587	16.46
1903	81,528,575	24.45	53,263,537	15.98
1904	80,028,575	22.04	52,894,037	14.57
1905	78,783,575	21.85	52,675,108	14.61
1906	78,318,575	20.31	53,261,122	13.81
1907	78,557,319	19.84	52,699,375	13.31
1908	77,641,679	19.01	59,267,043	14.51
1909	77,668,840	19.13	60,193,139	14.82
1910	72,358,757	17.09	62,684,098	14.81
1911	61,778,575	12.51	66,091,270	13.38

Source: Author's calculations using the Balance Sheet of the National Bank of Greece, 1898–1911.

Government debt traded on stock exchanges fell from 24 per cent in 1898 to approximately 13 per cent of its assets in 1911. This decrease was mainly due to a remarkable expansion of the balance sheet of the National Bank and not to a notable reduction in the value of public debt traded on secondary markets that the Bank held. In addition, the outstanding capital of the total illiquid public debt held by the National Bank had been reduced by approximately 25 per cent by 1911. Its share, however, in the total assets of the Bank experienced a more remarkable reduction again because of the expansion of the National Bank during this period; it fell from nearly 30 per cent in 1898 to roughly 12 per cent in 1911.

Table 4.7: Bilateral government debt that the National Bank held, 1898–1911

	Forced Circulation	Treasury Bills	Temporary Loans in Drachmae	Total
1898	81,450,283		909,106	82,359,389
1899	86,985,155		27,312	87,012,467
1900	85,403,669		27,312	85,430,981
1901	84,403,682			84,403,682
1902	83,278,575			83,278,575
1903	81,528,575			81,528,575
1904	80,028,575			80,028,575
1905	78,278,575	505,000		78,783,575
1906	76,278,575	2,040,000		78,318,575
1907	74,278,575	2,858,773	1,419,970	78,557,319
1908	72,278,575	5,363,104		77,641,679
1909	70,778,575	5,202,413	1,687,851	77,668,840
1910	69,216,657	3,142,100		72,358,757
1911	61,778,575			61,778,575

Source: Author's calculations using the Balance Sheet of the National Bank of Greece, 1898–1911.

Table 4.7 demonstrates that the illiquid public debt held by the National Bank consisted of banknotes issued as forced circulation, treasury bills and temporary loans in gold and drachmae. The domestic debt consolidation that the Law of Control introduced limited the illiquid public debt that the National Bank owned mainly to that derived from forced circulation. Moreover, as is explained above in section 4.1.1 of this chapter the Law of Control set a strict timetable for the reduction of forced banknotes in circulation; from 1900 onwards at least 2 million drachmae of forced circulation had to be repaid each year until the government's indebtedness to the bank of issue in banknotes of forced circulation was reduced to 40 million drachmae. Finally, according to the Law of Control the government could issue treasury bills up to 10 million drachmae.

Consequently, from the enactment of the Law of Control up to the Balkan Wars illiquid public debt held by the National Bank was mainly confined to forced banknotes in circulation. Treasury bills and temporary loans to the government remained insignificant as Table 4.7 above demonstrates.

Table 4.8: Government debt traded on stock exchanges held by the National Bank, 1898–1911

	Bonds in Gold	Bonds in Drachmae	Total Public Debt in Bonds
1898	23,020,450	45,429,910	68,450,360
1899	24,195,950	33,002,900	57,198,850
1900	24,195,950	33,669,050	57,865,000
1901	24,195,950	34,185,490	58,381,440
1902	25,878,287	31,718,300	57,596,587
1903	23,767,037	29,496,500	53,263,537
1904	23,767,037	29,127,000	52,894,037
1905	23,768,608	28,906,500	52,675,108
1906	24,648,322	28,612,800	53,261,122
1907	24,709,175	27,990,200	52,699,375
1908	25,659,943	33,607,100	59,267,043
1909	28,120,539	32,072,600	60,193,139
1910	29,905,932	32,778,167	62,684,098
1911	32,633,371	33,457,899	66,091,270

Source: Author's calculations using the Balance Sheet of the National Bank of Greece, 1898–1911.

Table 4.8 shows the liquid debt held by the National Bank, that is to say government debt held by the bank of issue which was traded on secondary markets. Public debt traded on stock exchanges was an investment for the Bank and consisted of bonds of loans that were denominated either in gold or in paper drachmae.

The National Bank, possibly on the eve of the announcement of default in 1893 embarked on a massive sale of bonds of government debt denominated in gold that were kept in its portfolio.[244] They only maintained bonds of the Piraeus-Larissa Railway Loan of 1890 and the Funding Loan of 1893. Presumably a sale of bonds of the Funding Loan would have accrued excessive loss to the National Bank.[245]

As Table 4.9 shows, at the end of 1898 the portfolio of the National Bank consisted of bonds denominated in gold of the Railway Loan of 1890, the Funding Loan of 1893 and of the 1898 Guaranteed Loan. The National Bank obtained 8,042 bonds of the 2.50 per cent Guaranteed Loan, as Table 4.9 shows, from the conversion of the floating debt in gold that it

[244] Ibid., p. 143. Valaorites did not state when precisely the National Bank liquidated the government debt denominated in gold that it owned. In his usual manner he tried to justify this act of the bank of issue.
[245] Ibid.

owned. Initially, it was proposed that all these bonds would be deposited at the Bank of France and the National Bank would not be able either to withdraw or sell them without the consent of the IFC. At the end, however, the 2,658 bonds of the 1898 Loan, which the National Bank obtained because of the conversion of the temporary loans and advances were left at the free disposal of the Bank and were deposited at the Bank of England as the terms offered where better. The remaining 5,384 bonds of the 2.50 per cent Guaranteed Loan of 1898, which the National Bank took for the conversion of the floating debt in metallic, were also deposited at the Bank of England with the consent of both the IFC and the Bank of France. This latter set of bonds, however, was not at the free disposal of the National Bank of Greece.

As Table 4.9 shows, after the restructuring of the Greek government debt in 1898 the portfolio of the National Bank consisted of bonds denominated in gold of the Railway Loan of 1890, the Funding Loan of 1893 and the 1898 Guaranteed Loan. On the other hand, its portfolio of bonds denominated in drachmae was confined to bonds of the Unified Loan of 1898.

Table 4.9: The number of bonds traded on stock exchanges that the National Bank held in 1898

Name of Loan	*Number of Bonds*
Denominated in Gold	
Piraeus-Larissa Railway Loan of 1890	3,600
Funding Loan of 1893	2,750
Guaranteed Loan of 1898	8,042
Denominated in Drachmae	
Unified Loan of 1898	454,299

Source: Annual Report of the National Bank for 1898 (1899, pp. 25–28).

Table 4.8 indicates that the National Bank restructured its portfolio in government bonds during the period in question. Government bonds in paper drachmae were reduced in favour of bonds denominated in gold. By contrast, in 1898 the bulk of debt in government bonds in the National Bank's portfolio was in bonds denominated in paper drachmae.

4.2.3. Public Debt and the National Bank: from the Balkan Wars until Stabilisation

4.2.3.1. Introduction

The Balkan Wars signalled a change in the relationship between the bank of issue and the government that lasted until stabilisation. The Law of Control was repeatedly violated during this period and the transparent and uncomplicated relationship between the Greek government and the National Bank that had prevailed during the first decade of the twentieth century, gave way to a complex financial relationship shaped by the historical conjuncture. During this period which included a long period of war, the Asia Minor debacle and a consequent increase in the population of the country swelled by more than a million refugees, the bank of issue proved to be an unfailing source of financial support for the Greek government.

The complexity in the relationship that developed between the bank of issue and the government is illustrated very vividly in the balance sheet of the National Bank during the period in question. This complexity coupled with a lack of transparency in the way that government debt was reported on the balance sheet of the National Bank makes the compilation and estimation of government debt granted to the government by the National Bank, in particular after 1915, a challenging and at the same time very strenuous task.

There follows an attempt to disentangle the complex financial relationship that was developed between the government and the National Bank during this turbulent period. Hence, the ways by which the National Bank financially supported the government will be presented in detail below. Briefly, the National Bank used the printing press several times to lend to the government up to early 1923, as has been already explained in section 4.1.3 of this chapter. The ΓΧΜΒ Law was employed by the government to finance Greek participation in the Great War and in this way the so-called Book Credit agreements with the Allies were utilised. (See Chapter 5 on the Book Credits opened by the Allies during the active participation of Greece in the First World War.) At the end, however, banknotes issued on account of the Book Credits turned into government debt to the bank of issue in the form of forced banknotes. Moreover, the Bank provided loans both in gold and in drachmae as well as advances to the government. In the 1920s, the National Bank further supported the government by guaranteeing, discounting and repaying the NDBs that had been issued. In addition to these conventional forms of government borrowing from the central bank, the National Bank on behalf of the Greek government financed the importation of food supplies, mainly cereals, during the First World War and the Asia Minor campaign. Finally, in 1926 the National Bank undertook the management and liquidation of Moslem properties in Greece and at the same time the indemnification of urban refugees for their holdings abandoned in Asia Minor – a task, however, close to the responsibilities of a mortgage bank.

To understand developments in the way that the National Bank financed public expenditure, the period in question here is divided into three sub-periods: 1912–1923, 1924–1927 and 1928–1930. The first sub-period refers to the long period of war; it covers the period from the outbreak of the First Balkan War until the signing of the peace Treaty of Lausanne with Turkey in 1923. The following sub-period starts in 1924 and finishes in 1927; this is a prolonged period towards stabilisation. Finally, the third sub-period deals with the banking reform and shows how the relationship of the National Bank with the government was transformed after the reform.

It should be noted that this is the first time that the relationship of the National Bank with the government has been approached in such a thorough and detailed way. Previous studies that have tackled the question present either aggregate data of public debt held by the National Bank or data of public debt as a percentage of its total assets.[246] Since the 1930s, it has been repeatedly stressed in the literature that the National Bank was overburdened with government debt during the 1920s. For the first time, however, here the methods followed by the National Bank to lend to the government are described in detail. In this way, the changes that happened to the balance sheet of the Bank during the period in question are exposed. These changes restrained the liquidity of the National Bank, but by no means was its solvency jeopardised.

4.2.3.2. Government debt traded on stock exchanges, 1912–1930

Here again, as in the period between 1898 and 1911 examined above, government debt held by the National Bank that was traded on stock exchanges is regarded as belonging to the portfolio of the Bank and is treated as a liquid investment. Hence, a distinction is made between government debt traded on stock exchanges and government debt held by the National Bank that was illiquid and was based on bilateral agreements between the Bank and the government. It should be stressed that this is a departure from previous research on the issue in question, where no such distinction is made and both categories of public debt are treated in the same way.

[246] See, for example, Alogoskoufis and Lazaretou (1997, pp. 136–137); Dertilis (2005, vol. II, pp. 1042–1050).

As in the period examined in the previous section, there is again here an entry on the balance sheet of the National Bank entitled ‘Bonds of Public Loans’ where Greek sovereign debt denominated in gold and traded on secondary markets that the Bank owned was reported. However, from 1924 to 1927 this asset item does not report only public debt denominated in gold and traded on stock exchanges. Liquid public debt was amalgamated with illiquid debt based on bilateral agreements between the bank of issue and the government and was reported as one on the balance sheet of the National Bank. Nevertheless, it is not possible at this stage of the research, using the evidence to hand, to distinguish between liquid and illiquid sovereign debt reported together on the balance sheet of the Bank as ‘Bonds of Public Debt’ in the 1920s.

Between 1915 and 1927, public debt owned by the National Bank that was traded on stock exchanges should be divided into two categories. Firstly, the Bank held government bonds denominated in gold and traded on stock exchanges that by law belonged to its gold and foreign exchange cover as it was the bank of issue in Greece. Government bonds denominated in gold that were kept as reserves was a prerequisite for the increase in the banknotes in circulation under the issuing privilege of the National Bank in 1915 and then again in 1920. As has been explained above in section 4.1.3, one-eighth of the increase in the banknotes in circulation, because of the extension of the note privilege of the National Bank both in 1915 and in 1920, had to be covered by gold and a further one-eighth by bonds of Greek government loans denominated in gold and traded on secondary markets. Secondly, in a separate category can be included public debt owned by the National Bank that was comprised of bonds of loans denominated either in gold or in drachmae, but on this occasion they were at its free disposal.

Table 4.10:
Government debt traded on secondary markets held by the National Bank, 1912–1930

	Bonds in gold	Bonds in drachmae	Bonds in gold and in drachmae	Bonds in gold kept as cover
1912	33,241,115.00	31,418,579.00		
1913	30,110,235.00	30,084,126.00		
1914	38,522,133.75	21,018,121.40		
1915	92,913,763.35	20,362,768.80		10,000,000.00
1916	103,253,133.85	19,479,743.15		10,000,000.00
1917	96,058,406.85	19,163,375.90		10,000,000.00
1918	79,650,977.40	60,304,014.50		10,000,000.00
1919	63,807,141.80	54,992,247.15		10,000,000.00
1920	22,450,343.45	83,412,135.00		47,500,000.00
1921	56,995,430.72	75,600,200.70		47,500,000.00
1922	47,452,400.00	74,357,182.14		67,500,000.00
1923	7,668,356.80	217,324,184.25		62,500,000.00
1924	25,008,824.80	812,547,367.85		47,500,000.00
1925	71,751,513.40	768,709,171.65		47,500,000.00
1926	68,844,900.00	738,601,400.60		47,500,000.00
1927	115,934,300.00	724,039,971.50		
1928			738,450,822.19	
1929			865,283,090.57	
1930			1,470,139,687.34	

Source: Author’s calculations using the Balance Sheet of the National Bank of Greece, 1912–1930.

Table 4.10 above presents public debt traded on secondary markets that the Bank owned between 1912 and 1930. Firstly, sovereign debt denominated in gold that the National Bank was required by law to keep as reserves is presented separately in the last column of Table 4.10. In 1927, the way that assets and liabilities were reported on the balance sheet of the National Bank changed. During that year, Greek government debt denominated in gold that was maintained as cover was added to the rest of the public debt in gold that the Bank owned. Secondly, Table 4.10 shows public debt denominated in gold and in drachmae held by National Bank. As has been explained above, between 1924 and 1927 public debt denominated in drachmae and traded on secondary markets was amalgamated with bilateral government debt in drachmae. It is not possible, however, using available evidence to distinguish between public debt owned by the Bank that was denominated in drachmae and traded on secondary markets and bilateral, illiquid public debt reported together on the balance sheet of the National Bank and presented in Table 4.10 above. The latter stemmed from bilateral agreements between the National Bank and the government. Thirdly, Table 4.10 indicates the stock of sovereign debt traded on secondary markets that the National Bank retained after the banking reform.

Sovereign debt owned by the National Bank that was denominated in gold and traded on stock exchanges was undervalued by the way that it was reported on its balance sheet in the 1920s. Furthermore, it would be incorrect to add together gold drachmae and paper drachmae. In other words, it will be misleading to follow the accountancy practice adopted by the Bank itself during the monetary upheaval of the 1920s. The real value of the public debt denominated in gold and traded on stock exchanges that the National Bank owned was higher than that reported on its balance sheet during the 1920s when it remained a central bank.

4.2.3.3. Illiquid public debt held by the National Bank, 1912–1930

Table 4.11 shows illiquid government debt held by the National Bank between the outbreak of the Balkan Wars and stabilisation as accurately as is possible. It presents loans to the government in forced circulation and loans in gold and drachmae granted by the National Bank using its own reserves as well as advances. The balance sheet of the National Bank is the main source of the information displayed in this table. Adjustments have been made where necessary, and of course possible, using information provided by the governor of the Bank in his annual report, as well as evidence from a variety of other sources.

Table 4.11: Bilateral government debt held by the National Bank, 1912–1930
(in drachmae)

	Forced Circulation			Temporary Loans		Advances		TOTAL
	A	B	C	in Gold	in Drachmae	in Gold	in Drachmae	
1912	61,778,575.42							61,778,575.42
1913	61,778,575.42			73,814,400.00				135,592,975.42
1914	60,951,915.42			77,320,876.60	11,295,260.00			149,568,052.02
1915	58,951,915.42		x	68,933,773.33				127,885,688.75
1916	56,951,915.42		x	53,933,772.33	4,945,183.55			115,830,871.30
1917	54,951,915.42		x	69,086,297.33	8,297,821.90			132,336,034.65
1918	52,951,915.42		*850,000,000.00*	55,000,000.00				957,951,915.42
1919	50,951,915.42		*1,193,941,070.00*	320,084,875.00				1,564,977,860.42
1920	48,951,915.42	300,000,000.00	1,139,784,174.70	55,000,000.00	611,985,350.00			2,155,721,440.12
1921	46,951,915.42	950,000,000.00	1,139,784,174.70	28,770,000.00	1,111,985,350.00			3,277,491,440.12
1922	44,951,915.42	2,100,000,000.00	1,139,784,174.70	74,370,000.00	811,985,350.00		129,910,516.48	4,301,001,956.60
1923	42,951,915.42	2,809,000,000.00	1,139,784,174.70	64,090,000.00	811,985,350.00	3,986,946.80	176,630,692.59	5,048,429,079.51
1924	40,951,915.42	2,631,500,000.00	1,139,784,174.70	97,935,142.50	251,000,000.00	46,884,717.70		4,208,055,950.32
1925	40,000,000.00	2,588,000,000.00	1,139,784,174.70	44,140,000.00	190,000,000.00	4,322,113.25	44,110,052.40	4,050,356,340.35
1926	40,000,000.00	2,588,000,000.00	1,139,784,174.70		190,000,000.00	3,921,368.95	155,186,217.75	4,116,891,761.40
1927	40,000,000.00	2,776,000,000.00	1,139,784,174.70	7,462,441.15	372,119,455.26			4,335,366,071.11
1928					313,872,183.29			313,872,183.29
1929					180,957,348.80			180,957,348.80
1930					185,185,433.74			185,185,433.74

Notes:
(1) The column headed A in the section of Table 4.11 entitled Forced Circulation presents government debt in forced banknotes issued in the nineteenth century and governed by the Law of Control.
(2) The column headed B contains government debt to the National Bank as a result of the use of the printing press in the 1920s.
(3) The column headed C presents government debt to the National Bank arising out of the Allied Book Credits.
(4) An x denotes missing data.
(5) The accountancy practice followed by the National Bank in the 1920s was used in Table 4.11 so that temporary loans and advances denominated in gold were added together with bilateral government debt in nominal drachmae.

Sources: Author's calculations using the Balance Sheet of the National Bank of Greece, 1912–1930; Annual Reports of the National Bank, 1912–1930 (1913–1931).

During the Balkan Wars the National Bank granted temporary loans in gold to the government. It is noteworthy that although the drachma had remained stable since 1910 these temporary loans were contracted in gold. These temporary loans, however, did not place any strain on the National Bank. In fact, in 1914 the Greek government entered into its largest borrowing agreement prior to the outbreak of the Great War. Of the total amount issued under the 1914 Loan, 25.95 per cent was given by the government to the bank of issue to clear its debt that had arisen out of the conflict.[247]

Illiquid public debt because of the issuing privilege

Government debt held by the National Bank in forced circulation presented in Table 4.11 is divided into three categories. The first category, headed A, shows debt in banknotes that had been issued in the nineteenth century and regulated by the Law of Control. As has been explained above, the Law of Control introduced in 1898 stipulated that from 1900 onwards the government had the obligation to cancel banknotes to the value of at least 2 million drachmae every year until the debt in banknotes fell to 40 million drachmae. As Table 4.11 shows, this provision of the Law of Control was observed even in the 1920s when the Law of Control no longer operated and the printing press was used liberally, as the adjacent column B of this table shows. The 40 million drachmae target stipulated by the Law of Control was achieved in 1925 and subsequently it remained unchanged until the establishment of the Bank of Greece. Public debt to the National Bank regulated by the Law of Control is the only part of illiquid government debt in Table 4.11 that was precisely and consistently presented on the balance sheet of the National Bank during the entire period in question. As it will become evident below, the remainder of the bilateral public debt held by the National Bank cannot be estimated as accurately and presented as easily as has been the government debt in forced

[247] For more, see Christodoulaki and Penzer (2004, p. 17).

circulation regulated by the Law of Control. This again points to the complexities in the relationship between the government and the National Bank that developed gradually after the outbreak of the First Balkan War.

As Table 4.4 above shows, the printing press was employed for the first time by the National Bank to lend to the government in 1920 and by March 1923 it had been used in total five times. Government debt to the bank of issue because of the use of the printing press in the early 1920s is presented in column B of Table 4.11. On the 1924 balance sheet all government debt from banknotes issued as forced circulation was for the first time gathered together in a single entry. Previously, the forced circulation resulting from the 2547 law of 1920 had been included with temporary loans in drachmae. An attempt has been made in Table 4.11, using evidence from the annual report of the National Bank to present together all government debt arising out of banknotes having been issued for the account of the government since 1920. It should be noted that the law of 19 April 1921 provided not only for the 500 million drachmae loan of forced banknotes but a further 50 million drachmae loan at 5.50 per cent from the reserves of the National Bank. On the balance sheet of the National Bank, this 50 million drachmae loan was added together with debt to the government because of forced circulation. No evidence has been found which specifies the remaining balance of this loan at the end of each year so as to integrate it with the other temporary loans. It should also be stated that there is a noticeable discrepancy between the balance of all loans of forced circulation at the end of 1927 shown in Table 4.11 and their balance on 14 May 1928, indicated in Table 4.4 above. This discrepancy can be explained partly by the fact that the 50 million drachmae loan referred to above is included with forced circulation on the balance sheet of the National Bank.

Column C of Table 4.11 reports debt of the government to the National Bank from Allied Book Credits. The Book Credits of the Allies are examined in detail in Chapter 5, which deals with public finance during the period in question. It should, however, be repeated briefly here that the ΓΧΜΒ Law was used by the government to finance active participation in the Great War. Under an agreement signed in Paris in early 1918 Britain, France and the USA opened Book Credits in equal shares to the Greek government to a total value of 750 million French francs. In addition, this Paris Agreement between the Allies stipulated that the National Bank would grant credits to the British and French armies stationed in Macedonia. In May 1919, a supplementary agreement was signed and a further 100 million French francs of Book Credits were granted to Greece by the Allies under the same terms and conditions as those of the 1918 agreement. On the strength of these Book Credits, the National Bank printed banknotes that were passed on to the government to meet the expenses of the armed forces.

Banknotes were also printed by the Bank to grant credit to the Allied army in Macedonia. Here, Book Credits is used as a generic term which refers to the 1918 and 1919 agreements between the Greek government and the Allies and to the agreement between the National Bank on the one hand, and on the other France and Britain that authorised the former to grant credit to the French and British army stationed in Macedonia. According to their agreement, these Book Credits could be drawn upon by the Greek government six months after the conclusion of peace.

The Allies repudiated the Book Credits in December 1920. (For more on this see Chapter 5.) Consequently, the banknotes in circulation because of the Book Credits were no longer covered by the credits in foreign exchange promised by the Allies. Hence, the Book Credits were turned into banknotes in forced circulation. In other words, the banknotes in circulation that had been issued on the strength of the Book Credits were in effect turned into government debt in forced circulation to the bank of issue. In spite of the fact, however, that the Allies had repudiated the Book Credits, the National Bank continued to report them on its balance sheet as ‘reserves abroad because of the ΓΧΜΒ Law’. This ‘reserves abroad because of the ΓΧΜΒ Law’ in the assets of the balance sheet of the National Bank has been very misleading for researchers who are not familiar with the historical period in question. Nevertheless, the persistent inclusion of this entry on the balance sheet of the National Bank until the banking reform encapsulates vividly the expectations of successive Greek governments, as well as of the governors of the National Bank, that eventually the Book Credits would be realised.

In 1922, the Book Credits that had not been granted by the Allies, but on the strength of which the National Bank had printed banknotes, were consolidated. Subsequently, this consolidated figure of Book Credits appeared on the balance sheet of the National Bank until the banking reform as ‘reserves abroad because of the ΓΧΜΒ Law’. It should be repeated that in this thesis the Book Credits that had not been granted by the Allies, but on the strength of which the Greek government had printed banknotes, are treated as government debt in forced circulation and appear in column headed C of Table 4.11. In this table, the consolidated figure of Book Credits that was reported on the balance sheet in 1922 has been included as government debt in forced circulation to the bank of issue retrospectively for 1920 and 1921. This is justified by the fact that the Book Credits were cancelled in December 1920.

In the annual report of the National Bank for 1919 its governor stated the amount of foreign exchange reserves abroad because of the ΓΧΜΒ Law that indeed represented Book

Credits both in 1918 and 1919.[248] In retrospect, however, what the governor of the National Bank reported in his annual report for 1919 as foreign exchange reserves abroad on the strength of the Book Credits was in reality, government debt in forced circulation. For this reason, the amount that the governor stated as foreign exchange reserves abroad covered by the Allied Book Credits in 1918 as well as in 1919 has been included in column C of Table 4.11 as government debt in forced circulation to the bank of issue.[249] These two figures are presented in italics.

It should be noted that this is the first time that Allied Book Credits have been regarded as government debt in forced circulation to the National Bank. Previous studies of the period in question view the Allied Book Credits as foreign exchange reserves abroad which, as it has been demonstrated here, is incorrect.

The principles of the ΓΧΜΒ Law were not violated for the first time in 1918. Previously, in 1915 the ΓΧΜΒ Law was used to open to the Greek government Book Credits by France, Great Britain and Russia. On the strength of these Book Credits, the National Bank issued banknotes that were passed over to the government. (These Book Credits are examined in detail in Chapter 5.) This experiment was repeated again in 1917 and possibly in 1916. No evidence, however, has been located which indicates the amount of government debt in forced circulation because of the Book Credits issued during the period of the Great War that Greece remained neutral. Therefore, between 1915 and 1917 government debt in forced circulation that is presented in Table 4.11 is understated.

Temporary loans and advances to the government

The rest of Table 4.11 shows temporary loans and advances granted by the National Bank to the government. The accountancy practice that the National Bank adopted in the 1920s has been reluctantly followed here so that debt in gold drachmae is added up together with debt of the government in paper drachmae.

During this turbulent period, on the one hand the government borrowed from the bank of issue and on the other, used proceeds of these loans to pay back to the National Bank part of its older obligations. For example, in 1922 the printing press was employed twice and in total 1,150 million drachmae were issued. A substantial part of the proceeds of these two

[248] See Annual Report of the National Bank for 1919 (1920, p. ε' and p. στ'); Annual Report of the National Bank for 1919: To the general board of the National Bank of Greece, The course of the Greek foreign exchange during 1919 (1920, pp. vii–viii).
[249] Minus the exchange rate difference.

loans in forced circulation, to be precise 441 million drachmae, was used by the government to repay temporary loans and advances that the National Bank had granted to it during the previous year.[250] Furthermore, in 1924 four loans that had been granted by the National Bank to the government after 1918 were consolidated in a loan of total value of 648 million drachmae redeemable over a period of 20 years.[251] This was a 6 per cent interest rate loan between the National Bank and the government guaranteed both by special taxation and the government's share in the profits of the National Bank. After 1924, this consolidated illiquid loan in drachmae was reported on the balance sheet of the National Bank, together with other loans also denominated in drachmae but traded on the Athens Stock Exchange. This change explains the sharp reduction in temporary loans in drachmae in 1924 that can be detected in Table 4.11.

Government debt called advances and presented in Table 4.11 was similar to treasury bills. It was an arrangement that allowed the Ministry of Finance to receive day-to-day credit from the National Bank. Advances were regulated by conventions made between the government and the Bank every three months. When the League representatives visited Athens in April 1927, the maximum amount of credit that the Bank was allowed to advance to the Treasury was 250 million drachmae, having been increased from 150 million drachmae that was allowed in December 1926.[252] The proceeds of a surtax of 10 per cent on all taxes and the surplus revenue of the IFC that belonged to the government were earmarked for the repayment of these advances.

National Defence Bonds and the National Bank

As is explained in Chapter 5 on public finance, the Greek government started issuing treasury bills known as NDBs in 1918. The cornerstone of the success of these NDBs was the National Bank. Briefly to repeat that the NDBs were issued by the government but the National Bank guaranteed their full and prompt repayment. In addition, when they fell due the Bank repaid them and subsequently the government reimbursed the Bank. Finally, the Bank discounted the NDBs under certain conditions before their maturity. The National Bank had the right by law to issue banknotes on its behalf in case the government was unable to settle the balance. Needless to say, the National Bank never availed itself of this right. (For more on NDBs see Chapter 5.)

[250] Annual Report of the National Bank for 1922 (1923, p. xi).
[251] Annual Report of the National Bank for 1924 (1925, p. xvii); Dertilis (1957, p. 65).
[252] HABOG_A3S1Y1F4T1, p. 26.

Table 4.12: National Defence Bonds and the Balance Sheet of the National Bank
(in drachmae)

	As Assets	*As Liabilities*	*Outstanding Balance*
1918		50,000,000	
1919	153,200,000	153,200,000	
1920	200,000,000	200,000,000	
1921	300,000,000	309,330,800	
1922	315,000,000	331,135,500	
1923	925,000,000	934,751,800	
1924	1,900,000,000	1,613,379,900	300,048,000
1925	1,900,000,000	1,493,550,900	611,964,907
1926	230,000,000	229,805,000	40,990,942
1927	105,500,000	104,633,700	
1928	96,630,000	96,627,600	92,793,029
1929	61,000,000	60,728,600	
1930	14,000,000	13,585,100	

Sources: Balance Sheet of the National Bank, 1918–1930; Annual Report of the National Bank for 1924 (1925, p. xvii); for 1925 (1926, p. xxiii); for 1926 (1927, p. xviii); Annual Report of the Bank of Greece for 1928 (1929, p. 63).

In 1918, NDBs appeared for the first time on the balance sheet of the National Bank as a liability. Subsequently, 'National Defence Bonds' is found as an entry on both sides of the balance sheet of the National Bank, as Table 4.12 above demonstrates. That same table, however, indicates that there was a discrepancy between the value of NDBs that was quoted as an asset and that quoted as a liability. A comparison between Table 4.12 and Tables 5.7 and 5.8 in the chapter that deals with public finance suggests that the entire value of the NDBs that had been issued was stated as a liability on the balance sheet of the National Bank. This may have been a way of expressing the responsibilities assumed by the National Bank where NDBs were concerned. It is also uncertain what the corresponding asset value of NDBs represented. Probably the entire amount of NDBs that the government could issue was reported on the asset side of the balance sheet of the National Bank rather than the quantum of outstanding government debt to the bank of issue stemming from NDBs.

Previous research that tackles the issue of public debt held by the National Bank during the period in question regards the entire amount of the NDBs that is reported on the balance sheet of the National Bank as an obligation of the government. This same tradition was followed by the governor of the National Bank in his annual report for 1920, where he stated the total public debt held by the National Bank during that year.[253] The governor of the Bank included in the figure that he stated as total public debt to the National Bank the entire amount of the NDBs that appeared as an asset on the balance sheet. The view here, however, is that if the entire amount of the NDBs found on the assets of the National Bank is treated as government debt, then public debt to the bank of issue is overstated.

The National Bank had been authorised to repay the NDBs as they matured, as well as to discount them under certain conditions. It is not, however, known what the outstanding balance of this account was at the end of each year. This outstanding balance was in fact the debt of the government to the National Bank because of the NDBs. The rest of the NDBs that had been issued represented a potential threat to the National Bank as they could be easily discounted and their maturity period was very short. It is possible that the balance due by the government to the National Bank because of the NDBs that had either been discounted or repaid, formed part of the figure stated as discounts amongst the assets of the National Bank. The governor of the Bank announced in his annual report that this balance was 300 million drachmae in 1924.[254] By the end of 1925, a year that the National Bank experienced a heavy strain because of the NDBs, this balance had been doubled.[255] By contrast, when the League representatives were in Athens in April 1927 the balance due by the government to the National Bank because of the NDBs was a mere 2 million drachmae.[256] By then, however, the Second Forced Loan had been issued which settled the question of the NDBs. (For more on the issue of the settlement of the NDBs, see Chapter 5.)

It would have been good if the outstanding balance of the NDBs due by the government to the Bank at the end of each year was known. Then, this figure could be added to the total public debt held by the Bank. Nevertheless, in this thesis the outstanding balance of the NDBs due by the government to the National Bank reported by the governor in his annual report for 1924 and 1925 is included in the total public debt held by the Bank during the period in question. (See Table 4.15 below.)

Financing food importation during the war

So far, conventional measures that are used by a central bank to financially support the government have been discussed here. The National Bank lent to the government using the

[253] Annual Report of the National Bank for 1920 (1921, p. ε).
[254] Annual Report of the National Bank for 1924 (1925, p. xvii).
[255] Annual Report of the National Bank for 1925 (1926, pp. xxiii and xxv); Annual Report of the National Bank for 1927 (1928, p. xxii). The exact amount for December 1924 was 300,048,000, whilst for 1925 was 611,964,907.
[256] HABOG_A3S1Y1F4T1, pp. 27–28.

printing press and provided loans and advances as well. It also played an instrumental role in the issue of the NDBs, which resembled treasury bills. The contribution, however, of the bank of issue to government finance during the period in question did not end there. The National Bank was further involved in financing food importation during the First World War and the Asia Minor campaign. Finally, after 1926 the Bank was engaged itself in the indemnification of urban refugees for their property left behind in Asia Minor, which in the end involved government lending.

Soon after the outbreak of the First World War the National Bank was involved in the importation of food supplies such as cereals in addition to sulphur and copper sulphate.[257] Initially, the National Bank was authorised not only to purchase wheat, flour and other cereals for the account of the government but it was also made responsible for their sale and distribution within the country. However, the government was accountable for any loss that could accrue to the Bank from the operation. In 1915, a government committee undertook the importation and distribution of food supplies whilst the role of the National Bank still remained imperative. The National Bank continued financing the entire operation. Finally, a Ministry of Food Provisions was established in 1917. The National Bank, however, still remained responsible for the finance of the importation of cereals until the Ministry was dissolved in the autumn of 1923.

[257] For a detailed account of these operations and their evolution see Eulambio (1924, pp. 179–235).

Table 4.13: Provisions and the National Bank
(in drachmae)

	Food Supplies	Sulphur & Copper Sulphate	TOTAL
1915	57,572,363.46		57,572,363.46
1916	28,893,160.52	3,393,118.06	32,286,278.58
1917	27,035,765.78	10,971,785.48	37,756,551.26
1918	45,974,595.64	7,078,454.26	53,053,049.90
1919	48,807,998.62	9,716,308.29	58,524,306.91
1920	157,692,464.27		157,692,464.27
1921	137,184,314.59		137,184,314.59
1922	241,641,401.97		241,641,401.97
1923	570,952,211.34	41,969,643.44	612,921,854.78
1924	396,055,202.23	20,636,617.73	416,691,819.96
1925	421,510,200.83	8,335,971.98	429,846,172.81
1926	447,394,954.31		447,394,954.31

Sources: Balance Sheet of the National Bank, 1918–1926; Annual Report of the Bank of Greece for 1928 (1929, p. xviii).

The balance due by the government to the National Bank at the end of each year because of the importation of cereals and other materials is presented in Table 4.13 above. This outstanding balance constituted part of the floating debt of the government. Government debt to the National Bank because of the importation of food supplies to Greece stopped appearing on the balance sheet of the latter after 1926. Nevertheless, this is misleading since the floating debt of the government due to the National Bank because of the importation of cereals was not settled in 1926. Instead, it is probable that it was integrated with other government debt held by the National Bank. It is known that in March 1932 the remaining balance of this account was still 61.90 million drachmae. [258]

Indemnification of urban refugees

A 1923 Lausanne Convention for the exchange of Greek and Turkish population provided for the liquidation of the refugee properties both in Greece and Turkey and the subsequent indemnification of the owners. In the literature on the issue in question, these properties are called in brief ‘exchangeable properties’, meaning in this case the property left in Greece by Moslem emigrants who were transferred to Turkey, and occasionally the refugees are referred to as ‘exchanged populations’. These terms have also been adopted here.

[258] Aggelopoulos (1937, p. 260).

The exchangeable properties consisted of rural estates and houses, which were granted to the RSC for the agricultural settlement, and of urban property.[259] In 1926, the urban property of Moslem populations abandoned in Greece was transferred by the government to the National Bank, authorising the latter to manage and gradually sell it at auction. Initially, the value of these properties was estimated at approximately 4,500 million drachmae.[260] New property was added later and their total value came up to nearly 5,125 million drachmae.[261] Liquidation of these properties, however, could easily extend over a period of years. For this reason, on the strength of these urban exchangeable properties, the National Bank was authorised to issue a series of bonds that were handed over to urban refugees as indemnity for their property abandoned in Asia Minor. Special committees were established which received the claims of the urban refugees, verified them and in return gave them a number of bonds representing a certain percentage of the value of their property in Asia Minor. These bonds were guaranteed by the government, carried an 8 per cent interest rate and were redeemable at par in proportion as the Moslem exchangeable urban properties were sold by the National Bank.[262] In addition, the urban refugees could obtain in cash from the National Bank the equivalent of one-fifth of the value of the bonds they were entitled to. In return, the National Bank received from the refugees a corresponding amount of bonds.

At first, against the pledged Moslem urban properties, bonds guaranteed by the government were issued to the value of 3,125 million drachmae. At the same time, an agreement between the government and the National Bank authorised the latter to pay in cash to the refugees 20 per cent of the nominal value of the bonds that they were entitled to receive. In other words, the National Bank could make cash payments to urban refugees up to 625 million drachmae and in return would accept a corresponding amount of bonds.

On 31 December 1926, the cash payments by the National Bank to urban refugees in exchange of bonds amounted to approximately 172 million drachmae.[263] (See Table 4.14.) A few months later, on 20 May 1927, the cash payments to urban refugees were 613 million drachmae, which means that they had nearly reached the maximum allowed by law.[264] It was decided then firstly, that the 8 per cent bonds that the National Bank had received in exchange for cash could be distributed back to urban refugees. Secondly, the National Bank could increase the cash payments to them. Finally, a new agreement between the government and

[259] See Pentzopoulos (1962, pp. 68, 117 and 147).
[260] See Annual Report of the National Bank for 1927 (1928, pp. xii–xiv); Aggelopoulos (1928, p. 109, n. 1); Eddy (1931, p. 265); Aegides (1934, p. 78).
[261] Aegides (1934, pp. 78–80).
[262] Pentzopoulos (1962, p. 147).
[263] Balance sheet of the National Bank for 1926.
[264] HABOG_A3S1Y1F4T1, pp. 29–30.

the National Bank authorised the latter to issue a new series of bonds for the indemnification of urban refugees for their property abandoned in Asia Minor.

At the end, two loans were issued which are known as ‘Loans of the Exchangeable’. The total amount of bonds granted to urban refugees as indemnity for their property in Asia Minor came up to over 6 billion drachmae.[265] In addition, the National Bank granted cash to urban refugees of nearly 900 million drachmae without having received in exchange any bonds as collateral from the refugees.[266] Hence, by the end of 1932 the cost of the indemnification of urban refugees for their property abandoned in Asia Minor had come up to nearly 7 billion drachmae whilst the estimated value of the urban exchangeable property was approximately 5 billion drachmae, which suggests that public money was also employed.[267]

Table 4.14: Indemnification of urban refugees and the National Bank
(in drachmae)

	Credit to Refugees	Other	Total	% of Total Assets
1926	172,044,732	1,466,000	173,510,732	
1927	869,397,364	96,372,860	965,770,224	
1928	1,070,311,054	72,175,524	1,142,486,578	15.52
1929	1,109,408,798	34,001,624	1,143,410,422	13.92
1930	1,023,528,325	128,533,961	1,152,062,286	12.81

Note: Other includes an account called account for the management of the property of the exchanged Moslems.
Source: Balance Sheet of the National Bank, 1926–1930.

Table 4.14 above indicates the outstanding balance at the end of each year of all the accounts on the balance sheet of the National Bank which were related to the indemnification of urban refugees and the urban exchangeable properties that the Bank had agreed to manage and liquidate gradually. The National Bank retained this business after the banking reform. The last column of Table 4.14 shows this business of the National Bank that is related to the indemnification of urban refugees as a percentage of its assets after the banking reform. It is

[265] See Aegides (1934, pp. 40–41). The total amount of bonds issued equalled 6,121,921,000 drachmae. It should be noted that when Venizelos returned to power in the summer of 1928 he pursued a reduction in the interest rate of all outstanding bonds from eight per cent to six per cent. However, as a change in the terms of the bonds that had been already issued was not possible, a compromise was reached: the outstanding bonds remained at eight per cent whilst all the bonds that were circulated subsequently were issued at six per cent.
[266] The exact figure of the cash that the National Bank granted without receiving any collateral was 870,958,144 drachmae. See Aegides (1934, pp. 40–41).
[267] The total cost of the indemnification of urban refugees had come to 6,992,879,144 drachmae by 31 December 1932. See Aegides (1934, pp. 40–41).

noticeable that it constituted a significant part of the business that the National Bank maintained after the reform.

The credit granted by the National Bank to urban refugees in agreement with the government takes the lion's share, as is shown in Table 4.14. Part of this credit was collateralised with bonds issued on the strength of Moslem urban exchangeable properties. These bonds did not represent government debt as they were to be paid by the proceeds of the liquidation of Moslem urban properties. In addition, the National Bank had the right to sell these bonds gradually in a span of four years on the Athens Stock Exchange after 1 July 1931.[268]

As has been explained above the National Bank also granted credit to urban refugees without receiving in return a corresponding amount of bonds. The credit that the National Bank distributed to urban refugees and was not collateralised with bonds was indeed an obligation of the government. This credit formed part of the floating debt of the government and should be added to the public debt held by the National Bank. So far, however, no evidence has been located indicating the amount of credit that the National Bank had granted year on year without collateral to urban refugees.

It is known that the total cash that the National Bank granted to urban refugees without collateral was nearly 900 million drachmae.[269] It is not known, however, the amount of cash at the end of each year that the National Bank had provided to urban refugees without any collateral so that it can be included in the total public debt that the National Bank held, as shown in Table 4.15.

Summary of illiquid debt

[268] Annual Report of the National Bank for 1927 (1928, p. xiii).
[269] Aegides (1934, pp. 40–41).

Table 4.15: Summary of bilateral public debt held by the National Bank of Greece, 1912–1930 (nominal drachmae)

	Forced Circulation	Temporary Loans	Advances	Consolidated Loans	National Defence Bonds	Food Supplies	Refugee Indemnity	Total
1912	61,778,575							61,778,575
1913	61,778,575	73,814,400						135,592,975
1914	60,951,915	88,616,137						149,568,052
1915	58,951,915	68,933,773				57,572,363		185,458,052
1916	56,951,915	58,878,956				32,286,279		148,117,150
1917	54,951,915	77,384,119				37,756,551		170,092,586
1918	902,951,915	55,000,000			x	53,053,050		1,011,004,965
1919	1,244,892,985	320,084,875			x	58,524,307		1,623,502,167
1920	1,488,736,090	666,985,350			x	157,692,464		2,313,413,904
1921	2,136,736,090	1,140,755,350			x	137,184,315		3,414,675,755
1922	3,284,736,090	886,355,350	129,910,516		x	241,641,402		4,542,643,359
1923	3,991,736,090	876,075,350	180,617,639		x	612,921,855		5,661,350,934
1924	3,812,236,090	348,935,143	46,884,718	x	300,048,000	416,691,820		4,924,795,770
1925	3,767,784,175	234,140,000	48,432,166	x	611,964,907	429,846,173		5,092,167,420
1926	3,767,784,175	190,000,000	159,107,587	x	40,990,942	447,394,954	x	4,605,277,658
1927	3,955,784,175	379,581,896		x	x	x	x	4,335,366,071
1928		313,872,183		?	92,793,029	x	x	406,665,212
1929		180,957,349		?	x	x	x	180,957,349
1930		185,185,434		?	x	x	x	185,185,434

Notes:
(1) An x denotes missing data.
(2) A ? denotes where the available evidence does not clarify whether or not the National Bank retained any government debt of that category after the central banking reform.

Sources: Tables 4.11 and 4.13; Annual Report of the National Bank for 1924 (1925, p. xvii); Annual Report of the National Bank for 1925 (1926, p. xxiii); Annual Report of the National Bank for 1926 (1927, p. xviii); Annual Report of the Bank of Greece for 1928 (1929, p. xviii).

All public debt based on agreements between the government and the bank of issue from the outbreak of the Balkan Wars until the establishment of the Bank of Greece is gathered together in Table 4.15. In spite of the effort that has been made, it has not been possible to collect all the different amounts of government debt owed to the Bank. In Table 4.15, x denotes where data are missing. In spite of the fact that the data on bilateral public debt presented in Table 4.15 are nearly complete, the arguments made below about the changes that happened to the balance sheet of the National Bank are correct. If the data are located then all the comments and observations made will be strengthened as illiquid public debt held by the National Bank will be increased.

Table 4.15 illustrates the complex relationship between the government and the National Bank that was created between the outbreak of the Balkan Wars and the banking reform. Furthermore, this table shows the methods that Greek governments used in order to finance public expenditure during such a turbulent period when they had no direct access to the financial markets. Indeed, if the total of the NDBs that had been issued as well as the proceeds of the two forced loans are added up together with the bilateral government debt held by the National Bank, then the outcome will show the stock of the domestic public debt that was created during the period in question. Therefore, the bank of issue proved to be the main source of financial support for the government. Participation in the First World War and the Asia Minor campaign were primarily financed by the National Bank. After the end of a long period of war, the National Bank continued its support to the government, although this time it was mainly confined to NDBs and advances. Achieving stabilisation of the drachma meant that they had to signal a change in their policy. Subsequently, the adoption of the gold exchange standard and the statutes of the new central bank led to the introduction of a legal framework which redefined the relationship of the central bank with the government. Government borrowing from the newly established Bank of Greece was strictly curtailed.

Table 4.15 shows that the National Bank played an imperative role in channelling funds to the government during a period of turmoil when the Greek government had no access to financial markets. Between 1918 and 1923, the printing press was the main instrument used to finance public expenditure. Budget deficits were monetised during active participation in the Great War and the Asia Minor campaign, leading to a monetary instability that the country had never experienced before. Temporary loans were also contracted between the National Bank and the government. Table 4.15 also suggests that 1918, with the issue of banknotes because of the Allied Book Credits, signifies a turning point in the relation between the central bank and the government, although the ΓΧΜΒ Law had also been violated before. At the end, the National Bank was encumbered with government debt in forced circulation, in spite of the official belief that these issues of banknotes were fully covered by foreign exchange reserves.

Between 1920 and 1923, the printing press was rolled several times. When resort to the printing press was stopped, the government used treasury bills, the so-called National Defence Bonds to cover budget deficits. The settlement of the NDBs in 1926 was the first important step towards stabilisation. The governor of the National Bank pursued a stabilisation that was accompanied with the flotation of a foreign loan to clear public debt, in particular government debt in forced circulation, and in this way to strengthen the financial position of the National Bank. Public debt held by the National Bank in the 1920s created severe liquidity problems for it. As it is, however, apparent in this thesis, the solvency of the Bank was never jeopardised during this turbulent period.

After the outbreak of the Balkan Wars, the stipulations of the Law of Control that defined the relationship between the Greek government and the bank of issue were at first discretely, and then openly, violated. During the Balkan Wars temporary loans were granted by the National Bank to the government. Subsequently, the principles upon which the ΓΧΜΒ Law operated were infringed and in this way the printing press was rolled implicitly. In the early 1920s, banknotes in favour of the government were overtly issued. In addition, treasury bills were also being circulated in the form of NDBs.

The period in question here was an exceptionally turbulent period for Greece and it is not expected that the monetary discipline endorsed by the Law of Control and favoured by the National Bank would have been or could have been maintained. The legal framework that defined the relationship of the government with the bank of issue, in this case the Law of Control, was observed for as long as both the economic conditions and the political economy in Greece were in favour of it. During the Balkan Wars no attention was paid to it because of the euphoria that was created by victory and the prospects of the Greek economy with the annexation of the New Areas. Then, during the First World War the printing press was used under the Book Credit agreements with the Allies. A new committee, the Inter-Allied Financial Commission, was established in Athens that oversaw how the Book Credits were spent. During the Asia Minor campaign the 'nationalist argument' was too strong for the Bank to refuse its help to the government.[270] Thus, from the outbreak of the First Balkan War until stabilisation the National Bank became too close to the government. In the 1920s, the international environment had changed. The Financial Committee of the League of Nations ruled the waves, promoting the ideas of the Bank of England on monetary orthodoxy and consequently the relationship between a central bank and its government.

4.2.4. Bilateral public debt held by the National Bank reconsidered, 1898–1930

4.2.4.1. Evolution of illiquid public debt

Table 4.16 demonstrates bilateral public debt held by the National Bank between the enactment of the Law of Control and the banking reforms of the late 1920s as a percentage of its total assets. In 1898, illiquid public debt to the National Bank – mainly government debt in forced circulation – accounted for nearly 29 per cent of its total assets. In 1912, when the First Balkan War broke out, bilateral public debt held by the National Bank still consisted solely of government debt in forced circulation which, however, had dropped to approximately 10 per cent of its total assets. This was the lowest percentage share of bilateral government debt in terms of the assets of the National Bank since the enactment of the Law of Control. Then illiquid government debt as a percentage of the assets of the National Bank started increasing, although by the end of 1917 it had fluctuated severely. It should be reminded that the data for the period after 1915 and until 1927 are not complete and therefore the total bilateral government debt presented in Table 4.15, as well as its percentage share in the total assets, is understated.

[270] Dertilis and Kostis (1995, p. 462).

Table 4.16: Total bilateral public debt held by the National Bank of Greece as a percentage of its assets, 1898–1930

	% of Assets
1898	28.88
1899	27.99
1900	27.09
1901	25.58
1902	23.81
1903	24.45
1904	22.04
1905	21.85
1906	20.31
1907	19.84
1908	19.01
1909	19.13
1910	17.09
1911	12.51
1912	10.54
1913	18.43
1914	20.62
1915	20.29
1916	13.16
1917	10.69
1918	40.72
1919	60.34
1920	58.37
1928	4.26
1929	2.20
1930	2.06

Sources: Table 4.15 and Table A2.1 in Appendix A2.

Table 4.16 demonstrates unequivocally that 1918 was a turning point in the relationship between the government and the National Bank. Bilateral public debt on the balance sheet of the National Bank corresponded to nearly 41 per cent of its assets in 1918, whilst the year before it had been only 10 per cent. The following year it increased to approximately 60 per cent. As it has been repeatedly explained, there is no point extending this exercise into the 1920s because of the accountancy practices followed by the National Bank during the monetary upheaval. Bilateral government debt, however, held by the National Bank during the 1920s remained a significant percentage of its assets, pointing out the liquidity problems that the Bank experienced during that period.

It is unfortunate that there are no data on bilateral public debt held by the National Bank for the period before the enactment of the Law of Control that could be compared with the time series constructed in this thesis for the period 1898 to 1930. In this way, the experience of the National Bank as a lender to the government during its entire history as a bank of issue could be evaluated and general conclusions could be drawn. Nonetheless, it is possible that bilateral government borrowing from the National Bank between 1918 and 1927 reached unprecedented high levels in its entire history as the bank of the government.

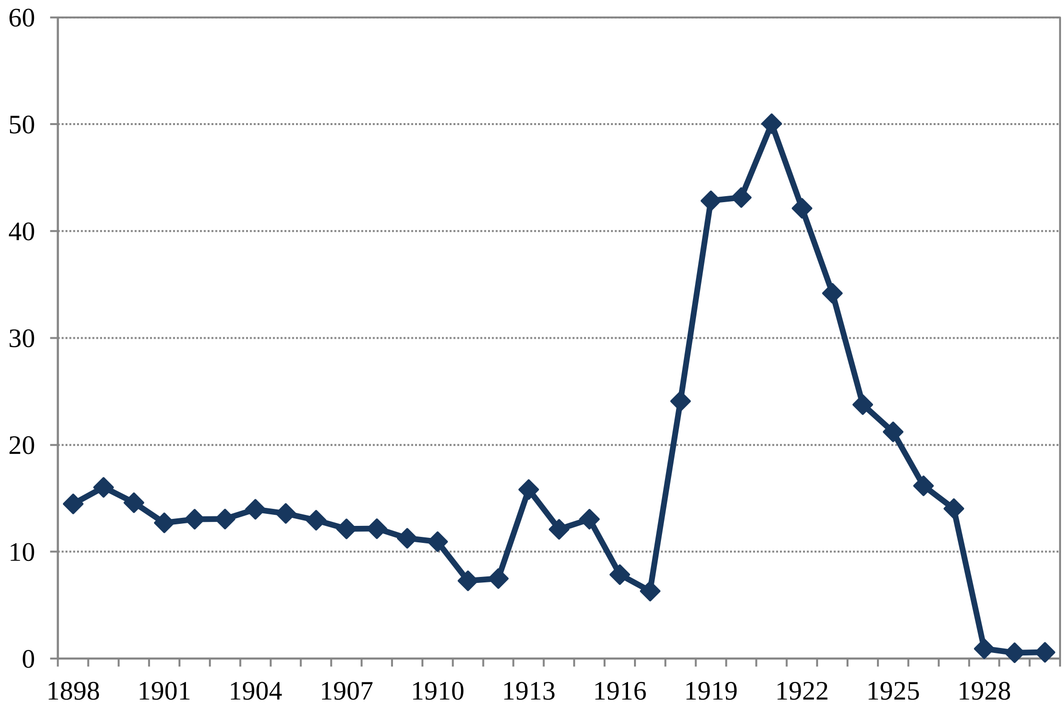

Figure 4.5: Bilateral public debt held by the National Bank as a percentage of GDP, 1898–1930

Source: Table A2.14 in Appendix A2.

Both Figure 4.5 and Table A2.14 in Appendix A2 demonstrate bilateral government debt owned by the National Bank between the enactment of the Law of Control and the central banking reform as a percentage of GDP. They show that between 1898 and 1911 bilateral public debt held by the National Bank as a percentage of GDP fell steadily. This fall was due on the one hand to a slow but steady decrease in the illiquid public debt held by the National Bank and on the other to a significant increase in GDP. (See Table A2.15 where the time series of illiquid public debt in nominal drachmae for the entire period in question is presented and Table A1.2 in Appendix A1 for GDP data.)

Between 1912 and 1917, bilateral public debt held by the National Bank as a percentage of GDP fluctuated from year to year. Figure 4.5, where illiquid public debt is presented as a percentage of GDP, shows that 1918 was a watershed. After 1918, the percentage share of bilateral public debt in GDP increased significantly, reaching exceptionally high levels. For example, in 1921 bilateral public debt held by the National Bank accounted for half of GPD of that year. Subsequently, the percentage share of illiquid public debt owned by the National Bank as a percentage of GDP shrank and by 1927 it represented merely 14 per cent of GDP. This is a moderate estimate since, as has been noted, the data are not complete. If the data had been complete then illiquid public debt held by the National Bank as a percentage of GDP in 1927 would have been shown to have been between 17 per cent and 20 per cent. This significant decrease of bilateral government debt of the National Bank as a percentage of GDP was due, to a large extent, to high inflation in the 1920s. Illiquid public debt had not decreased notably by 1927, as is demonstrated in Table 4.15. On the other hand, Kostelenos et al. (2007) data on GDP in nominal drachmae show that it increased rapidly in the 1920s – an increase that was primarily inflationary. This suggests that high inflation wiped out a significant part of the burden of bilateral government debt which was denominated in drachmae.

A last attempt will be made to appraise developments in the relationship of the National Bank with the government between the enactment of the Law of Control and the banking reform. This time the data of illiquid government debt owned by the National Bank is converted to constant 1911 values using Kostelenos *et al*. (2007) deflator. The result is presented in Table A2.15. Subsequently, as Table A2.15 shows, bilateral public debt at constant values was transformed into a ratio form where 1911 is again the base year. In this way, the proportionate change in the total stock of bilateral public debt at 1911 values that the National Bank held becomes evident. In addition, the evolution of bilateral government debt denominated in drachmae is also examined.

Figure 4.6, where illiquid government debt at 1911 values is graphically depicted, echoes Figure 4.5, which illustrates bilateral government debt as a percentage of GDP as well as Table 4.16 which shows bilateral public debt held by the National Bank as a percentage of its assets. Once again, the increase in the bilateral public debt that the National Bank held between the Balkan Wars and *de jure* stabilisation of the drachma is manifested in Figure 4.6. Between 1911 and 1917 bilateral government debt held by the National Bank at constant values fluctuated and its level in 1917 was close to that observed in 1911. This observation is consistent with previous comments made when bilateral public debt owned by the Bank was examined as a percentage of its assets and of GDP. Furthermore, 1918 is again displayed as a turning point.

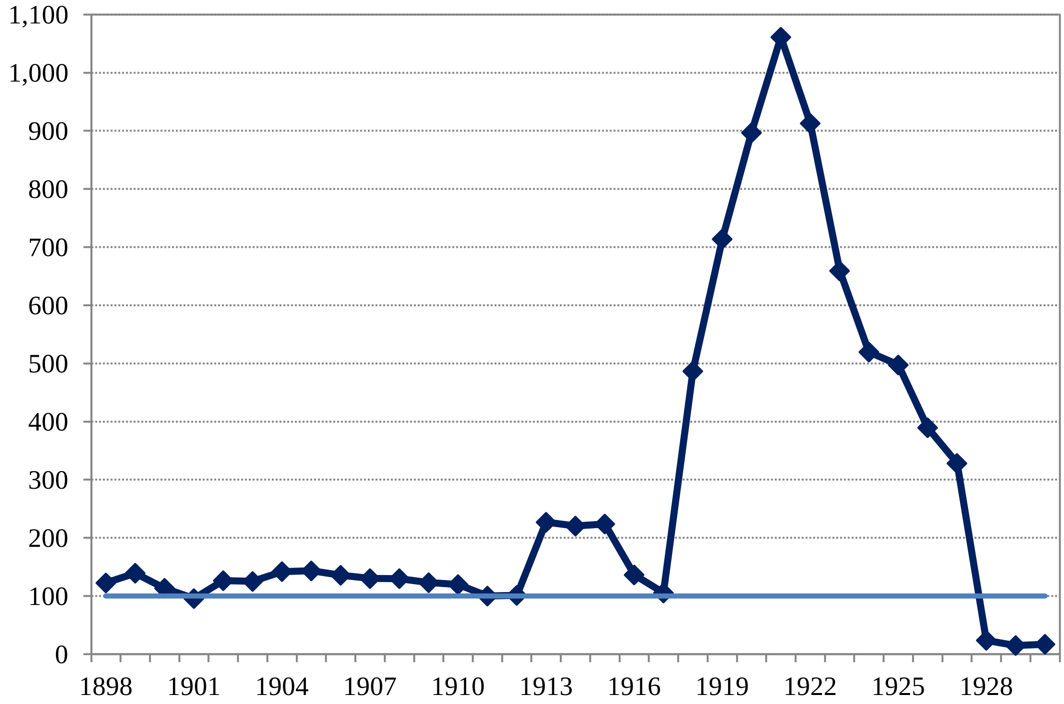

Figure 4.6: Total bilateral public debt held by the National Bank at 1911 values as a ratio, 1898–1930 (1911=100)

Source: See Table A2.15 in Appendix A2.

Figure 4.6 shows that between 1918 and 1927 bilateral government debt at 1911 values held by the National Bank ballooned. After 1918 it increased remarkably reaching exceptionally high levels. As Figure 4.6 above shows, high inflation in the 1920s wiped out a significant part of the nominal value of bilateral public debt denominated in drachmae that the National Bank owned. High inflation, however, did not eliminate public debt denominated in drachmae. In 1927, bilateral government debt at 1911 values still remained approximately three and a half times higher than it had been before the outbreak of the Balkan Wars. This is a good proxy, given that the data on bilateral government debt compiled in Table 4.15 are not complete.

Most of the illiquid public debt held by the National Bank in 1928 was passed to the newly established Bank of Greece during the reform. The Old Bank, that is to say the National Bank, maintained some illiquid government debt mainly in temporary loans and the outstanding floated debt related to the NDBs as well as to the importation of food supplies on behalf of the government during the First World War and the Asia Minor campaign.

During the central banking reforms, one-third of the Stabilisation Loan of 1928, that is to say 3 million pounds sterling, was used by the government for the repayment of illiquid government debt to the bank of issue, by this time the Bank of Greece. In this way, the reserve position of the newly established central bank was strengthened and at the same time illiquid public debt created during the period of war and monetary upheaval was converted into government debt denominated in gold and traded on stock exchanges. At the end, however, the illiquid public debt that the Bank of Greece inherited from its predecessor represented 47.41 per cent of its total assets on the day that it opened its doors for operations. (See Table A5.1 in Appendix A5.)

4.2.4.2. Was the National Bank a 'bank of the government' or a commercial bank, 1898–1930[271]

Table 4.17: Bilateral public debt held by the National Bank compared to credits supplied to the economy, 1898–1930

1898	0.91
1899	0.77
1900	0.68
1901	0.62
1902	0.57
1903	0.55
1904	0.51
1905	0.50
1906	0.47
1907	0.42
1908	0.40
1909	0.41
1910	0.39
1911	0.30
1912	0.28
1913	0.70
1914	0.64
1915	0.72
1916	0.57
1917	0.64
1918	3.45
1919	4.82
1920	4.30
1921	5.89
1922	4.28
1923	4.94
1924	2.20
1925	1.80
1926	1.64
1927	1.99
1928	0.10
1929	0.04
1930	0.04

Sources: Tables A2.2 and A2.15 in Appendix A2.

271 The term 'bank of the government' is used here to denote the importance of illiquid public debt on the balance sheet of the National Bank comparing it with credits granted to the economy borrowed from Agriantoni (1986). As has been stated above, the National Bank was in any event the bank of the government.

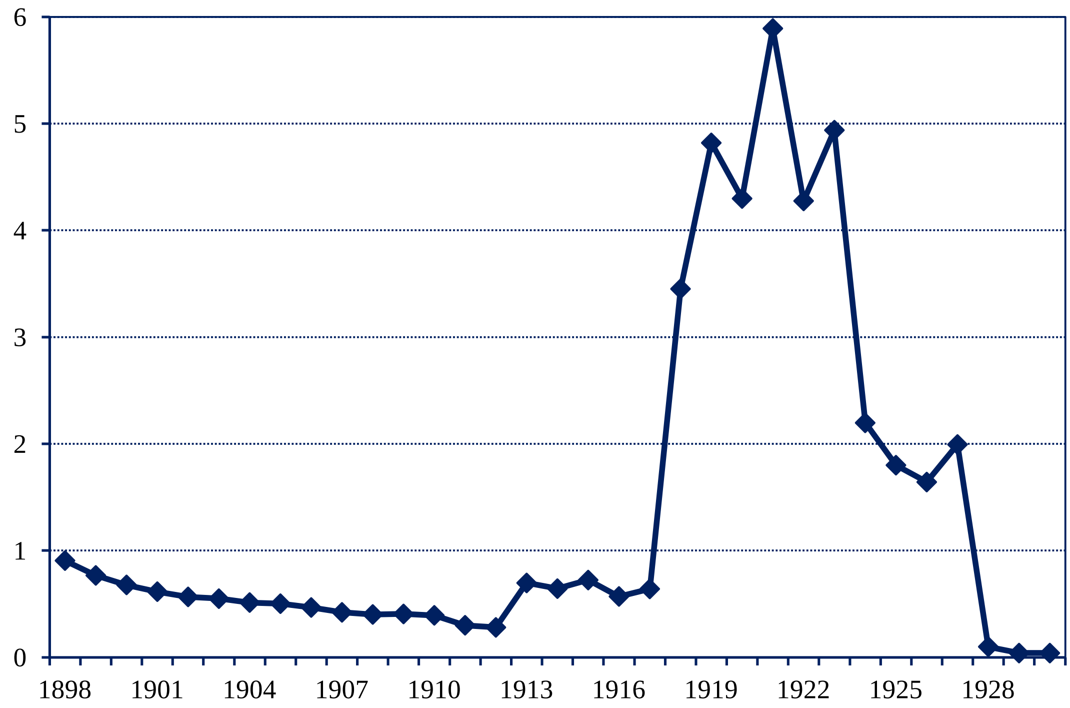

Figure 4.7: Bilateral public debt held by the National Bank compared to credits to the economy, 1898–1930

Source: Table 4.17.

In Table 4.17 and Figure 4.7, illiquid government debt held by the National Bank is compared with total credits granted to the economy during the entire period in question. After the enactment of the Law of Control the National Bank gradually increased credits to the economy, reinforcing in this way its commercial aspect. However, illiquid public debt held by the bank of issue, slowly but steadily, decreased until the Balkan Wars. As a result, in 1911 bilateral public debt which was comprised of banknotes in forced circulation represented only 30 per cent of credits to the economy. By contrast, at the end of 1898, when the floating debt of the government had been restructured following the introduction of the Law of Control, the illiquid public debt that the National Bank retained was approximately equal to total credits that it had granted to the economy.

Although illiquid public debt increased more rapidly than credits to the economy between the outbreak of the Balkan Wars and active participation of Greece in the First World War, it still remained a fraction of total credits to the economy supplied by the National Bank. Table 4.17 shows that the relationship between credits to the economy and bilateral public debt held by the National Bank changed fundamentally after 1918. In 1918, illiquid government debt was approximately three and a half times higher than credits to the economy. Indeed, from 1918 to the establishment of the Bank of Greece in 1928, bilateral public debt persistently exceeded credits to the economy: illiquid public debt on the balance sheet of the National Bank was several times higher than credits to the economy, as Table 4.17 and Figure 4.7 demonstrate. In 1924, credit granted to the economy in nominal terms increased by nearly twofold. This increase meant that the ratio of public debt to credits to the economy dropped abruptly; in 1924 illiquid public debt held by the National Bank was roughly 2.20 times higher than private credits to the economy or in other words, credits provided to the economy represented approximately 45 per cent of bilateral public debt held by the Bank. It should be reminded again that total illiquid government debt held by the National Bank in the 1920s, and presented in Table 4.15, is understated because the data are not complete. This means that the ratio between bilateral public debt and credits to the economy presented in Table 4.17 was to some extent higher in the 1920s. However, if the data in Table 4.15 were complete, the picture conveyed by Table 4.17 and Figure 4.7 would not have been very different. After 1928, as Table 4.17 demonstrates, illiquid government debt held by the National Bank was minute if it is compared with credits to the economy indicating the radical central banking reform that had taken place with the establishment of the Bank of Greece and the transformation of the National Bank into a purely commercial bank.

The National Bank restrained credits to the economy after the outbreak of the First World War, as Tables A2.3 and A2.4 in Appendix A2 show. In 1927, credits to the economy at constant prices were half of those provided in 1911. On the other hand, bilateral government debt held by the National Bank, as has been said before, was approximately 3.50 times higher than that appearing on its balance sheet in 1911. This noticeable change in the balance sheet of the National Bank was not the result of a deliberate shift in the approach of the National Bank. Nor does it indicate that the bank of issue aimed at curbing its commercial activities and giving up lucrative private business to evolve itself into a fully fledged central bank. In 1927, on the eve of central banking reforms, the National Bank remained a dual-purpose bank, that is to say a commercial bank which at the same time acted as the central bank in Greece. Both commercial activities and central banking responsibilities were important to the National Bank as late as 1927 when the League of Nations was approached for assistance. In fact, its governors pursued the stabilisation of the drachma expecting that a stable drachma would encourage capital flows, which in turn would enable them to expand the commercial aspect of the National Bank whilst retaining their public responsibilities.

PART III:

FROM MONETARY STABILITY VIA MONETARY UPHEAVAL TO *DE JURE* STABILISATION

CHAPTER 5:

GREEK GOVERNMENTS: OPTIONS FOR FINANCE

5.1. Introduction

After the end of the Balkan Wars there was optimism in Greece. New fertile areas had been annexed, the drachma remained at par and the creditworthiness of the Greek government was high on capital markets abroad. (See Figures 6.3 and 6.5 in Chapter 6 of this thesis.) Hence, at the time it was difficult to imagine that the country would soon enter a long period of war, great financial and monetary instability in addition to financial isolation.

Although the Greek government borrowed heavily during the Balkan Wars its financial position remained fairly strong. The expenditure incurred during the period of mobilisation was covered by part of the proceeds of the 1910 Bonds Loan and loans from the National Bank of Greece.[272] The loans granted by the bank of issue to the government were known as 'credit operations'.[273] The government intended to float an international loan after

[272] For a detailed presentation of the way that the Balkan Wars were financed, see for example Andreades (1939, pp. 580–589).
[273] Aggelopoulos (1937, p. 28, n. 2).

the end of the Balkan Wars with the aim of paying off the 'credit operations' and to develop the New Areas annexed. This resulted in the flotation of the 1914 Loan.[274]

At the end of 1913, public debt was 141.99 per cent of GDP. It was also the equivalent of 252.39 drachmae per capita. In 1913, the drachma remained stable at its LMU parity where one nominal drachma was equal to one gold drachma, which in turn equalled one French franc. Therefore, in 1913 per capita public debt was 252.39 gold drachmae or French francs or indeed 10.10 pounds sterling. These data from 1913 show an overall improvement in the burden of public debt since the enactment of the Law of Control, despite new external borrowing after 1900 and domestic loans during the Balkan Wars. By contrast, in 1898 total Greek public debt including the 2.50 per cent Guaranteed Loan was approximately 230 per cent of GDP. It was nearly 360 French francs per capita or approximately 14.50 pounds sterling per capita. (See Table A6.1 in Appendix A6 which presents some general information on public debt.) The improvement to be seen in the burden of public debt in 1913 was due to a large extent to the appreciation of the drachma, which by the end of 1909 had reached its LMU parity. In addition, an increase in GDP and of course in the population in the country had contributed to this improvement in the level of public debt.

Table A6.1 in Appendix A6 demonstrates that in 1898, after the reconstruction of Greek public debt, nearly 87 per cent of the country's total debt was external debt denominated in gold and traded on secondary markets, whilst only 13 per cent was domestic debt. By 1913, the share of domestic public debt had increased mainly because of the way in which war expenditure during the Balkan Wars had been financed: by then 32 per cent of the total public debt was domestic debt, whilst the share of external debt had decreased to approximately 68 per cent.

This chapter examines firstly the methods employed by Greek governments to finance war and reconstruction between the outbreak of the Great War and stabilisation. More precisely, the methods used to mobilise internal resources are presented. In addition, the struggle of the Greek government to secure finance from its Allies during the Great War and then from the international capital markets is discussed. Secondly, this chapter establishes that market participants in London were well informed about developments in Greece and thus were able to evaluate country risk during a period when a system of formal rating had not been developed. Research into the newspaper cuttings that the Council of the Corporation of Foreign Bondholders systematically collected provides ample evidence that British investors

[274] For more on this loan, see Christodoulaki and Penzer (2004).

were able to be well informed about developments in Greece and promptly. Finally, this chapter closes with an appraisal of the period in question and its legacy.

War, and to a large extent subsequent reconstruction, have a long-term impact on financial institutions. This long-term impact of war and its aftermath on financial institutions is a result of the need for direct and indirect funding of the conflict and its preparation as well as of the expenditure that occurs during reconstruction. Central banks tend to come very close to their governments and support them to pay for war and its aftermath. Deficit financing becomes an acceptable central bank duty. By contrast, during stabilisation the dangers inherent in political interference in central banking are widely acknowledged and establishing central bank independence becomes a major objective.

In the Greek example, a long period of war and monetary upheaval in addition to the influx of over a million of refugees from Asia Minor put severe pressure on public finance. The Greek government adopted policies of deficit finance which had as a consequence a close relationship with the National Bank. During the attempt at stabilising the drachma under the aegis of the League of Nations in the late 1920s, the question of the relationship of the Greek government to the National Bank was scrutinised and was one of the reasons that led to the establishment of a new central bank which would be independent of any political interference.

5.2. Governments in search of finance: the First World War

The First World War created a deep national schism and intense domestic strife in Greece with the country divided between two sides. The Premier, Venizelos, aspired to a policy of intervention on the side of the Allies, whilst on the other hand the King was in favour of the country remaining neutral. The Premier believed in the final victory of the Entente which would bring territorial gains to Greece whilst the King had faith in the military supremacy of Germany. This crisis came to a head in 1916. Finally, in June 1917, King Constantine was forced to leave the country and subsequently the Venizelos government declared war on the Central Powers.

The Greek government borrowed heavily both before and during active participation in the First World War. As with most of the belligerent European governments at the time, it resorted to the printing press to finance expenditure. The increase in the money supply during the Great War is not usually thought to have been inflationary as these banknotes were issued under the ΓΧΜΒ Law. The principles upon which the ΓΧΜΒ Law operated were, however, infringed. Short- and long-term loans were also issued.[275] Furthermore, in 1918 the Greek government started issuing the treasury bills known as National Defence Bonds (NDBs). Finally, the government borrowed for importation of food, sulphur and copper sulphate. As is discussed in Chapter 4, the National Bank was responsible for financing the importation of these goods. Overall, Greece financed war expenditure by mobilising internal resources.

During the Great War the National Bank resorted to the ΓΧΜΒ Law repeatedly to increase the money supply. As has been stated, however, the principles of the 1910 Law were violated. Between 1916 and 1919 the banknotes issued under the ΓΧΜΒ Law were printed on the strength of Book Credits opened by foreign governments. In the end, the banknotes issued under the ΓΧΜΒ Law during the Great War became government debt in forced circulation.

Table 5.1 below shows the Book Credits opened in favour of the Greek government by other European governments during the period of neutrality. See also Table 4.5 in Chapter 4 which presents the evolution of the ΓΧΜΒ Law between 1916 and 1919 when this law was used to print banknotes for the last time. Evidence, although scant, located in the archives of the National Bank, indicates that the Bank was aware of the perils of increasing the money supply on the strength of Book Credits.[276]

[275] For more, see Zolotas (1928, pp. 51–54).
[276] NBGHA_Α1Σ10Υ1Φ217: The third German Loan of 1916, p. 5.

Table 5.1: Book Credits opened during the period 1915–1917
(in drachmae)

France	11 October 1915	10,000,000
	23 December 1915	10,000,000
	24 August 1915	10,000,000
	4 August 1917	50,000,000
	Total:	80,000,000
Great Britain	5 November 1915	10,000,000
	5 September 1917	50,000,000
	Total:	60,000,000
Russia	16 November 1915	10,000,000
		10,000,000
Germany	1916	73,600,000
	Total:	73,600,000
	Grand Total:	223,600,000

Note: The German Book Credit was opened by the S. Bleichroeder banking firm and amounted to 80 million marks. In 1916, the exchange rate between the drachma and the mark was 0.92 marks per drachma.

Sources: NBGHA_Α1Σ19Υ1Φ34Ε18, pp. 1–2; NBGHA_Α1Σ10Υ1Φ217; Zolotas (1928, pp. 54–56).

Eleftherios Venizelos realised that the Allies would not make any real transfers to financially support the active participation of Greece in the Great War. For this reason he pursued a different kind of agreement with the Allies that would allow him to finance participation in the war. Under the February 1918 Paris Agreement, Britain, France and the USA made available Book Credits in equal shares to the Greek government totalling 750 million French francs, including a provisional Book Credit of 50 million drachmae opened in 1917.[277] The ΓΧΜΒ Law was modified and on the strength of these Book Credits, the National Bank printed banknotes that enabled the government to meet the expenses of the armed forces during 1918.[278] The Allied Book Credits opened on behalf of Greece could be drawn upon by the Greek government six months after the conclusion of peace. It was, however, stipulated that the Greek government reserved the right to draw drafts in case their foreign reserves together with the National Bank's deposits available abroad, fell below 100 million francs. The repayment of these advances placed an obligation on the Greek government and they were granted by the

[277] For the negotiations of the Greek government with the Western Allies and the difficulties encountered, see Leontaritis (1990, pp. 199–245).
[278] See Annual Report of the National Bank for 1918 (1919).

Allies in pounds sterling, French francs and US dollars. These Book Credits were aimed at helping the Greek government to procure internal resources, to liquidate arrears and pay for military arrangements.

This 1918 Paris Agreement between the Greek government and its Allies consisted of five articles and is presented in Appendix A6. It provided that the amortisation period of the loan could be up to 15 years. The interest rate of these advances was not specified and the Greek government was not required to assign any specific revenues as guarantees. Article four of the Paris Agreement, however, stipulated that until the repayment of these obligations by the Greek government, no new security could be 'effected to an external loan without the consent of the Governments of the USA, France and Great Britain'.[279] This clause complicated the relationship of the Greek government with its war Allies in the 1920s; each time that the Greek government attempted to float a foreign loan it was under the obligation to ask the permission of its former Allies.[280] An Inter-Allied Financial Commission which was composed of representatives of the three Allies and of Greece was established in Athens. This Inter-Allied Financial Commission was made responsible for the authorisation of advances concerning the organisation and maintenance of the army and navy.

In May 1919, a supplementary agreement was signed and a further 100 million French francs of Book Credits were granted to Greece; however, this time only by France and Great Britain but under the same terms and conditions as those of the 1918 agreement.

As Table 5.2 demonstrates, in total the 1918 and 1919 agreements provided for the opening of Book Credits of 850 million francs and the equivalent of banknotes were printed by the bank of issue. Zolotas (1928, p. 57) claimed that the National Bank did not always print fresh banknotes but sometimes used its own reserves to lend the government on the strength of the Book Credit agreements. Together these two agreements represented a huge borrowing operation for the Greek government; total Book Credits issued during these two years were 22.50 per cent of the 1919 GDP.

[279] See Appendix A6 for the text of the 1918 Book Credits Agreement between Greece and the Allies.
[280] This right was waived in 1927 and 1928 when Greece settled its war debt with Britain and the USA respectively.

Table 5.2: Book Credits issued, 1918–1919
(French francs)

France	1918	250,000,000
	1919	50,000,000
Great Britain	1918	250,000,000
	1919	50,000,000
U.S.A.	1918	250,000,000

Table 5.3 shows the Book Credits opened by the three Allies. In addition, it indicates the total advances made to the government by the National Bank as well as the total of the banknotes issued each year on the strength of these Book Credits.

Table 5.3: Book Credits opened and increase in the banknotes in circulation
(in millions of drachmae)

	Britain	**France**	**U.S.A.**	**Total opened**	**Advances to the government by the National Bank**	**Total of banknotes issued**
1917	25.00	25.00		50.00	50.00	50.00
1918	200.00	183.50	205.00	588.50	625.00	464.00
1919	25.00	30.70	45.00	100.70	175.00	336.00
1920		10.80		10.80		
	250.00	250.00	250.00	750.00	850.00	850.00

Source: Pantenlakis (1988, pp. 88–89).

In 1918 and 1919 the National Bank made separate agreements with Great Britain and France on the lines of the Paris Agreement for the financial support of their troops stationed in Macedonia. These additional agreements stipulated that the interest rate charged on the advances furnished to the Allied armies in Macedonia would be 5 per cent.

Table 5.4 below shows the advances made by the National Bank to the Allied troops in Macedonia and the sums that each government reimbursed. The British Treasury reimbursed nearly all the advances made to the British troops by the National Bank. By contrast, France did not reimburse any of the advances made to its army in Macedonia.

Table 5.4: Advances made by the National Bank to the Allied troops in Macedonia
(in millions of Drachmae)

<table>
<tr><th rowspan="2"></th><th colspan="2">Britain</th><th colspan="2">France</th></tr>
<tr><th>Advances made by the National Bank</th><th>Reimbursed</th><th>Advances made by the National Bank</th><th>Reimbursed</th></tr>
<tr><td>1918</td><td>98.866</td><td></td><td rowspan="2">241,964,965.80</td><td rowspan="2">0</td></tr>
<tr><td>1919</td><td>11.187</td><td>40.272</td></tr>
<tr><td>1920</td><td></td><td>68.094</td><td>22,427,970.80</td><td>0</td></tr>
<tr><td>Total</td><td>110.053</td><td>108.366</td><td>264,392,936.60</td><td>0</td></tr>
</table>

Sources: NBGHA_A1Σ19Y1Φ34E18; Pantenlakis (1988, p. 111).

Just a few months after the signing of the Treaty of Sèvres, in November 1920 Venizelos was overwhelmingly defeated in a general election.[281] This general election that brought the Populist Party to power together with the unexpected death of the young King Alexander who had succeeded his father, paved the way for the return to Athens of the exiled King Constantine. Following a referendum held on 22 November (Julian)/5 December (Gregorian) 1920, King Constantine was officially returned to the Greek throne. Immediately, the Allied governments informed Athens that the repatriation of King Constantine meant that they were no longer bound by the Treaty of Sèvres. Greece would also encounter a financial embargo and cancellation of the Book Credits.[282]

Political historiography and military sources correlate subsequent events in Asia Minor with the return of King Constantine to the Greek throne. Careful examination, however, of geopolitical developments in the area late in 1920 does not support the view that the outcome of the election had a catalytic effect on the course of history.[283] Economic history literature on the period links the cancellation of the Book Credits with the depreciation of the drachma and the difficulties the country faced in raising capital from financial markets abroad in the 1920s.[284] With hindsight, the return of the exiled King to Athens, served as an excuse on the part of the Allies to cancel the Book Credits at a time when their domestic preoccupations prevailed over international agreements.

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[281] For more see Bochotis (1999, pp. 98–100); Yanoulopoulos (1999b, p. 132).
[282] Yanoulopoulos (1999a, pp. 270–271).
[283] Ibid., pp. 273.
[284] See for example Diomides (1922); Pepelasis Minoglou (1993, pp. 54–57).

Table 5.5.: Book Credits realised
(millions of French francs)

	Book Credits Paid				*Total Opened*
	Britain	**France**	**U.S.A.**	**Total**	
1917					50.00
1918					588.50
1919			25.90	25.90	100.70
1920	164.83		51.80	216.63	10.80
	164.83		77.70	242.53	750.00

Sources: NBGHA_A1Σ19Y1Φ34E18; NBGHA_A1Σ19Y1Φ35E6; Pantelakis (1988, pp. 88-89); Pepelasis Minoglou (1993, p. 54).

Table 5.5 shows the Book Credits that had been realised by the three war Allies before their cancellation in December 1920. The remaining Book Credits that had not been realised continued to appear on the balance sheet of the National Bank as ‘reserves abroad because of the ΓΧΜΒ Law’ until the central banking reform of 1928. These ‘reserves abroad because of the ΓΧΜΒ Law’ were in fact government debt in forced circulation. Nevertheless, as is explained in Chapter 4, the persistent inclusion of this entry on the balance sheet of the National Bank until the banking reform encapsulates vividly the expectations of successive Greek governments as well as the governors of the National Bank that eventually the Book Credits would be realised. In the end, one-third of the Stabilisation Loan of 1928, which was the equivalent of the government debt in forced circulation because of the Allied Book Credits, was used by the government to repay debt in forced circulation that the newly established Bank of Greece inherited from its predecessor. This was to strengthen the reserve position of the new central bank to enable it to support a drachma *de jure* stabilised.

It has been repeatedly argued that had the Allied Book Credits been realised in full then the monetary upheaval experienced in the 1920s would have been avoided. The main argument proposed in favour of this claim is that if the Book Credits had been realised in full, then the banknotes issued under the Paris Agreements would have been withdrawn from circulation. This belief was based on article eight of the ΓΧΜΒ Law, which stipulated that when the bank of issue sold gold or foreign exchange accumulated under this law then it had to withdraw from circulation the equivalent value in banknotes. The conjuncture, however, of the early 1920s was very different from that of the period between 1910 and 1914 when the ΓΧΜΒ Law operated in the way that it was designed to by its ‘father’ Ioannis Valaorites. In addition, it is believed that the Greek government would not have experienced financial difficulties, in particular during the Asia Minor campaign. As a result the country would have escaped monetary upheaval in the 1920s.[285]

During the Great War the drachma remained stable at its par value, whilst at the same time prices increased more than threefold. The size of Book Credits issued during the entire First World War was one of the main reasons of the high inflation experienced after the outbreak of the war and of the monetary upheaval in the 1920s; a fact that was persistently denied by contemporaneous policy makers and in particular by the governor of the National Bank, Alexandros Diomides.[286] (See Table 6.1 in Chapter 6 for the inflation rates experienced and Table 5.13 in this chapter for the seigniorage collected by the government during the period in question.)

5.3. Governments in despair

5.3.1. Introduction

After the cancellation of the Book Credits in December 1920, the Greek government struggled to finance the Asia Minor campaign, the rehabilitation of over a million of refugees and reconstruction. In the 1920s, the creditworthiness of the Greek government on the London market was low and the risk premium rocketed to nearly 19 per cent, reflecting the political, economic and financial distress that prevailed in Athens. In addition, clause four of the Paris Agreement and war debts together created a complex financial relationship between Greece and its former Allies.

The creditworthiness of the Greek government on the London market between 1896 and 1929 is illustrated in Figure 6.3 in Chapter 6. Greek sovereign risk is measured by a Greek government loan's spread in London relative to the British consols. The time series of sovereign risk constructed and presented in Figure 6.3 demonstrate that sovereign risk remained low during the First World War. The risk premium increased rapidly after 1919 reflecting the decreased credibility of the Greek government as a borrower on the London market. The Asia Minor campaign, acting perhaps as a proxy of fiscal performance, prompted a continuous increase in the risk premium of Greek government debt. Military defeat and its aftermath exerted a strongly negative impact on the value of Greek sovereign debt traded on the London market and consequently the Greek default risk soared. By the end of the period in question, Greek country risk had decreased considerably but still remained higher than it

[285] For example, see Diomides (1922); Pepelasis Minoglou (1993, pp. 55–56).
[286] See Diomides (1922).

had been at the beginning of 1914. Stabilisation and the concomitant institutional reforms were gradually factored into the market price of Greek sovereign debt traded in London and as a result the risk premium demanded by investors fell steadily.[287]

In the 1920s, the Greek government borrowed from the domestic market to an unprecedented extent: it heavily borrowed from the National Bank, resorted to forced loans and issued treasury bills, the so-called National Defence Bonds. In addition and despite the low creditworthiness of the Greek government on the financial markets abroad, foreign loans were contracted for productive purposes, the settlement of refugees and the stabilisation of the drachma. It has to be said, however, that borrowing for the settlement of over a million of refugees and the stabilisation of the drachma was under the auspices of the Financial Committee of the League of Nations.

5.3.2. Internal borrowing

In April 1920, a public loan denominated in drachmae, the 5 per cent Lottery Loan, was floated in Athens with great difficulty, in spite of concessions from the government to encourage subscription.[288] This was the last attempt by the Greek government to issue a public loan on the Athens market before the stabilisation of the drachma. Subsequently, it heavily borrowed from the bank of issue, implemented forced loans and issued NDBs.

5.3.2.1. Borrowing from the bank of issue

As is discussed extensively in Chapter 4, the government borrowed widely from the National Bank in the 1920s. The bank of issue proved to be the main source of financial support for the government and a complex relationship was created between them. It is unfortunate that there are no data systematically presented on bilateral government debt held by the bank of issue before the enactment of the Law of Control that could be compared with the time series constructed in this thesis. Nevertheless, it is possible that it was the first time in its entire history as a bank of issue that the National Bank lent to the government to such a great extent. This, however, remains to be verified by future research.

The money supply was increased again and again for the account of the government until 1923. As it has been extensively discussed in the previous chapter the printing press was used once in 1920 and once in 1921, twice during 1922 and then once more in early 1923. In

[287] For a detailed quantitative analysis of Greek government sovereign risk between 1914 and 1929, see Christodoulaki *et al*. (2011, 2012).

[288] Annual Report of the National Bank for 1920 (1921, p. 84); Zolotas (1928, p. 102); Dertilis (1957, p. 84).

all cases, the government was charged commission of 0.50 per cent but no interest was levied and the amortisation period was not specified. All the laws, however, that authorised the use of the printing press for the account of the government, stated that convertibility could be restored only if the government had repaid these loans to the bank of issue. In addition, the National Bank supplied loans to the government using its own reserves and granted advances that allowed the Ministry of Finance to receive day-to-day credit from the bank of issue.

Between 1918 and 1925, NDBs became an important source of finance for the government. In particular, after 1923, once the printing press stopped being used as a financial tool, the government heavily depended on NDBs to finance public expenditure. The central bank played an instrumental role in the success of these treasury bills. (NDBs are examined in detail in part 5.3.2.3 of this section of Chapter 5.)

The use of the printing press, bilateral loans and advances from the central bank are all conventional measures that governments take to finance their budget deficits. During the period in question the National Bank was further involved in supporting the government financially; for example it was on behalf of the government that it financed the importation of food during the Great War and the Asia Minor campaign. In addition, the government borrowed from the National Bank for the indemnification of urban refugees for their property left behind in Asia Minor.

5.3.2.2. The two Forced Loans

On Monday 21 March 1922 (Julian calendar), the minister of finance, Petros Protopapadakis, delivered the budget to the parliament for the fiscal year that was nearing its end. (At the time the fiscal year ran from 1 April to 31 March.) In his speech, he painted a bleak picture of the financial position of the government. The estimated total budget deficit amounted to 1,679 million drachmae. For military expenditure alone the government needed 1,710 million drachmae at a time that the Greek army was marching into the interior of Asia Minor. Subsequently, he spoke about the unsuccessful attempts of the Greek government to secure capital from abroad and warned of the perils of monetising the budget deficit using as an example the monetary situation which prevailed in Austria and Germany at the time. Then, the minister of finance, in his budget speech, made an appeal for a domestic loan of approximately 1.5 billion drachmae to cover the budget deficit as it then stood, stressing as he did so that it was a matter of urgency.[289]

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[289] Parliamentary Papers of the Hellenic Government from the 73rd sitting, 21 March 1922, pp. 1175–1198. See also Parliamentary Papers of the Hellenic Government from the 74th, 75th, 76th, and 77th

Petros Protopapadakis suggested increasing the money supply by 550 million drachmae adding that subsequently the total banknotes in circulation would be approximately 3 billion drachmae.[290] Then, he proposed a controversial plan to fund government expenditure by literally forcing the Greek people to lend the government half of their cash holdings.[291] This proposal for an internal loan by the minister of finance became the 2749 law on 25 March 1922 (Julian calendar) and is known as the First Forced Loan. In short, this law stipulated that all banknotes of 5, 10, 25, 500, and 1 thousand drachmae were required to be presented at the nearest bank where they were to be cut into two parts. The part of each banknote that had the effigy of Georgios Stavros, the first governor of the National Bank and one of its founders, constituted legal tender for half its original value. The other half that bore the picture of a crown or 'Στέμμα' was exchanged for a twenty-year bond at 6.50 per cent. In this way temporarily the government's cash requirements were met.

The expected revenue from this forced loan was 1,570 million drachmae. In the end the final proceeds were 1,288,470,545. The First Forced Loan was extended beyond the Greek borders and banknotes of Greek drachmae held abroad were subject to the cutting process. On the other hand, foreigners in Greece were exempted from having their cash holdings cut into two parts with the part of 'Georgios Stavros' remaining legal tender and the other half a twenty-year government bond.

There is a consensus in the literature that the impact of the Forced Loan of 1922 was deflationary. The only exception is Kostis (2003, p. 156), who rejects the idea that the unexpected and sharp reduction in the banknotes in circulation in March 1922 had a deflationary impact. To support his claim, he resorts to the increase in the price level during that year: inflation may have been as high as 55 per cent in 1922 when the previous year it had fluctuated between 17 and 25 per cent, depending on the price index used to estimate inflation. However, a counterfactual question should be asked to understand the impact of the First Forced Loan. What would have happened had the government employed the printing press to monetise the entire budget deficit in March 1922?

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sittings, March 1922, pp. 1198–1288, where the debate that took place in the parliament regarding the First Forced Loan is recorded.

[290] More precisely, the upper limit of the banknotes that could be in circulation according to all legal arrangements amounted to 3,100,140,000, including a 550 billion increase in the money supply that the minister of finance proposed. (See Table 4.4 in Chapter 4 and Table A3.1 in Appendix 3.)

[291] A similar forced loan was introduced in Finland at the end of 1945, although its objective was different from the Greek Forced Loan of 1922. Its aim was to 'stop rampant inflation … by decreasing the note circulation'. For more, see Bank of Finland (1947, p. 19).

The impact of the First Forced Loan was deflationary as the money supply was abruptly and without advanced warning decreased, if only temporarily, in 1922. Figure 5.1 illustrates this sharp decrease in the value of banknotes in circulation in March 1922. At the end of February 1922, the value of banknotes in circulation was of approximately 2,218 million drachmae. By the end of the following month, the banknotes that were in circulation amounted to 1,198 million drachmae, as Table A3.1 in Appendix A3 shows. The currency that had been withdrawn soon returned, however, back into circulation as the government spent it to meet its own requirements. In addition, the Forced Loan had as a consequence a decrease in purchasing power and an increase in demand for bank credit. 'Στέμμα', that is to say the part of a banknote that constituted a 6.50 per cent government bond could be used as collateral for advances from the National Bank.[292] Consequently, the banknotes in circulation rapidly increased and as Figure 5.1 indicates, by the end of September 1922 their value was similar to that when the Forced Loan was instigated. By the end of that year the money supply had increased by 40 per cent.

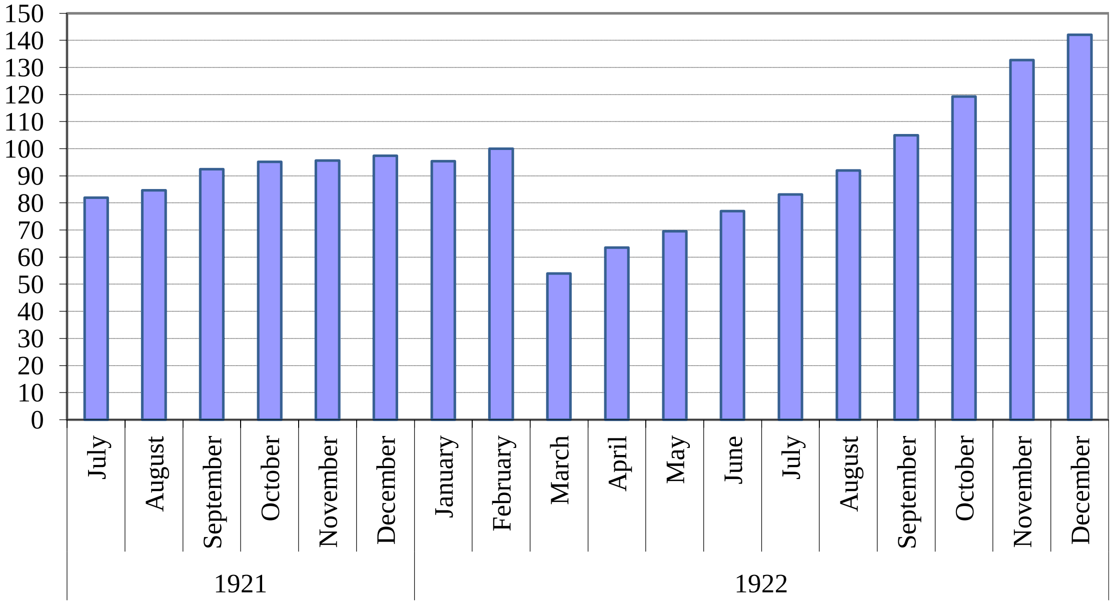

Figure 5.1: The Forced Loan of 1922 and the money supply
(February 1922=100)

Source: Author's calculations using the data of Table A3.1 in Appendix A3.

[292] Edwards (1922, p. 9).

Illustration 5.1: A bond of the Forced Loan of 1922


ΧΡΕΩΛΥΤΙΚΟΣ ΠΙΝΑΞ.

Ἔτη κληρώσεων	Κληρούμεναι ὁμολογίαι	Ἔτη κληρώσεων	Κληρούμεναι ὁμολογίαι
		ἐκ μεταφορᾶς	5456960
1922	404320	1932	759040
1923	430720	1933	808480
1924	458720	1934	860960
1925	488640	1935	916960
1926	520160	1936	976480
1927	554080	1937	1040000
1928	589920	1938	1107520
1929	628320	1939	1179520
1930	669280	1940	1256160
1931	712800	1941	1337920
εἰς μεταφοράν	5456960		15700000

ΚΛΗΡΩΣΕΙΣ
κατὰ Μάρτιον, Ἰούνιον, Σεπτέμβριον, Δεκέμβριον.

ΚΕΡΔΗ ΕΚ ΛΑΧΝΩΝ.

Κληρούμενοι Ἀριθμοί			Ποσὰ Λαχνῶν
1	Λαχν. ἐκ δραχ.	300,000 δραχ.	300,000
2	„ „	100,000 „	200,000
4	„ „	50,000 „	200,000
20	„ „	20,000 „	400,000
40	„ „	10,000 „	400,000
50	„ „	5,000 „	250,000
50	„ „	3,000 „	150,000
100	„ „	1,000 „	100,000
267		ἑκάστοτε	2,000,000

BRADBURY, WILKINSON & Cº Lᵈ ANGLETERRE

Illustration of a bond of the Forced Loan of 1922

In January 1926, the experiment of the First Forced Loan was repeated as another forced loan was imposed by the government of General Theodore Pangalos. This time, however, it was more limited in its application. The 1926 law demanded the redemption of one quarter part of those banknotes in circulation that were of a 50 drachmae denomination or upwards. The interest rate of the Second Forced Loan was 6 per cent and the revenue from it amounted to 1,250 million drachmae. Its amortisation period was 20 years and this time it was contained within the geographical limits of the country.

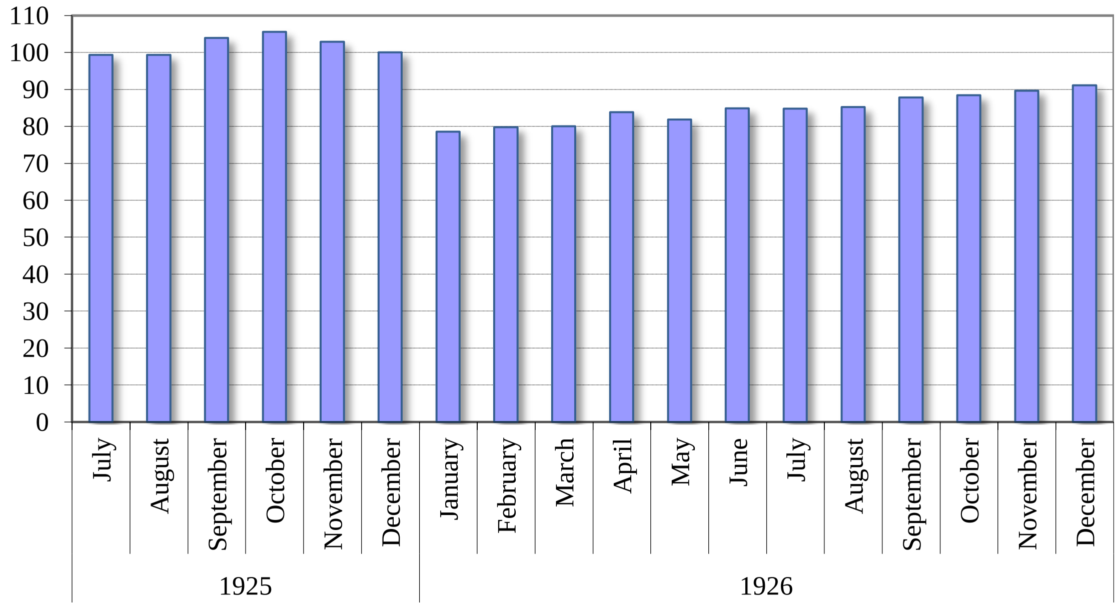

Figure 5.2: Second Forced Loan of 1926
(December 1925=100)
Source: Author's calculations using the data of Table A3.1 in Appendix A3.

The Second Forced Loan was aimed at providing a definite settlement of the outstanding NDBs. Half of the proceeds of this forced loan were used by the government to repay its debt to the National Bank resulting from NDBs. The remainder of the proceeds of this loan were used to pay off half of the outstanding NDBs in cash. The other half of the NDBs were converted into 8 per cent bonds with a ten-year amortisation period.

Figure 5.2 demonstrates the impact of the Second Forced Loan on the money supply. In January 1926, the banknotes in circulation decreased unexpectedly by approximately 21 per cent. By the end of the year, the currency that had been withdrawn had not yet returned back into circulation. Figure 5.2 further demonstrates that by the end of December 1926 the total amount of the banknotes in circulation still remained at a lower level than before the implementation of the Second Forced Loan. The Second Forced Loan, together with the settlement of the NDBs in early 1926, was the first major step and perhaps one of the most important towards *de facto* stabilisation of the drachma in 1927.

5.3.2.3. National Defence Bonds

The Law of Control restricted the number of treasury bills that the Greek government could issue to 10 million drachmae which was approximately one-tenth of their ordinary revenue between 1892 and 1896.[293] This limit was reached in November 1912 and as the ordinary revenue of the Greek government had increased by then, the amount of treasury bills that could be issued was also raised to 25 million drachmae with the consent of the IFC.[294]

In 1918, the government introduced by law a new series of treasury bills (National Defence Bonds) in maturities of three, six and ten months up to the value of 200 million drachmae.[295] The issuing of this series of NDBs echoed the so called Bons de la Défence Nationale issued in France at the time. The National Bank was made responsible for discounting the NDBs. According to this initial law, NDBs could be discounted at the National Bank after the passage of half of the period of their maturity.[296]

After 1920, the limit of the number of NDBs that could be issued was increased repeatedly becoming 600 million drachmae in June 1923. In December 1923, 1,250 million drachmae of NDBs could be issued and by the end of August 1924 the value of the NDBs that could potentially be issued stood at 2,250 million drachmae.[297] This amount of 2,250 million drachmae of NDBs, a short-dated investment, corresponded to approximately 45 per cent of ordinary revenue for the fiscal year 1924–25.

The issuance of these treasury bills also directly involved the National Bank, which not only marketed the bills for the treasury but guaranteed their repayment, as well as standing by to discount them if the holder desired cash before maturity. Under a law passed in December 1922, the National Bank was given the right to issue banknotes on its own behalf beyond the legal limit, in case the government was unable to pay its debt to the Bank because of NDBs. This law provided that as soon as the government paid back outstanding debt related to NDBs, the Bank had to withdraw from circulation the equivalent amount in

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293 United Kingdom House of Commons (1898, article 29, p. 14).
294 NBGHA_A1Σ10Y1Φ180: Report of experts on the improvement of public finance, 1927; Zolotas (1928, p. 47).
295 See Annual Report of the National Bank of Greece for 1918 (1919, pp. 19–23).
296 See Law 1240/1918.
297 HABOG_A3S1Y2F147T1, pp. 1–19; HABOG_A3S1Y2F147T2, pp. 1–34; Annual Reports of the National Bank for the period 1918 to 1925.

banknotes that had been issued for this particular purpose. In any event, the Greek government had to pay 3 per cent of its debt to the Bank because of NDBs at the end of each year.[298] As it has already been mentioned by the end of the institution of NDBs the National Bank had never availed itself of this right.

Table 5.6: Interest rates charged, National Defence Bonds

	Three-Month	Six-Month	One-Year	Three-Year	Five-Year	Ten-Year
April 1918	4.5	5				
December 1919	5	5.5	6			
March 1923	5.5	6	7			
April 1924	4	5	6		7.5	
April 1925			7	7.5	8	9

Sources: HABOG_A3S1Y2F147T1, pp. 1–19; HABOG_A3S1Y2F147T2, pp. 1–34; HABOG_A3S1Y2F147T12, pp. 1–21.

Table 5.6 shows the interest rate that the NDBs of various maturities bore. In addition, it indicates changes in the interest rate and the evolution of the institution. Initially, NDBs of three-month, six-month and one-year maturity were issued. In April 1924, NDBs of five-year maturity were introduced for the first time and a year later NDBs of three- and ten-year maturity were added, whilst issue of the three-month NDBs was stopped. The response from the public, however, to NDBs with a medium- and long-term maturity was limited. By the end of 1924, only 0.60 per cent of the total bonds issued had a five-year maturity.[299] By then, the popularity of the whole institution had begun to ebb away.

[298] HABOG_A3S1Y2F147T1, p. 5.
[299] HABOG_A3S1Y2F147T2, p. 13.

Table 5.7: National Defence Bonds, 1918–1922 and 1926–1928

(Balance at the end of the month)

		Drachmae
1918	*June*	25,000,000
	December	50,000,000
1919	*June*	50,000,000
	December	153,200,000
1920	*June*	168,200,000
	December	200,000,000
1921	*June*	200,000,000
	December	309,330,800
1922	*June*	354,276,100
	December	331,135,500
1926	*June*	708,496,100
	December	229,805,000
1927	*June*	114,020,300
	December	104,633,700
1928	*14th May*[1]	102,011,000

Note: [1] This balance of NDBs on the eve of the reform was retained by the National Bank of Greece.

Source: HABOG_A3S1Y2F147T2.

Tables 5.7 and 5.8 trace the evolution of NDBs. Data in Table 5.7 cover the period between 1918 and 1922 and from 1926 to 1928. They are biannual data. By contrast, the data in Table 5.8 show the outstanding balance at the end of each month between 1923 and 1925. Figure 5.3 illustrates vividly the way that the institution evolved between 1918 and 1928.

Table 5.8: National Defence Bonds, 1923–1925

(Balance at the end of the month, in drachmae)

	1923	1924	1925
January	332,513,800	1,095,198,700	1,576,303,600
February	332,727,600	1,194,965,600	1,591,098,300
March	325,787,900	1,252,982,200	1,529,557,500
April	335,520,000	1,647,529,800	1,371,626,400
May	364,854,800	1,897,812,500	1,403,976,300
June	433,773,400	1,911,739,500	1,421,977,900
July	547,211,300	1,745,253,300	1,437,338,500
August	592,777,700	1,669,491,600	1,461,601,900
September	616,334,500	1,690,111,000	1,470,601,000
October	616,748,200	1,741,141,800	1,461,054,500
November	757,111,700	1,584,267,900	1,474,875,500
December	934,751,800	1,613,379,900	1,493,550,900

Sources: HABOG_A3S1Y2F147T2, pp. 33–34; HABOG_A3S1Y2F147T12, p. 3; Kostis (2003, p. 222).

Both Table 5.8 and Figure 5.3 demonstrate that by the end of 1923 the value of the outstanding NDBs had increased significantly. The peak was reached on 23 June 1924 when there were outstanding NDBs of 1,933.207 million drachmae.[300] This was the equivalent of nearly 40 per cent of the ordinary revenue of the government for the fiscal year 1924–25. Subsequently, a decrease is seen.

NDBs were a short-term, profitable and highly liquid investment. In particular after December 1923, NDBs of three-, six- and twelve-month maturity could be discounted at the National Bank one day after their issuance.[301] This stipulation increased their popularity as it made them relatively easy to sell. It was also a favourite investment medium for banks.[302] For reference, on 31 December 1924 approximately 27 per cent of the outstanding NDBs were held by banks.[303]

[300] Ibid., pp. 2, 11 and 33; HABOG_A3S1Y2F147T12, p. 1.
[301] HABOG_A3S1Y2F147T2, p. 8.
[302] BoE Archive, 0V80/1/33.
[303] HABOG_A3S1Y2F147T2, p. 26.

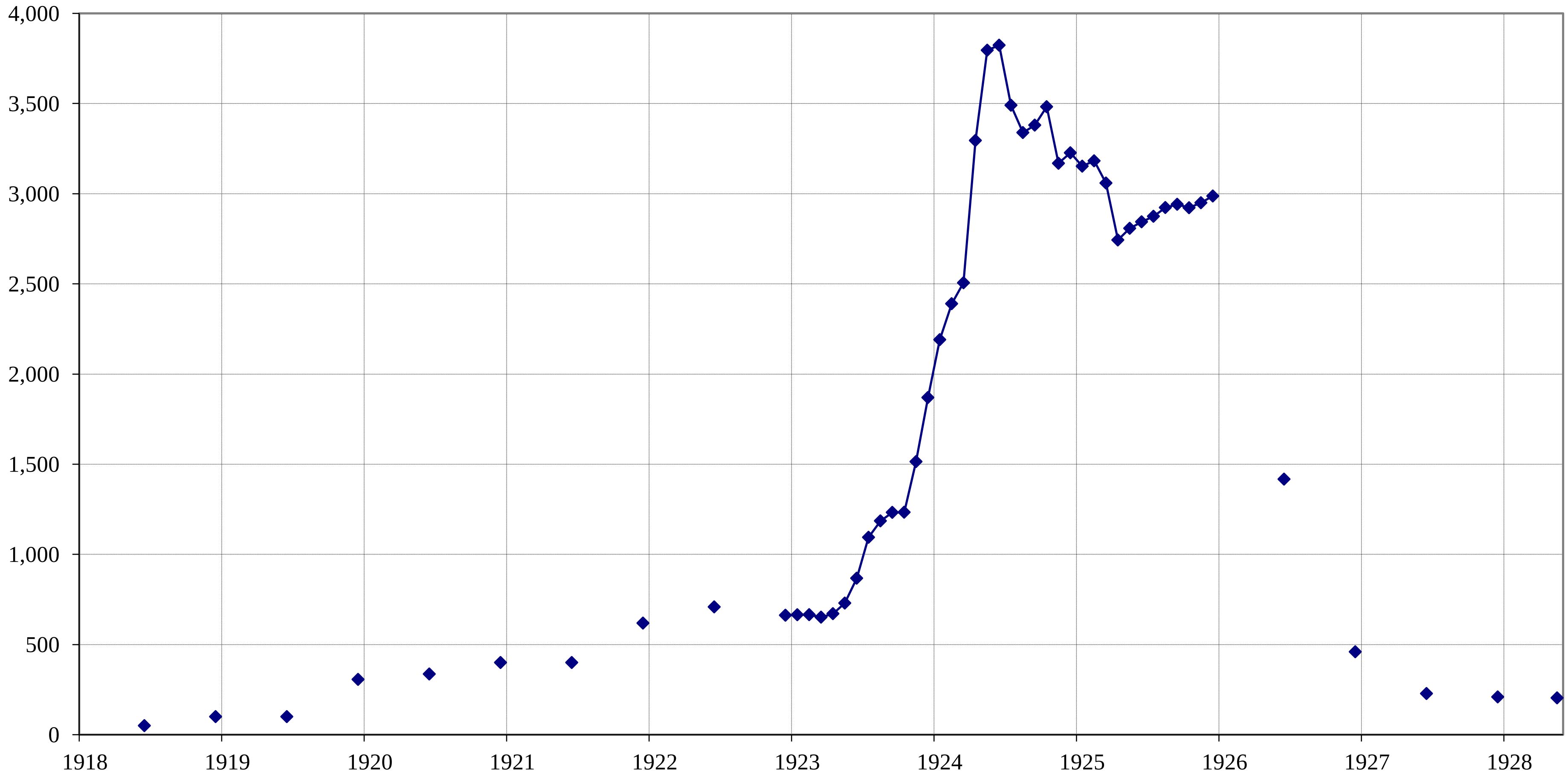

Figure 5.3: National Defence Bonds, 1919–1928
(June 1919 = 100)

Sources: Author's calculations using the data in Tables 5.7 and 5.8.

The institution of NDBs reached its peak in June 1924. Subsequently, there was a decrease in the outstanding balance of NDBs as Table 5.8 and Figure 5.3 demonstrate. By the end of July 1924, NDBs started not to be renewed and instead the National Bank had to pay them off. By the end of December 1924 the government owed to the National Bank approximately 300 million drachmae because of NDBs that had not been rolled over.[304]

The smooth functioning of the institution came close to ending in the first five months of 1925 when a large number of NDBs were brought to the National Bank for discounting. This culminated on 30 April 1925 when on a single day, NDBs of nearly 111 million drachmae were discounted by the National Bank. To cope with this situation the government introduced restrictive measures which limited the discounting of NDBs by the National Bank in the second half of 1925.[305]

In 1925, the policy of the banks changed; they invested only a very limited proportion of their liquid assets in NDBs.[306] Money became tight. The discount rate increased twice during that year; once in February and then again in August when it increased from 8.50 to 10 per cent. (See Table 3.12 in Chapter 3.)

At the end of December 1925, the government owed the National Bank 612 million drachmae because of NDBs that had been redeemed by then. (See Table 4.15 in Chapter 4.) This item of government debt to the National Bank can be compared with credits to the agricultural sector: in December 1925, agricultural credit represented 92 per cent of the government's outstanding debt to the National Bank because of NDBs. The government needed 12 per cent of its ordinary revenue in the fiscal year that had ended in March 1925 simply to repay this item of its floating debt to the National Bank. Furthermore, on 31 December 1925, 93.85 per cent of the outstanding NDBs were short-term bills with an amortisation period up to a year.

After the middle of 1924, the National Bank was under severe strain because of NDBs that it had either to discount or to redeem. In February 1925, the governor of the National Bank proposed increasing the banknotes in circulation by 600 million drachmae for 'the needs of trade'.[307] It is probable that Diomides was eager to print banknotes in 1925 to cope with the increasing pressure that the Bank was experiencing because of the NDBs. The British representative on the IFC, L. G. Roussin, objected to this proposed new increase in the

[304] Annual Report of the National Bank for 1924 (1925, p. xvii).
[305] HABOG_A3S1Y2F147T12, pp. 5–6.
[306] Ibid., p. 6.
[307] For more on this see Pepelasis Minoglou (1993, pp. 126–127).

number of banknotes in circulation and effectively blocked it. Ultimately, the printing press was not used and instead the governors of the National Bank suggested to the government the implementation of the Second Forced Loan to deal directly with the floating debt caused by NDBs.

The Second Forced Loan, introduced in January 1926, aimed at settling the question of the NDBs. Half of its yield, which amounted to 1,250 million drachmae, was used for the repayment of the government debt to the National Bank caused by NDBs.

By April 1926, the NDBs due for repayment amounted to approximately 1,272 million drachmae, as roughly 93 per cent of the outstanding NDBs had a period of maturity of less than a year. As is explained above, half of the outstanding short-term NDBs were repaid in cash by the government when they reached maturity using the remaining proceeds of the Second Forced Loan whilst the other half was converted into a loan repayable in ten years and bearing interest at 8 per cent. This loan is known as the Third Forced Loan.

Thus, with the nip of scissors a significant source of the monetary instability of the 1920s was removed. The NDBs were a major cause of inflation and at the same time an important source of revenue for the government. In particular after 1923, when the printing press stopped rolling, NDBs became the main instrument by which to finance budget deficits. The NDBs were rarely used as means of payment, however, as has been explained before it was easy to discount them at the National Bank.[308]

The question which is raised here is whether the funding crisis of 1925 was caused by a sudden crisis of confidence in the public finance practices of the government or simply that bondholders of NDBs, and in particular banks had found more lucrative means of investment.[309] The latter view was supported by the governor of the National Bank in his annual report for 1925. Diomides argued that the redemptions came primarily from commercial banks who wished to make loans to the then booming Greek economy.[310] The National Bank changed its discount rate twice in 1925. The money market was becoming tighter and an increase in the discount rate of the National Bank further stepped up interest rates in the economy. Banks preferred, since the profit was higher, to lend rather than to invest in short-term treasury bills. It is difficult, however, to single out one of the reasons mentioned above to explain why it

308 Zolotas (1928, p. 98).
309 Makinen and Woodward (1990, p. 176).
310 Annual Report of the National Bank for 1925 (1926, pp. xxiv–xxix); Makinen and Woodward (1990, p. 181).

became increasingly difficult for the government to refinance its floating debt of NDBs after the middle of 1924.

5.3.3. External borrowing

All Greek governments faced great difficulties in borrowing from the international capital markets in the 1920s. The literature relates these difficulties to the embargo imposed by the war Allies. In the 1920s, however, the London market 'was not the free market of the pre-war days'.[311] More importantly, at the time the creditworthiness of the Greek government on the London market was very low, as Figure 6.3 in Chapter 6 demonstrates. In fact, in the early 1920s, Greek government bonds plummeted and as a consequence market rates rocketed, reflecting the political, economic and financial distress that prevailed in Athens during that period. This occurred at a time when the country was having to absorb over a million of refugees that had crossed the Aegean Sea from Asia Minor.

In February 1923, Greece approached the Council of the League of Nations hoping to float an international loan under its aegis for the settlement of refugees. The negotiations with the League were protracted and the Geneva Protocol was only signed in September 1923.[312] For this purpose, an autonomous organisation was established, namely the Refugee Settlement Commission. This Commission handled the proceeds of the First Refugee Loan and was made responsible for the settlement of refugees primarily in rural areas.[313]

The 7 per cent Refugee Loan of 1924 was the only loan to be floated on the international financial markets before the stabilisation of the drachma. This was made possible because it was issued under the auspices of the League of Nations and its yield was used for the rehabilitation of refugees. The total sum issued was £12,300,000. The price at issue was 88 per cent in London and New York and 86 per cent in Athens.[314] A substantial part of the loan, in other words £7,500,000, was issued in London. The rest was floated in almost equal parts in Athens and New York. The Refugee Loan was placed under the direct control of the IFC.

[311] Atkin (1970, p. 326). For the way that the London market was regulated in the 1920s, see for example Atkins (1970, 1977); Moggridge (1971).
[312] For further information see Minoglou Pepelasis (1989, pp. 331–366; 1993, pp. 64–99).
[313] For more information on the First Refugee Loan see Stefanides (1930, pp. 234–235); League of Nations (1945, pp. 74–76); Wynne (1951, pp. 349–350); Minoglou Pepelasis (1989, pp. 331–366); Pepelasis Minoglou (1993, pp. 64–99).
[314] League of Nations (1945, p. 167).

Table 5.9: Foreign loans contracted between 1920 and 1927

	Nominal	Actual
6% Loan of 1921 (in check on Paris)	40 million French francs	
5% Loan of 1923 from the Canadian Government	40 million French francs	40 million French francs
7% Refugee Loan of 1924	12.30 million pounds sterling	9.963 million pounds sterling
8% Greek Railways Loan of 1925	2.2 million pounds sterling	2 million pounds sterling
8% Water-Supply Loan of 1925	11 million dollars	9.3 million dollars
8.5% Swedish Loan of 1926	1 million pound sterling	0.94 million pound sterling

Note: The 1923 Canadian Loan was not a new loan but the rescheduling of an agreement between the Greek government and the Canadian government which took place in 1919. This loan from the Canadian government provided for the payment of wheat imports.

Contrary to conventional belief and in spite of the war debt embargo on foreign financial markets, there was some capital influx into Greece after 1924. This influx was possible because the embargo was applied against the central government and excluded public entities. The Greek government could and did raise capital from smaller capital markets and for infrastructure programmes that were being undertaken at the time. However, raising money from the small capital markets of Europe, such as with the Swedish Loan of 1926, proved to be very expensive and the sums that could be raised were very limited. Table 5.9 lists all the external loans that were contracted before the implementation of the stabilisation programme in 1928.

The so-called Swedish Loan, a private loan, was obtained from the match trust Svenska Tandsticksaktielboget, which had raised loans for other European and Latin American countries in the 1920s. The nominal value of this loan was 1 million pounds sterling; its issue price was 94 per cent, the nominal interest rate was 8.5 per cent and the redemption period 28 years. The real interest rate was a fraction above 9 per cent. This was at a time when the market yield of pre-1914 Greek loans on the London market was between 8.30 and 8.80 whilst that of the Refugee Loan of 1924 was around 7.60 per cent. The government also conceded to the Alsing Trading Company the exclusive right to sell matches in Greece for 28 years. This was a high price indeed to pay for such limited capital, which was used by the government of General Pangalos to cover just one-third of the budget deficit for that financial year.

5.4. Developments in Greece: The Fleet Street Perspective[315]

A considerable part of this thesis is devoted to Athens' foreign borrowing and the complicated relationship that arose between Greek political and monetary authorities on the one hand and foreign supervisors and financial markets on the other. During the entire period in question the creditworthiness of the Greek government on the London market fluctuated markedly depending on a variety of historical events including political and institutional changes.

Research into the press of the period will ascertain how well informed market participants in London were about developments in Greece, so as to be able to evaluate country risk at a time that sovereign credit rating was not common practice. Having said that, *Moody's Manual of Investments,* which at the time furnished investors with 'a key to the relative security and stability of particular investment bonds', valued the Refugee Loan as a safer investment than other Greek loans traded on the London Stock Exchange. Under their system of ratings, the Refugee Loan carried a 'Baa' rating whilst, for example, the Monopoly Loan one of the Old Loans placed under the jurisdiction of the IFC, the 1910 Bonds Loan and the 1914 Loan all carried a 'Ba' rating.[316]

The Council of the Corporation of Foreign Bondholders, besides publishing an annual report, systematically collected invaluable information from the British press on countries at the centre of their interest. This published material, sourced from a wide range of mainly daily press, was neatly organised in a continuous format in the form of cutting books.[317] The material on Greece [hereafter *Greek Extracts*] consists of nine volumes, covering the period from 1867 until January 1971. Volumes six and seven, loaded with information that appeared in the British press during the period in question, have been used in this thesis.[318]

The *Greek Extracts* provide ample evidence that British investors were able to be well informed about developments in Greece, and promptly. They also indicate the kind of qualitative information that an investors' organisation, whose principal objective was 'the

[315] This section also appears in Christodoulaki and Penzer (2004, pp. 19–29).
[316] Moody's rating system (from highest to lowest) was: Aaa, Aa, A, Baa, Ba, Caa, Ca, C. Moody (1926).
[317] These volumes, adding up to a total of 503 volumes, are kept at the Guildhall Library, London. The cuttings are almost entirely in English, taken primarily from British daily newspapers, the weeklies and the financial press.
[318] Council of the Corporation of Foreign Bondholders, *Greek Extracts* [hereafter *Greek Extracts*], vol. 6 (27 October 1904–25 September 1916); *Greek Extracts*, vol. 7 (25 September 1916–31 October 1931). The cuttings that appear in these two volumes come from *The Times, Financial News, Financial Times, Morning Post, Daily Telegraph, Board of Trade Journal, Stock Exchange Journal, Stock Exchange Gazette and Evening Standard*. There is also a small number of cuttings from the *Message d'Athenes*.

protection of the interests of the holders of foreign securities',[319] observed to evaluate the creditworthiness of a country, in this case Greece. The information that is collected in the *Greek Extracts* covering the period between the outbreak of the Great War and stabilisation is presented in Tables 5.10 and 5.11 below.

[319] Corporation of Foreign Bondholders (various years).

Table 5.10: Press cuttings on Greece collected for the Council of the Corporation of Foreign Bondholders

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
January	20	9	8	2	8	7	8	17	10	9	11	8	10	9	12	5
February	8	7	4	3	3	5	4	7	10	7	8	7	9	12	5	5
March	20	11	9	10	8	9	17	10	20	14	11	7	13	14	7	9
April	17	9	10	2	7	8	4	9	14	9	6	15	14	14	5	5
May	10	5	23	5	7	5	5	11	12	3	11	11	1	7	4	9
June	17	4	20	7	9	6	7	12	10	17	5	9	10	11	10	5
July	5	5	6	10	7	8	9	13	7	9	7	9	8	6	10	2
August	1	6	3	7	3	3	1	4	6	10	4	5	10	8	5	6
September	7	4	10	8	6	6	3	15	7	9	11	12	8	11	10	5
October	6	6	12	7	8	7	4	7	11	8	13	18	5	8	10	8
November	9	4	3	2	5	4	9	5	6	11	10	6	6	6	9	6
December	4	4	3	5	6	7	17	6	10	8	8	10	6	10	5	5
Total:	124	74	111	68	77	75	88	116	123	114	105	117	100	116	92	70

Notes: (1) This table shows the absolute number of press cuttings on Greece, per month and per year, that were gathered in the *Greek Extracts*. (2) The number of press cuttings gathered for the first six months of the year is generally higher than that of the second half. (3) The total number of cuttings for the first half of 1914 is considerably higher than the average number observed during the first six months of each subsequent year during the period in question. This, to a large extent, is explained by the flotation of the 1914 Loan which attracted a lot of publicity in the press. In addition, the number of press cuttings clustered as 'National Issues' in Table 5.11 during the first semester of 1914 is substantial both in comparison with other years and the second part of 1914. (4) 1922 is the year of the Asia Minor debacle.

Sources: Council of the Corporation of Foreign Bondholders, *Greek Extracts,* Volumes 6 and 7; See the text.

Table 5.10 shows the absolute number of press cuttings per month and per year that the *Greek Extracts* include during the period under examination. Table 5.11 illustrates the wide range of issues covered by the press cuttings in the *Greek Extracts*. At the same time, however, Table 5.11 indicates the kind of news that the Council considered important in evaluating the creditworthiness of the Greek government.

The system employed to compose this table was to read the *Greek Extracts* and then divide the issues tackled in the cuttings into categories. Often, one press cutting refers to more than one topic related to Greece. For this reason, the total of Table 5.11 is different from the total of Table 5.10, which is simply the number of press cuttings per year that the volumes include.

Table 5.11: Greek issues tackled in the press cuttings on Greece collected by the Council of the Corporation of Foreign Bondholders

	1914		1915		1916		1917		1918		1919	
		%		%		%		%		%		%
Public Debt	60	37.04	42	39.25	68	40.00	40	45.45	53	49.07	50	45.87
Public Finance	23	14.20	20	18.69	39	22.94	16	18.18	31	28.70	27	24.77
Domestic Politics	8	4.94	11	10.28	14	8.24	5	5.68	4	3.70	0	0
National Issues	24	14.81	2	1.87	0	0	0	0	0	0	2	1.83
War	2	1.23	6	5.61	7	4.12	5	5.68	2	1.85	0	0
Refugees	0	0	0	0	0	0	0	0	0	0	0	0
Economic Conditions	8	4.94	1	0.93	1	0.59	0	0	2	1.85	2	1.83
Primary Sector	4	2.47	0	0	2	1.18	5	5.68	1	0.93	0	0
Industry	5	3.09	0	0	0	0	1	1.14	0	0	0	0
Trade	7	4.32	4	3.74	0	0	1	1.14	3	2.78	4	3.67
Shipping	1	0.62	1	0.93	5	2.94	0	0	0	0	1	0.92
Infrastructure	8	4.94	0	0	3	1.76	0	0	1	0.93	3	2.75
Stabilisation	0	0	0	0	0	0	0	0	0	0	0	0
The Exchange Rate	0	0	3	2.80	1	0.59	0	0	0	0	2	1.83
The Money Supply	1	0.62	3	2.80	9	5.29	0	0	0	0	2	1.83
The National Bank	2	1.23	2	1.87	7	4.12	5	5.68	0	0	3	2.75
The Banks	1	0.62	1	0.93	1	0.59	0	0	0	0	2	1.83
Miscellaneous	8	4.94	11	10.28	13	7.65	10	11.36	11	10.19	11	10.09
***Total*:**	162	100	107	100	170	100	88	100	108	100	109	100

	1920		1921		1922		1923		1924		1925	
		%		%		%		%		%		%
Public Debt	49	31.82	66	43.42	73	42.20	76	41.08	62	40.79	68	31.43
Public Finance	28	18.18	23	15.13	30	17.34	36	19.46	31	20.39	36	16.67
Domestic Politics	9	5.84	6	3.95	15	8.67	7	3.78	19	12.50	6	2.78
National Issues	10	6.49	4	2.63	8	4.62	4	2.16	7	4.61	16	7.41
War	0	0	0	0	1	0.58	0	0	0	0	0	0
Refugees	0	0	0	0	0	0	4	2.16	3	1.97	12	5.56
Economic Conditions	1	0.65	2	1.32	3	1.73	1	0.54	1	0.66	2	0.93
Primary Sector	3	1.95	1	0.66	2	1.16	0	0	1	0.66	1	0.46
Industry	3	1.95	1	0.66	0	0	1	0.54	0	0	0	0
Trade	8	5.19	9	5.92	4	2.31	2	1.08	1	0.66	6	2.78
Shipping	2	1.30	1	0.66	0	0	1	0.54	0	0	1	0.46
Infrastructure	3	1.95	0	0	2	1.16	4	2.16	1	0.66	8	3.70
Stabilisation	0	0	0	0	0	0	0	0	0	0	2	0.93
The Exchange Rate	8	5.19	12	7.89	16	9.25	14	7.57	8	5.26	20	9.26
The Money Supply	8	5.19	3	1.97	6	3.47	14	7.57	2	1.32	17	7.87
The National Bank	0	0	4	2.63	1	0.58	6	3.24	3	1.97	10	4.63
The Banks	8	5.19	3	1.97	0	0	2	1.08	1	0.66	2	0.93
Miscellaneous	14	9.09	17	11.18	12	6.94	13	7.03	12	7.89	9	4.17
***Total*:**	154	100	152	100	173	100	185	100	152	100	216	100

	1926		1927		1928		1929	
		%		%		%		%
Public Debt	59	37.58	77	36.32	71	47.97	54	52.43
Public Finance	32	20.38	30	14.15	24	16.22	21	20.39
Domestic Politics	13	8.28	6	2.83	4	2.70	2	1.94
National Issues	13	8.28	18	8.49	5	3.38	6	5.83
War	0	0	0	0	0	0	0	0
Refugees	4	2.55	3	1.42	2	1.35	1	0.97
Economic Conditions	2	1.27	1	0.47	1	0.68	1	0.97
Primary Sector	1	0.64	0	0	1	0.68	0	0
Industry	1	0.64	0	0	1	0.68	0	0
Trade	0	0	1	0.47	2	1.35	1	0.97
Shipping	1	0.64	0	0	0	0	0	0
Infrastructure	2	1.27	5	2.36	9	6.08	3	2.91
Stabilisation	5	3.18	24	11.32	10	6.76	2	1.94
The Exchange Rate	7	4.46	6	2.83	2	1.35	0	0
The Money Supply	5	3.18	4	1.89	2	1.35	2	1.94
The National Bank	3	1.91	16	7.55	3	2.03	2	1.94
The Banks	2	1.27	6	2.83	3	2.03	1	0.97
Miscellaneous	7	4.46	15	7.08	8	5.41	7	6.80
***Total*:**	157	100	212	100	148	100	103	100

Notes:
(1) The system employed to compose this table was to read the *Greek Extracts* and then divide the issues tackled in the cuttings into categories. One piece of press cutting may refer to more than one issue related to Greece. For this reason, the total of observations in Table 5.11 is different from the total of Table 5.10 which shows the absolute number of press cuttings per year that the *Greek Extracts* include.
(2) 'National Issues' is a generic term that contains news on foreign diplomacy, reports on Greek minorities in the Near East and the Balkans, Greek War debts as well as the issue of Book Credits and rearmament.
(3) Cuttings grouped as 'National Issues' in 1914 mainly refer to minority issues of Greek populations in surrounding areas not belonging to Greece and to a strained relationship between Greece and Turkey. In 1925, 1926 and 1927 'National Issues' includes news on the negotiations for the settlement of war debts with Great Britain, France and the USA.
(4) News in the *Greek Extracts* on the macroeconomic situation in Greece are divided into the following categories: Economic Conditions where general references on economic progress and development have been classified; information on agriculture and minerals is included in the Primary Sector; Industry, Trade, Shipping as well as Infrastructure, which contains news on infrastructure projects proposed or underway and on railways; Stabilisation, the Exchange Rate, the Money Supply and the National Bank which was the central bank in Greece until 12 May 1928; and finally, the Banks, where references to banks other than the National Bank are included.
(5) Information on macroeconomic conditions could be separated into two groups: news on the real economy (Economic Conditions, Primary Sector, Industry, Trade, Shipping and Infrastructure) and monetary and financial information (Stabilisation, the Exchange Rate, the Money Supply, the National Bank and the Banks).
(6) The *Greek Extracts* include press cuttings with information for British investors on entrepreneurial opportunities in Greece.
(7) Miscellaneous primarily contains information on foreign direct investment in Greece.

Source: Council of the Corporation of Foreign Bondholders, *Greek Extracts,* Volumes 6 and 7; See the text.

It is apparent that the Council pedantically collected information on Greek government debt as it appeared in the British press. References to public debt account for between one-third and over half of the total references to Greece in a year. If information on public debt in the *Greek Extracts* is thematically disaggregated, news on the service of the debt predominates.[320] Special consideration was also paid to gathering announcements in the press that described efforts of the Greek government to raise fresh capital both on the international financial markets and in Athens. In retrospect, reports in the press on fresh borrowing and its terms might have been instigated frequently by Greek officials in an attempt to influence market expectations. *Ex post*, having the benefit of archival research, reports on new loans during periods that the Greek government faced difficulties in borrowing or a financial embargo, as the London market was not 'the free market of the pre-war days',[321] illustrate the method and the terms on which Greek officials wished to borrow.[322]

[320] See Christodoulaki and Penzer (2004), Table A12 in Appendix II, pp. 61–62.
[321] Atkin (1970, p. 326).
[322] See, for example, *Greek Extracts* for 1921 and *Greek Extracts*, *F. News*, 8 April 1927.

The information presented in Table 5.11 demonstrates that public finance comes after government debt in terms of importance. References to the finance of the Greek government vary from 14 per cent to nearly 29 per cent of the total theme references of a year. In the 1920s, it was customary to report the budget presentations of the Greek Minister of Finance in the British press. In these reports, the tenor was positive and expenditure typically met revenues. Public borrowing was added up with ordinary revenues to present a budget in equilibrium, a practice that was not overlooked by newspaper correspondents.[323]

Citations on politics vary from no reference at all in 1919, a year of political stability, to 12.50 per cent of total citations in 1924 which was a year of constitutional change as the country became a republic, and had only short-lived governments. The collection of press cuttings in the *Greek Extracts* on the political situation is eclectic and hardly paints the picture of political crisis and bitter polarisation that characterised these times. Having said this, however, one can find press cuttings on all major political changes and general elections of the period.

War and refugee problems have serious implications for government indebtedness. It is therefore surprising that both these issues, as Table 5.11 demonstrates, are hardly covered by the press cuttings collected in the *Extracts*. Cuttings on the Greek presence in Smyrna or on the advance of the Greek army in Asia Minor and ultimate defeat are scarce in the *Greek Extracts*. By contrast, events in Asia Minor and the debacle were more than adequately reported in the British press.[324] In addition, despite the refugee problem in Greece being 'more acute … than in any other country'[325] and at the time attracting widespread attention, press cuttings on refugees included in the *Greek Extracts* are limited and mainly related to the Refugee Loan of 1924.[326]

News on macroeconomic conditions in the country can be divided into two parts: news on the three sectors of the economy and monetary and financial information. In the 1920s, a period of high inflation in Greece, news on monetary conditions dominates. Information on fluctuations of the drachma is provided and also there are articles that discuss the root of that problem. Economic and policy changes are reported and there is plenty of information on the central banking reforms that led to the establishment of a fully fledged central bank. In total, news on the three sectors of the economy together with monetary and financial news fluctuates between 6.50 per cent of the total observations in 1918 and over 30

[323] See *The Economist*, 2 September 1922.
[324] See *Palmer's Index to The Times* (1922).
[325] Cited in Pentzopoulos (1962, pp. 77–78).
[326] By contrast *The Economist* reported regularly on the refugee question in Greece.

per cent in 1925.[327] Both in qualitative and quantitative terms, news on macroeconomic developments gathered in the *Greek Extracts* plays a more central role than information on the political situation, supporting the assertion that ‘economics, not politics, were a key factor in allocating […] exports of capital’.[328]

A secondary objective of the Council of the Corporation of Foreign Bondholders was to provide information on ‘the economic and financial condition’ of states that were at the centre of their interest.[329] They never attempted to develop a system of formal rating.[330] However, they collected ample information to enable investors to assess sovereign risk. The cuttings from the British press collected in the *Greek Extracts* indicate that news on public debt took precedence over any other issue and public finance followed. News on macroeconomic conditions was also a vital component of the information gathered in the *Greek Extracts*.

This qualitative research on cutting books of mainly daily press organised by an investors’ organisation supports findings of quantitative statistical analysis of Greek sovereign risk between 1914 and 1929. This statistical analysis of daily time series of country risk between the outbreak of the Great War and stabilisation shows that investors acted upon news of fiscal performance and public debt developments. Unforeseen political changes also influenced market participants’ expectations. By contrast, institutional innovations, such as the adoption of the gold exchange standard and the establishment of a central bank *de novo*, did not result in any quantitative market response. Stabilisation and the concomitant institutional reforms, however, were gradually factored into the market price of Greek sovereign debt traded in London and as a result the creditworthiness of the Greek government steadily improved.[331]

[327] In 1918, all references are on the economy and trade opportunities in Greece for British merchants. In 1925, the emphasis is shifted to the exchange rate and to news on the money supply; nearly 24 per cent of the total references are on monetary and financial issues, whilst only eight per cent refer to the economy.
[328] Flandreau (1998, p. 31).
[329] Corporation of Foreign Bondholders, *Annual Report*.
[330] See Flandreau (1998) for a nineteenth century attempt to provide formal ratings to monitor sovereign risk and Moody, *Moody's Manual* for creation of sovereign ratings in the 1920s.
[331] See Christodoulaki *et al.* (2011, 2012).

5.5. The legacy of the period

Figure 5.4 shows the budget surplus, the primary surplus and the exchange rate parity of the drachma with the pound sterling in historical perspective. The time series cover the period between 1833 and 1930. This figure demonstrates that budget deficits were a chronic characteristic of public finances. It should be noted that it also indicates that there was an attempt to improve the position of the budget after the enactment of the Law of Control. This attempt, however, was short-lived. After 1907, budget deficits persisted once again and when the First Balkan War broke out primary deficits also came into the picture.

It has been argued that deficit financing was an instrument of policy and a result of the adoption of a system of Western parliamentarianism. The main characteristics of the taxation system in Greece were firstly that the bulk of public revenue came from indirect taxes, and secondly the way that the fiscal burden was distributed amongst different classes or interest groups. The peasantry and the higher classes were under-taxed. By contrast, the middle classes carried the main fiscal burden by not being able to avoid indirect or income taxation. Thus, both the structure and the evolution of the taxation system in Greece were based on grounds of political expediency. It was when parliamentary democracy and universal male suffrage were adopted in 1864 that the under-taxation of the peasantry started. The peasantry constituted the largest voting group whilst the higher classes were involved in governance.[332] These arguments may not, however, survive if analysis on a micro level is carried out. The peasantry composed a substantial part of the electorate but at the same time the majority of them lived close to subsistence levels, in particular during the nineteenth century.

In addition, it has been argued that foreign capital was acquired to serve a political and not an economic function.[333] Foreign capital was not seen by the state as a tool for promoting economic growth, but rather as a means of enabling the central government to enhance its position in Greek society.[334] The cost of national unification also absorbed a substantial part of foreign loans.[335] This policy of deficit financing, coupled with a concomitant dependence on foreign borrowing, resulted in Greece experiencing recurring default and/or difficulty in borrowing independently from the international capital markets. Both default and difficulties with independent borrowing invited international financial intervention and control which in

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[332] See Dertilis (1993, pp. 23–70). Kammas and Sarantides (2017) test econometrically Dertilis (1993) hypothesis that is to say that the agrarian sector was undertaxed and that this trend began in the 1860s when fundamental political reforms were implemented.
[333] Pepelasis Minoglou (1995, p. 261)
[334] Ibid., p. 263; for the effect of foreign borrowing on the economy, see Stefanides (1930); Aggelopoulos (1937, pp. 92–138).
[335] Aggelopoulos (1937, pp. 26 and 32).

turn resulted in partial loss of fiscal and monetary sovereignty. Conditionality attached to supervised foreign borrowing by governments experiencing difficulties in accessing capital markets independently promoted institutions that had previously been adopted by creditor countries whilst at the same time guaranteeing the continuity of debt service.

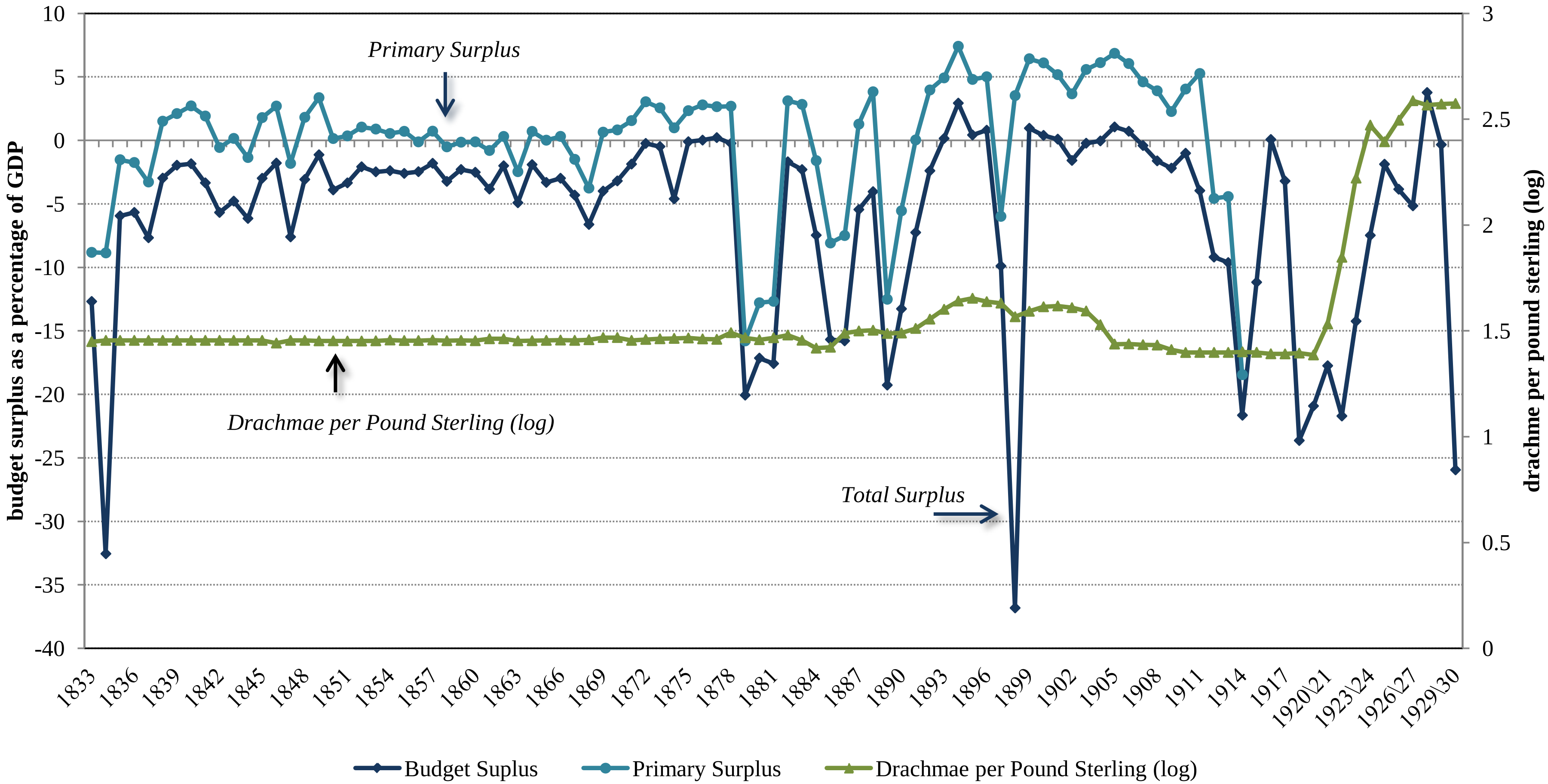

Figure 5.4: Budget surplus and the drachma in historical perspective, 1833–1930

Sources: Greek government budget (1907–1930); Dertilis (1993, p. 128); Lazaretou (1993, pp. 305–306); Kostelenos *et al*. (2007).

Although the heavy budget deficits experienced in the 1920s were not extraordinary in the history of public finance from Independence to stabilisation in 1928, the depreciation of the drachma after 1919 was unique. By 1928, when the drachma was stabilised *de jure* it had lost approximately 95 per cent of its value. This scale of monetary instability, as Figure 5.4 demonstrates, had not been experienced before, in spite of long periods of floating exchange rates.

The depreciation of the drachma in the 1920s was the result of monetisation of budget deficits. The participation of Greece in the First World War was financed by the Allied Book Credits and subsequently the printing press was rolled to cover public expenditure during the Asia Minor campaign. In addition, NDBs became a major financial tool for the government in particular after the debacle.

Table 5.12 shows seigniorage collected by the government between the outbreak of the Great War and the establishment of the Bank of Greece. Seigniorage was calculated in a simple way: as the difference in the average banknotes in circulation between two consecutive years. This difference is presented in the first column of Table 5.12. The rest of this table indicates seigniorage as a percentage of public revenue, expenditure and GDP. Table 5.12 demonstrates that seigniorage, in other words loans to the government by the central bank in forced banknotes, constituted a significant source of revenue for the government during the period that this table covers. During certain periods it was practically the only source of extraordinary revenue for the government. In this way, the bank of issue operated at barely arm’s length from the government.

Table 5.12: Seigniorage, 1914–1928

	A *('000 omitted)*	*As percentage of revenue*	*As percentage of expenditure*	*As percentage of GDP*
1914	21,136.83	9.69	4.35	1.71
1915	54,817.17	24.14	14.21	3.86
1916	172,661.58	72.18	72.56	9.17
1917	206,146.08	89.28	65.03	7.67
1918	414,163.75	91.19	28.64	9.87
1919	249,092.33	44.41	18.40	6.57
1920	92,060.25	12.59	5.47	1.72
1921	406,808.42	41.02	16.45	5.96
1922	262,244.92	13.64	7.58	2.43
1923	2,058,416.08	55.04	41.35	12.43
1924	493,883.25	9.67	8.98	2.38
1925	619,340.17	10.47	9.05	2.58
1926	-747,006.75	-10.33	-8.60	-2.65
1927	433,840.50	4.86	5.58	1.41
1928	-78,251.58	-0.84	-0.83	-0.23

Notes:
(1) The annual average amount of banknotes in circulation was used to estimate seigniorage between 1914 and 12 May 1928 when the National Bank lost its issuing privilege.
(2) Column A shows the difference in the average banknotes in circulation from year to year.
Sources: Annual Reports of the National Bank for 1914–1928; Greek government budget (1914–1930); Kostelenos *et al.* (2007).

The burden of public debt in 1928 after *de jure* stabilisation is shown in Table A6.1 in Appendix A6. Public debt as a percentage of GDP was approximately 133 per cent in 1928. This is an improvement if public debt as a percentage of GDP after stabilisation is compared with that of 1913. Public debt as a percentage of GDP in 1913 was 142 per cent. The picture, however, changes if public debt per capita is estimated. Table A6.1 indicates that per capita public debt both in gold drachmae and in pounds sterling nearly doubled between 1913 and 1928, in spite of a considerable increase in the population because of the influx of one and a quarter million refugees. In 1913, public debt per capita was 252 gold drachmae or 10 pounds sterling, whilst by 1928 it had increased to 484 gold drachmae or 19 pounds sterling. These data imply that the burden of public debt per capita in 1928 was even higher than in 1898, although data of public debt as a percentage of GDP create a different picture.

Table A6.1 also demonstrates that the structure of public debt changed between 1898 and 1928. After the enactment of the Law of Control and the consolidation of domestic government debt in 1898, domestic public debt represented only 13 per cent of the total public debt. At the end of the Balkan Wars as well as after stabilisation, the percentage share of domestic government debt had increased to one-third of the total public debt. In 1928, 40 per cent of the government debt denominated in drachmae was held by the newly established central bank together with its predecessor.

The way that a long period of war and subsequent reconstruction was financed had a long-term impact on the banking structure in Greece. The implementation of a stabilisation plan sponsored by the Financial Committee of the League of Nations urged institutional reforms which focused on the country's central banking system. The League insisted on reform of the National Bank, the issuing bank in Greece at the time, to confine its activities to central banking and to become independent from the government. This suggestion led to the establishment of a fully fledged central bank in Greece in 1928. At the same time, the National Bank chose to retain its commercial activities and maintain its strength as a banking institution.

CHAPTER 6:

THE STABILISATION OF THE DRACHMA

6.1. Introduction

With the drachma exhibiting notable stability during the second half of 1924, the First Refugee Loan was floated under the auspices of the League of Nations in December of that year. It was then widely believed that Greece was on the threshold of stabilising its currency.[336] The governor of the National Bank of Greece, Alexandros Diomides, assumed that after the flotation of the 1924 Refugee Loan, the drachma would stabilise at a rate of no more than 250 drachmae to the pound sterling through the interplay of market forces.[337] In fact, it would take nearly four years and would involve the implementation of a stabilisation plan sponsored by the Financial Committee of the League of Nations and the flotation of a second loan on the international markets under the auspices of the League, for Greece to stabilise *de jure* its currency.

Tables 6.1 and 6.2, as well as Figure 6.1, illustrate in brief the monetary upheaval in Greece in the 1920s. Table 6.1 shows the inflation rates experienced in Greece between the outbreak of the Great War and stabilisation. Two price indices were used: the price index that appears in the *Statistical Yearbooks* and that produced by Kostelenos *et al*. (2007). Both indices indicate

[336] Pepelasis Minoglou (1993, p. 101).
[337] Ibid., p. 125.

that by the mid-1920s inflation had stabilised although its rate remained high. The significant fluctuations in prices from year to year demonstrated in Table 6.1 came to an end in 1924. Nevertheless, inflation remained high until 1927, by which time the drachma was heading towards stabilisation.

Table 6.1: Inflation rates, 1915–1929

	Statistical Yearbooks Price Index		Kostelenos *et al*. Price Index	
	$(p_t-p_{t-1})/p_{t-1}$	$\ln p_t - \ln p_{t-1}$	$(p_t-p_{t-1})/p_{t-1}$	$\ln p_t - \ln p_{t-1}$
1915	19.00	17.40	22.00	19.89
1916	33.61	28.98	31.15	27.12
1917	66.04	50.70	48.75	39.71
1918	36.36	31.02	28.57	25.13
1919	-10.00	-10.54	9.48	9.05
1920	6.79	6.57	13.43	12.60
1921	19.08	17.46	24.74	22.10
1922	46.12	37.92	54.64	43.59
1923	111.13	74.73	72.58	54.57
1924	2.52	2.49	10.36	9.85
1925	15.58	14.48	8.02	7.72
1926	11.75	11.11	14.46	13.50
1927	12.06	11.39	12.75	12.00
1928	2.97	2.93	-0.15	-0.15
1929	3.96	3.89	-7.98	-8.31

Source: Author’s calculations using data in Table A1.1 in Appendix A1.

Figure 6.1 demonstrates the way that the value of the drachma fluctuated from May 1919 when it began depreciating to the end of 1928. The data used are weekly data, hand-collected from *The Economist* which are available upon request. Table 6.2 provides summary statistics of the exchange rate during the entire period that the drachma was depreciating. The period in question was divided into sub-periods taking into account historical and political events.

It is evident that the external value of the drachma fluctuated severely and by the time convertibility was introduced it had lost approximately 95 per cent of its pre-war value. On 12 May 1928, when the gold exchange standard was adopted, one sterling pound equalled 375 drachmae whilst according to the LMU parity one pound sterling was equal to 25.207 drachmae.

De facto stabilisation in Greece was achieved in the spring of 1927 and the implementation of a stabilisation programme prepared by the Financial Committee of the League of Nations led to the adoption of the gold exchange standard on 12 May 1928. The National Bank of Greece, the Greek Treasury, the IFC, the Bank of England and later the Financial Committee of the League of Nations were all involved in the attempts at stabilisation of the drachma in the late 1920s.

In this chapter firstly, the measures taken that curbed the depreciation of the drachma are examined. Secondly, the stabilisation plans proposed by the British member of the IFC and the sub-governor of the National Bank are presented. Subsequently, the negotiations with the Financial Committee of the League and the stabilisation programme they prepared are studied. A comparison of the League stabilisation programmes follows and the flotation of the Stabilisation Loan is discussed. This chapter closes with an examination of the parallels and contrasts between the Law of Control of 1898 and the 1928 Geneva Stabilisation Plan. At the time, the establishment of the Bank of Greece was regarded as a symbol of foreign intervention in the country's affairs and its creation was often compared with of the Law of Control.

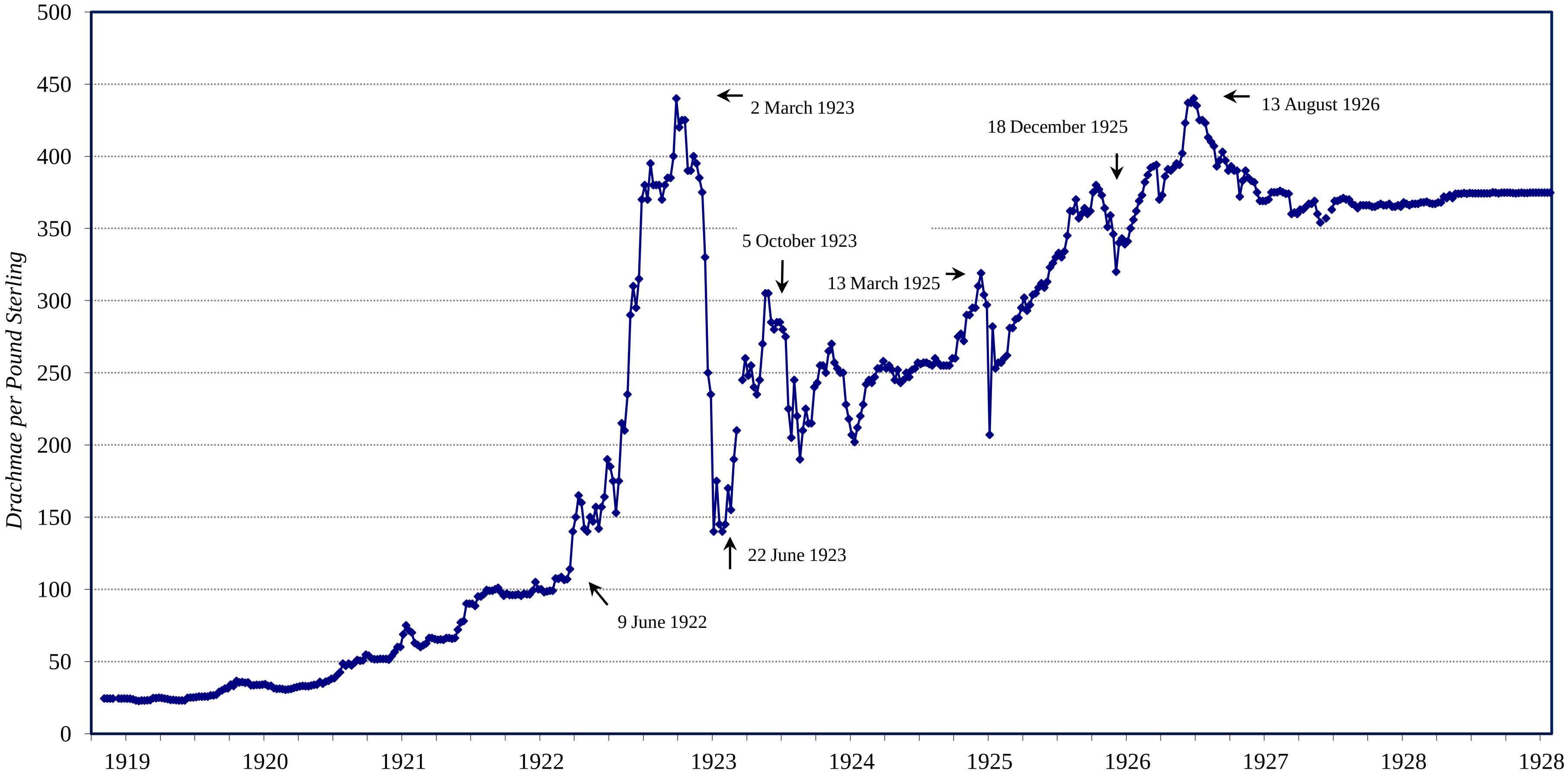

Figure 6.1: Evolution of the exchange rate of the drachma, May 1919–December 1928
(Weekly rates in London)

Notes:
(1) These are weekly rates of drachmae to the pound sterling, hand-collected by the author from *The Economist*.
(2) The period covered begins on 9 May 1919 when *The Economist* commenced reporting quotations of the drachma against the pound sterling and finishes on 27 December 1928.

Source: Hand-collected weekly data from *The Economist* (9 May 1919–27 December 1928). Data available upon request.

Table 6.2: Summary statistics of the drachma exchange rate, 1919–1928
(drachmae per pound sterling)

	Number of Observations	Mean	Median	Minimum	Maximum	Standard Deviation
The Slide of the Drachma:[1] *(9 May 1919–17 May 1928)*	470	224	253	22.60	440	139
May 1919–November 1920[2]	81	29.11	30	22.60	40.50	5
December 1920–September 1922[3]	96	90	92.50	42.50	190	36
October 1922–November 1926[4]	216	305	295	140	440	73
December 1926–May 1928[5]	77	367	367	275	390	14
Bank Consortium:[6] *(June 1921–September 1922)*	69	105	98	60	190	33

Notes:
[1] 'The Slide of the Drachma' covers the period from 9 May 1919 up to 17 May 1928. In May 1919, the drachma began fluctuating after having been stable around its LMU parity since the end of 1909 and on 12 May 1928 the gold exchange standard was *de jure* adopted**.** This entire period of monetary upheaval in Greece in the 1920s, entitled here as 'The Slide of the Drachma', is divided below into four sub-periods.
[2] This first sub-period begins in May 1919, when Greek troops disembarked in Smyrna and ends in November 1920 when the Allies renounced payment of the Book Credits.

[3] This second sub-period begins in December 1920, when the exiled King Constantine returns to the Greek throne and finishes with the Asia Minor debacle.
[4] This third sub-period is a period of severe political upheaval in Athens.
[5] This fourth sub-period begins when a coalition government is formed after a general election whose priority was the stabilisation of the Greek currency and finishes with *de jure* adoption of the gold exchange standard.
[6] Late in May 1921 a syndicate of leading banks was formed by the Greek government which was known as the Bank Consortium. The objective of the government in setting up this Consortium was to curb the depreciation of the drachma. Theoretically, all the foreign exchange which entered or left the country, regardless of the reason or the mechanism, was to be controlled and managed by this banking syndicate. Its capital came mainly from contributions made by the participating banks; the size of each contribution at the same time determining the responsibility of the investing bank and its share in the expenses as well as in the profits and losses of the Consortium. The Bank Consortium operated from 1 June/14 July 1921 up to 28 September/11 October 1922. By the end, almost all Greek banks were members of this banking syndicate. During its operation, however, a large proportion of the country's foreign exchange earnings eluded its control; there are references to a 25 and indeed 35 per cent difference between the price set by the Consortium and that prevailing on the shadow foreign exchange market. For more on the Bank Consortium, see NBGHA_A1Σ19Y1Φ2E1; NBGHA_A1Σ19Y1Φ2E21; NBGHA_A1Σ19Y1Φ2E22; NBGHA_A1Σ19Y1Φ2E37; Zolotas (1928, p. 192); Tsalikis (1929, pp. 19-20).

Source: Author's calculations using hand-collected data on the exchange rate of the drachma to the pound sterling quoted in *The Economist* (1919–1928). Data available upon request.

6.2. Ending Monetary Instability

In the Greek literature, the timing of the stabilisation of the drachma is seen as a consequence of political change and institutional advances that occurred in 1927: a coalition government was formed in December 1926, the war debt with Great Britain was settled,[338] subsequently the financial embargo which had been imposed on the country was lifted,[339] and recourse was made to the League of Nations.[340] Fiscal developments are also regarded as having played a role in bringing about stabilisation.[341] Foreign capital is treated as a prerequisite for stabilisation. The possibility of achieving stabilisation from domestic resources through an expenditure retrenchment or increase in taxation or both is not considered in the literature as it was completely ignored as an option by policy makers in the late 1920s. In short, stabilisation is explained as a natural outcome of the steps that the government took: to settle its war debts and to resort to an outside agent in order to raise capital from the international financial markets.

Changes in the fiscal policy of the Greek government in order to stabilise the drachma were neither abrupt nor fundamental. On the contrary, it is argued here that fiscal policy did not change and that budget deficits persisted. What changed was the way in which the government borrowed. They stopped monetising their budget deficits and turned to the international financial markets.

In the example of Greece, fiscal consolidation was not achieved in the way that the Financial Committee of the League intended it and indeed as orthodox economic policy at the time required. Then again, achieving a balanced budget before the implementation of a League sponsored reconstruction scheme was not seen as a prerequisite by the Financial Committee. Ordinarily, a *de facto* currency stabilisation was thought to be a requirement before the League was approached. In Article V of the 1927 Geneva Protocol which refers to the budget it is stated that ‘the Hellenic Government undertakes to make, and to persist in making, every effort to keep the budget within the limit of about 9,000 million drachmae, until the end of the financial year 1929–30, and to maintain thereafter a complete equilibrium between the current revenue and current expenses of the State’.[342]

338 For more about the war debt issue, see Veremis (1982, pp. 91–116); Pandelakis (1988, pp. 175–325); Pepelasis Minoglou (1993, pp. 109–114).

339 Pepelasis Minoglou (1993, p. 114) argues that ‘the British Treasury through the embargo prevented Greece from reaching stabilisation at an earlier date’.

340 Zolotas (1929, pp. 67–130); Pepelasis Minoglou (1993, pp. 142–150).

341 Zolotas (1929, pp. 67–111).

342 League of Nations (1945, p. 19).

The finance minister, before leaving Athens for Geneva in June 1927, presented the budget for the fiscal year 1927–28 and proposed to the parliament increases in taxation.[343] The aim was to balance the budget. At the end, for the first time since the early nineteenth century, the budget of the fiscal year 1927–28 closed in surplus.[344] Subsequently, budget deficits persisted, which is hardly surprising given the advent of the Great Depression.

By contrast, there was a significant change in policy in respect of the banknotes in circulation and the NDBs. The last time that the government resorted to the National Bank to borrow in forced circulation was in early March 1923. (See Table 4.4 in Chapter 4.) Subsequently any increase in the banknotes in circulation was based on the Law of 23 April 1923, an arrangement which echoed the principles of the ΓΧΜΒ Law. Hence, any new issues of banknotes in circulation in response to the April 1923 Law were fully covered by foreign exchange reserves.

After the middle of 1923, one of the main causes of monetary instability and an important source by which the government increased its revenue was the NDBs. The number of the NDBs issued tripled in 1923. (See data in Chapter 5 where the evolution of the NDBs is examined.) This is very vividly depicted in Figure 6.2 below where the outstanding amount of NDBs is added together with the banknotes in circulation. As has been explained in Chapter 5, the NDBs were a very liquid investment as their maturity was short. Furthermore, and perhaps more importantly, the National Bank discounted them under certain conditions.

In January 1926, with no advance warning, the Second Forced Loan was imposed by General Pagalos to deal with the issue of the NDBs. In short, all banknotes over 50 drachmae were torn in two pieces: one part representing three-quarters of the original face value of the banknote continued circulating as money. The remaining one-quarter of the original face value of the banknote was converted into a 6 per cent bond of a 20-year period of maturity. The proceeds of this forced loan which approximately amounted to one quarter of the banknotes that were in circulation late in January 1926, were applied by the government firstly to repay its debt to the National Bank because of the NDBs, thereby improving its liquidity, and secondly to redeem half of the NDBs when they matured. The remaining half of the NDBs was converted into an 8 per cent loan with an amortisation period of ten years.

[343] Agrafiotis (1983, pp. 185–186); Pepelasis Minoglou (1993, p. 146).
[344] The data to hand show that the fiscal year of 1916 ended in surplus, although marginally so. However, 1916 was a year of political turmoil so the data available may not survive scrutiny.

On 23 January 1926, there were approximately 1.3 billion drachmae of short-term NDBs in circulation and 96 million drachmae of a maturity of three, five and ten years.[345] On 31 December 1927, only 134 million of the short-term NDBs remained unredeemed, of which only half were to be repaid in cash, the other half would be converted into an 8 per cent bond. By 31 March 1927, when all short-term NDBs had matured only, a tiny number (about 30 million) remained unsettled.[346] The three-, five- and ten-year NDBs of value of 96 million drachmae would be repaid in cash in full upon their maturity.

Figure 6.2 demonstrates the impact of the Second Forced Loan on the money supply and the NDBs. The number of banknotes in circulation had abruptly dropped by the end of January 1926. (See Figure 5.2 in Chapter 5 and Table A3.1 in Appendix A3.) In addition, by the end of June 1926, the outstanding amount of the NDBs had also considerably decreased. (See also Figure 5.3 and Table 5.7 in Chapter 5.) The money supply vigorously contracted because of the introduction of the Second Forced Loan. Subsequently, however, slowly but steadily the banknotes in circulation increased. By May 1928, when the National Bank lost its issuing privilege, the money supply had not reached the level that it enjoyed before the implementation of the Second Forced Loan. Therefore, the Second Force Loan and the concomitant retirement of the NDBs was the first major milestone towards stabilisation.

[345] Annual Report of the National Bank for 1926 (1927, p. xviii).
[346] Ibid.

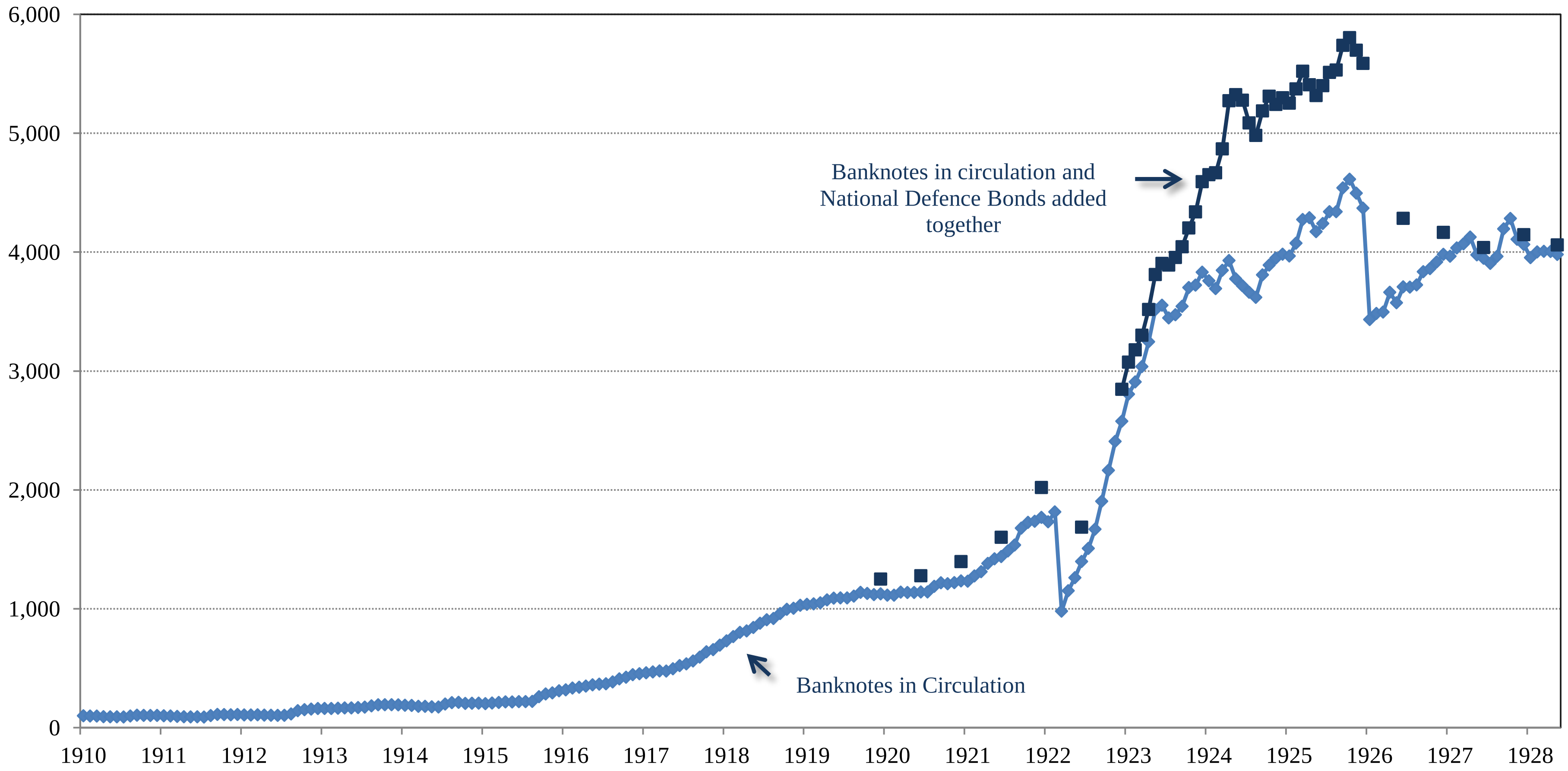

Figure 6.2: Total banknotes in circulation added together with the National Defence Bonds, January 1910–May 1928
(January 1910=100)

Sources: Tables 5.7 and 5.8 in Chapter 5; Table A3.1 in Appendix A3.

Contrary to the conventional belief and in spite of the Allies' embargo, there was some capital influx into Greece in particular after 1924. (See Table 5.9 in Chapter 5.) This influx was possible because the ally embargo was applied against the central government and excluded public entities. In addition, the Greek government could and did raise capital from smaller capital markets and for infrastructure programmes that were being undertaken at the time. However, raising money from small capital markets of Europe, such as with the 8.50 per cent Swedish Loan of 1926, proved to be very expensive and the sums that could be raised were very limited indeed.

During the period 1923–1926, the balance of payments in Greece was passive. Imports remained high and although exports increased, this increase was limited. Invisible earnings from remittances remained low before the stabilisation of the drachma and shipping profits improved only after 1925.[347] Overall the position of the balance of payments was improving after 1926.

The important issues in any stabilisation are the price level, the exchange rate, the budget and the money supply. All these issues were examined above and it was shown that the achievement of stabilisation in Greece in the 1920s was a slow procedure. To bring to a halt hyperinflation like that experienced in Germany or Austria after the end of the Great War was probably more spectacular than bringing about price and exchange rate stability after a long period of high inflation. It has been argued here that a change in monetary policy played an important role in delivering stabilisation to Greece. Fiscal policy, defined as the government's choice of levels of spending and taxation did not change much either before or after stabilisation. The Stabilisation or Tripartite Loan, as it is otherwise known, reduced the adjustment effort and served as a substitution for fiscal reforms. In addition, it provided foreign reserves, which worked as a cushion and made possible the adoption of the gold exchange standard. The role of the external agent, in this case the Financial Committee of the League, was to make the stabilisation attempt credible and to guarantee the flotation of a loan on favourable terms on the international financial markets. Institutional reforms that were introduced created a commitment mechanism which enhanced credibility during the stabilisation attempt. In Greece, the stabilisation plan provided for central banking reforms, which led to the establishment of a new central bank. The statutes of the Bank of Greece incorporated rules which prevented policy makers from altering monetary policy.

Political authorities in Greece expected that institutional developments that ended with the establishment of a new central bank and the adoption of the gold exchange standard

[347] Zolotas (1928, p. 155).

would facilitate an influx of foreign capital essential for economic growth. The impact, however, that these institutional reforms have, at least in the short-run, on the cost and of course the volume of borrowing 'reflect external circumstances as well'.[348] By May 1928, the international economy was about to enter the most severe depression that has ever been experienced.

6.3. Historical Background

The first stabilisation programme that was suggested to the National Bank was prepared by L. G. Roussin, the British member of the IFC in Athens, in July 1925.[349] In this stabilisation programme he explicitly described how he envisaged the operation of a stable monetary system and explained the causes of the monetary upheaval in Greece. He was clearly an advocate of the quantity theory of money in contrast to the prevailing idea in the country amongst representatives of the government and the National Bank, who blamed the position of the balance of payments for the depreciation of the drachma. He stated that

> new issues of paper money not covered by gold or foreign currency must be abstained from, even to satisfy the needs of commerce or for productive purposes. The demand for capital in the short or long term can only be satisfied by the growing resources of the country and the multiplication of means of payment can in a way replace actual wealth.[350]

This was a statement clearly in contrast to the policy of the National Bank as an issuing bank at the time, which reflected the principles of the banking school.[351] L. G. Roussin also examined the reasons that led to the monetary instability and claimed that

> [t]he release of large of notes from the till of the National Bank, in order to increase its advances and to repay national war bonds, in swelling the circulation resulted in causing a demand for exchange which greatly diminished the reserve of funds abroad. Moreover, this reserve, instead of having been kept in a liquid state, had been partly tied up in bonds and advances.[352]

He believed that it would have been possible to establish convertibility of the drachma at around 300 drachmae to the pound if the part of the reserves of the National Bank which were immobile were liquidated.[353]

[348] Drazen and Masson (1994).
[349] L. G. Roussin was appointed in January 1925 and was French. Prior to 1925 the Counsellor of the Legation in Athens served as the British Member of the IFC. This arrangement had been made at the beginning of the century when Greek public finance seemed to be sound and resources allocated to the IFC were plentiful for the service of the debt under their jurisdiction.
[350] Bank of England Archive, OV80/1, 9, p. 3.
[351] For the open conflict between Alexandros Diomides, the governor of the National Bank and L. G. Roussin, which took place in September and October of 1925, see Psalidopoulos (1989, pp. 320–325); Pepelasis Minoglou (1993, pp. 125–130).
[352] BoE Archive, OV80/1/9, p. 11.
[353] Ibid., pp. 13–15.

Ioanna Pepelasis Minoglou (1993, p. 128) argues that L. G. Roussin promoted the implementation of a stabilisation programme under the supervision of the IFC. His stabilisation proposal, however, did not receive much attention either from the Bank of England or from the National Bank of Greece. In 1925, the governor of the National Bank believed that thoughts of stabilisation were still premature in view of 'the unsettled state of public finances, the large floating debt, the new situation created by the inflation itself, and the need for elasticity'.[354]

L. G. Roussin proposed a new more comprehensive stabilisation plan in March 1926. The most innovative point of this plan was the proposition of 'the creation of an issuing office quite independent of the National Bank's other departments and safeguarded by legal provisions excluding any outside interference in its management'.[355] He further suggested the unification of the various existing issues of banknotes. In addition to these, he pointed out that '[s]tabilisation measures must of course be preceded or accompanied by measures for balancing the budget and settling the floating debt, so as to exclude strictly all possibility of recourse to arbitrary issues'.[356] Roussin proposed that it would be possible to make the drachma freely convertible at a rate of 275 drachmae to the pound sterling. This was an optimistic estimation considering that the going market rate was approximately between 340 drachmae and 370 drachmae to the sterling in March 1926. He based this calculation on the twin presumption that a foreign long-term credit of £2,000,000 would be made available and that the National Bank would be reorganised and would liquidate its gold securities held as cover.[357]

The National Bank rejected the proposal to establish a special department of issue because 'the statutes of the National Bank similar to those of Banking institutions of Continental Europe, provide for the unity of the departments of issue and the banking department. Otherwise, the unhampered functioning of the branch offices, especially, would be rendered impossible'.[358] Pepelasis Minoglou (1993, pp. 130–132) describes the reasons that led to the disapproval of this stabilisation scheme by both the National Bank and the Bank of England. The governor of the National Bank, Alexandros Diomides maintained that complete freedom in the buying and selling of foreign exchange would be impracticable, given the high tendency for speculation in Greece and that there was not sufficient foreign credit available to stabilise. Furthermore, he reacted strongly to Roussin's proposal that a special issuing department be set up at the National Bank entirely independent of the other services of the Bank and under the

[354] Pepelasis Minoglou (1993, p. 128).
[355] BoE Archive, OV80/1/90, p. 9.
[356] Ibid., p. 10.
[357] Pepelasis Minoglou (1993, p. 130).
[358] BoE Archive, OV80/1/13, p. 1; HABOG_A3S1Y1F36T3, p. 1.

control of the IFC. At the same time the Bank of England effectively blocked this proposal by the British member of the IFC by refusing to extend the necessary credit.[359]

How the representatives of the National Bank of Greece envisaged achieving stabilisation is revealed in a scheme for the stabilisation of the drachma proposed by Emmanuel Tsouderos, the sub-governor of the National Bank, to the Bank of England in 1926. In this scheme, he recommended the unification of all different kinds of banknote issue (examined in detail in Chapter 4) and suggested ways by which the National Bank could increase its reserves. As a prerequisite for stabilisation he suggested that the Bank of England would concede credits and that in return the National Bank would accept the appointment of a 'Special Commissioner' proposed by the Bank of England, who would be independent from the IFC. The office of the 'Special Commissioner' as stated in the scheme, would last until the credit had been repaid.[360]

Prior to December 1926, none of the stabilisation programmes proposed could actually lead to stabilisation. They were not stabilisation schemes accepted by all parties and none of them guaranteed external financial assistance. They highlighted, however, differences in the way that Greeks on the one hand, and their counterparts on the other, approached the question of stabilisation. The Greek delegation saw as imperative the raising of a big external loan without envisaging any institutional changes. By contrast, both the Bank of England and the IFC urged institutional reforms, although not as sweeping as the ones that the Financial Committee of the League of Nations required.

Stabilisation also proved to be difficult because there was not sufficient political stability in the country and the problem of war debts with the Allies had not been settled. Clause four of the 1918 Paris Agreement blocked the Greek government's access to the international capital markets, since every time that the Greek government wanted to float a foreign loan it was required to ask permission of Britain, France and the USA. In addition to this difficulty, Pepelasis Minoglou (1993, p. 110) says that in the late autumn of 1925 or early winter of 1926 the British Treasury imposed an embargo in the City after Greco-British negotiations for the determination of the net war debt and the mode of payment reached deadlock.

Some fiscal measures were taken in 1926. The government of General Pangalos implemented unpopular austerity measures and decreased the number of public servants; nevertheless, overall public expenditure rose by 27 per cent in 1926 due to an increase in

[359] Pepelasis Minoglou (1993, pp. 131–132).
[360] BoE Archive, OV80/1/18.

military expenditure. However, as has been noted above, a turning point towards stabilisation was the retirement of the NDBs in early 1926.

6.4. Recourse to the League of Nations

By the time that the coalition government was formed, on 4 December 1926, it was universally recognised in the country that stabilisation should be achieved as soon as possible. A few days later, on 10 December 1926, a Committee of Greek Experts was appointed to examine the public finances of the country and to suggest measures for their improvement. The Committee announced its results to the Greek government at the end of February 1927. They suggested the unification of the budget and economies in military and naval expenditure, in pensions and in civil administration. They encouraged an increase in revenues by means other than taxation in order that budget deficits be avoided in the future. In addition, they suggested stabilisation of the drachma at the prevailing market rate.[361] The Committee of Greek Experts perceived stabilisation as a matter of technicality, but at the same time as a prerequisite together with the settlement of the war debt in order for foreign capital to flow into the country again.

The general view in the country was that monetary stability could only be achieved with a large loan from abroad, which would provide the capital needed for the completion of the refugee settlement and the stabilisation of the drachma. It is significant that the Greek Committee of Experts did not envisage any institutional changes. They recommended cuts in public expenditure and a return to capital markets as preconditions to achieving monetary stability, but on the other hand they dismissed the issue of public revenue. By contrast, in France, at roughly the same time, political truce and broad consensus led to monetary stabilisation by means of increased revenues through taxation, which assured persistent balanced or surplus government budgets in the future.

Pepelasis Minoglou (1993, p. 134) argues that Diomides was against the involvement of the League of Nations because of theoretical differences over the nature of stabilisation and the operation of central banking. It is not clear from the evidence she provides that the governor of the National Bank *et al.* were aware of the central banking reform that the involvement of the Financial Committee of the League of Nations in the stabilisation process in Greece would entail. The help and involvement of the Bank of England was welcomed, in spite of the fact that Greek bankers held different views on monetary issues from those of the Bank of England

[361] BoE Archive, OV80/1/33; BoE Archive, OV80/1/39; Psalidopoulos (1989, pp. 317–319); Pepelasis Minoglou (1993, p. 145).

whose after all theoretical position dominated the Financial Committee of the League. From the end of 1925 the practice developed was of turning, not to the League of Nations, but to one or more of the major national central banks for assistance. In this way four countries – Belgium, Italy, Poland and Rumania – stabilised their currencies in the years 1926–28.[362]

Recourse to the League of Nations involved stringent controls and, as archival material reveals, the Greek government was anxious to avoid any kind of control or any sort of foreign intervention into Greek public affairs because of the political cost that such intervention entailed. Nor were they prepared to extend the rights of the IFC.[363] Furthermore, during the negotiations for the settlement of the war debts with Britain, the Greek government suggested surrendering its claim to the remainder of the Book Credits granted under the agreement of February 1918, provided that the British Treasury would support them in their efforts to obtain credits from the London market of an equivalent amount, that is to say 5.5 million sterling, to stabilise the drachma.[364] Needless to say, this proposition was not accepted by the Treasury, and the Bank of England's advice was recourse to the League of Nations.

As late as 30 March 1927, the Greek minister of finance, George Kaphandaris, maintained that a League of Nations plan would be disadvantageous for the country.[365] A few days later the British war debt settlement was signed and a few weeks after that the League Secretariat was 'invited' to examine financial conditions in Greece. A mission was sent to Greece in April 1927. This committee was headed by Joseph Avenol and its members were E. Felkin, Jacques Rueff and J. Von Walre de Bordes, all members of the Financial Committee of the League of Nations. At the end of May, they submitted to the Secretariat a long report which dealt with the accounts of the Treasury, the budget, the National Bank and the general economic situation in the country.[366] In this report, as has been noted before, a lot of attention was paid to the National Bank and its dual-purpose character.

In the proceedings of the 27th session of the Financial Committee which was held between 8 and 14 June, the implementation of a Greek reconstruction plan was discussed in detail.[367] The Greek delegation, which was headed by the minister of finance Georgios Kaphandaris, and a member of which was the sub-governor of the National Bank Emmanuel

[362] Meyer (1970, p. 3).
[363] BoE Archive, OV80/1/38; BoE Archive, OV80/1/39; BoE Archive, OV80/2/1; BoE Archive, OV80/2/17; BoE Archive, OV80/2/20; BoE Archive, OV80/2/24.
[364] BoE Archive, OV80/1/38.
[365] Pepelasis Minoglou (1993, p. 143).
[366] See HABOG_A3S1Y1F1; HABOG_A3S1Y1F2; HABOG_A3S1Y1F3; HABOG_A3S1Y1F4; HABOG_A3S1Y1F5.
[367] For a detailed description of the events in Geneva in June 1927, see Pyrsos (c1935, pp. 45–49); Bank of Greece (1978, pp. 60–64); Pepelasis Minoglou (1993, pp. 146–147).

Tsouderos, was asked privately to answer questions which dealt with the reforms that the Financial Committee requested.[368] These questions referred to the budget, to the way the proceeds of the loan would be used, to changes of the National Bank 'to bring [it] closer to conformity with modern central banking', and to the appointment of a foreign advisor to the central bank. These questions constituted the main points of what later became a stabilisation programme for Greece. They were all accepted in principle, but with the appointment of an advisor with extended powers.[369] On the last day of the proceedings in Geneva, the Greek minister of finance made an official request to the League to raise under its aegis a loan of 9 million pounds sterling and the Financial Committee asked the Council to approve the reconstruction scheme for Greece. The Council accepted the plan in principle but reserved the right to approve it in its September session.

The original idea of the Financial Committee was that the existing bank of issue, the National Bank of Greece – which, as has been discussed in Chapters 3 and 4, pursued public responsibilities and at the same time was the most powerful commercial bank in Greece – should be reformed by winding up or transferring to other institutions all those parts of its activities which would not normally fall within the scope of a central bank. This idea was embodied in the Committee's June report. The Protocol, however, that was signed in September spoke about the establishment of a new, independent, fully fledged central bank. The establishment of a new fully fledged central bank, the Bank of Greece, is examined in detail in Chapter 7.

The Geneva Protocol also stated that fiscal consolidation and *de jure* stabilisation of the Greek currency could be achieved with a loan of 9 million sterling, of which 3 million would be available for the settlement of refugees, 3 million for budget arrears and 3 million for strengthening the newly established central bank. Article V of the Geneva Protocol referred to the budget, saying that the Hellenic government had to undertake to make, and to persist in making, every effort to keep the budget within the limit of about 9 billion drachmae, until the end of the financial year 1929–1930, and to 'maintain thereafter a complete equilibrium between the current revenue and current expenses of the government'.[370] In addition, they had to send every three months a report on the situation of the budget for a period of three years following stabilisation. Advances and treasury bills or other similar short-term obligations were

[368] BoE Archive, 0V80/2/23; Pyrsos (c1935, pp. 47–49); Bank of Greece (1978, pp. 61, n. 1); Pepelasis Minoglou (1993, p. 152, n. 21).
[369] BoE Archive, 0V80/2/23.
[370] League of Nations (1945, p. 19).

limited to 800 million drachmae. Finally, Greece undertook to create a new system of public accounting in conformity with the principle of the unity of the budget.[371]

6.5. Comparison of the League stabilisation plans

In this section, a comparison between the Greek stabilisation plan and the other plans that were prepared by the Financial Committee will be attempted. The Financial Committee had implemented six reconstruction schemes (Austria, Hungary, Greece, Bulgaria, Danzig and Estonia) and had prepared another three for Albania, Portugal and Rumania which were never executed. In Greece and Bulgaria the League of Nations stepped in twice, at first to assist with the settlement of refugees and then to involve itself in currency stabilisation.[372]

The League reconstruction programmes can be broadly divided into two parts: the making of a loan and the conditions attached to the scheme in order for the League to supervise the making of the loan. In each case, a big foreign loan was issued under the aegis of the Financial Committee of the League. It was generally speaking difficult for those countries which resorted to the League of Nations to borrow independently from the international capital markets. Their creditworthiness was low reflecting their internal economic and monetary conditions. The money loaned to the government was to

> afford a breathing-space during which inflation could be arrested and the state could settle down to living within its means, and at the same time the actual foreign exchange proceeds of the loan would strengthen the position of the central bank, and pave the way for exchange stability on the basis of free convertibility.[373]

Institutional reforms, changes in fiscal and monetary policy and a mechanism of stringent control were introduced as conditions by the League. This conditionality bound governments to follow planned policy in the future. The most important institutional change in all reconstruction schemes was central banking reforms ‘on the lines recommended at Brussels’.[374] Accounting or auditing offices were also reorganised. The objective was to achieve better control and monitoring of public finances by a central authority.[375]

In all the cases a plan was drawn up in order for the country to balance its budget. In most of the cases a balanced budget was not regarded by the League of Nations as a prerequisite

[371] League of Nations (1927, pp. 16–20).
[372] In Greece, the League intervened for the first time in 1923 and then in 1927; in Bulgaria in 1926 and then again in 1928.
[373] League of Nations (1945, p. 19).
[374] Ibid., p. 20.
[375] Santaella (1993, p. 11).

to a country adopting convertibility. All the stabilisation programmes, however, spoke about fiscal consolidation and asked for guarantees that this would be achieved in the future.

Some sort of supervision was imposed in all cases. In Austria and Hungary and later in Bulgaria a foreign Commissioner-General was sent to control the proceeds of the loan.[376] A foreign advisor was appointed in the central bank of the countries which resorted to the League of Nations. Both the foreign advisor to the bank and the Commissioner-General reported to the Council regularly according to the rules set out in the League Protocol. In Greece, the presence of the IFC made the question of supervision a more complicated one.[377] The IFC was responsible for servicing the government's foreign debt under their aegis. It should be noted here that the idea of introducing an international commission similar in structure to the IFC in Greece was incorporated in the first drafts of the scheme for Austria but it was subsequently dropped from the final Protocol.[378] Nevertheless, a foreign advisor was appointed to the newly established central bank in Greece and the servicing of both League loans that Greece had raised in the 1920s was assumed by the IFC.

It is widely recognised that the League reconstruction schemes were comprehensive and effective, since inflation was immediately curbed in all cases. Institutional changes mainly focused on monetary policy and fiscal reforms were introduced that made the stabilisation programmes credible. Ending inflation was promoted as a fiscal phenomenon in the schemes. In addition, all these plans made provision for the flotation of a big international loan which was regarded as a pre-condition for currency stabilisation in the countries where the League intervened.

6.6. The making of the loan

The making of the Stabilisation Loan is briefly examined here. The Stabilisation Loan is also known as the Tripartite Loan because it served three purposes: one-third of the loan went towards budget arrears, one-third to the central bank and one-third to the refugees.

The settlement of the war debts with the USA was tied up to this loan. The Americans indicated that they would block any issue of the loan on the American market unless the war debts with Greece were settled.[379] Aware of this possibility, negotiations were entered into and

[376] The Commissioner-General remained in those countries until 30 June 1926.
[377] League of Nations (1945, p. 89).
[378] Ibid., p. 18.
[379] BoE Archive, OV80/2/25; BoE Archive, OV80/2/34A.

an agreement was reached on 6 December 1927. As part of the settlement the Greek government renounced its claim to the remaining Book Credits, and in return the American government promised to release credit amounting to 2.5 million pounds sterling or 12.167 million American dollars on account of the American share of the 1918 Book Credits. Since this American credit would be employed directly by the RSC for the rehabilitation of refugees, it was then arranged that a 6.5 million pounds sterling Stabilisation Loan would be floated on the capital markets instead of a loan of 9 million pounds as the Geneva Protocol had indicated. The proceeds of this 6.5 million pound loan were then allocated as follows: 3 million pounds was earmarked for the budget, 3 million pounds for the central bank and only 500 thousand pounds for the refugees.

The 2.5 million pounds loan from the American government, which became known as the Second Refugee Loan was issued at par, had a 4 per cent interest rate and a 20 year redemption period. This was a very favourable agreement for the Greek government. It was not certain, however, until the spring of 1929 that the credit would in fact be transferred, as the American Congress delayed giving its approval. It was expected to pass a resolution in March 1928 but only did so finally on 10 May 1929.

Archival Material shows great cooperation between the Bank of England (Montagu Norman and Otto Niemeyer) and the Federal Reserve Bank of New York (Benjamin Strong and George Harrison) to overcome difficulties and arrange for part of the Stabilisation Loan to be issued on the New York market. The Bank of England wanted the loan to be an international loan and for as many markets to participate as possible. This was either because Montagu Norman genuinely believed that 'it is not reasonable, even if it were possible, that London should issue any part of the proposed Loan without the co-operation of America'[380] or that he doubted that Greece would be able to raise this amount of money in Europe alone.[381] On the other hand, the relationship, as it appears in the archival material between the Bank of England and the Bank of France, was not as strong as that between the Federal Reserve Bank of New York and the Bank of England. In the end France did not participate and no part of the loan was floated in France.

Two banks competed to underwrite the Stabilisation Loan: the Hambros Bank, which was considered to be 'the Bankers of the Greeks',[382] and the American house of Blair & Co.

[380] BoE Archive, OV80/2/34A; Pepelasis Minogou (1993, p. 156).
[381] BoE Archive, OV80/2/30.
[382] BoE Archive, OV9/197/49.

Table 6.3 shows the various offers made by each house.[383] At the end, Hambros obtained the loan with an offer that was regarded as being extremely 'favourable to Greeks'.[384] It is possible that Hambros made this offer under some pressure from the British Treasury and Foreign Office to secure the business.[385]

Table 6.3: Bids made for the Stabilisation Loan, January 1928

	Nominal Interest Rate	Issue Price	Real Interest Rate
Hambros			
First Offer	7.00%	93	7.50%
Second Offer	6.50%	88	7.40%
Third Offer	6.00%	85.50	7.00%
Blair			
First Offer	7.00%	89	7.80%
Second Offer	6.50%	88.50	7.40%

Source: Pepelasis Minoglou (1993, p. 164).

The Stabilisation Loan had a coupon rate of 6 per cent, the price of issue was 91 and net 86. In addition, its amortisation period was 40 years. The Geneva Protocol of September 1927 placed the new League of Nations loan under the jurisdiction of the IFC without the Greek government having to assign to it additional revenues. As has been noted above, these terms were very favourable to the Greek government and this was recognised in the literature by contemporaneous scholars.[386] Table 6.4 presents all the loans that were issued under the auspices of the League and their terms are compared. It is noticeable that the terms and conditions of the Greek Stabilisation Loan were more advantageous than the others.

383 See also BoE Archive, OV9/197/54-55.
384 BoE Archive, OV80/3/8A; BoE Archive, OV9/197/218–224.
385 BoE Archive, OV80/3/8A; BoE Archive, OV9/197/225–227.
386 Zolotas (1929, p. 129); Stefanidis (1930, p. 245).

Table 6.4: Loans issued under the auspices of the League of Nations

	Date of Issue	Nominal Amount in £	Coupon Rate	Maturity (years)	Price of Issue	Price Received
Austria	1923	33,782,558	6, 6.50, 7.00	20	75–93	75–91.50
Hungary	1924	14,386,583	7.50	20	88–92	80–86.80
Greek Refugee Loan	1924	12,300,000	7.00	40	86–88	80–81
Municipality of Danzig	1925	1,500,000	7.00	20	90	84
Bulgaria Settlement Loan	1926	3,327,596	7.00	40	92–93	87–88.50
Estonia	1927	1,523,708	7.00	40	94.50	89.50
Free City of Danzig	1927	1,900,000	6.50	20	91	85.50
Greek Stabilisation Loan	1928	7,557,903	6.00	40	91	86
Bulgarian Stabilisation Loan	1928	4,480,412	7.50	40	96–97	90–91.80

Source: League of Nations (1945, pp. 164–171); Flores and Decorzant (2012, p. 31).

The flotation of the loan was launched simultaneously in London and in New York on 31 January 1928. On 20 January 1928, nearly ten days before issue, when agreement had been already reached, *The Times* wrote: 'it would be interesting to know why it is expected that the public will subscribe to the new loan, which gives a yield smaller by nearly 0.50 per cent, the security being in no way better than that of the existing [Refugee Loan]'.[387] It is true that the terms by which the Stabilisation Loan was issued surprised all the participants involved in its flotation. In London, however, it was six times oversubscribed by the public,[388] and there was similar success in the other capital markets. Table 6.5 compares the two Greek League of Nations loans by market percentage. Note that the flotation of the loan in Italy and Sweden was in sterling whilst in Switzerland it was in American dollars.[389] The Hambros and Erlangers were

[387] BoE Archive, OV80/3/6.
[388] BoE Archive, OV9/197/293a.
[389] BoE Archive, OV80/3/21.

responsible for the part of the loan issued in pounds sterling and Speyer, the National City Co and the National City Bank of New York led the dollar tranche.

Table 6.5: Geographical breakdown of the two Greek League of Nations loans

	First Refugee Loan (1924)	Stabilisation Loan (1928)
Britain	61%	44.50%
USA	19%	41%
Greece	20%	–
Italy	–	5%
Sweden	–	4%
Switzerland	–	5.50%

Source: Pepelasis Minoglou (1993, p. 168).

6.7. Greek government borrowing under foreign supervision in 1898 and 1928: parallels and contrasts[390]

According to George Leontaritis (1990, p. 195) 'Greece has always lived beyond her resources'. Not only has she borrowed heavily, but by 1932 she had defaulted on her sovereign debt four times.[391] As a consequence the country experienced financial embargoes, foreign intervention into its monetary policy and control of its fiscal revenues. A byzantine relationship arose between the Greek government and its foreign creditors, making an historical analysis of Greek public debt and the conditionality that often accompanied it even more compelling.

In the late 1920s, three foreign institutions were based in Athens as a consequence of the 1893 default and government borrowing under the aegis of the League of Nations in the 1920s: the IFC, the RSC and the financial advisor to the Bank of Greece. The IFC, established in 1898, was mainly a debt management committee responsible for the service of the government debt placed under its jurisdiction. A special body, the RSC, was established in 1923 to administer the proceeds of the First Refugee Loan and to carry out the settlement of refugees mainly in rural areas. The RSC was an autonomous body, its statutes having been developed by the Financial Committee of the League of Nations, and it was under the strict supervision of the League Council. In 1928, H. O. Finlayson was appointed as advisor to the Bank of Greece, a clause in the Geneva Protocol that Greek representatives went to great lengths to avoid. In the end, there was a compromise and the financial advisor to the newly established central bank did not have the power of veto. Its role was to oversee the activities and policies pursued by the Bank of Greece and to report regularly to the Council of the League.

This thesis examines in depth the Geneva Protocol of 1927 prepared by the Financial Committee of the League and refers extensively to the 1898 Law of Control. The two historical periods covered, that is to say the 1890s which led to the introduction of the Law of Control and the 1920s, were very different. Whereas in 1893 the Greek government defaulted on its external debt obligations, in the 1920s none of the Greek governments, despite the difficulties they encountered in financing public expenditure, considered default an option. The humiliation of the military defeat of 1922, combined with the transaction costs and the

[390] Pepelasis Minoglou (1993, pp. 202–204) in her thesis makes a 'temporal comparison' between the 1898 Law of Control and the League of Nations Stabilisation scheme of 1928. She sees the similarities as factual and in the nature of the interests that both organisations represent. In her analysis, the differences are also of this nature.

[391] The first episode of default is broadly regarded as having occurred even before Greece became a sovereign state; this rather 'excusable default' occurred in 1827 during the War of Independence. See, for example, Reinhart and Trebesch (2015); Dertilis (2016). The other three default episodes took place in 1844, 1893 and 1932.

embarrassment of the 1893 default which still loomed large in politicians' minds in Athens, as well as the belief that foreign capital would be forthcoming, led governments to opt for controversial measures to cover expenditure rather than ceasing to honour their foreign obligations.[392]

Military defeat is a common characteristic of both historical periods. In 1898, Greece had to pay a war indemnity in exchange for Turkish troops evacuating Thessaly. In the 1920s, Greek governments had to settle more than a million refugees who reached Greece after the Asia Minor debacle.

In both the late 1890s and the 1920s, the creditworthiness of the Greek government as demonstrated by Figure 6.3 below was very low. In the 1890s, the Greek government did not have access to the international financial markets as a consequence of default. Furthermore, the negotiations with foreign bondholders proved to be difficult and protracted. It took five years and a Greco-Turkish war before a compromise was reached in 1898. This compromise resulted in the stipulation of the Law of Control which provided detailed instructions for the restructuring of Greek public debt and outlined the organisation and responsibilities of the IFC. Furthermore, the Law of Control suggested some monetary changes.

The literature argues that in the 1920s the Greek government was unable to borrow from the international financial markets because of embargoes imposed by the Allies either for 'political and strategic considerations' or to force Greece to settle its war debt.[393] It is further argued that in this way stabilisation was delayed.[394] In the 1920s, the London market 'was not the free market of the pre-war days'.[395] After 1918, an embargo on overseas loans was introduced, though with some reluctance on the part of the London authorities, as a new instrument of monetary policy.[396] Later, it was also used as a 'useful political lever to force a prompt settlement' of war debts to Britain.[397] Governments that had not settled their war debts to Britain were not permitted to raise capital on the London market.

Figure 6.3 provides a graphic demonstration of why Greek governments faced considerable difficulties in raising capital on the financial markets in the 1920s, beyond the international politics and embargoes referred to in the literature. In the early 1920s, Greek

[392] The most controversial measure adopted was the Forced Loan of April 1922. The experiment was repeated in 1926. For more, see Chapter 5 of this thesis.
[393] For example, see Pepelasis Minoglou (1993, pp. 17, 30, n. 39 and 42).
[394] Pepelasis Minoglou (1993, p. 114).
[395] Atkin (1970, p. 326). See also Moggridge (1971).
[396] Atkin (1970, p. 334); See also Atkin (1977).
[397] Atkin (1977, pp. 95–96).

government bonds plummeted and as a consequence market rates rocketed, reflecting the political, economic and financial distress that prevailed in Athens during that period. For example, the market value of the Bonds Loan amounted to a country risk of nearly 19 per cent in November 1922. Subsequently, the market price of Greek government debt drifted gradually upwards and consequently, the spread between the yield of Greek government bonds and the British consol steadily declined. The extended period of restoration of the institutions in Greece, both political and economic, is delineated by the sovereign risk of the Greek government on the London market which slowly but steadily improved, as Figure 6.3 below demonstrates. Stabilisation and the concomitant institutional reforms were gradually factored into the market price of Greek sovereign debt traded in London and as a result the creditworthiness of the Greek government steadily improved.[398]

In the 1920s an international committee, the Financial Committee of the League, prepared stabilisation programmes for several countries that borrowed capital under its aegis. By contrast, in the late nineteenth century, bondholders organised themselves into committees which negotiated with the government in question for a debt settlement. In the Greek example, however, because of the 1897 war with Turkey, the Great Powers of the time intervened and eventually a debt restructuring and resumption of the debt service was agreed under their jurisdiction in January 1898.[399]

[398] For an extended analysis of the sovereign risk of the Greek government on the London market between 1914 and 1929, see Christodoulaki *et al.* (2011, 2012).
[399] The mediating powers were the following: Great Britain, France, Germany, Italy, Austria-Hungary and Russia.

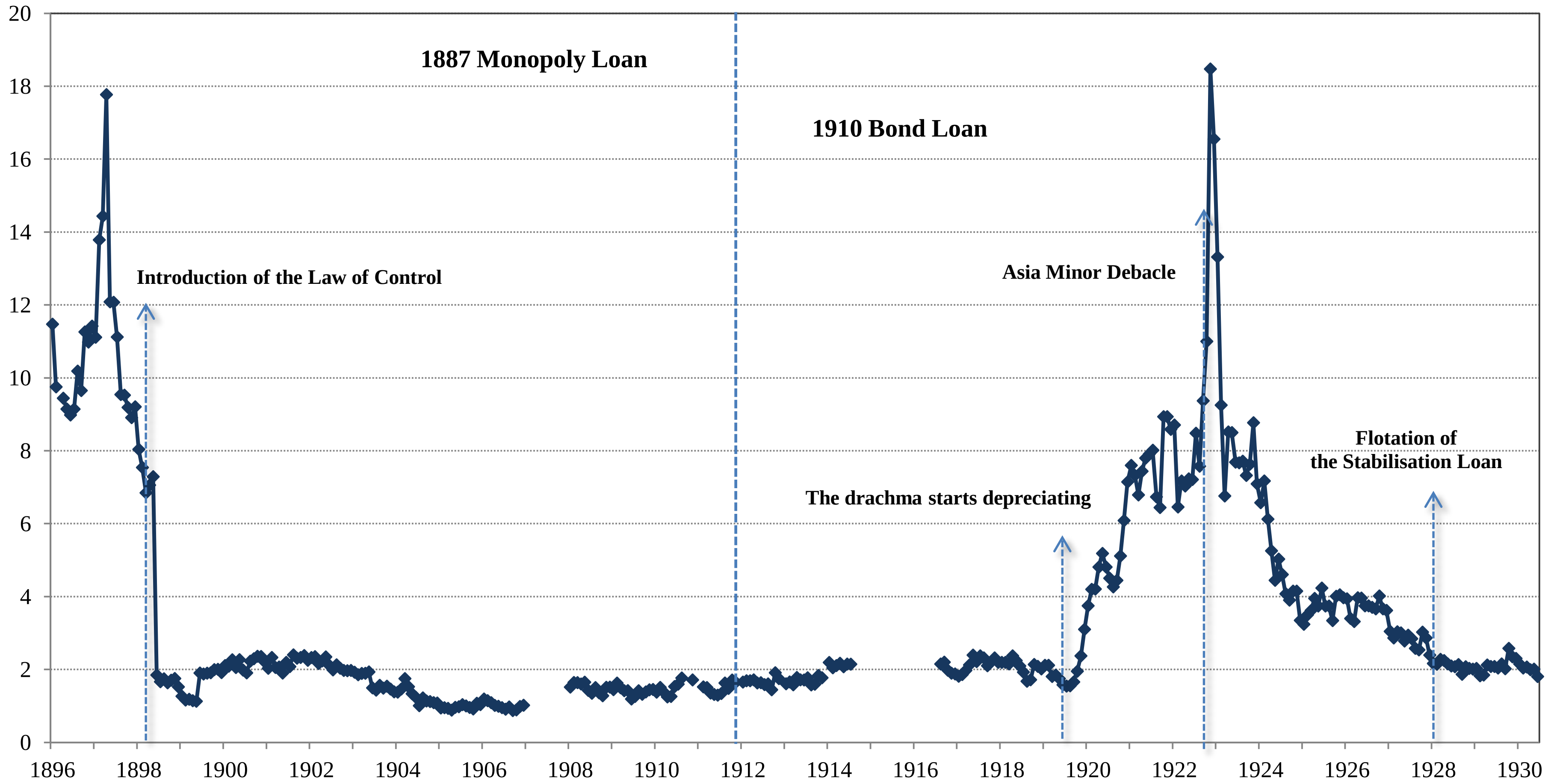

Figure 6.3: Greek sovereign risk between 1896 and 1930

Notes: (1) Country risk is measured by a loan's spread in London relative to the British consols.
(2) Author's calculations using hand-collected monthly data from the *Investor's Monthly Manual* (1896–1930).
Source: *Investor's Monthly Manual* (1896–1930). Data available upon request.

Prior to the Second World War, foreign financial advice and assistance coupled with capital usually raised from the markets was accompanied by conditionality. Table 6.6 below compares the conditionality introduced by the Law of Control in 1898 with that of the stabilisation plan prepared by the Financial Committee of the League of Nations in 1928.

Table 6.6: A summary of the conditionality introduced by the Law of Control and the League Stabilisation Plan

1898 Law of Control	1928 League Stabilisation Plan
Foreign Supervision	
• International Financial Committee	• Advisor to the Bank of Greece • The government had to report to the Council of the League on the budget situation every three months for three years
Fiscal Measures	
• No reference to balanced budgets • Certain revenues were assigned exclusively to the IFC for the service of the Old Gold Loans • The number of treasury bills that could be issued was limited to 10 million drachmae	• The Greek government had to keep the budget within 9 billion drachmae until the end of the financial year 1929–30 and thereafter to maintain balanced budgets • The number of treasury bills that could be issued was limited to 400 million drachmae • The new central bank could grant credits to the government to a maximum of 400 million drachmae • A new system of public accounting was introduced
Public Debt Settlement	
• Restructuring of the Old Gold Loans • Retirement of floating debt and consolidation of debt in drachmae, both held by the banks of issue • Introduction of a precise timetable for the retirement of government debt in forced circulation	• Retirement of the NDBs preceded recourse to the League • One-third of the Stabilisation Loan employed to clear illiquid public debt transferred to the Bank of Greece and thus its reserve position was strengthened
Monetary Reform	
• Greek government not obliged to assume the Gold Standard • Article 30 of the Law of Control[1]	• *De jure* adoption of the gold exchange standard • Establishment of the Bank of Greece

Note: [1]Article 30 of the Law of Control is examined extensively in Chapter 4 of this thesis.

Both plans incorporated extensive control and supervision over monetary and public finance. In 1898, the IFC, primarily a debt management committee, was established. In the 1920s, both League of Nations loans that is to say the 1924 Refugee Loan and the Stabilisation Loan, were placed under the aegis of the IFC and were guaranteed by revenues that the Greek government had already assigned to the Commission. The RSC administered the proceeds of the First Refugee Loan, to carry out the settlement of refugees in rural areas.

In 1928, the stabilisation plan incorporated foreign supervision over monetary policy with the appointment of a financial advisor to the Bank of Greece. His main task was to oversee the policies and activities of the newly established central bank and to report regularly to the Council of the League. In addition, the Greek government was obliged to report to the Council on the state of public finances every three months for a period of three years.

In the late 1890s, the central issue at the negotiations was the resumption of the debt service of the external public debt. The Law of Control introduced a rescheduling of the public debt denominated in gold and contracted before 1897. The debt readjustment plan that was developed defined the minimum interest rate to be paid to the bondholders of the Old Gold Loans, as the external loans floated before 1893 and placed under the jurisdiction of the IFC are known. The aim, however, was to increase both the interest rate paid and the sinking fund for the loans placed under the jurisdiction of the IFC to their full contractual level, using public revenues earmarked for this purpose. Thus, the yield of the Old Gold Loans fluctuated within limits from year to year depending on the volume of the surplus revenues of the IFC.

For example, the minimum rate of the Monopoly Loan was set at 43 per cent of its original interest rate which was 4 per cent. In other words, the minimum interest rate that the IFC had to pay the holders of the Monopoly Loan was 1.72 per cent. The interest rate paid to Monopoly Loan bondholders during the period in question is presented in Figure 6.4 and in Table A4.1 in Appendix A4. Figure 6.4 and Table A4.1 show that the interest rate paid in 1920 and 1921 was at the full contractual level for the first time since the introduction of the Law of Control. Subsequently, it retained either its original level or remained close to that level.

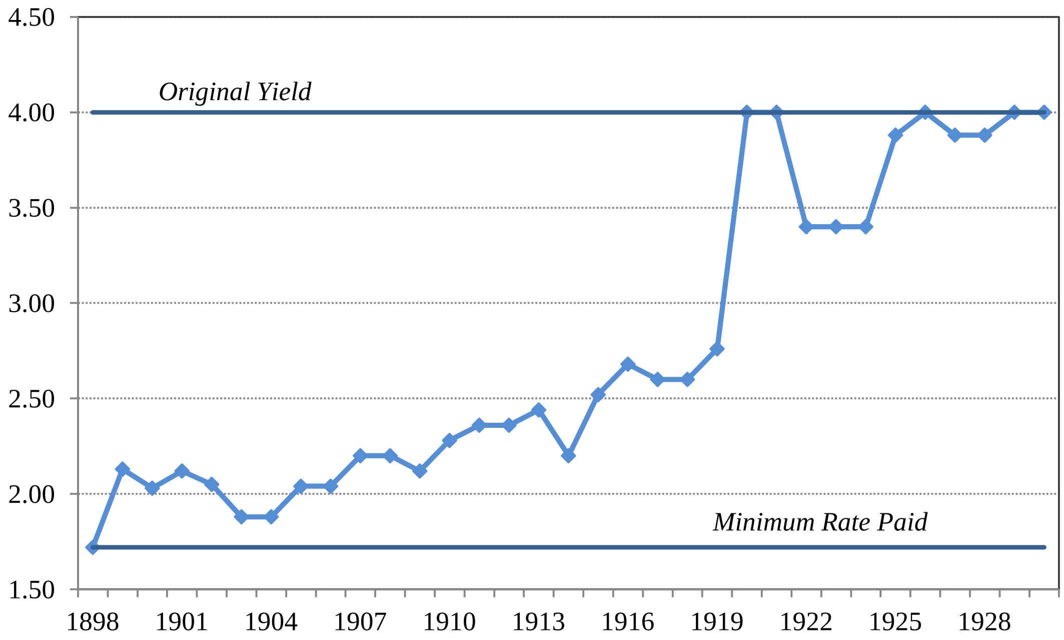

Figure 6.4: Monopoly Loan interest rate paid by the IFC, 1898–1930
Source: Table A4.1 in Appendix A4.

Amongst the priorities of the coalition government that was formed in December 1926 was the stabilisation of the drachma and the continuation of the settlement of refugees. By May 1928, the Greek currency had lost approximately 95 per cent of its pre-war value, with the origin of this monetary upheaval being the monetisation of budget deficits. The Financial Committee of the League insisted on reform of the National Bank, a dual-purpose bank, to confine its activities to central banking responsibilities and to become independent from the government. This proposal led to the establishment of a new central bank in Greece in 1928 with a clear mandate: to ensure the stability of the external value of the drachma. Through conditionality, therefore, creditors promoted institutions akin to those prevailed in their countries.

The Law of Control also introduced a degree of monetary discipline in Greece and independence for the National Bank. Article 30 strictly prohibited the National Bank from using the printing press to lend to the government without the consent of the IFC until the debt in banknotes from forced circulation had been fully paid off.

In 1898, Great Britain, France and Russia guaranteed jointly and severally the flotation of the loan.[400] As a result the terms under which the Guaranteed Loan was issued were very favourable; its interest rate for example was only 2.50 per cent and the amortisation

[400] Wynne (1951, p. 319).

period 60 years. The proceeds of this loan were used for the payment of the war indemnity to Turkey, to cover the budget deficit for 1897, to retire the floating debt denominated in gold and for the service of the Old Gold Loans for 1898.[401]

Figure 6.5 demonstrates the market performance of the 2.50 per cent Guaranteed Loan between 1898 and 1930. In addition, the market rate of this 1898 Loan is compared with that of the British consols and other Greek loans traded on the London Stock Exchange during this period. It is evident that the yield of the 1898 Guaranteed Loan remained close to that of consols and its movement did not resemble that of the other Greek loans traded on the London market.

By 1927, the creditworthiness of the Greek government on the London market had improved significantly. The drachma had also exhibited considerable stability. The government, however, was unable to secure by itself the entire amount of capital needed for reconstruction and further settlement of refugees at a reasonable cost. The role that the League played here was twofold. Firstly, the Financial Committee defined the amount of capital and the terms under which a loan could be raised and secondly a stabilisation programme that incorporated reforms was prepared. The way that the proceeds of the loan could be used was also specified. In this way, the League facilitated access to capital markets by signalling that a country would follow prudent fiscal and monetary policies in the future.

By contrast to loans issued in the late nineteenth century under the aegis of the Great Powers, the coupon rate of the League loans was close to the market yield of the country that floated the loan. In this way the creditworthiness of the country in question was denoted.

For example, the coupon rate of both Greek League loans was set close to the market rate of the other Greek government loans traded on the London market at the time. Subsequently, the market rate of both loans fluctuated on the capital markets in the same way as the other Greek loans denominated in gold. This is illustrated in Figure 6.5 below, where the market yield of the two Greek League of Nations loans, that is to say the Refugee Loan of 1924 and the Stabilisation Loan, is compared with that of the 1910 Bonds Loan.

[401] Ibid., p. 318.

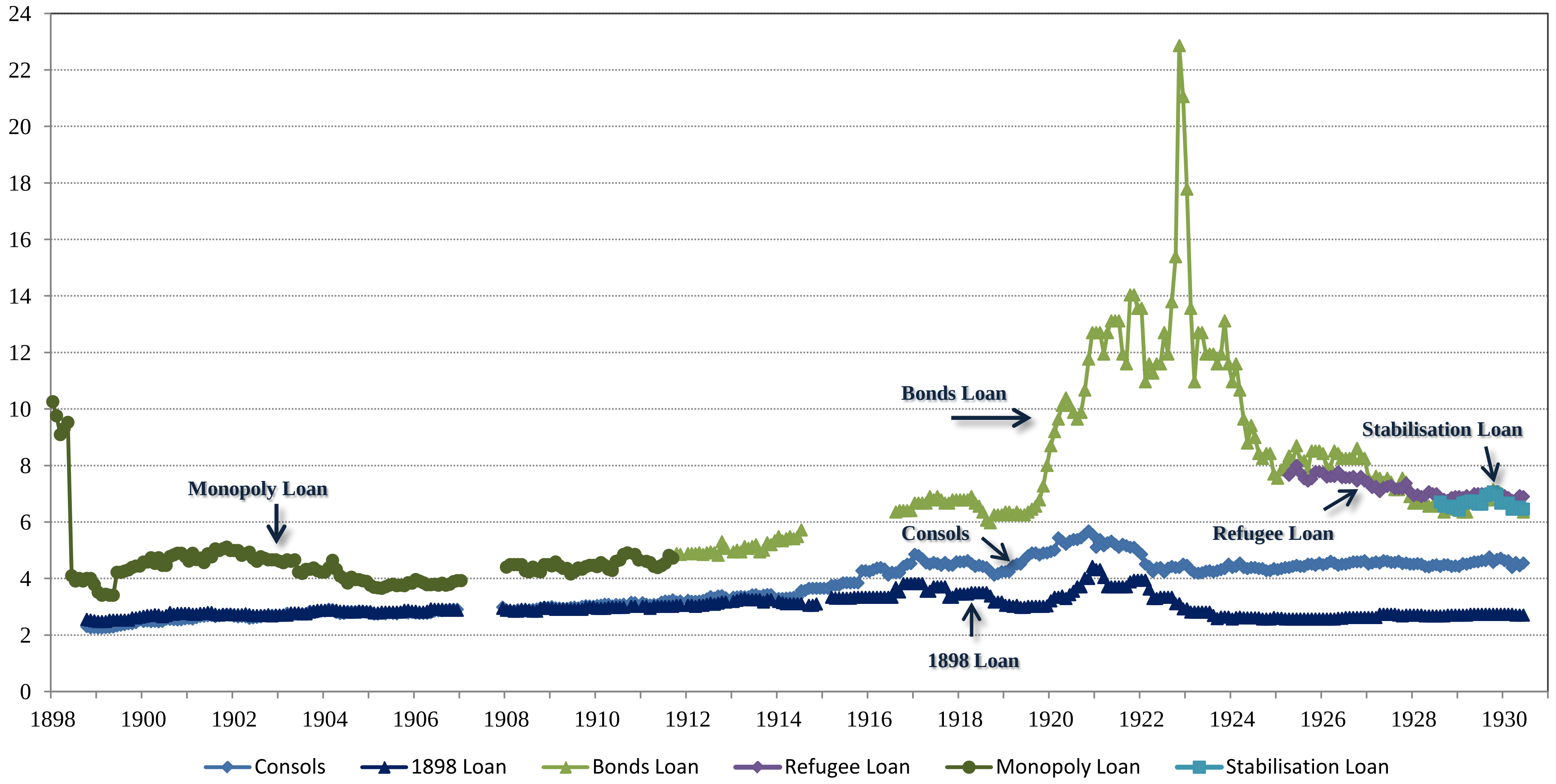

Figure 6.5: Market yield of Greek government loans and the British consol, 1898–1930

Note: Author's calculations using hand-collected monthly data from the *Investor's Monthly Manual* (1896–1930).

Source: *Investor's Monthly Manual* (1898–1930). Data available upon request.

PART IV:

THE ESTABLISHMENT OF THE BANK OF GREECE

CHAPTER 7:

A DOMESTIC VARIATION ON LEAGUE OF NATIONS' NORMS[402]

7.1. Introduction

The cornerstone of the reconstruction scheme that the Financial Committee of the League prepared for Greece was the establishment of a fully fledged central bank *de novo*, that is the Bank of Greece, which started operations on 14 May 1928, two days after the gold exchange standard was officially adopted. On that same date, the old National Bank, the central bank in Greece since 1842, opened its doors for business for the first time in its history as a pure commercial banking institution. Prior to this, on 31 January 1928 the Stabilisation Loan was successfully floated in London and New York.

Section two of this chapter explores the negotiations between the Financial Committee of the League and Greek officials that led to the establishment of a central bank in Greece and the different positions of the participants in the negotiations are described. The reasons that impeded the metamorphosis of the National Bank, the precursor of the central bank in the country, from a dual-purpose bank into a fully fledged central banking institution are also

[402] Part of this chapter appears in Christodoulaki (2002). An earlier version of this chapter was presented at the pre-conference to session No. 39, XIII Economic History Congress, Buenos Aires 2002, Kassel-Hofgeismar, April 2001; at the summer school of the European Historical Economics Society, Trinity College, Dublin, Ireland, August 2001 and at the Warwick Summer Research Workshop, Department of Economics, Warwick University, July 2002. Thanks are due to the participants on these occasions for helpful comments and advice.

discussed. Sections three and four focus on the institutional arrangements surrounding the establishment of the Bank of Greece. The objectives and functions of the new central bank are illustrated in section three whilst section four looks at its financial position upon commencement of operations.

7.2. Path towards inevitable reform

7.2.1. Background to change

Despite a cardinal point in all League of Nations reconstruction schemes being the issue of central banking reforms, neither the National Bank nor the Greek government seemed to consider it a possibility that the involvement of the Financial Committee of the League in the stabilisation process would entail such developments. They were anxious to avoid any kind of control or any sort of foreign intervention in Greek public affairs that recourse to the League might involve.[403] However, Joseph Avenol, the deputy Secretary-General of the League, who headed a committee that visited Greece in April 1927 to investigate economic conditions in the country, informed the National Bank unofficially that it should be reformed in line with the principles of modern central banking.[404] A considerable part of the report that this committee prepared for the Financial Committee of the League was devoted to the National Bank, to the way it functioned, its multifaceted character and its role as the central bank in the country.[405]

In the Spring of 1927, when the League representatives visited Athens to investigate economic conditions in the country, a new specialist institution, the National Mortgage Bank was about to open for business. In spite of this imminent change in the status of the National Bank at the time when the League committee was in Athens, the dual-purpose character of the National Bank still attracted severe criticism on the part of the committee. Its activities as a commercial bank were in stark contrast to those of an orthodox central bank. In addition, the National Bank, as the bank of issue in the country, was thought by the League representatives to be too close to the government. The commercial activities of the National Bank as well as its responsibilities and privileges as the central bank in Greece, are examined in Chapters 3 and 4 of this thesis respectively. Furthermore, the relationship of the Old Bank with the government is scrutinised in section 4.2 of Chapter 4, where changes that a long period of war and its aftermath brought to its role as a bank of the government are also highlighted.

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403 BoE Archive, OV80/1/38; BoE Archive, OV80/1/39; BoE Archive, OV80/2/1; BoE Archive, OV80/2/17; BoE Archive, OV80/2/20; BoE Archive, OV80/2/24.
404 Spiliotopoulos (1949, p. 111).
405 See HABOG_A3S1Y1F4T1, pp. 1–100;

7.2.2. June 1927, Geneva

A Greek delegation headed by the Minister of Finance Georgios Kaphandaris, arrived in Geneva early in June 1927 to officially request the assistance of the League of Nations in order for Greece to obtain an international loan. The views of the Financial Committee on a stabilisation scheme in Greece were outlined in a set of seven questions that the Greek delegation was asked to answer.[406] One of the questions dealt with the reform of the National Bank, to bring it into closer conformity with modern central banking practice. The Greek delegation deemed that the reform of the National Bank be entrusted to the bank itself and that it should be implemented gradually. They also strongly objected to the appointment of a foreign expert at the National Bank with excessive powers including the right of veto. By contrast, the Financial Committee insisted that central banking reform should precede *de jure* stabilisation. In the end, the Financial Committee gave way on the issue of foreign control, accepting that any potential appointee should only have supervisory responsibilities whilst the Greek delegation accepted in principle the recommendations for banking reform.[407]

The Financial Committee, in its report to the Council dated 14 June 1927, spelt out the main principles that the National Bank was expected to conform to, in order to operate as a pure central bank. These principles were: (a) the independence of the Bank, (b) the sole right of note issue, (c) the limitation of the Bank's operations to loan and discount transactions of a short-term and self-liquidating character, (d) the reduction of the government debt to the Bank and the well-defined limitation of new advances to the government, (e) the centralisation of the money transactions of the government and of government enterprises in the National Bank and (f) the provision of adequate and appropriate cover for a unified note issue.[408] These recommendations echoed Montagu Norman's 'Epitome' of central banking where he sketched out the main tenets of the institution as it had developed by the early 1920s. (See Table 1.2 in Chapter 1.) In addition, the Financial Committee suggested that a provision of 3 million sterling of the prospective League sponsored loan be devoted to the reduction of the government debt to the Bank, in order to strengthen it sufficiently for its enhanced responsibilities as a central bank.

[406] BoE Archive, OV80/2/23; Pyrsos (c1935, pp. 47–49); Bank of Greece (1978, p. 61); Pepelasis Minoglou (1993, pp. 146–147).
[407] Pyrsos (c1935, pp. 47–56); Bank of Greece (1978, pp. 61–62).
[408] League of Nations (1927, p. 15); Pyrsos (c1935, pp. 57–58); Venezis (1955, pp. 24–25); Bank of Greece (1978, pp. 61–63); Kostis (1987, p. 260); Kostis (1999, pp. 706-707).

7.2.3. Preparing for central banking reforms

A sub-committee was formed to examine central banking reform in Greece. The members of this sub-committee were Sir Henry Strakosch (Britain),[409] M. Janssen (Belgium), M. Dubois (Switzerland), L. Osborne (representative of the Bank of England) and J. de Bordes of the Financial Section of the League. Emmanuel Tsouderos, the deputy governor of the National Bank, represented Greece in the talks.

The position of the representatives of the League was that the reorganisation of the National Bank should take place within two or three months. In that time the National Bank should be reformed by winding up or transferring to other institutions or to a new commercial bank all those activities which did not normally fall within the scope of a central bank. These activities included the operation of interest bearing accounts, mortgage loans, loans to the agricultural sector and to legal entities, in short all medium- and long-term lending of the bank. Tsouderos tried to convince the Financial Committee that in such a limited time-span a radical reorganisation of an institution with the importance and the history of the National Bank carried great risks for the country. Instead, he argued that reform should be implemented gradually, spread over two or three years. He argued that the transfer of certain commercial type operations of the Bank, such as deposits, to other institutions would seriously affect the operation of important economic functions such as savings in the country. Although the League accepted the argument that more time was necessary for reforms to take place, they refused to grant any concessions in relation to the metamorphosis of the National Bank into a pure central bank.[410] They declined to accept its retaining part of its commercial functions by acting as a bank for interest bearing deposits and insisted that the Bank conform strictly to what were then recognised as the principles of an orthodox central bank. A counter suggestion came from the deputy governor of the National Bank: the bank could be separated into two autonomous departments in terms of accounting and management, the issue department and the commercial department, but both would continue to operate under the same governance. The League rejected the proposition, arguing that the co-existence under the same direction of central banking functions and profit-maximising commercial operations would inhibit the smooth operation of central banking in the country.[411] It should be mentioned here that the National Bank of Greece had never previously been divided into two departments, namely the Issue

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[409] He was responsible for the founding of the South African Reserve Bank. Montagu Norman considered him ‘the best authority on the subject [of] the principles which should govern the policy of central banks in any country’. For more, see Cottrell (1997, p. 29).
[410] Venezis (1955, p. 38).
[411] Bank of Greece (1978, p. 65).

Department and the Banking Department following the paradigm of the Bank of England, as has been argued in the literature.[412]

7.2.4. Opposition to the League's proposals

Strong opposition to the proposals of the League sub-committee was expressed by the governor of the National Bank, Alexandros Diomides, who was prepared to espouse only marginal reforms of the business that the National Bank pursued, in spite of the fact that such a stance might lead to the collapse of the whole stabilisation plan.[413] His views on the League's proposals are clearly expressed in a letter written on 22 June 1927 and sent to Tsouderos.[414] The arguments that he put forward to support his position were a mixture of political rhetoric and commercial banking rationale. The public responsibilities of the National Bank were mixed up with the welfare of the Bank as a private, profit maximising banking institution. Diomides was very clear as to what business he could accept the National Bank losing and did not want to deprive the National Bank of its commercial functions. He consented to the National Bank passing on immediately to the newly established Mortgage Bank long-term agricultural advances of at least a three-year duration and felt that later on, this bank could also take over responsibility for credit to the refugees.[415] On the other hand, he was determined that the National Bank should maintain the right to accept interest bearing deposits. He called the Bank a pure 'Banque de Depots' and argued that the National Bank should not under any circumstances shed this aspect of their work.[416] This view of the governor of the National Bank echoed what M. S. Eulambio, a managing director of the Bank had argued a few years before the negotiations with the Financial Committee took place. Eulambio (1924, p. 178) had ended his monograph on the history of the Bank by referring to its deposit character and asserting that the National Bank's power as an institution rested with its deposits. In his words the deposits of the National Bank represented 'real wealth – the wealth of the whole nation'.

The governor held that documentary credit should be allowed, and that loans or advances on securities as well as mortgage loans should be possible on condition that they were granted on a short-term basis. The Bank should also be allowed to grant loans and have the freedom to invest in companies or in long-term bond loans. Finally, he argued that the National Bank should retain its property and its investment in companies. The changes to the status of the

412 Lazaretou (1993, p. 290); Alogoskoufis and Lazaretou (1997, p. 47).
413 HABOG_A3S1Y1F40T13, pp. 1–16; Pyrsos (c1935, pp. 61–65); Venezis (1955, pp. 27–35); Bank of Greece (1978, pp. 64–65).
414 The entire letter was printed in Venezis (1955, pp. 27–35).
415 HABOG_A3S1Y1F40T13, p. 13; Venezis (1955, p. 33).
416 HABOG_A3S1Y1F40T13, p. 3; Venezis (1955, pp. 28–29);

National Bank that its governor would not permit to take place indicate that Diomides was ardent about preserving the commercial freedom that the Bank enjoyed.

By the 1920s, the idea of central banking had been consolidated and applied albeit to a limited number of countries. Central banks were regarded as being non-competitive with other commercial banks and non-profit-maximising in nature, as has been discussed in Chapter 1. Chapter 3 of the thesis demonstrates that by 1927 these were principles that the National Bank as the bank of issue in the country had not adopted naturally. Adoption of these attributes in 1927 would have marked the true emergence of the National Bank as a central banking institution. The governor of the National Bank was, however, reluctant to permit this metamorphosis of the Bank from a dual-purpose bank that pursued both central banking and commercial functions into a fully fledged central bank in accordance with the basic tenets of the institution as they had evolved by then. Such a transformation would have removed profitable commercial activities from the National Bank and would have induced it to confine its activities merely to public responsibilities as the bank of issue in Greece. Furthermore, the introduction of the gold exchange standard was expected to generate capital inflows to the country and to create new entrepreneurial opportunities. A National Bank bound by the constraints that govern a fully fledged central bank would not have been able to take up any of the new opportunities that stabilisation would offer. Its role would have been to guarantee the external value of the drachma and to be the bank of the government. All the business of the National Bank would have been focused on these two objectives and its portfolio would have been limited to short-term, self-liquidating assets. In addition, a substantial part of its assets would have continued to consist of illiquid government debt, further weakening the National Bank.

Tables 3.9 and 3.10 in Chapter 3 demonstrate why the governor of the National Bank was opposed to the Bank losing its interest bearing deposits. Table 3.9 shows government deposits and deposits of other agencies as a percentage of the total deposits of the National Bank between 1898 and 1930. Table 3.10 demonstrates deposits at the National Bank as a percentage of its total liabilities between 1898 and 1920 and during a short period following stabilisation. As it has been mentioned several times, accountancy practices that were employed during the monetary upheaval of the 1920s obscure the real financial position of the Bank during that period. The difficulty stems from the way that assets and liabilities denominated in gold and foreign exchange were reported in the balance sheet of the Bank. Therefore, it may not be an accurate exercise to extend the estimates presented in Table 3.10 into the 1920s.

Deposits of a fully fledged central bank consist of government deposits and deposits of the banking sector. Tables 3.9 and 3.10 show that deposits of the government, both as a percentage of total deposits and as a percentage of total liabilities, constituted only a small part of total deposits of the National Bank. In addition, their volumes fluctuated considerably not only from year to year but also throughout the year according to the service of public debt and other obligations of the government. A portion of the liabilities of the National Bank was held by other commercial banks which received an interest rate of 1 per cent for their deposits at the National Bank when the League representatives visited Athens in April 1927.[417] Deposits of other banks at the National Bank were, however, very volatile as they rose and fell according to seasonal patterns in the country. For example in 1926, deposits of banks at the Athens and Piraeus offices of the Old Bank fluctuated from about 18 per cent of its total sight deposits to less than 6 per cent.[418] Commercial banks used to deposit with the National Bank, but they did not resort to it for re-discounting facilities. They preferred to acquire short-term credits from abroad where they could obtain more favourable interest rates.[419]

Restricting the deposits of the National Bank to non-interest bearing deposits, i.e. deposits from the government and the commercial banks, such as a central bank can accept, would have caused both the size and the importance of the Bank as a commercial institution to contract severely. In fact, its commercial aspect would have been eclipsed as the Financial Committee of the League of Nations suggested. If the National Bank had agreed to lose its interest bearing deposits then it would have been left without the means to expand its size and its activities in the future. In short, it would have lost one of the main sources of its lending power, namely interest bearing deposits; the others being its capital including its lottery loans and the issuing privilege. The National Bank had been the issuing bank in the country but 'to a large extent' it had obtained its means to grant credits from its deposits.[420] In the past, new issues of banknotes had been used to finance the expenditure of the government of the day and represented government debt in the assets of the National Bank. In 1927, the country was about to adopt the gold exchange standard. This implied that the central bank would have to abide by a monetary rule which did not allow the use of the issuing privilege liberally.

The inflationary period of the 1920s had exerted a negative influence on the balance sheet of the National Bank as it was a lender in nominal drachmae both to the private sector of the economy and to the government. As it is extensively discussed in Chapter 4, a considerable part of its assets was tied to illiquid government debt, as lending to the

[417] BoE Archive, OV9/190/100; HABOG_A3S1Y1F4T1, pp. 96–100.
[418] BoE Archive, OV9/190/100. Author's calculations using data appearing in HABOG_A3S1Y1F4T1, p. 90.
[419] HABOG_A3S1Y1F4T1, p. 96.
[420] HABOG_A3S1Y1F4T1, p. 2; HABOG_A3S1Y1F40T13, pp. 5–6; Venezis (1955, pp. 29–30); Kostis (1987, p. 213).

government increased considerably during this period and the terms of this lending were very favourable for the government. Furthermore, as Table 3.5 in Chapter 3 of this thesis and Table 2 in 'Banking Reform and the Establishment of the Bank of Greece'[421] both demonstrate, total credits to the economy as well as deposits of other agencies as a percentage of GDP shrank substantially after the outbreak of the First World War, indicating 'a loosing of the links'[422] between the National Bank and the economy.

The National Bank had always pursued commercial activities in a conservative and risk-averse fashion, and loans were granted cautiously as it has been repeatedly maintained in this thesis. Furthermore, its commercial aspect had always been very important for its financial strength. By 1927, the National Bank remained a private dual-purpose institution. As a joint stock bank, its governors had a 'duty to the proprietors' which was to produce dividends by maintaining its commercial strength.

The National Bank pursued the implementation of a stabilisation plan, accompanied by the issue of an international loan in order to liquidate part of the government debt that was tied to its assets. This would improve the liquidity of the National Bank and put it in a position to expand its commercial business and take advantage of the new opportunities that convertibility and capital inflows would create, so as to regain ground lost because of war and monetary upheaval. At the same time, however, the Financial Committee of the League was promoting the metamorphosis of the National Bank into a fully fledged central bank, a course which would restrict its business mainly to discounting and confine its duties to public responsibilities. Clearly, the way in which the governors of the National Bank had envisaged stabilisation affecting the status of the National Bank showed a marked difference in thinking from that of the Financial Committee of the League.

7.2.5. Tsouderos' proposition: the 'deus ex machina'

The negotiations between the Greek side and the representatives of the League were about to reach a stalemate in late June 1927, since there was a fundamental disagreement over the way that each side envisaged the stabilisation of the drachma as affecting the status of the National Bank.

At this point, Emmanuel Tsouderos suggested to the sub-committee of the League responsible for central banking reform in Greece an alternative solution which at the time

[421] See Christodoulaki (2002).
[422] Bouvier (1984, p. 36).

appeared to be innovative: the National Bank would continue its commercial functions and instead it would transfer to a new bank its privilege of note issue and those of its other activities which were usually carried on by a central bank. Tsouderos, without consulting the governor of the National Bank, presented this solution to members of the League committee, who promptly accepted it. Only one member of the sub-committee of the League, M. Dubois, voiced doubts about Tsouderos' proposal to create a New Bank of Issue and for the National Bank to be transformed into a purely commercial bank. Dubois argued that according to this plan 'the new bank would not have sufficient standing and would not be strong enough to control the financial market'.[423] In Athens, neither the National Bank nor the minister of finance objected to this scheme when they were informed. Greek officials involved in the negotiations with the Financial Committee of the League saw this option as the best solution that, on the one hand, would not undermine the National Bank, and on the other would allow the flotation of an international loan under the auspices of the League to go ahead. In fact, they believed that this alternative option would work in favour of the National Bank. The New Bank of Issue would develop close links with the National Bank and business that would officially belong to the new central bank would continue to be carried out in branches of the National Bank.[424] This proposition from the deputy governor of the National Bank led to the establishment of a fully fledged central bank *de novo* in Greece, the Bank of Greece.

The statutes of the New Bank of Issue for Greece were fairly closely drafted in accordance with Estonian and Indian precedents.[425] They were prepared by Osborne and de Bordes under the supervision of Strakosch at the Bank of England in early July 1927. Tsouderos took part in the discussions on a consultative basis, suggesting 'only a few alterations'.[426]

News about possible central banking reforms in Greece appeared in the British press on the same day that the Greek representatives in Geneva officially asked the Council to authorise a Stabilisation Loan for Greece. The Financial News of 15 June reported that the National Bank, under the League's scheme, 'would be transformed into an issue bank and would engage a foreign advisor'.[427] Some central banking reforms would in any event, have been anticipated by the markets, as they were an integral part of all the League sponsored reconstruction schemes that had preceded the Greek stabilisation plan. Three weeks later, *The Economist* published a long article on the negotiations between Greek officials and the Financial Committee of the League. It was reported that a prerequisite for the flotation of a

[423] BoE Archive, OV9/190/93.
[424] Venezis (1955, p. 41).
[425] BoE Archive, OV9/190/1.
[426] Ibid.
[427] *Greek Extracts*, Financial News, 15 June 1927.

League sponsored loan was that the Greek parliament authorised 'the gradual conversion of the National Bank of Greece into a central bank of issue of modern type'.[428] By that time, however, not only the manner of central banking reform in Greece had been agreed upon, but the statutes of the New Bank had been drafted.[429]

The architects of the reform at first withheld and then influenced the release of news of the establishment of the Bank of Greece. On 17 July, the day that the ministers of finance and foreign affairs returned to Athens, the first reference to the creation of a new central bank appeared in the Greek press as an option under consideration.[430] The first public announcements by the minister of finance to the press stated clearly that two plans were being considered: the government was thinking either of transforming 'the National Bank into a pure bank of issue by transferring all its other functions to another bank' or of forming 'a new independent bank of issue'.[431] When Tsouderos returned to Athens at the end of July, he brought with him the final draft of the statutes of the Bank of Greece and a convention between the National Bank and the government which settled the constitution of the New Bank including the early loss of the issuing privilege by the National Bank.[432]

By early August 1927, details of the sweeping reforms had been made known publicly, as had been the opposition of the leader of the Populist Party to the arrangements provided by the Geneva Protocol. The Populist Party led by Panayis Tsaldaris withdrew from the coalition government, protesting against the establishment of a new fully fledged central bank in the country. It was their view that the National Bank should not be deprived of its issuing privilege. The Populist Party's disagreement with the Geneva Stabilisation Plan ignited considerable opposition to the New Bank of Issue which was to haunt the institution and threaten its existence for years to come. A reshuffled government brought the stabilisation plan to parliament, which ratified it the following December, the Populist Party being absent. Previously, the Council of the League had approved the scheme in its September session.

It took less than two months from the day that the Greek delegation arrived in Geneva until Emmanuel Tsouderos returned to Greece armed with the Geneva Protocol which spelt out in detail central banking reforms in the country and formed the legal basis of the stabilisation scheme in Greece. By contrast, it took approximately ten months from the day

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428 *The Economist*, 9 July, 1927. The requirements set by the League for the re-organisation of the National Bank to operate as a central bank of issue and maintain the stable value of the drachma were also stated.
429 See BoE Archive, OV9/190/1; BoE Archive, OV9/190/93.
430 Venezis (1955, p. 44).
431 *Greek Extracts*, Financial News, 22 July 1927; Venezis (1955, p. 44).
432 League of Nations (1927, Annex III, pp. 24–27 and Annex IV, pp. 27–39).

that Tsouderos arrived in Athens until the Bank of Greece opened for business in May 1928. Prior to this, on 1 March 1928 in an extraordinary meeting, the shareholders of the National Bank unanimously ratified the reform of the Bank that its governors had decided. A prerequisite for the Bank of Greece to open its doors for business was that the Stabilisation Loan had already been floated. Delays in the launch of the Stabilisation Loan due to the fact that Greece had not reached an agreement regarding war debts with the USA delayed the start of operations of the Bank of Greece.

The political authorities expected that institutional developments resulting in the establishment of a central bank and the adoption of the gold exchange standard would facilitate an influx of foreign capital essential for economic growth. However, by May 1928 the Greek government had over-borrowed and the international economy was about to enter the most severe depression ever experienced. A few months after Greece adopted the gold exchange standard, in December 1928, a loan for public works with a nominal value of 4 million pounds was issued on the London market, on similar terms to those of the Stabilisation Loan. Only one-third of this loan was covered. A month later, in January 1929, the Greek government signed an agreement with Seligman & Co for a loan with a nominal value of up to 54 million dollars.[433] The agreement provided for the flotation of a loan on terms similar to the Stabilisation Loan on the condition that the IFC would assume responsibility for its service. Seligman would take responsibility for any part of the loan that remained uncovered. On 30 October 1929, the *Evening Standard* announced the cancellation of this loan.[434] The official reason for the termination of this agreement was that the IFC had refused to assume responsibility for the service of this loan.[435] The timing of the termination of the agreement, however, is more revealing than the official announcement.

7.3. Bank of Greece: objectives and functions

Autonomy was incorporated in the statutes of the Bank of Greece which at the time were regarded as the most modern of their kind.[436] The macro function of a central bank, that is responsibility for monetary management, can be clearly traced to the statutes for the new central bank in Greece, together with the other main principles that the Financial Committee followed

[433] The nominal value of this loan in sterling was approximately 11 million, close to that of the Refugee Loan of 1924. This means that the Seligman Loan was potentially a bigger lending operation than the Stabilisation Loan.
[434] *Greek Extracts*, 30 October 1929.
[435] *Greek Extracts*: Morning Post, 2 November 1929; Financial News, 25 November 1929. On the refusal of the IFC, see *Greek Extracts*: *The Times*, 30 August 1929; *The Economist*, 19 October 1929. See also Stefanides (1930, pp. 257–258).
[436] League of Nations (1927, p. 7).

when they were involved in central banking reforms. The Bank of Greece, however, was not initially intended to be the bankers' bank, as none of the characteristics of a central bank associated with its micro function were set out in its charters.

The prime objective that was assigned to the New Bank was to ensure the convertibility of the currency.[437] To achieve this aim the Bank should 'exercise control within the limits of its statutes over currency and credit in Greece' and it was granted a monopoly over the right of issuing banknotes.[438] It was, however, stipulated in the statutes that the issuing privilege could 'be revoked at any time'[439] if the Bank of Greece failed to ensure that the gold value of its notes remained stable, a clause that put the New Bank in a precarious position, in particular after the collapse of the Gold Standard in 1931. The ultimate power to suspend the minimum reserve ratio that the Bank of Greece was obliged to hold was handed over to the government.[440]

The statutes of the New Bank laid down a minimum 40 per cent of reserve against its notes in circulation and other demand liabilities.[441] The term reserve was defined in its statutes to include gold coin and bullion in the ownership of the New Bank and net foreign gold exchange. In the way that 'net foreign gold exchange' was described, it could also include bills of exchange payable in a foreign currency maturing within three months and bearing at least two good signatures, and treasury bills of a foreign government maturing within three months. A temporary provision was included which allowed the New Bank to hold in its reserves during the first five years of its existence, the bonds of the Greek government denominated in gold that the National Bank had passed on to the newly established central bank.[442]

Provision was made so that at the request of the Bank of Greece, the government could suspend the full reserve requirements for up to 30 days in the first instance and subsequently to renew this temporary suspension for further periods of not exceeding 15 days each. In such cases, the New Bank had to pay a tax to the government and to raise its discount rate by not less than 1 per cent *per annum* during the period of suspension.[443] These provisions in the statutes of the Bank of Greece, which were related to the regulation of note issue and to the reserve requirements, were very close to the basic stipulations of the Federal Reserve Act of the USA in

[437] League of Nations (1927, Article 4, p. 27); Bank of Greece (1936, Article 4, p. 4).
[438] League of Nations (1927, Article 2, p. 27); Bank of Greece (1936, Article 2, p. 3). This exclusive privilege was conferred on the Bank of Greece until 31 December, 1960.
[439] League of Nations (1927, Article 2, p. 27); Bank of Greece (1936, Article 2, p. 3).
[440] League of Nations (1927, Article 63, pp. 37–38); Bank of Greece (1936, Article 63, pp. 33–34).
[441] League of Nations (1927, Article 61, p. 37); Bank of Greece (1936, Article 61, p. 32).
[442] League of Nations (1927, Article 62, p. 37); Bank of Greece (1936, Article 62, p. 32).
[443] League of Nations (1927, Articles 63 and 64, pp. 37–38).

its amended 1917 form.[444] By then, the system of a partial fiduciary note issue associated with the Bank of England and dating back to the Bank Act of 1844 had been renounced; the major weakness of which was thought to be its lack of elasticity. This new means of regulating banknotes in circulation, first seen in the statutes of the Reichsbank when it was established in 1875 and subsequently modified and improved in the USA, were adopted by most of the central banks established or reformed in the 1920s, as they provided a high degree of elasticity in note circulation without at the same time undermining its credibility.

The administration of the New Bank was entrusted to a Board of Directors. This Board consisted of the governor, the deputy governor and nine directors. At least three of the directors were to represent the industrial and commercial sectors of the country and three the agricultural sector. The first Board of Directors, including the governor and the deputy governor, was appointed by the government in agreement with the National Bank.[445] Subsequently, it was entirely the responsibility of the shareholders to elect the Board of Directors but the government was to approve the election of the governor.[446] The government had the power to appoint a commissioner who would have veto powers over decisions that were deemed to be contrary to the statutes of the New Bank or other laws of the state.[447] Alexandros Diomides, the governor of the National Bank, was appointed as the first governor of the Bank of Greece and Emmanuel Tsouderos, the sub-governor of the National Bank, as the first deputy governor of the New Bank.

The Geneva Protocol explicitly directed the New Bank to act as the government's bank.[448] The government undertook to centralise at the Bank of Greece all the receipts and payments of the state and state enterprises. In addition, the Bank was made responsible for the 'issue and management of all internal state debt, upon such terms and conditions as may be agreed upon'.[449] Lending to the government, however, was strictly limited. In accordance with its statutes, the New Bank was allowed to grant credits to the government up to a maximum of 400 million drachmae and to discount treasury bills endorsed by a third party up to a similar limit.[450] Consequently, neither treasury bills nor similar floating debt could total in excess of 800 million drachmae, a sum which corresponded to 3 per cent of the GDP of 1927 or to less than one-tenth of the 1927 budget which was about 9 billion drachmae. The rate of interest that

[444] For more, see De Kock (1954, pp. 34–36).
[445] The first governor and deputy governor of the Bank were appointed irrevocably for five years. See League of Nations (1927, Article 29, p. 32).
[446] League of Nations (1927, Articles 20–25 and 29, pp. 30–32); Bank of Greece (1936, Articles 20–25, pp. 11–13).
[447] League of Nations (1927, Article 47, p. 34); Bank of Greece (1936, Article 47, pp. 22–23).
[448] League of Nations (1927, Articles 45 and 46, p. 34); Bank of Greece (1936, Articles 45 and 46, p. 22).
[449] League of Nations (1927, Article 45, p. 34); Bank of Greece (1936, Article 45, p. 22).
[450] League of Nations (1927, Article 55, pp. 35–36); Bank of Greece (1936, Article 55, pp. 25–29).

could be charged on temporary advances on drachmae was to be agreed between the Bank of Greece and the government.

Although the Bank of Greece immediately became the government's bank it was not designed to be the bank of the banks. No provision was included in its original statutes to compel commercial banks to place their domestic or foreign reserves with the central bank. Initially, Henry Strakosch had proposed a clause which was included in the draft statutes that forced other banks to keep reserves at the central bank.[451] According to this clause, every bank transacting business in Greece would be obliged to maintain a daily minimum balance with the central bank equal to 7 per cent of its liabilities.[452] It is not clear from the material to hand why this clause was discarded from the final draft statutes of the New Bank. It is quite possible that in the end a tendency to let the Greeks fight this point out amongst themselves prevailed, since there was disagreement even amongst the members of the sub-committee about the exact nature and phrasing of a provision regulating the commercial banks in the country.[453] The only bank that was required by law to 'maintain daily a minimum balance with the Bank of Greece equal to 7 per cent of the aggregate sight deposits payable in drachmae' was the National Bank.[454] This stipulation was incorporated in the agreement between the government and the National Bank of Greece that was drafted at the Bank of England in early July 1927.

The business of the New Bank was limited to discounting bills of three-month maturity and granting advances for fixed periods not exceeding six months. An exception was given to agricultural bills and advances which could have a maturity date of nine months.[455]

The Bank of Greece received statutory independence which was primarily instrument independence, granting as it did full discretion and power to pursue monetary policy to attain a goal which was precisely defined. This goal was to ensure the stability of the external value of the drachma. According to its creators, the strength of the New Bank was based both on its being statutorily independent and on an endowment of reserves upon commencement of operations. That having been said, very little concern was expressed if the composition of the

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[451] BoE Archive, OV9/190/1; BoE Archive, OV9/190/96: Article 59a.
[452] BoE Archive, OV9/190/57: Article 59a.
[453] BoE Archive, OV9/190/96: Article 59a; Dubois opposed in principle 'the system of all banks having to deposit a reserve of 7 per cent at the central bank'. In his opinion a reserve of 7 per cent should 'be a blocked reserve which would not be available in case of crisis' calculated as a percentage of the bank's capital or of the total of its clearings during the preceding year. For a different view as to why this clause was excised from the statutes of the Bank of Greece, see Pepelasis Minoglou (1993, p. 149; 1996, p. 36; 1998, p. 52).
[454] League of Nations (1927, Annex III, Article 7, p. 26).
[455] League of Nations (1927, Article 55, pp. 35–36); Bank of Greece (1936, Article 55, pp. 25–29). This exception must have been a concession to Tsouderos. See BoE Archive, OV9/190/95: Article 54.

assets that the New Bank inherited might not allow it to influence decisively monetary policy and to play the role of the lender of last resort in order to achieve systemic stability.

7.4. Endowment of the Bank of Greece

The Bank of Greece opened its doors for business on Monday 14 May 1928 as a joint stock company. Its share capital was 400 million drachmae divided into 80,000 shares of 5,000 drachmae each. In order to safeguard its independence, the statutes of the New Bank stipulated that the state together with state institutions could not own more than one-tenth of its nominal issued capital.[456] See Table A5.1 in Appendix A5 where the first balance sheet of the Bank of Greece is presented. This table shows the financial strength of the Bank of Greece upon commencement of operations.

The share capital of the New Bank was initially taken over by the National Bank, which was obliged to offer it for public subscription at par in three separate issues: the first within two months of the opening of the New Bank and the second and third issues each with a year's interval between them. A pre-emption right to one-half of each issue was to be reserved for the shareholders of the National Bank in proportion to the number of shares that they held in the capital of this bank.[457] In return, the National Bank transferred to the Bank of Greece bills and advances and other liquid assets that the latter was entitled to hold. The total discounts and advances that were passed on to the Bank of Greece amounted to nearly 50 million drachmae or 0.16 per cent of the GDP of the country in 1927. (See Appendix A5, Table A5.1.) By contrast the discounts of the National Bank on 14 May 1928, the first day that it operated as a pure commercial bank, amounted to over a billion drachmae or 3.38 per cent of the 1927 GDP.

The New Bank's deposits comprised deposits belonging to the government and to the banking sector. As has been mentioned above, the National Bank was obliged by law to keep deposits at the Bank of Greece equal to 7 per cent of its aggregate sight deposits payable in drachmae. Other banks could deposit with the new central bank if they wished.[458] On the first day of the New Bank's operations almost the entirety of its liabilities in favour of the banking sector, 95 per cent, belonged to the National Bank and only a small proportion, 5 per cent, comprised deposits of the other banks.[459]

[456] League of Nations (1927, Article 8, p. 28); Bank of Greece (1936, Article 8, p. 6).
[457] League of Nations (1927, Annex III, p. 24); Bank of Greece (1978, p. 77).
[458] League of Nations (1927, Annex III, Article 3, p. 25).
[459] Bank of Greece (1929, pp. 35–36).

According to the Geneva Protocol, the government undertook to centralise at the Bank of Greece all the receipts and payments of the government and government enterprises.[460] However, in violation of the Geneva Protocol, the final agreement between the government and the National Bank gave the latter the right to retain deposits of the surplus funds of state enterprises until 1950.[461] The literature has seen this arrangement as a gesture on the part of Greek officials involved in the central banking reform to preserve a strong National Bank.[462]

The Geneva Protocol stated that the New Bank should have reserves in gold and foreign exchange of not less than 50 per cent of the total of the note circulation and its other demand liabilities on the day that it commenced business.[463] The balance sheet of 14 May 1928, the day that the Bank commenced operations, painted an optimistic picture: it showed a reserve ratio of 53.67 per cent of all sight liabilities or 81.51 per cent of the notes in circulation alone.

Table 7.1: Allocation of public debt previously belonging to the National Bank on 14 May 1928

	Percentage of GDP[1]	**Percentage of the former National Bank debt**
Bank of Greece (Article 62)[2]	0.75	3.64
Bank of Greece	12.18	58.70
National Bank of Greece	3.73	17.97
Cleared by one-third of the Stabilisation Loan	3.64	17.57
Cleared by residual items[3]	0.40	1.94
Measurement error[4]	0.04	0.19
Total	20.74	100.00

Notes:
[1] GDP for 1927 has been used for the estimates.
[2] This is government debt comprising bonds denominated in gold and traded on the Athens Stock Exchange and abroad that the Bank of Greece included in its reserves under Article 62 of its statutes.
[3] This refers to the public debt cleared by the part of the reserve funds of the National Bank which under the Law 2577/1921 belonged to the government and by exchange rate differences in favour of the government.
[4] There is some discrepancy amongst sources for the exact figures on 14 May 1928 but this is very marginal.

[460] League of Nations (1927, Annex VI, p. 40).
[461] NBGHA_A1Σ22Y6Φ8E2. For more on the issue of the deposits of the state enterprises and for the compromised solution that was reached in July 1929, see: Pyrsos (c1935, pp. 123–139); Kostis (1986, p. 51); Pepelasis Minoglou (1996, p. 36; 1998, p. 52).
[462] Kostis (1986, p. 51); Pepelasis Minoglou (1996, p. 36; 1998, p. 52).
[463] League of Nations (1927, p. 7).

Sources: NBGHA_Α1Σ22Υ6Φ2Ε1; Balance Sheet of the Bank of Greece and the National Bank on 14 May 1928; Annual Report of the Bank of Greece for 1928; Annual Report of the National Bank for 1928; Kostelenos *et al.* (2007).

Table 7.1 illustrates how the government debt that the National Bank possessed before central banking reform, was distributed between the two banks, the National Bank and the Bank of Greece. This table also shows what proportion of that debt was cleared by the proceeds of one-third of the Stabilisation Loan. The National Bank transferred to the New Bank the Greek government bonds denominated in gold that it was obliged to keep as cover for banknotes issued in conformity with the Laws 656 of 1915 and 2547 of 1920, after deducting gold bonds forming part of this cover to the value of £700,000.[464] According to the Geneva Protocol, the value of these bonds was to be based on the average price of Greek government bonds traded on the London Stock Exchange during the three months to 30 September 1927. Their value in sterling was converted into Greek currency at the stabilisation price.[465] This arrangement transferred to the New Bank Greek government bonds denominated in gold of market value of £621,409 or 233,028,598.50 drachmae.[466] As Table 7.1 shows, these bonds were 0.75 per cent of GDP in 1927 or 5.84 per cent of the total debt that was transferred to the Bank of Greece.[467] They formed part of the reserves of the Bank of Greece as defined by its statutes, representing 7.30 per cent of the total reserves. In fact, it was the only part of the government debt that the Bank of Greece inherited from its predecessor that was liquid, traded on secondary markets and could be used for open market operations.

The rest of the government debt that the National Bank passed over to the New Bank and which appears on its balance sheet of 14 May 1928 under the heading 'Government Debt' was immobile, illiquid debt that had its origins in the inflationary period of the 1920s. It consisted of issues of banknotes for the account of the government, loans resulting from the ΓΧΜΒ Law and other direct loans of the National Bank to the government after the proceeds of one-third of the Stabilisation Loan had been deducted.[468] (For a detailed presentation of this illiquid government debt held by the National Bank before the central banking reform, see Table 4.11 in Chapter 4.) As Table 7.1 illustrates, this debt was more than 12 per cent of the 1927 GDP of the country and comprised 94.16 per cent of the total government debt that the Bank of Greece held on the very first day of its operations or 47.41 per cent of its total assets. In practice, it limited the power of the bank to intervene in the financial market and to conduct effectively monetary policy. The 3 million sterling of the Stabilisation Loan that was

[464] BoE Archive, OV9/192/2, p. 121; NBGHA_Α1Σ22Υ6Φ2Ε1.
[465] League of Nations (1927, Annex III, p. 24).
[466] Bank of Greece (1929, p. 10).
[467] Balance Sheet of the Bank of Greece, 14 May 1928; Bank of Greece (1929, p. 10).
[468] NBGHA_Α1Σ22Υ6Φ2Ε1.

employed for repayment of government debt to the central bank formed part of the New Bank's reserves.

Table 7.2: Composition of public debt remaining at the National Bank on 14 May 1928

	Percentage of GDP[1]	Percentage of the total debt at the National Bank
Government bonds[2]	2.43	65.24
Temporary loans to the Greek government	0.97	25.89
Government bonds against National Defence Bonds	0.33	8.87
Total	3.73	100.00

Notes:
[1] GDP for 1927 has been used for the estimates.
[2] This is government debt denominated in gold and in drachmae that was traded on the Athens Stock Exchange.
Sources: Annual Report of the National Bank for 1928 (1929); Kostelenos *et al.* (2007).

The Old Bank retained national debt amounting to nearly 4 per cent of the 1927 GDP or nearly 18 per cent of the total public debt that it held before the reform. (See Table 7.1 above.) The composition of the public debt that remained at the National Bank is illustrated in Table 7.2. Government debt of nearly 2.50 per cent of GDP comprised Greek government bonds denominated in gold and in drachmae that were traded on the Athens Stock Exchange. This is a modest estimate based on the book value of the government bonds that the National Bank recorded in its annual report.[469] Both the discount portfolio of the Old Bank and its portfolio of government bonds when compared with those of the New Bank gave the former an unchallenged pre-eminence on the credit market. By contrast, as has been pointed out above, the instruments that the Bank of Greece wielded were not effective in imposing its authority on the financial markets and exercising monetary policy. It possessed too few assets which could be used to inject or drain market liquidity.

[469] Annual Report of the National Bank for 1928 (1929, p. 6).

CONCLUSION

CONCLUSION

This thesis examines the origins of central banking in Greece and thus contributes to the literature dealing with the evolution of central banking and its transfer to small open economies. It also adds to research related to foreign financial intervention and control, and sends the message that conditionality attached to financial assistance is successfully implemented if it is in line with the prevailing political economy in the recipient country. A long time-span is covered, allowing the thesis to demonstrate that conditionality is also successful as long as the historical and economic circumstances which prevailed when it was introduced remain unchanged.

Prior to the establishment of a fully fledged central bank in Greece in 1928, the National Bank, a dual-purpose bank, carried out the public responsibilities of a central bank whilst at the same time being by far the most important commercial bank. The Old Bank of issue is considered in this thesis to be a central bank which, however, failed to develop into a fully fledged central bank as would be recognised today, owing either to market forces or government intervention, by following a route similar to that described in the natural evolution hypothesis. When under pressure from the League, the National Bank's governors faced the challenge of transforming it into a fully fledged central bank by shedding all commercial and deposit banking business; they chose instead for the Old Bank to continue with its commercial activities and to lose all its public responsibilities. A fully fledged central bank, the Bank of Greece, was then established alongside it. As a result, the social cost of transferring the commercial activities and deposits of the National Bank to a newly established commercial bank, or to other banks that already operated in Greece as was initially suggested by the League, was minimised.

Extensive use of the annual reports and the published balance sheets of the Old Bank of issue as well as material, both qualitative and quantitative, from a variety of archives enabled widespread analysis of the 'dual position' of the National Bank over a long and historically diverse period. Time series are constructed to demonstrate how its governors managed 'the two conceptions of their business',[470] i.e. central banking responsibilities and commercial banking preserving and safeguarding the financial strength and consequently the reputation and credibility of the Bank. A strong, financially sound National Bank created the systemic

[470] Clapham (1944, p. 372).

stability that characterised the Greek banking system and made it a respectable ambassador for the Greek government abroad. It is unfortunate that no similar time series have been created exploring the central banking responsibilities and the commercial activities of the National Bank from 1842 up to 1897. Future research has the potential to fill this gap by constructing time series following the methodology adopted here; only then could the entire history of the Old Bank as a dual-purpose bank be evaluated.

The time series constructed demonstrate the evolution of the dual-purpose Old Bank between the enactment of the Law of Control in 1898 and the establishment of the Bank of Greece in 1928. They refer to the commercial activities of the Bank, its financial position, its relationship with the government and the manner in which the printing press was used. For the first time ever, and for the purpose of this thesis, public debt as it appeared on the National Bank's balance sheet is divided into public debt traded on stock exchanges and government debt that was not traded on secondary markets, and time series were created accordingly. The newly constructed time series indicate that the changes a long period of war and monetary upheaval brought to the structure and composition of the balance sheet of the Old Bank, to a great extent, determined the banking reforms that took place in the late 1920s.

This thesis demonstrates that the commercial aspect of the National Bank was very strong on the eve of central banking reforms. The Old Bank was involved in a variety of commercial activities; most of which were not, however, compatible with central banking orthodoxy as promoted by the Bank of England. The Old Bank can be compared with other continental 'public banks', which in the past had combined unique public responsibilities with commercial activities. It differed, however, from those continental banks of issue in that it remained a dual-purpose bank until as late as the 1920s and never evolved into a fully fledged central bank. The structure of the assets and liabilities of the Greek bank of issue was close to the early North European central banking model, where 'solidity of collateral' was more important than the liquidity dictated by the classical model of central banking.[471]

The time series constructed demonstrate that at the beginning of the period in question the commercial activities of the National Bank were primarily focused on mortgage credit and time deposits. Illiquid public debt held by the Bank consisted mainly of forced banknotes in circulation between the enactment of the Law of Control and the outbreak of the Balkan Wars. The newly created time series indicate that during this period of relative peace and growth the Old Bank of issue expanded credits to the economy and its deposits increased. They also show

[471] Tarkka (2009).

that the Bank began restructuring its portfolio of credits to the economy in favour of more liquid forms, just after the outbreak of the First World War. It is important to note that the significance of mortgage credit as an asset item of the Old Bank had diminished by 1926 in favour of more liquid assets, following a long period of war and high inflation. In addition, time deposits decreased during that same period. This change on the Bank's balance sheet explains in a way that goes beyond what is argued in the literature why, of its own volition, it conceded its mortgage credit privilege to the newly established Mortgage Bank in 1927.

The same newly constructed time series show that the commercial aspect of the National Bank subsided after the outbreak of the Great War and in addition graphically indicate that the relationship between credits supplied to the economy and bilateral public debt held by the National Bank changed fundamentally after 1918. As is evidenced, the Old Bank proved to be the main source of financial support to the government during a turbulent historical period when the latter had no access to international financial markets and a complex relationship developed between them. High inflation in the 1920s wiped out a significant part of the nominal value of bilateral public debt denominated in drachmae and owned by the National Bank without, however, entirely eliminating it. Hence, the National Bank promoted a stabilisation programme which would help to reduce it still further so as to increase its liquidity.

The financial position of the dual-purpose Old Bank was also protected by the way in which it pursued its commercial activities. The National Bank's financial strength was based on its ability to select high quality assets and liabilities, which resulted in its enduring profitability and solvency. In this thesis, the term profitability does not necessarily mean that the aim of its management was the maximisation of profits, despite the fact that the National Bank was a private institution. The quality of its assets and liabilities, given the constraints under which it operated, was more important for its conservative and risk-averse governors than maximisation of profits *per se* in the conventional sense of the term. A great number of the assets and liabilities of the Old Bank related to the monopolies and privileges that it enjoyed. Furthermore, as is shown, there was a considerable spread between the interest rate charged for credits to the economy and the rate paid for deposits, which also indicates that the banking system in Greece was not at all competitive.

The policy of the National Bank as a commercial bank was to lend against a variety of good collateral, to low-risk, creditworthy customers from its establishment in 1842 to the end of the period in question. A conservative and risk-averse National Bank did not challenge the informal credit networks that operated but did business with them, as they could provide high quality collateral and were the low-risk and creditworthy customers it sought. Research, however, on the relationship between the banking sector and the non-banking credit system is very limited. The literature has not so far tackled crucial questions related, for example, to the National Bank and the cost of capital in Greece.

This thesis demonstrates that it was the way in which the governors of the National Bank combined central banking responsibilities with commercial banking that safeguarded and preserved the financial strength and consequently the reputation and authority of the Bank. As a bank of the government the Old Bank lent to the government, though reluctantly, during periods of national crisis. When attempts at reconstruction were made, the aim of the Old Bank was to achieve a reduction and/or a reconstruction of the illiquid public debt that it held. A financially sound National Bank in turn acted as an anchor in an unstable political, economic and monetary environment, such as that of the period in question. Although it protected its own interests at the same time, a financially sound National Bank provided the systemic stability that characterised the Greek banking system and made it a respectable and credible ambassador for the Greek government abroad.

As is shown, restructuring of the domestic public debt in 1898 strengthened the financial position of the Old Bank of issue. In the late 1920s, the National Bank pursued a stabilisation programme that would improve its liquidity and its position as the bank of the government, whilst allowing it to expand its commercial aspect, as stabilisation was expected to encourage foreign direct investment in Greece. William Miller (1928, pp. 20–21), an experienced observer of Greek affairs, wrote that on the eve of the central banking reform

> the terrace of the *Grande Bretagne* in Athens [was] often full of business men in search of concessions. The drainage of the Vardar and Struma valleys, the Salonika harbour-works, the new port of Candia, the 'Power and Traction' convention for the traffic of Athens and suburbs, railways, telegraphic and aerial communications, water-works, and roads – all these have attracted foreigners.[472]

The National Bank would not have implemented such radical reforms of its own volition. Neither were key market forces conducive to such sweeping central banking reforms in the late 1920s. The structure and the size of the banking sector as well as the payments system, in short, the stage of development of financial institutions in Greece at the time, would not have encouraged the Old Bank to confine its activities to central banking orthodoxy. By the time the Greek delegation arrived in Geneva in June 1927 to request officially the assistance of the League in stabilising *de jure* the drachma, the National Bank had already conceded its monopoly on mortgage credit, of its own accord, to a newly

[472] Quoted also in Mazower (1991, p. 107).

established National Mortgage Bank. This was the only monopoly that the bank of issue had enjoyed since its foundation in 1842 but which it willingly passed to another banking institution in the late 1920s. Then in 1928 the Old Bank conceded its issuing privilege to the Bank of Greece; and finally in 1930 it lost its monopoly on agricultural credit when a specialised institution, the Agricultural Bank of Greece, commenced operations. These wide-ranging banking reforms led to the modernisation and rationalisation of the banking system in Greece and together constitute the most important transformation of the banking system in the country in its entire history.

This thesis also examines the monetary arrangement introduced in March 1910, which is known as the ΓΧΜΒ Law or the Valaorites Law, and draws attention to the discrepancy between the way that this monetary change in Greece in 1910 is seen in recent economic history literature and the way it was considered by scholars and policy makers at the time. These days it is claimed that Greece adopted either the gold standard or the gold exchange standard during that month. By contrast, before the 1980s it was believed that the Greek currency had remained inconvertible throughout the period from September 1885, when the gold standard was suspended, until May 1928, when the gold exchange standard was *de jure* introduced. A close analysis, however, of the ΓΧΜΒ Law indicates that in 1910 the National Bank, a privately owned bank of issue, aimed at avoiding the 'golden fetters'. Thus, a mechanism was introduced that helped the Old Bank to maintain a stable drachma at its LMU parity, whilst at the same time increasing the money supply for the 'needs of trade'. Simultaneously, the ΓΧΜΒ Law helped the Bank to increase its reserves in gold and foreign exchange, which, as is shown, became an important source of income for the bank of issue. The fact that the National Bank was reluctant to adopt the gold standard raises questions that are at the heart of the 'rules versus discretion' debate. Does the 1910 monetary arrangement in Greece reflect the inherent tension between a privately owned central bank's duty to earn profits for its shareholders and its responsibility to provide the public with monetary and financial stability? To what extent did the ΓΧΜΒ Law enacted in March 1910 and its evolution reflect the political economy of the time and historical circumstances? Only future research can provide conclusive answers to these questions.

It has been argued that the emergence of early central banks stemmed from the needs of 'revenue seeking or power-hungry governments'[473] to 'finance [public expenditure] on beneficial, subsidised terms'[474]. Once again state finance was at the core of central banking reforms under the terms of the stabilisation programmes sponsored by the Financial Committee

[473] Bordo and Redish (1987, p. 405).
[474] Goodhart (1988, p. 19).

of the League of Nations. This time, however, central banking reforms were aimed at preventing governments from borrowing liberally from the central bank and making monetary policy subordinate to fiscal policy. Central banking reforms in the 1920s also aimed to re-establish the pre-war *status quo* and encourage cooperation among central bankers.

The statutes of the Bank of Greece were at the heart of the stabilisation principles and were focused both on the macro function of a central bank and on its role as the bank of the government. The law of the New Bank set up a commitment mechanism for monetary policy and central bank independence. The law alone, however, is insufficient to guarantee independence for any central bank. Central banks also need to achieve a political consensus, or at least a sufficient degree of political support, to maintain their position of independence.[475] In Greece, the establishment of a central bank was not welcomed either by politicians or by the commercial banks. Its independence, a keystone in its statutes, was limited from its earliest days. And in the final analysis the credibility of the Bank of Greece was contingent upon events that its creators were not able to predict even as late as 1928.

Central banking reforms that took place under the supervision of the Financial Committee of the League of Nations in the 1920s were aimed at combating different economic and monetary conditions from those that emerged in the 1930s. In the 1930s, central banks had to operate in an environment dominated by the failure of the gold exchange standard, by collapsing financial structures, extensive state intervention and autarky. The actions of the Bank of Greece became effective under the distinctive conditions that were created by the financial crisis of 1931. These conditions, coupled with the fact that depreciation and flexible exchange rates enabled policy makers to pursue monetary policies independent of the exchange rate, strengthened the position of the newly established central bank in Greece. More research, however, must be carried out to delineate the monetary policy that the Bank of Greece exercised in the 1930s and the effect that this policy had on enabling the Bank of Greece to strengthen its position in the market place.

This thesis also explores the complex relationship that arose between Greek governments and foreign supervisors and unravels the impact that foreign financial intervention had on the evolution of monetary institutions in Greece during the period in question.

Sovereign risk time series were constructed to establish the background of the negotiating power of the Greek government between the introduction of the Law of Control in 1898 and stabilisation in 1928. These sovereign risk time series illustrate in a graphic way

[475] Goodhart (1993, p. 6).

why Greek governments faced considerable difficulties in raising capital on the financial markets in the 1920s, beyond the international politics and embargoes referred to in the literature. Qualitative research into the British press supports the findings of quantitative analysis which indicates that creditors acted upon news of fiscal policy and public debt.[476]

This thesis examines in depth the Geneva Protocol of 1927 prepared by the Financial Committee of the League and refers extensively to the 1898 Law of Control. The parallels and contrasts between them are explored as the international financial control of the late nineteenth century is echoed in the League reconstruction schemes. In the late 1890s, the central issue in the negotiations was the resumption of the debt service of the external public debt. The Law of Control detailed the restructuring of the Greek government debt and encouraged monetary discipline in Greece and independence for the National Bank. It should be noted that the Law of Control did not stipulate that Greece had to adopt the gold standard as is usually claimed by modern scholars. By contrast, a prerequisite of the 1927 League Reconstruction scheme was *de jure* adoption of the gold exchange standard.

In both 1898 and 1928 conditionality was introduced that was pertinent to the operation of the National Bank; in fact, as is shown, conditionality protected its financial strength since on both occasions it improved the quality of its assets. In particular, the bilateral public debt that it held was restructured in 1898, whilst in 1928 the National Bank refused to confine its assets and liabilities to those of a central bank and passed over to the Bank of Greece nearly all the illiquid debt that it held. This thesis also demonstrates that reforms relating to monetary institutions encouraged by foreign creditors were adapted in such a way as to be in line with the objectives and the constraints under which the Old Bank of issue operated when still a privately owned central bank. For example, in 1898 conditionality introduced by the Law of Control relating to monetary institutions had been endorsed, if not promoted, by the National Bank. Yet again, in 1928, the National Bank sponsored a stabilisation programme which safeguarded and preserved its own financial position and strength.

In the 1920s, the League facilitated access to capital markets by signalling that a country, in this case Greece, would follow prudent fiscal and monetary policies in the future. The coupon rate of the League loans was close to the market yield of the country that floated the loan. In this way the creditworthiness of the country in question was denoted. By contrast, in 1898 the Great Powers jointly and severally guaranteed the flotation of the 2.50 per cent

[476] See Christodoulaki *et al*. (2011, 2012).

Guaranteed Loan. As a result, the terms under which the Guaranteed Loan was issued were very favourable; in fact, its interest rate was only 2.50 per cent, that is to say the same as the British consols coupon rate.

In the both late 1890s and late 1920s, lenders to Greece promoted the establishment of institutions there that were akin to those which prevailed in their own countries. By the time that the 1898 Law of Control and the 1928 League stabilisation programme were signed, conditionality had not only been accepted but, as discussed, also shaped by those that were most affected. Since 2009, when the current economic recession started, successive Greek governments have faced similar questions to those that are tackled extensively here in this thesis. An over-borrowed Greek government has had no access to capital markets and has been expected to implement widespread structural reforms demanded by its lenders, which, however, have mustered very little support. Resistance and delays in the implementation of structural reforms in a fairly unstable and polarised political environment are among the most important reasons for a deep and protracted economic recession. A 'war of attrition' with distributional implications among different socio-economic groups has taken place and the burden of a huge and rapid fiscal adjustment has been shifted onto those that can bear it least and to future generations.

APPENDICES

APPENDIX A1: General information

Table A1.1: Available price indices, 1914–1929

	A	**B**	**C**	**D**	**E**
1914	100	100	100	100	100
1915	119	117	123	121	122
1916	159	159	181	161	160
1917	264	156	231	268	238
1918	360	366	292	350	306
1919	324	323	333	328	335
1920	346	351	362	358	380
1921	412	398	465	402	474
1922	602	636	751	648	733
1923	1271	1181	1467	1239	1265
1924	1303	1235	1353	1301	1396
1925	1506	1414	1474	1508	1508
1926	1683	1633	1711	1690	1726
1927	1886	1790	1965	1816	1946
1928	1942	1868	1860	1889	1943
1929	2019	1923	1662	1925	1788

Notes:
(1) Column headed A shows a general price index which appears in the *Statistical Yearbooks*.
(2) Column headed B indicates a cost of living index which is also provided by the *Statistical Yearbooks*.
(3) Column headed C shows a price index constructed by Kostelenos (1995).
(4) Column headed D shows a price index constructed by Mitrofanis (2002) and published in Dertilis (2005).
(5) Column headed E presents a deflator based on a sample of ten items constructed by Kostelenos *et al*. (2007).

Sources: *Statistical Yearbook of Greece for 1939* (1940, pp. 471–472); Kostelenos (1995, pp. 332–333); Dertilis (2005, pp. 1048–1050); Kostelenos *et al.* (2007, Table 7–II, column headed 3, p.38 of CD).

Table A1.2: GDP data at current prices, 1898–1930

1898	568,609,039
1899	542,817,095
1900	585,318,900
1901	663,880,009
1902	638,047,417
1903	623,984,536
1904	572,452,526
1905	579,591,946
1906	604,516,897
1907	646,723,396
1908	638,396,799
1909	689,464,639
1910	660,869,107
1911	847,536,747
1912	823,862,626
1913	856,722,066
1914	1,235,786,566
1915	1,420,876,565
1916	1,882,928,700
1917	2,689,025,077
1918	4,196,152,017
1919	3,789,749,966
1920	5,361,536,871
1921	6,821,748,101
1922	10,780,134,536
1923	16,558,597,496
1924	20,718,344,368
1925	23,992,285,292
1926	28,217,011,578
1927	30,874,784,578
1928	33,618,998,228
1929	32,387,828,463
1930	31,089,932,899

Source: Kostelenos *et al.* (2007, Table 6–III, Column H, pp. 138–141).

APPENDIX A2: Financial position of the National Bank, 1898–1930

Table A2.1: Total assets and liabilities of the National Bank, 1898–1930
(in Drachmae)

1898	285,206,415.00
1899	310,906,883.87
1900	315,345,530.51
1901	329,988,672.21
1902	349,835,505.87
1903	333,401,636.79
1904	363,023,704.55
1905	360,514,674.84
1906	385,574,311.39
1907	395,912,553.59
1908	408,335,218.99
1909	406,085,817.95
1910	423,366,869.95
1911	493,774,990.66
1912	586,362,493.07
1913	735,632,510.32
1914	725,446,800.83
1915	913,928,534.01
1916	1,125,648,628.22
1917	1,590,753,339.45
1918	2,483,020,605.15
1919	2,690,469,188.26
1920	3,963,521,338.29
1921	5,107,005,324.22
1922	8,095,503,082.78
1923	10,104,224,035.06
1924	11,080,903,898.31
1925	11,621,735,863.81
1926	11,111,440,888.04
1927	10,142,406,900.33
1928	7,362,310,823.58
1929	8,212,332,107.93
1930	8,994,604,459.10

Source: Balance Sheet of the National Bank, 1898–1930.

Table A2.2: Credits to the economy by the National Bank, 1898–1930
(in Drachmae)

	Discounts	Loans against Securities	Loans against Merchandise	Agricultural Credit	Mortgage Loans	Loans to legal entities	**TOTAL**
1898	15,735,435.26	5,035,809.97		4,441,196.51	36,895,992.56	28,748,966.72	90,857,401.02
1899	19,989,630.64	9,553,107.31		10,075,563.98	43,107,082.37	30,628,638.67	113,354,022.97
1900	22,904,815.33	9,978,007.06	130,302.35	12,594,367.93	45,528,961.61	34,717,257.15	125,853,711.43
1901	25,171,505.70	10,667,797.93	623,358.73	12,279,357.70	48,559,656.38	39,807,403.89	137,109,080.33
1902	24,599,858.32	12,563,613.49	561,426.90	13,746,457.90	50,346,619.37	45,157,368.29	146,975,344.27
1903	23,816,294.14	12,838,454.30	4,245,090.40	13,500,025.64	51,143,697.18	42,694,673.41	148,238,235.07
1904	23,414,374.70	15,311,250.37	5,187,723.36	13,965,710.29	54,411,486.18	43,513,839.51	155,804,384.41
1905	25,702,248.41	12,545,344.18	2,563,796.38	14,950,285.18	57,482,151.94	43,383,406.53	156,627,232.62
1906	24,143,943.31	12,245,138.20	5,737,380.32	17,179,935.97	62,345,114.29	45,953,525.56	167,605,037.65
1907	26,399,574.19	16,470,486.66	10,049,323.57	18,016,244.30	68,680,254.18	46,705,574.32	186,321,457.22
1908	26,956,001.57	23,176,588.57	10,967,832.76	16,772,876.08	69,384,628.68	45,926,165.16	193,184,092.82
1909	25,094,915.63	25,155,334.62	7,260,689.42	16,694,189.66	69,532,928.83	47,281,496.24	191,019,554.40
1910	24,689,228.06	18,269,261.97	6,714,690.81	17,036,145.13	68,483,660.26	48,598,969.34	183,791,955.57
1911	25,266,886.24	23,511,246.69	7,601,902.10	16,786,140.23	70,953,832.93	61,351,418.91	205,471,427.10
1912	29,018,541.66	37,055,864.79	4,999,952.85	16,100,478.05	72,513,291.94	60,380,031.49	220,068,160.78
1913	17,587,992.04	26,291,407.11	4,670,847.90	13,964,349.69	72,786,956.74	59,238,223.28	194,539,776.76
1914	28,989,753.89	38,358,020.22	2,553,552.65	13,946,707.20	72,735,462.10	75,695,794.84	232,279,290.90
1915	30,237,087.73	56,305,558.14	4,541,619.46	13,636,421.24	75,997,567.20	75,387,774.52	256,106,028.29
1916	28,521,896.84	52,861,351.99	15,181,993.52	14,898,109.87	75,005,685.51	73,070,621.50	259,539,659.23
1917	27,343,924.86	45,038,257.70	29,019,396.90	15,256,684.43	70,903,595.62	77,695,240.28	265,257,099.79
1918	16,105,546.33	22,995,612.60	90,592,223.72	19,713,592.22	66,563,738.78	76,939,087.77	292,909,801.42

	Discounts	Loans against Securities	Loans against Merchandise	Agricultural Credit	Mortgage Loans	Loans to legal entities	**TOTAL**
1919	33,964,800.24	27,760,594.07	94,387,318.32	30,403,636.26	71,327,065.15	79,022,851.98	336,866,266.02
1920	72,450,363.55	59,595,318.15	170,560,796.64	63,337,109.97	90,620,355.20	81,691,145.10	538,255,088.61
1921	68,953,004.08	73,166,755.25	158,740,400.83	68,821,866.66	116,284,614.85	93,680,086.23	579,646,727.90
1922	185,321,780.53	210,825,521.26	340,053,454.43	78,553,841.93	145,344,864.26	102,351,834.44	1,062,451,296.85
1923	178,075,557.38	143,263,648.68	311,938,368.63	176,525,578.55	220,654,593.46	115,946,834.78	1,146,404,581.48
1924	479,032,337.28	235,737,708.62	440,223,510.16	462,155,810.85	407,138,279.20	217,427,303.09	2,241,714,949.20
1925	680,362,329.35	344,589,817.55	416,835,096.61	565,515,421.43	540,771,820.08	280,611,840.67	2,828,686,325.69
1926	663,086,628.24	327,633,282.82	302,902,539.69	485,184,154.07	637,947,648.05	362,634,493.34	2,779,388,746.21
1927	848,867,414.03	293,480,166.70	204,533,262.91	755,639,043.65	0.00	71,649,572.80	2,174,169,460.09
1928	1,055,875,030.70	425,380,082.38	693,741,563.00	878,531,153.57	0.00	91,884,330.45	3,145,412,160.10
1929	1,461,621,441.87	696,753,083.71	966,894,989.92	1,258,101,890.59	0.00	124,766,825.74	4,508,138,231.83
1930	1,915,732,162.11	818,448,811.69	1,023,819,503.45	513,714,948.94	0.00	350,808,727.81	4,622,524,154.00

Source: Author's calculations using the Balance Sheet of the National Bank, 1898–1930.

Table A2.3: Credits to the economy by the National Bank at 1911 values, 1898–1930

	Discounts	Loans against Securities	Loans against Merchandise	Agricultural Credit	Mortgage Loans	Loans to legal entities	**TOTAL**
1898	14,463,884.94	4,628,875.83		4,082,311.94	33,914,498.21	26,425,817.89	83,515,388.82
1899	19,772,352.05	9,449,269.19		9,966,046.98	42,638,527.13	30,295,718.68	112,121,914.02
1900	18,777,821.58	8,180,167.95	106,824.45	10,325,112.45	37,325,545.10	28,461,895.50	103,177,367.03
1901	17,620,053.99	7,467,458.55	436,351.11	8,595,550.39	33,991,759.47	27,865,182.72	95,976,356.23
1902	23,078,217.60	11,786,482.76	526,699.46	12,896,161.54	47,232,395.49	42,364,129.01	137,884,085.86
1903	22,575,862.15	12,169,784.81	4,023,991.94	12,796,899.30	48,479,962.95	40,470,992.50	140,517,493.66
1904	25,671,181.90	16,787,033.54	5,687,744.89	15,311,802.85	59,655,966.78	47,707,944.52	170,821,674.47
1905	28,875,365.50	14,094,152.10	2,880,314.45	16,795,999.40	64,578,713.91	48,739,382.64	175,963,928.01
1906	25,848,221.66	13,109,500.90	6,142,371.87	18,392,637.33	66,745,945.89	49,197,303.83	179,435,981.48
1907	26,992,823.05	16,840,609.96	10,275,151.07	18,421,103.72	70,223,630.68	47,755,137.79	190,508,456.26
1908	27,874,956.17	23,966,699.54	11,341,736.15	17,344,678.67	71,750,013.75	47,491,829.88	199,769,914.17
1909	24,555,240.03	24,614,359.68	7,104,545.56	16,335,174.83	68,037,597.03	46,264,689.87	186,911,606.99
1910	25,244,042.17	18,679,807.18	6,865,582.74	17,418,979.85	70,022,618.92	49,691,081.01	187,922,111.87
1911	25,266,886.24	23,511,246.69	7,601,902.10	16,786,140.23	70,953,832.93	61,351,418.91	205,471,427.10
1912	29,340,969.90	37,467,596.62	5,055,507.88	16,279,372.25	73,318,995.18	61,050,920.73	222,513,362.57
1913	18,187,582.68	27,187,705.08	4,830,081.35	14,440,407.07	75,268,330.27	61,257,708.16	201,171,814.60
1914	26,380,676.04	34,905,798.40	2,323,732.91	12,691,503.55	66,189,270.51	68,883,173.30	211,374,154.72
1915	22,553,893.31	41,998,408.12	3,387,601.40	10,171,428.96	56,686,709.96	56,231,864.60	191,029,906.35
1916	16,221,828.83	30,064,893.94	8,634,758.81	8,473,299.99	42,659,483.63	41,558,915.98	147,613,181.19
1917	10,455,030.09	17,220,510.30	11,095,651.76	5,833,438.16	27,110,198.33	29,707,003.64	101,421,832.27
1918	4,789,557.90	6,838,564.53	26,940,824.70	5,862,538.86	19,795,098.79	22,880,578.39	87,107,163.17
1919	9,226,259.17	7,540,937.49	25,639,540.20	8,258,898.21	19,375,411.73	21,465,909.05	91,506,955.84

	Discounts	Loans against Securities	Loans against Merchandise	Agricultural Credit	Mortgage Loans	Loans to legal entities	**TOTAL**
1920	17,349,955.48	14,271,510.40	40,844,822.35	15,167,571.07	21,701,190.32	19,562,879.48	128,897,929.11
1921	13,237,813.02	14,046,782.13	30,475,477.80	13,212,636.85	22,324,683.44	17,984,995.46	111,282,388.69
1922	23,007,206.04	26,173,427.61	42,216,731.72	9,752,250.50	18,044,178.24	12,706,707.96	131,900,502.06
1923	12,810,178.44	10,305,922.55	22,439,835.21	12,698,677.98	15,873,176.29	8,340,839.50	82,468,629.97
1924	31,226,319.98	15,366,856.36	28,696,518.21	30,126,202.57	26,539,816.19	14,173,269.76	146,128,983.08
1925	41,056,347.46	20,794,213.13	25,153,842.04	34,125,930.60	32,632,782.25	16,933,473.14	170,696,588.62
1926	34,959,955.49	17,273,828.93	15,969,948.50	25,580,392.83	33,634,551.55	19,119,199.82	146,537,877.12
1927	39,695,238.79	13,723,892.69	9,564,505.10	35,335,638.73	0.00	3,350,519.59	101,669,794.90
1928	49,451,686.98	19,922,587.49	32,491,241.50	41,145,823.46	0.00	4,303,383.46	147,314,722.89
1929	74,389,010.74	35,461,146.88	49,209,979.91	64,030,912.78	0.00	6,349,989.45	229,441,039.76
1930	109,367,394.45	46,724,493.01	58,448,917.70	29,327,515.91	0.00	20,027,348.95	263,895,670.02

Sources: Author’s calculations using the data in Table A2.2 in Appendix A2 and Table 2.1 in Chapter 2.

Table A2.4: Credits to the economy by the National Bank at constant values as a ratio series (1911=100)

	Short-Term Credit				**Agricultural Credit**	**Mortgage Credit**			**TOTAL Credits to the Economy**
	Discounts	Loans against Securities	Loans against Merchandise	**Total Short-Term Credits to the economy**		Mortgage Loans	Loans to Public Entities	**Total Mortgage Credit**	
1898	57.24	19.69	0.00	33.86	24.32	47.80	43.07	45.61	40.65
1899	78.25	40.19	0.00	51.83	59.37	60.09	49.38	55.13	54.57
1900	74.32	34.79	1.41	48.00	61.51	52.61	46.39	49.72	50.21
1901	69.74	31.76	5.74	45.27	51.21	47.91	45.42	46.75	46.71
1902	91.34	50.13	6.93	62.77	76.83	66.57	69.05	67.72	67.11
1903	89.35	51.76	52.93	68.76	76.23	68.33	65.97	67.23	68.39
1904	101.60	71.40	74.82	85.40	91.22	84.08	77.76	81.15	83.14
1905	114.28	59.95	37.89	81.32	100.06	91.02	79.44	85.65	85.64
1906	102.30	55.76	80.80	79.99	109.57	94.07	80.19	87.63	87.33
1907	106.83	71.63	135.17	95.97	109.74	98.97	77.84	89.17	92.72
1908	110.32	101.94	149.20	112.07	103.33	101.12	77.41	90.13	97.23
1909	97.18	104.69	93.46	99.81	97.31	95.89	75.41	86.39	90.97
1910	99.91	79.45	90.31	90.08	103.77	98.69	80.99	90.48	91.46
1911	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1912	116.12	159.36	66.50	127.46	96.98	103.33	99.51	101.56	108.29
1913	71.98	115.64	63.54	89.05	86.03	106.08	99.85	103.19	97.91
1914	104.41	148.46	30.57	112.82	75.61	93.28	112.28	102.09	102.87
1915	89.26	178.63	44.56	120.50	60.59	79.89	91.66	85.35	92.97

	Short-Term Credit				Agricultural Credit	Mortgage Credit			TOTAL Credits to the Economy
	Discounts	Loans against Securities	Loans against Merchandise	**Total Short-Term Credits to the economy**		Mortgage Loans	Loans to Public Entities	**Total Mortgage Credit**	
1916	64.20	127.87	113.59	97.41	50.48	60.12	67.74	63.65	71.84
1917	41.38	73.24	145.96	68.77	34.75	38.21	48.42	42.94	49.36
1918	18.96	29.09	354.40	68.41	34.92	27.90	37.29	32.26	42.39
1919	36.52	32.07	337.28	75.22	49.20	27.31	34.99	30.87	44.54
1920	68.67	60.70	537.30	128.53	90.36	30.58	31.89	31.19	62.73
1921	52.39	59.74	400.89	102.45	78.71	31.46	29.31	30.47	54.16
1922	91.06	111.32	555.34	162.11	58.10	25.43	20.71	23.24	64.19
1923	50.70	43.83	295.19	80.80	75.65	22.37	13.60	18.30	40.14
1924	123.59	65.36	377.49	133.54	179.47	37.40	23.10	30.77	71.12
1925	162.49	88.44	330.89	154.32	203.30	45.99	27.60	37.46	83.08
1926	138.36	73.47	210.08	120.97	152.39	47.40	31.16	39.87	71.32
1927	157.10	58.37	125.82	111.71	210.50		5.46	2.53	49.48
1928	195.72	84.74	427.41	180.68	245.12		7.01	3.25	71.70
1929	294.41	150.83	647.34	282.12	381.45		10.35	4.80	111.67
1930	432.85	198.73	768.87	380.53	174.71		32.64	15.14	128.43

Source: Author's calculations using the data in Table A2.3.

Table A2.5: Credit to the economy supplied by the Bank of Athens, 1898–1928
(in Drachmae)

	Mortgage Credit Excluded[1]	Total Credit
1898	10,798,448.75	10,798,448.75
1899	18,802,937.35	18,802,937.35
1900	31,804,229.00	31,804,229.00
1901	29,708,598.61	33,322,847.16
1902	29,975,681.78	34,238,957.68
1903	33,494,063.01	39,238,247.06
1904	45,542,587.48	50,394,649.48
1905	76,497,989.88	83,324,511.48
1906	99,388,058.29	109,115,920.94
1907	96,453,262.69	106,703,919.26
1908	99,944,265.43	109,934,477.78
1909	113,013,475.93	122,386,471.63
1910	158,916,138.01	169,616,460.21
1911	173,575,280.57	184,223,790.55
1912	151,792,934.68	161,476,762.67
1913	100,126,230.28	109,396,673.24
1914	72,160,732.38	80,984,710.11
1915	55,411,301.74	63,402,751.25
1916	52,160,535.47	57,869,092.51
1917	71,757,144.49	77,050,551.37
1918	120,799,067.00	126,591,840.15
1919	173,229,403.72	178,170,517.46
1920	188,111,717.53	193,187,878.07
1921	255,702,754.49	259,568,413.13
1922	218,784,318.96	223,383,664.96
1923	508,486,426.29	513,376,912.64
1924	613,888,834.78	622,084,321.13
1925	802,597,769.60	814,010,790.98
1926	728,862,672.53	746,320,509.53
1927	972,048,890.27	995,530,612.69
1928	1,848,106,899.84	1,892,583,491.30

Note: [1] Mortgage credit supplied by the Bank of Athens after 1901 was subtracted from the total credit of the Bank of Athens.

Source: Annual Reports of the Bank of Athens, 1898–1928.

Table A2.6: Credit to the economy by the Bank of Athens as a percentage of the credits provided by the National Bank

	As a % of National Bank short-term credit	As a % of total National Bank credit
1898	51.99	11.89
1899	63.65	16.59
1900	96.34	25.27
1901	81.48	24.30
1902	79.46	23.30
1903	81.89	26.47
1904	103.71	32.34
1905	187.44	53.20
1906	235.93	65.10
1907	182.26	57.27
1908	163.57	56.91
1909	196.51	64.07
1910	319.92	92.29
1911	307.87	89.66
1912	213.57	73.38
1913	206.23	56.23
1914	103.23	34.87
1915	60.84	24.76
1916	54.02	22.30
1917	70.77	29.05
1918	93.14	43.22
1919	110.96	52.89
1920	62.16	35.89
1921	84.99	44.78
1922	29.72	21.03
1923	80.29	44.78
1924	53.15	27.75
1925	55.67	28.78
1926	56.34	26.85
1927	72.17	45.79
1928	84.97	60.17

Sources: Table A2.2 and Table A2.5.

Table A2.7: Deposits at the National Bank, 1898–1930
(in Drachmae)

	Government Deposits	Deposits of Other Agencies	Total
1898	15,949,148.25	52,807,689.61	68,756,837.86
1899	32,324,185.62	53,680,769.18	86,004,954.80
1900	20,940,878.11	62,065,714.36	83,006,592.47
1901	23,246,176.61	72,194,218.31	95,440,394.92
1902	38,217,635.01	73,663,165.94	111,880,800.95
1903	21,294,936.06	83,107,236.81	104,402,172.87
1904	30,458,962.39	91,523,198.48	121,982,160.87
1905	26,185,607.26	101,836,287.48	128,021,894.74
1906	25,521,669.62	125,082,004.64	150,603,674.26
1907	19,257,941.03	134,838,416.96	154,096,357.99
1908	8,394,880.56	166,297,447.98	174,692,328.54
1909	8,007,277.92	160,532,632.23	168,539,910.15
1910	17,547,342.32	165,242,959.32	182,790,301.64
1911	33,096,125.36	189,245,401.45	222,341,526.81
1912	6,948,288.85	221,345,008.21	228,293,297.06
1913	8,873,227.10	266,046,251.79	274,919,478.89
1914	12,109,404.57	300,704,665.84	312,814,070.41
1915	14,350,300.50	351,792,775.15	366,143,075.65
1916	10,010,067.06	403,099,352.77	413,109,419.83
1917	18,357,623.50	490,425,664.37	508,783,287.87
1918	179,247,679.38	611,064,986.76	790,312,666.14
1919	45,424,564.01	788,162,105.56	833,586,669.57
1920	81,164,871.41	1,242,381,455.42	1,323,546,326.83
1921	79,077,041.86	1,763,152,987.76	1,842,230,029.62
1922	113,736,230.64	2,143,598,870.02	2,257,335,100.66
1923	130,049,619.85	2,583,782,825.14	2,713,832,444.99
1924	472,087,928.60	2,937,818,940.46	3,409,906,869.06
1925	449,727,152.45	2,690,207,209.13	3,139,934,361.58
1926	492,367,340.05	3,479,103,992.79	3,971,471,332.84
1927	*1,366,090,883.08*	3,072,444,606.44	4,438,535,489.52

	Government Deposits	Deposits of Other Agencies	Total
1928		5,278,884,906.55	5,278,884,906.55
1929		6,210,852,957.64	6,210,852,957.64
1930		6,864,583,470.82	6,864,583,470.82

Notes:
(1) Deposits of the government are in gold and nominal drachmae.
(2) In 1927 the way that data were presented on the balance sheet changed. Three categories of deposits appear: sight, time and savings deposits. Government deposits were most likely included in sight deposits. In the Annual Report of the National Bank for 1927, p. XIV the governor reported data on deposits of other agencies. Thus, using these data on deposits of other agencies it can be assumed that in 1927 government deposits were 1,366,090 and deposits of other agencies 3,072,444,606. Government deposits for 1927, however, seem to be an outlier. Note that in June 1927 the National Bank handed over to the Mortgage Bank a significant part of its time deposits.

Sources: Balance Sheet of the National Bank, 1898–1930; Annual Report of the National Bank for 1927.

Table A2.8: Deposits of other agencies at 1911 prices

	1911 prices	1911=100
1898	48,540,401.56	25.65
1899	53,097,282.56	28.06
1900	50,882,702.76	26.89
1901	50,535,952.82	26.70
1902	69,106,681.45	36.52
1903	78,778,734.89	41.63
1904	100,344,711.59	53.02
1905	114,408,668.65	60.46
1906	133,911,322.61	70.76
1907	137,868,493.75	72.85
1908	171,966,679.16	90.87
1909	157,080,317.56	83.00
1910	168,956,284.25	89.28
1911	189,245,401.45	100.00
1912	223,804,397.19	118.26
1913	275,116,010.37	145.38
1914	273,641,245.91	144.60
1915	262,402,807.69	138.66
1916	229,262,756.89	121.15
1917	187,515,695.20	99.09
1918	181,721,940.51	96.02
1919	214,097,765.99	113.13
1920	297,517,664.32	157.21
1921	338,495,615.79	178.87
1922	266,122,097.10	140.62
1923	185,868,962.12	98.22
1924	191,505,389.39	101.19
1925	162,340,090.21	85.78
1926	183,429,005.41	96.93
1927	143,675,467.21	75.92
1928	247,235,474.26	130.64
1929	316,100,458.13	167.03
1930	391,892,782.84	207.08

Sources: Table A2.7 and Table 2.1 in Chapter 2.

Table A2.9: Composition of deposits of other agencies at the National Bank
(in Drachmae)

	Sight Deposits	Time Deposits	Savings	Total
1898	16,076,109.10	34,675,983.39	2,055,597.12	52,807,689.61
1899	8,757,041.07	42,637,582.57	2,286,145.54	53,680,769.18
1900	12,378,855.54	47,160,661.90	2,526,196.92	62,065,714.36
1901	19,288,488.20	50,200,951.51	2,704,778.60	72,194,218.31
1902	13,845,828.84	56,751,602.83	3,065,734.27	73,663,165.94
1903	14,662,042.63	64,965,223.60	3,479,970.58	83,107,236.81
1904	17,580,008.17	70,183,964.41	3,759,225.90	91,523,198.48
1905	15,429,567.32	81,158,900.63	5,247,819.53	101,836,287.48
1906	27,341,460.52	90,402,148.38	7,338,395.74	125,082,004.64
1907	18,816,895.20	106,220,530.15	9,800,991.61	134,838,416.96
1908	26,857,222.87	127,288,792.93	12,151,432.18	166,297,447.98
1909	29,086,625.65	117,585,023.88	13,860,982.70	160,532,632.23
1910	28,786,983.46	119,156,671.39	17,299,304.47	165,242,959.32
1911	39,776,247.89	126,470,989.58	22,998,163.98	189,245,401.45
1912	54,371,744.61	139,479,166.57	27,494,097.03	221,345,008.21
1913	70,922,642.84	153,872,794.96	41,250,813.99	266,046,251.79
1914	88,945,327.48	169,774,490.01	41,984,848.35	300,704,665.84
1915	115,588,771.69	184,047,024.36	52,156,979.10	351,792,775.15
1916	149,636,073.22	194,923,227.44	58,540,052.11	403,099,352.77
1917	218,588,307.52	200,895,654.27	70,941,702.58	490,425,664.37
1918	280,007,019.73	232,533,095.20	98,524,871.83	611,064,986.76
1919	342,797,327.12	325,998,567.11	119,366,211.33	788,162,105.56
1920	526,115,636.92	578,240,656.47	138,025,162.03	1,242,381,455.42
1921	666,787,276.34	910,090,916.21	186,274,795.21	1,763,152,987.76
1922	957,820,710.88	988,105,872.62	197,672,286.52	2,143,598,870.02
1923	1,373,177,391.79	988,867,454.98	221,737,978.37	2,583,782,825.14
1924	1,668,488,930.68	1,054,848,798.78	214,481,211.00	2,937,818,940.46
1925	1,423,378,497.85	1,009,870,113.04	256,958,598.24	2,690,207,209.13
1926	2,031,215,214.93	892,712,227.28	555,176,550.58	3,479,103,992.79
1927	*2,022,000,000.00*	302,876,161.94	747,568,444.50	3,072,444,606.44

	Sight Deposits	Time Deposits	Savings	Total
14 May 1928	3,437,210,305.53	473,121,364.44	899,064,373.82	4,809,396,043.79
1928	3,522,022,574.73	762,829,978.17	994,032,353.65	5,278,884,906.55
1929	4,009,231,220.95	872,610,201.90	1,329,011,534.79	6,210,852,957.64
1930	3,691,602,207.83	1,460,734,074.32	1,712,247,188.67	6,864,583,470.82

Note: Deposits in gold and in nominal drachmae were added together.
Source: Balance Sheet of the National Bank, 1898–1930.

Table A2.10:
Commercial deposits at the National Bank in gold and nominal drachmae, 1920–1927

	Sight Deposits		**Time Deposits**		**Savings**	
	In Gold	In Drachmae	In Gold	In Drachmae	In Gold	In Drachmae
1920	80,508,989.04	445,606,647.88	196,391,514.96	381,849,141.51	1,104,931.01	136,920,231.02
1921	73,667,559.08	593,119,717.26	186,665,793.82	723,425,122.39	1,250,804.90	185,023,990.31
1922	63,308,017.47	894,512,693.41	173,884,278.75	814,221,593.87	985,722.21	196,686,564.31
1923	48,716,142.16	1,324,461,249.63	116,930,204.88	871,937,250.10	744,347.02	220,993,631.35
1924	79,850,623.75	1,588,638,306.93	98,120,227.18	956,728,571.60	1,545,592.40	212,935,618.60
1925	99,272,124.46	1,324,106,373.39	89,719,994.68	920,150,118.36	3,596,112.64	253,362,485.60
1926	92,829,994.47	1,938,385,220.46	43,079,678.71	849,632,548.57	4,953,181.67	550,223,368.91
1927	117,142,605.22	3,270,948,277.86	35,819,705.04	267,056,456.90	7,217,395.56	740,351,048.94

Notes: In 1927 all deposits were shown together. In this table sight deposits for 1927 include government deposits at the National Bank as well.
Source: Balance Sheet of the National Bank, 1920–1927.

Table A2.11:
Government deposits at the National Bank in gold and nominal drachmae, 1920–1926

	In Gold	In Drachmae	Total
1920	4,572,602.79	76,592,268.62	81,164,871.41
1921	6,622,893.66	72,454,148.20	79,077,041.86
1922	0.00	113,736,230.64	113,736,230.64
1923	4,612,171.64	125,437,448.21	130,049,619.85
1924	4,755,297.42	467,332,631.18	472,087,928.60
1925	4,024,788.26	445,702,364.19	449,727,152.45
1926	4,704,461.49	487,662,878.56	492,367,340.05

Source: Balance Sheet of the National Bank, 1920–1926.

Table A2.12: Deposits at the Bank of Athens
(in Drachmae)

	Total Deposits
1898	8,697,202.15
1899	10,616,467.35
1900	19,480,891.01
1901	25,312,500.88
1902	27,086,233.03
1903	32,720,317.62
1904	40,798,989.22
1905	54,682,419.22
1906	69,148,091.03
1907	78,288,814.02
1908	77,152,348.69
1909	89,094,829.32
1910	127,260,534.18
1911	140,319,617.22
1912	118,279,364.91
1913	98,742,088.73
1914	69,552,960.91
1915	57,064,396.06
1916	72,900,834.67
1917	153,030,614.64
1918	251,879,398.99
1919	312,292,573.95
1920	417,952,870.31
1921	537,927,628.70
1922	510,388,384.56
1923	764,328,077.24
1924	948,851,921.17
1925	1,079,653,503.23
1926	1,215,410,698.33
1927	1,303,113,034.70
1928	2,464,057,436.65

Source: Annual Reports of the Bank of Athens, 1898–1928.

Table A2.13: Deposits at the Bank of Athens as a percentage of the National Bank's deposits of other agencies

	%
1898	16.47
1899	19.78
1900	31.39
1901	35.06
1902	36.77
1903	39.37
1904	44.58
1905	53.70
1906	55.28
1907	58.06
1908	46.39
1909	55.50
1910	77.01
1911	74.15
1912	53.44
1913	37.11
1914	23.13
1915	16.22
1916	18.09
1917	31.20
1918	41.22
1919	39.62
1920	33.64
1921	30.51
1922	23.81
1923	29.58
1924	32.30
1925	40.13
1926	34.93
1927	42.41
1928	46.68

Sources: Tables A2.12 and A2.9.

Table A2.14: Bilateral public debt held by the National Bank as a percentage of GDP, 1898–1930

	% of GDP
1898	14.48
1899	16.03
1900	14.60
1901	12.71
1902	13.05
1903	13.07
1904	13.98
1905	13.59
1906	12.96
1907	12.15
1908	12.16
1909	11.27
1910	10.95
1911	7.29
1912	7.50
1913	15.83
1914	12.10
1915	13.05
1916	7.87
1917	6.33
1918	24.09
1919	42.84
1920	43.15
1921	50.06
1922	42.14
1923	34.19
1924	23.77
1925	21.22
1926	16.18
1927	14.04
1928	0.93
1929	0.56
1930	0.60

Sources: Table A2.15 in Appendix A2 and Table A1.2 in Appendix A1.

Table A2.15: Total bilateral public debt held by the National Bank, 1898–1930

	Bilateral public debt in nominal drachmae	Bilateral public debt at 1911 values	Bilateral public debt at constant values as a ratio, 1911=100
1898	82,359,389	75,704,084.84	122.54
1899	87,012,467	86,066,679.32	139.31
1900	85,430,981	70,038,011.45	113.37
1901	84,403,682	59,082,577.40	95.64
1902	83,278,575	78,127,322.94	126.46
1903	81,528,575	77,282,295.05	125.10
1904	80,028,575	87,742,172.59	142.03
1905	78,783,575	88,509,942.28	143.27
1906	78,318,575	83,846,945.00	135.72
1907	78,557,319	80,322,652.01	130.02
1908	77,641,679	80,288,554.42	129.96
1909	77,668,840	75,998,542.37	123.02
1910	72,358,757	73,984,796.48	119.76
1911	61,778,575	61,778,575.00	100.00
1912	61,778,575	62,465,003.61	101.11
1913	135,592,975	140,215,462.78	226.96
1914	149,568,052	136,106,927.32	220.31
1915	185,458,052	138,333,465.02	223.92
1916	148,117,150	84,241,629.06	136.36
1917	170,092,586	65,035,400.53	105.27
1918	1,011,004,965	300,658,339.26	486.67
1919	1,623,502,167	441,011,036.41	713.86
1920	2,313,413,904	554,001,750.69	896.75
1921	3,414,675,755	655,560,113.30	1061.14
1922	4,542,643,359	563,957,088.23	912.87
1923	5,661,350,934	407,259,237.15	659.22
1924	4,924,795,770	321,028,950.62	519.64
1925	5,092,167,420	307,285,965.00	497.40
1926	4,564,286,716	240,643,158.26	389.53
1927	4,335,366,071	202,732,945.77	328.16
1928	313,872,183	14,700,138.27	23.79
1929	180,957,349	9,209,797.96	14.91
1930	185,185,434	10,572,066.81	17.11

Sources: Author's calculations using data on bilateral public debt reported on the Balance Sheet of the National Bank, 1898–1930 and Table 2.1 in Chapter 2.

Table A2.16: Revenue of the National Bank, 1898–1930
(in Drachmae)

	1st Semester	*2nd Semester*	*Total*
1898	5,020,777.00	4,956,214.87	9,976,991.87
1899	5,503,909.98	5,516,309.13	11,020,219.11
1900	5,697,210.50	5,881,115.37	11,578,325.87
1901	5,875,180.76	6,017,272.85	11,892,453.61
1902	6,058,885.65	6,123,052.46	12,181,938.11
1903	6,183,527.49	6,275,700.40	12,459,227.89
1904	6,445,559.99	6,702,017.00	13,147,576.99
1905	6,624,242.68	6,986,755.91	13,610,998.59
1906	6,994,143.83	7,522,053.86	14,516,197.69
1907	7,579,184.84	8,004,901.20	15,584,086.04
1908	8,213,599.94	8,429,709.73	16,643,309.67
1909	8,591,655.48	8,531,229.69	17,122,885.17
1910	8,200,172.06	8,235,069.01	16,435,241.07
1911	8,704,553.90	9,193,931.89	17,898,485.79
1912	9,450,618.15	9,749,263.44	19,199,881.59
1913	10,172,039.52	13,069,203.41	23,241,242.93
1914	13,967,241.36	14,666,280.52	28,633,521.88
1915	15,507,131.04	17,523,123.72	33,030,254.76
1916	18,825,478.60	19,782,541.96	38,608,020.56
1917	20,285,382.26	22,726,867.91	43,012,250.17
1918	25,287,957.44	27,549,470.96	52,837,428.40
1919	32,033,343.83	32,327,269.99	64,360,613.82
1920	45,536,530.73	54,268,099.26	99,804,629.99
1921	65,224,317.98	120,216,683.99	185,441,001.97
1922	115,341,912.83	164,077,638.60	279,419,551.43
1923	135,560,482.94	143,145,589.73	278,706,072.67
1924	158,945,519.30	172,804,909.05	331,750,428.35
1925	229,763,572.84	262,259,128.18	492,022,701.02
1926	283,393,732.38	311,306,343.15	594,700,075.53
1927	336,036,927.80	300,444,393.19	636,481,320.99
1928		570,368,422.04	570,368,422.04
1929		622,732,346.31	622,732,346.31
1930		667,892,217.31	667,892,217.31

Sources: Profit and Loss Statements of the National Bank, 1898–1930.

Table A2.17: Expenses of the National Bank, 1898–1930
(in Drachmae)

	1st Semester	*2nd Semester*	*Total*
1898	3,962,025.99	3,770,014.09	7,732,040.08
1899	4,109,534.85	4,046,497.01	8,156,031.86
1900	4,076,989.97	4,176,279.39	8,253,269.36
1901	4,149,665.03	4,196,694.86	8,346,359.89
1902	4,243,363.03	4,288,625.40	8,531,988.43
1903	4,376,359.38	4,450,486.84	8,826,846.22
1904	4,503,735.35	4,774,942.06	9,278,677.41
1905	4,689,154.70	5,068,179.04	9,757,333.74
1906	5,055,717.65	5,476,582.15	10,532,299.80
1907	5,519,258.60	5,861,567.46	11,380,826.06
1908	6,059,729.94	6,303,390.23	12,363,120.17
1909	6,436,171.84	6,395,593.45	12,831,765.29
1910	6,056,823.05	6,079,413.16	12,136,236.21
1911	6,640,417.05	7,124,542.76	13,764,959.81
1912	7,377,525.50	7,678,187.40	15,055,712.90
1913	8,100,616.94	10,996,772.09	19,097,389.03
1914	11,895,045.72	12,336,611.20	24,231,656.92
1915	13,087,891.18	15,107,343.33	28,195,234.51
1916	16,124,393.25	17,112,877.36	33,237,270.61
1917	17,582,991.47	19,730,373.14	37,313,364.61
1918	22,299,617.61	24,026,558.67	46,326,176.28
1919	27,687,982.75	28,772,962.03	56,460,944.78
1920	37,091,738.92	38,900,490.43	75,992,229.35
1921	39,729,568.02	47,511,360.11	87,240,928.13
1922	67,534,320.21	109,080,149.74	176,614,469.95
1923	108,405,709.44	113,706,202.86	222,111,912.30
1924	127,349,693.43	137,821,517.44	265,171,210.87
1925	190,884,698.28	222,309,515.97	413,194,214.25
1926	238,352,068.30	263,796,040.33	502,148,108.63
1927	288,591,571.62	250,261,412.54	538,852,984.16
1928		481,524,637.67	481,524,637.67
1929		523,203,893.79	523,203,893.79
1930		556,108,382.96	556,108,382.96

Source: Profit and Loss Statements of the National Bank, 1898–1930.

Table A2.18: Revenue and expenses of the National Bank at constant prices and as a ratio, 1911=100

	Revenue		Expenses	
	At 1911 prices	*As a ratio*	*At 1911 prices*	*As a ratio*
1898	9,170,770.30	51.24	7,107,228.76	51.63
1899	10,900,434.12	60.90	8,067,379.34	58.61
1900	9,492,141.03	53.03	6,766,193.80	49.16
1901	8,324,717.53	46.51	5,842,451.92	42.44
1902	11,428,416.17	63.85	8,004,236.57	58.15
1903	11,810,309.77	65.98	8,367,114.65	60.79
1904	14,414,813.33	80.54	10,173,007.76	73.91
1905	15,291,368.79	85.43	10,961,942.84	79.64
1906	15,540,870.47	86.83	11,275,756.26	81.92
1907	15,934,290.22	89.03	11,636,574.96	84.54
1908	17,210,695.23	96.16	12,784,590.18	92.88
1909	16,754,651.08	93.61	12,555,813.35	91.22
1910	16,804,572.33	93.89	12,408,960.62	90.15
1911	17,898,485.79	100.00	13,764,959.81	100.00
1912	19,413,213.61	108.46	15,222,998.60	110.59
1913	24,033,558.03	134.28	19,748,436.38	143.47
1914	26,056,504.91	145.58	22,050,807.80	160.20
1915	24,637,321.17	137.65	21,030,871.64	152.79
1916	21,958,311.69	122.68	18,903,697.66	137.33
1917	16,445,860.36	91.88	14,266,874.70	103.65
1918	15,713,091.45	87.79	13,776,738.70	100.09
1919	17,483,032.41	97.68	15,337,152.16	111.42
1920	23,900,582.44	133.53	18,198,139.13	132.21
1921	35,601,542.57	198.91	16,748,785.78	121.68
1922	34,689,193.97	193.81	21,926,216.60	159.29
1923	20,049,211.55	112.02	15,978,011.08	116.08
1924	21,625,565.17	120.82	17,285,515.89	125.58
1925	29,691,025.06	165.89	24,934,133.62	181.14
1926	31,354,407.23	175.18	26,474,784.41	192.33
1927	29,763,515.01	166.29	25,198,161.13	183.06
1928	26,713,086.16	149.25	22,552,106.04	163.84
1929	31,693,872.21	177.08	26,628,386.09	193.45
1930	38,129,354.94	213.03	31,747,718.22	230.64

Sources: Tables A2.16 and A2.18 in Appendix A2; Table 2.1.

Table A2.19: Expenses as a percentage of revenue, 1898–1930

1898	77.50
1899	74.01
1900	71.28
1901	70.18
1902	70.04
1903	70.85
1904	70.57
1905	71.69
1906	72.56
1907	73.03
1908	74.28
1909	74.94
1910	73.84
1911	76.91
1912	78.42
1913	82.17
1914	84.63
1915	85.36
1916	86.09
1917	86.75
1918	87.68
1919	87.73
1920	76.14
1921	47.05
1922	63.21
1923	79.69
1924	79.93
1925	83.98
1926	84.44
1927	84.66
1928	84.42
1929	84.02
1930	83.26

Sources: Author's calculations using the data in Tables A2.16 and A2.17 in Appendix A2.

Table A2.20: Net profits of the National Bank, 1898–1930
(in Drachmae)

	1st Semester	*2nd Semester*	*Total*
1898	1,129,239.89	1,245,394.67	2,374,634.56
1899	1,472,052.80	1,546,259.92	3,018,312.72
1900	1,673,209.45	1,765,403.42	3,438,612.87
1901	1,780,611.15	1,880,027.99	3,660,639.14
1902	1,876,722.62	1,881,469.83	3,758,192.45
1903	1,869,809.95	1,865,343.66	3,735,153.61
1904	1,988,340.31	1,977,216.65	3,965,556.96
1905	1,984,957.98	1,965,336.25	3,950,294.23
1906	1,976,415.78	2,083,688.89	4,060,104.67
1907	2,107,749.72	2,204,366.18	4,312,115.90
1908	2,213,852.06	2,184,935.54	4,398,787.60
1909	2,196,035.06	2,176,435.28	4,372,470.34
1910	2,175,400.17	2,106,424.57	4,362,072.04
1911	2,106,424.57	2,103,648.75	4,210,073.32
1912	2,104,576.45	2,103,487.54	4,208,063.99
1913	2,102,745.17	2,103,011.54	4,205,756.71
1914	2,103,042.23	2,360,546.60	4,463,588.83
1915	2,449,889.56	2,448,913.80	4,898,803.36
1916	2,733,243.00	2,717,623.00	5,450,866.00
1917	2,734,729.19	3,045,939.36	5,780,668.55
1918	3,026,760.39	3,542,153.88	6,568,914.27
1919	4,409,254.10	3,585,301.20	7,994,555.30
1920	8,551,832.15	15,419,440.98	23,971,273.13
1921	25,580,857.59	72,760,426.02	98,341,283.61
1922	47,901,351.99	55,079,428.55	102,980,780.54
1923	27,234,202.05	29,524,634.77	56,758,836.82
1924	31,646,016.19	35,064,152.60	66,710,168.79
1925	38,943,026.96	40,037,286.22	78,980,313.18
1926	45,078,950.30	47,589,253.12	92,668,203.42
1927	47,534,609.30	50,217,589.95	97,752,199.25
1928		88,926,239.17	88,926,239.17
1929		100,184,421.39	100,184,421.39
1930		112,942,020.19	112,942,020.19

Source: Profit and Loss Statements of the National Bank, 1898–1930.

Table A2.21: Net profits at 1911 prices, 1898–1930

	At 1911 prices	*As a ratio*
1898	2,182,744.90	51.85
1899	2,985,504.97	70.91
1900	2,819,042.98	66.96
1901	2,562,447.40	60.86
1902	3,525,726.94	83.75
1903	3,540,614.36	84.10
1904	4,347,779.32	103.27
1905	4,437,984.88	105.41
1906	4,346,700.29	103.25
1907	4,409,017.38	104.73
1908	4,548,746.27	108.04
1909	4,278,438.72	101.62
1910	4,460,096.13	105.94
1911	4,210,073.32	100.00
1912	4,254,820.26	101.06
1913	4,349,134.78	103.30
1914	4,061,865.84	96.48
1915	3,654,025.46	86.79
1916	3,100,180.04	73.64
1917	2,210,255.62	52.50
1918	1,953,500.65	46.40
1919	2,171,655.32	51.58
1920	5,740,489.09	136.35
1921	18,879,866.68	448.45
1922	12,784,789.94	303.67
1923	4,083,046.76	96.98
1924	4,348,585.50	103.29
1925	4,766,053.38	113.21
1926	4,885,751.17	116.05
1927	4,571,146.01	108.58
1928	4,164,841.88	98.93
1929	5,098,871.56	121.11
1930	6,447,756.49	153.15

Source: Author's calculations using the data in Table A2.20 and Table 2.1.

Table A2.22: Net Profit Margin, 1898–1930

1898	23.50
1899	27.01
1900	29.41
1901	30.49
1902	30.58
1903	29.73
1904	29.94
1905	28.82
1906	27.82
1907	27.48
1908	26.24
1909	25.42
1910	26.44
1911	23.42
1912	21.84
1913	18.05
1914	15.56
1915	14.80
1916	14.09
1917	13.41
1918	12.42
1919	12.40
1920	23.98
1921	52.99
1922	36.83
1923	20.35
1924	20.10
1925	16.05
1926	15.58
1927	15.36
1928	15.59
1929	16.07
1930	16.88

Sources: Tables A2.16 and A2.20 in Appendix A2.

Table A2.23: Dividend paid per share by the National Bank, 1898–1930
(in Drachmae)

	1st Semester	*2nd Semester*	*Total*
1898	50	55	105
1899	65	70	135
1900	75	80	155
1901	80	85	165
1902	85	85	170
1903	85	85	170
1904	90	90	180
1905	90	90	180
1906	90	95	185
1907	95	100	195
1908	100	100	200
1909	100	100	200
1910	100	100	200
1911	100	100	200
1912	100	100	200
1913	100	100	200
1914	100	112.5	212.5
1915	112.5	112.5	225
1916	125	125	250
1917	125	140	265
1918	140	160	300
1919	160	160	320
1920	180	240	420
1921	250	300	550
1922	350	450	800
1923	550	650	1,200
1924	750	900	1,650
1925	1,100	1,100	2,200
1926	1,200	1,300	2,500
1927	1,300	1,300	2,600
1928		2,600	2,600
1929		3,000	3,000
1930		3,400	3,400

Source: Profit and Loss Statements of the National Bank, 1898–1930.

Table A2.24:
Percentage of net profits of the National Bank paid as dividend, 1898–1930

1898	88.43
1899	89.45
1900	90.15
1901	90.15
1902	90.47
1903	91.03
1904	90.78
1905	91.13
1906	91.13
1907	90.44
1908	90.93
1909	91.48
1910	91.70
1911	95.01
1912	95.06
1913	95.11
1914	95.21
1915	91.86
1916	91.73
1917	91.68
1918	91.34
1919	80.05
1920	35.04
1921	11.19
1922	15.54
1923	42.28
1924	49.47
1925	55.71
1926	53.96
1927	53.20
1928	58.48
1929	59.89
1930	60.21

Sources: Tables A2.20 and A2.23 in Appendix A2.

Table A2.25:
Dividend paid per share by the National Bank at constant prices, 1898–1930
(1911=100)

	At 1911 prices	*1911=100*
1898	96.52	48.26
1899	133.53	66.77
1900	127.07	63.54
1901	115.50	57.75
1902	159.48	79.74
1903	161.15	80.57
1904	197.35	98.67
1905	202.22	101.11
1906	198.06	99.03
1907	199.38	99.69
1908	206.82	103.41
1909	195.70	97.85
1910	204.49	102.25
1911	200.00	100.00
1912	202.22	101.11
1913	206.82	103.41
1914	193.38	96.69
1915	167.83	83.91
1916	142.19	71.09
1917	101.32	50.66
1918	89.22	44.61
1919	86.93	43.46
1920	100.58	50.29
1921	105.59	52.80
1922	99.32	49.66
1923	86.32	43.16
1924	107.56	53.78
1925	132.76	66.38
1926	131.81	65.90
1927	121.58	60.79
1928	121.77	60.89
1929	152.68	76.34
1930	194.10	97.05

Source: Author's calculations using the data in Table A2.23 and Table 2.1 in Chapter 2.

APPENDIX A3: Money supply, 1910–1928

Table A3.1: Banknotes in circulation, January 1910–May 1928
(end of month data, ’000.00 omitted)

		A	B	C	D	Total
1910	January	61,778	60,419			122,198
	February	61,778	57,868			119,647
	March	61,778	57,517			119,295
	April	61,778	50,990			112,769
	May	61,778	49,864			111,643
	June	61,778	49,792			111,571
	July	61,778	48,191			109,970
	August	61,778	58,236			120,015
	September	61,778	58,801	7,500		128,080
	October	61,778	50,190	14,209		126,177
	November	61,778	48,255	14,984		125,018
	December	61,778	42,601	21,476		125,856
1911	January	61,778	37,891	22,490		122,160
	February	61,778	33,442	25,000		120,221
	March	61,778	28,986	25,000		115,764
	April	61,778	25,381	25,000		112,159
	May	61,778	23,935	25,000		110,713
	June	61,778	24,975	25,000		111,753
	July	61,778	22,327	25,000		109,106
	August	61,778	37,438	25,000		124,217
	September	61,778	49,342	25,000		136,120
	October	61,778	41,589	31,000		134,367
	November	61,778	40,598	29,850		132,226
	December	61,778	42,718	30,850		135,347
1912	January	61,778	36,062	33,000		130,841
	February	61,778	35,597	33,000		130,376
	March	61,778	36,473	34,000		132,252
	April	61,778	32,204	35,000		128,983
	May	61,778	30,678	35,000		127,457
	June	61,778	29,593	35,000		126,372
	July	61,778	30,328	35,000		127,107
	August	61,778	39,201	40,000		140,979
	September	61,778	56,269	56,500		174,547
	October	61,778	48,074	75,000		184,853
	November	61,778	39,325	90,000		191,103
	December	61,778	34,967	100,000		196,746
1913	January	61,778	25,720	110,000		197,498
	February	61,778	26,428	108,766		196,972
	March	61,778	23,973	114,000		199,751
	April	61,778	18,319	122,730		202,827
	May	61,778	13,029	128,234		203,041
	June	61,778	9,165	135,681		206,624
	July	61,778	8,545	140,802		211,125

		A	B	C	D	Total
	August	61,778	19,820	142,486		224,084
	September	61,778	23,604	149,804		235,186
	October	61,778	17,551	156,319		235,648
	November	61,778	13,434	160,595		235,807
	December	61,778	6,870	165,825		234,473
1914	January	61,778	0	168,540		230,318
	February	61,778	0	166,533		228,311
	March	61,778	0	157,698		219,476
	April	61,778	0	157,368		219,146
	May	61,778	0	152,470		214,248
	June	61,778	0	150,564		212,342
	July	61,778	13,397	167,613		242,788
	August	61,778	24,877	170,613		257,268
	September	61,778	28,044	170,613		260,435
	October	61,778	16,721	170,613		249,112
	November	61,778	21,637	167,613		251,028
	December	60,951	37,742	153,513		252,206
1915	January	60,951	52,376	133,513		246,840
	February	60,951	58,829	133,513		253,293
	March	60,951	64,583	133,513		259,047
	April	60,951	70,470	133,513		264,934
	May	58,951	71,737	133,513		264,201
	June	58,951	75,164	133,513		267,628
	July	58,951	75,211	133,513		267,675
	August	58,951	77,548	133,513		270,012
	September	58,951	125,507	133,513		317,971
	October	58,951	133,960	153,513		346,424
	November	58,951	125,084	173,513		357,548
	December	58,951	136,447	183,513		378,911
1916	January	58,952	129,704	200,000		388,656
	February	58,952	143,372	205,000		407,324
	March	58,952	141,572	215,000		415,524
	April	58,952	143,453	225,000		427,405
	May	57,952	137,367	245,000		440,319
	June	57,952	129,356	260,000		447,308
	July	57,952	132,997	260,000		450,949
	August	57,952	142,219	270,000		470,171
	September	57,952	143,494	300,000		501,446
	October	57,952	135,450	325,000		518,402
	November	57,952	136,578	350,000		544,530
	December	56,952	137,437	360,000		554,389
1917	January	56,951	142,017	365,000		563,968
	February	56,951	140,894	375,000		572,845
	March	56,951	141,142	385,000		583,093
	April	56,951	134,781	390,000		581,732
	May	56,951	138,211	410,000		605,162
	June	56,951	135,865	445,000		637,816
	July	56,951	122,887	475,848		655,686

		A	B	C	D	Total
	August	56,951	137,638	490,848		685,437
	September	56,951	126,903	540,848		724,702
	October	56,951	113,324	609,448		779,723
	November	56,951	116,127	628,806		801,884
	December	54,951	114,371	678,806		848,128
1918	January	54,951	144,323	692,859		892,133
	February	54,951	112,907	768,109		935,967
	March	54,951	124,263	800,068		979,282
	April	54,951	107,112	832,368		994,431
	May	54,951	115,024	859,595		1,029,570
	June	54,951	137,666	880,714		1,073,331
	July	54,951	128,973	924,966		1,108,890
	August	54,951	140,075	927,005		1,122,031
	September	54,951	142,913	975,194		1,173,058
	October	54,951	139,829	1,021,654		1,216,434
	November	54,951	105,542	1,066,698		1,227,191
	December	52,951	44,539	1,160,333		1,257,823
1919	January	52,951	54,149	1,160,572		1,267,672
	February	52,951	98,020	1,121,394		1,272,365
	March	52,951	108,560	1,121,394		1,282,905
	April	52,951	87,801	1,172,371		1,313,123
	May	52,951	72,092	1,206,121		1,331,164
	June	52,951	74,369	1,206,361		1,333,681
	July	52,951	83,513	1,196,897		1,333,361
	August	52,951	101,969	1,197,058		1,351,978
	September	52,951	137,823	1,200,000		1,390,774
	October	52,951	99,299	1,227,300		1,379,550
	November	52,951	120,538	1,193,941		1,367,430
	December	50,951	130,354	1,193,941		1,375,246
1920	January	50,951	147,706	1,163,089		1,361,746
	February	50,951	150,774	1,159,883		1,361,608
	March	50,951	153,159	1,188,883		1,392,993
	April	50,951	142,861	1,195,317		1,389,129
	May	50,951	156,359	1,182,061		1,389,371
	June	50,951	161,607	1,181,991		1,394,549
	July	50,951	176,289	1,167,378		1,394,618
	August	50,951	234,341	1,167,378		1,452,670
	September	50,951	270,714	1,167,378		1,489,043
	October	50,951	338,045	1,090,268		1,479,264
	November	50,951	347,849	1,091,816		1,490,616
	December	48,951	362,133	1,097,281		1,508,365
1921	January	48,951	358,929	1,097,281		1,505,161
	February	48,951	413,046	1,097,281		1,559,278
	March	48,951	456,620	1,097,281		1,602,852
	April	48,951	541,845	1,097,281		1,688,077
	May	48,951	588,968	1,097,281		1,735,200
	June	48,951	612,208	1,097,281		1,758,440
	July	48,951	669,989	1,097,281		1,816,221

		A	B	C	D	Total
	August	48,951	730,948	1,097,281		1,877,180
	September	48,951	904,588	1,097,281		2,050,820
	October	48,951	963,853	1,097,281		2,110,085
	November	48,951	974,945	1,097,281		2,121,177
	December	46,951	1,016,950	1,097,281		2,161,182
1922	January	46,951	929197	1,139,784		2,115,932
	February	46,951	1,030,844	1,139,784		2,217,579
	March	46,951	10,835	1,139,784		1,197,570
	April	46,951	220,589	1,139,784		1,407,324
	May	46,951	354,575	1,139,784		1,541,310
	June	45,951	522,269	1,139,784		1,708,004
	July	45,951	656,595	1,139,784		1,842,330
	August	45,951	853,903	1,139,784		2,039,638
	September	45,951	1,141,161	1,139,784		2,326,896
	October	45,951	1,458,952	1,139,784		2,644,687
	November	45,951	1,756,162	1,139,784		2,941,897
	December	44,951	1,964,710	1,139,784		3,149,445
1923	January	44,952	2,242,662	1,139,784		3,427,398
	February	44,952	2,368,794	1,139,784		3,553,530
	March	44,952	2,526,308	1,139,784		3,711,044
	April	44,952	2,781,327	1,139,784		3,966,063
	May	44,952	3,012,215	1,139,784	99,117	4,296,068
	June	44,952	3,030,492	1,139,784	126,320	4,341,548
	July	44,952	2,900,057	1,139,784	126,320	4,211,113
	August	44,952	2,932,611	1,139,784	126,320	4,243,667
	September	44,952	3,126,903	1,139,784	18,703	4,330,342
	October	44,952	3,259,720	1,139,784	78,908	4,523,364
	November	42,952	2,937,012	1,139,784	428,520	4,548,268
	December	42,952	2,798,569	1,139,784	699,895	4,681,200
1924	January	42,952	2,630,533	1,139,784	779,525	4,592,794
	February	42,952	2,754,698	1,139,784	575,283	4,512,717
	March	42,952	2,822,272	1,139,784	695,531	4,700,539
	April	42,952	2,150,747	1,139,784	1,467,672	4,801,155
	May	42,952	1,989,898	1,139,784	1,440,612	4,613,246
	June	42,952	2,056,780	1,139,784	1,302,745	4,542,261
	July	42,952	2,057,507	1,139,784	1,234,943	4,475,186
	August	42,952	1,984,589	1,139,784	1,255,169	4,422,494
	September	42,952	2,191,049	1,139,784	1,280,074	4,653,859
	October	42,952	2,521,050	1,139,784	1,049,993	4,753,779
	November	42,952	2,777,338	1,139,784	866,176	4,826,250
	December	40,952	2,968,765	1,139,784	716,423	4,865,924
1925	January	40,952	2,975,411	1,139,784	691,220	4,847,367
	February	40,952	3,013,778	1,139,784	784,675	4,979,189
	March	40,952	2,845,408	1,139,784	1,196,292	5,222,436
	April	40,952	2,889,352	1,139,784	1,171,110	5,241,198
	May	40,952	2,935,086	1,139,784	982,125	5,097,947
	June	40,952	2,997,752	1,139,784	1,003,212	5,181,700
	July	40,952	2,940,850	1,139,784	1,181,172	5,302,758

		A	B	C	D	Total
	August	40,952	2,934,939	1,139,784	1,187,147	5,302,822
	September	40,952	2,959,418	1,139,784	1,407,691	5,547,845
	October	40,952	2,938,442	1,139,784	1,517,347	5,636,525
	November	40,952	2,915,520	1,139,784	1,396,994	5,493,250
	December	40,000	3,143,364	1,139,784	1,016,101	5,339,249
1926	January	40,000	2,394,074	1,139,784	620,706	4,194,564
	February	40,000	2,446,020	1,139,784	631,395	4,257,199
	March	40,000	2,729,359	1,139,784	362,319	4,271,462
	April	40,000	2,886,559	1,139,784	408,336	4,474,679
	May	40,000	2,875,456	1,139,784	311,781	4,367,021
	June	40,000	2,878,195	1,139,784	472,468	4,530,447
	July	40,000	3,149,643	1,139,784	198,176	4,527,603
	August	40,000	3,035,353	1,139,784	335,074	4,550,211
	September	40,000	3,013,501	1,139,784	492,895	4,686,180
	October	40,000	2,893,235	1,139,784	644,694	4,717,713
	November	40,000	2,680,176	1,139,784	926,526	4,786,486
	December	40,000	2,500,370	1,139,784	1,184,486	4,864,640
1927	January	40,000	2,350,635	1,139,784	1,314,878	4,845,297
	February	40,000	2,677,520	1,139,784	1,073,242	4,930,546
	March	40,000	2,902,674	1,139,784	889,855	4,972,313
	April	40,000	2,598,690	1,139,784	1,263,656	5,042,130
	May	40,000	2,418,206	1,139,784	1,261,359	4,859,349
	June	40,000	2,401,625	1,139,784	1,243,182	4,824,591
	July	40,000	2,621,031	1,139,784	970,741	4,771,556
	August	40,000	2,705,032	1,139,784	958,269	4,843,085
	September	40,000	2,971,695	1,139,784	974,835	5,126,314
	October	40,000	3,011,764	1,139,784	1,041,787	5,233,335
	November	40,000	2,749,418	1,139,784	1,090,315	5,019,517
	December	40,000	2,626,819	1,139,784	1,159,655	4,966,258
1928	January	40,000	2,499,844	1,139,784	1,151,113	4,830,741
	February	40,000	2,463,843	1,139,784	1,245,885	4,889,512
	March	40,000	2,400,969	1,139,784	1,314,735	4,895,488
	April	40,000	2,212,860	1,139,784	1,501,292	4,893,936
	May	40,000	2,025802	1,139,784	1,657,767	4,863,353

Notes:
(1) The second column headed A of the table above shows the banknotes in circulation because of the ΒΦΙΘ Law of 1898.
(2) The third column headed B indicates the banknotes in circulation for the account of the National Bank. In the 1920s banknotes issued for the account of the government were reported together with the banknotes in circulation because of the privilege of the National Bank.
(3) Column headed C shows the banknotes in circulation under the ΓΧΜΒ Law.
(4) Column headed D indicates the banknotes in circulation under the law of 23 April 1923.
(5) Total is the sum of columns A, B, C and D.

Sources: Annual Reports of the National Bank, 1910–1928.

APPENDIX A4: Interest rate paid on Old Gold Loans, 1898–1930

Table A4.1: Interest rate paid on the Monopoly Loan, 1898–1930

	% of Original Interest Rate	*Rate of Interest Paid*		*% of Original Interest Rate*	*Rate of Interest Paid*
1898	43	1.72	**1915**	63	2.52
1899	53.25	2.13	**1916**	67	2.68
1900	50.75	2.03	**1917**	65	2.60
1901	53	2.12	**1918**	65	2.60
1902	51.25	2.05	**1919**	69	2.76
1903	47	1.88	**1920**	100	4.00
1904	47	1.88	**1921**	100	4.00
1905	51	2.04	**1922**	85	3.40
1906	51	2.04	**1923**	85	3.40
1907	55	2.20	**1924**	85	3.40
1908	55	2.20	**1925**	97	3.88
1909	53	2.12	**1926**	100	4.00
1910	57	2.28	**1927**	97	3.88
1911	59	2.36	**1928**	97	3.88
1912	59	2.36	**1929**	100	4.00
1913	61	2.44	**1930**	100	4.00
1914	55	2.20			

Note: The minimum interest rate fixed by the Law of Control was 1.72 per cent or 43 per cent of the original interest rate.

Source: *The Stock Exchange Year Book* (1914–1930); Wynne (1951, p. 336).

APPENDIX A5: Bank of Greece, 14 May 1928

Table A5.1: Balance Sheet of the Bank of Greece, 14 May 1928
('000 omitted)

	Thousand Drachmae	% of Total Assets	% of GDP[1]
ASSETS			
Gold Coin and Bullion	876,306	11.05	2.84
Foreign Gold Exchange (Article 62 of Statutes)	3,191,081	40.24	10.34
Other Foreign Exchange	9,828	0.12	0.03
Subsidiary Greek Coins	0	0	0
Inland Bills and Notes	49,999	0.63	0.16
Advances	0	0	0
Government Debt	3,759,525	47.41	12.18
Investments	0	0	0
Bank Buildings and Equipment	0	0	0
Other Assets	42,938	0.54	0.14
LIABILITIES			
Capital Paid Up	400,000	5.04	1.30
Reserve Funds	0	0	0
Bank Notes in Circulation	4,863,353	61.33	15.75
Other Sight Liabilities in Drachmae:			
1) Current and Deposit Accounts:			
a) Government Accounts	666,738	8.41	2.16
b) Banks' Accounts	964,588	12.16	3.12
c) Other Accounts	891,430	11.24	2.89
2) Bank Post Bills and Demand Drafts	0	0	0
Deposits in Drachmae at Notice:			
a) Government Accounts	0	0	0
b) Banks' Accounts	0	0	0
c) Other Accounts	0	0	0
Foreign Exchange Liabilities:			
a) Foreign Gold Exchange (Article 62)	103,383	1.30	0.33
b) Other Foreign Exchange	9,828	0.12	0.03
Other Liabilities	30,357	0.38	0.10
TOTAL:	7,929,677	100.00	25.68

Note: [1]The GDP of 1927 has been used for the estimates.

Sources: Annual Report of the Bank of Greece for 1928 (1929), pp. 57–58; Kostelenos *et al*. (2007), Table 7–II, column headed 3, p.38 of CD.

APPENDIX A6: Greek public debt: some general information

Table A6.1: Some general information on Greek public debt, 1898–1928

	1898	1913	1928
Total public debt (in drachmae)	1,305,841,866.69	1,216,479,596.00	44,720,268,534.00
Public debt as % of GDP	229.66	141.99	133.02
Public debt per capita in drachmae	528.96	252.39	7,207.50
Public debt per capita in gold drachmae	358.84	252.39	483.72
Public debt per capita in French francs	358.84	252.39	2,397.31
Public debt per capita in pounds sterling	14.35	10.10	19.22
External public debt in the total public debt (%)	86.69	67.98	66.77
Domestic public debt in the total public debt (%)	13.31	32.02	33.23
% of forced circulation in total public debt	7.18	5.08	8.47
% of forced circulation in total domestic public debt	53.94	15.86	25.50

Notes:
(1) The 2.50 per cent Guaranteed Loan was included in public debt for 1898.
(2) Data on public debt for 1928 are after the stabilisation of the drachma.

Sources: Lekatsas (1919, pp. 36–41); Annual Report of the Bank of Greece for 1928 (1929, pp. 59–65); Commission Financiere Internationale (1929, p. 20); Andreades (1939, pp. 560–561); Dertiles (1993, pp 144–145); Lazaretou (2014, pp. 161–162).

APPENDIX A7:

A7.1: Text of the 1918 Book Credits Agreement between Greece and the Allies

THE GREEK LOAN FAILURE.

TEXT OF THE 1918 AGREEMENT.

In view of the efforts—which happily proved abortive—to raise a loan for Greece in this country, we reproduce below the text of the agreement made by Greece in 1918 with the British, French, and American Governments. From this it will be seen that Greece is unable to offer any specific security for a new loan without the consent of the above-mentioned Governments. The British Government alone gave its consent to the raising of a loan here. Hence the failure of the recent negotiations.

The Financial Delegates of the United States, Great Britain, and France have, in consequence of the decision of the Superior War Committee dated December 1, 1917, accorded their approval—the representatives of the United States *ad referendum*—to the under-mentioned agreement with the Hellenic Government.

ARTICLE I.

The Governments of the United States, France, and Great Britain are in agreement for the granting, in equal shares, during the year 1918, to the Hellenic Government, advances intended to permit the said Government to procure for itself the internal resources which are necessary :—

1. For the liquidation of arrears ;
2. For the expenses during the said year of 1918 of the Hellenic Army and Navy embodied in the effective forces provided for in the military arrangements. These latter expenses, included therein being those of the Navy, to be effected in Greece, are applied to the following objects :—

(*a*) Pay and indemnity of the troops ;
(*b*) Allocations to the families of mobilized soldiers ;
(*c*) Exploitation of the local resources ;
(*d*) Requisitions of animals and vehicles of the country ;
(*e*) Transportation by rail and sea.

The advances contemplated in this article shall be capable of attaining the amount of 750 millions of francs, therein included being the 50 millions which formed the subject of the arrangement of November 30, 1917.

ARTICLE II.

These advances shall be placed at the disposal of the Hellenic Government according to its needs, at its request and upon the advice to that effect of an Inter-Allied Financial Commission, which shall be instituted at Athens. This Commission shall include representatives of the United States, France, and Great Britain, and of Greece.

The employment of these resources shall be followed both by the said Commission in as far as concerns the payment of the arrears, and by an Inter-Allied Military Commission of similar composition, also sitting at Athens, and which, previously to the grant of the advances having for their object the organization and the maintenance of the Army and the Navy, shall have given its advice to the Financial Commission.

ARTICLE III.

These advances granted in dollars, francs, and pounds sterling, designed to guarantee the issues of the National Bank for equal amounts, may, during the period of the war, be utilized, within the limits of need, by drawings upon one or other of the lender States in the case when the assets of the Hellenic Treasury and of the National Bank which are available abroad fall below 100 millions of francs.

Six months after the conclusion of peace the balance of these advances may be utilized within the restrictions of the first paragraph.

ARTICLE IV.

The advances shall be represented by obligations of the Hellenic Government.

For each drawing and dating from the day on which it shall take place these obligations, for an amount equal to that of the said drawing, shall become productive of interest at a rate fixed respectively with the parties and shall be, save for the right reserved to itself by the Hellenic Government to amortize them by anticipation, repayable at the end of the 15th year which shall follow upon the cessation of hostilities.

Until the repayment of the said obligations no fresh gage shall be effected to an external loan without the consent of the Governments of the United States, France, and Great Britain.

ARTICLE V.

In consideration of the advances granted to it, the Hellenic Government undertakes to adopt immediately the necessary measures to the intent that for the future there shall not be delivered in Greece any remittances from abroad except for legitimate needs and upon production of vouching documents.

Read and approved :
Signed : KLOTZ
O. CROSBY (*ad referendum*)
A. BONAR LAW
A. ROMANOS

The contract hereunder [*sic*] has been approved by the Government of the United States under the following reservation :—

The obligations which shall be remitted to the Government of the United States shall be subject to a period for repayment which shall not exceed the maximum period authorized by the Legislature of the United States, but in no case shall it be more than 15 years, reckoning from the cessation of hostilities.

(Signed) O. CROSBY.
February 13, 1918.

Source: *The Times*, 10 March 1922.

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— OV9/197: Papers of Otto Ernst Niemeyer Papers: League of Nations – Greece
Loan Negotiations, 15 December 1927–23 July 1928

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— **OV80/3**: Greece: Country File
Greek War Debt, Economic Situation, Budgets, Drachma Stabilisation, etc., Analysis of Refugee Problem, 11 January 1928–29 September 1929

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A3: Emmanuel Tsouderos Archive

S1: Banking and economic issues

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Y2: Files on economic issues
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— **F135**: Bank of Greece: Historical records on its history
— **F138**: Reform of the Bank of Greece. Foreign exchange, cover etc.
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National Bank of Greece Historical Archive, Athens

A1Σ10: Public Loans

[477] The method adopted by each archive to catalogue its collection of records has been strictly followed in this thesis. A stands for archive, S and Σ for series, Y for sub-series and F as well as Φ for file.

Y1: Public Loans - Loose documents
— **Φ180**: Public Finance: Correspondence, Report of experts on the improvement of public finance, 1927
— **Φ217**: The third German Loan of 1916

A1Σ18: Monetary Issues, 1845–1939
Y1: Banknotes, coins, cheques, covers, issuing privilege, miscellaneous
— **Φ34**: Banknotes; Copies of issues of the official Government Gazette: Legislative decrees relating to the issue of banknotes from the National Bank of Greece, 1910–1913 and 1916–1917
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— **Φ164**: Miscellaneous. A note on the real circulation of banknotes in 1914 and conclusions drawn, 1914/and conclusion drawn over it. 1914.
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A1Σ19: Foreign Exchange
Y1: Foreign Exchange
— **Φ2**: Bank Consortium, 1921–1922
— **Φ34**: Foreign Exchange Control, 1910–1923
— **Φ35**: Articles on foreign exchange and public finance, 1923–1925

A1Σ22: Banks
Y6: Bank of Greece
— **Φ1**: Agreements between the Greek government and the National Bank relating to the establishment of the Bank of Greece, 1928
— **Φ2**: Memorandum of transferring assets and liabilities of the National Bank to the Bank of Greece
— **Φ8**: Attempts at settlement of public debt: K. Varvaressos' agreement with bondholders

League of Nations Archive, Geneva

— **BOX S123, File No 6**: Monetary Policy, Currency Questions, Genoa Conference Resolutions, January 1925.

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